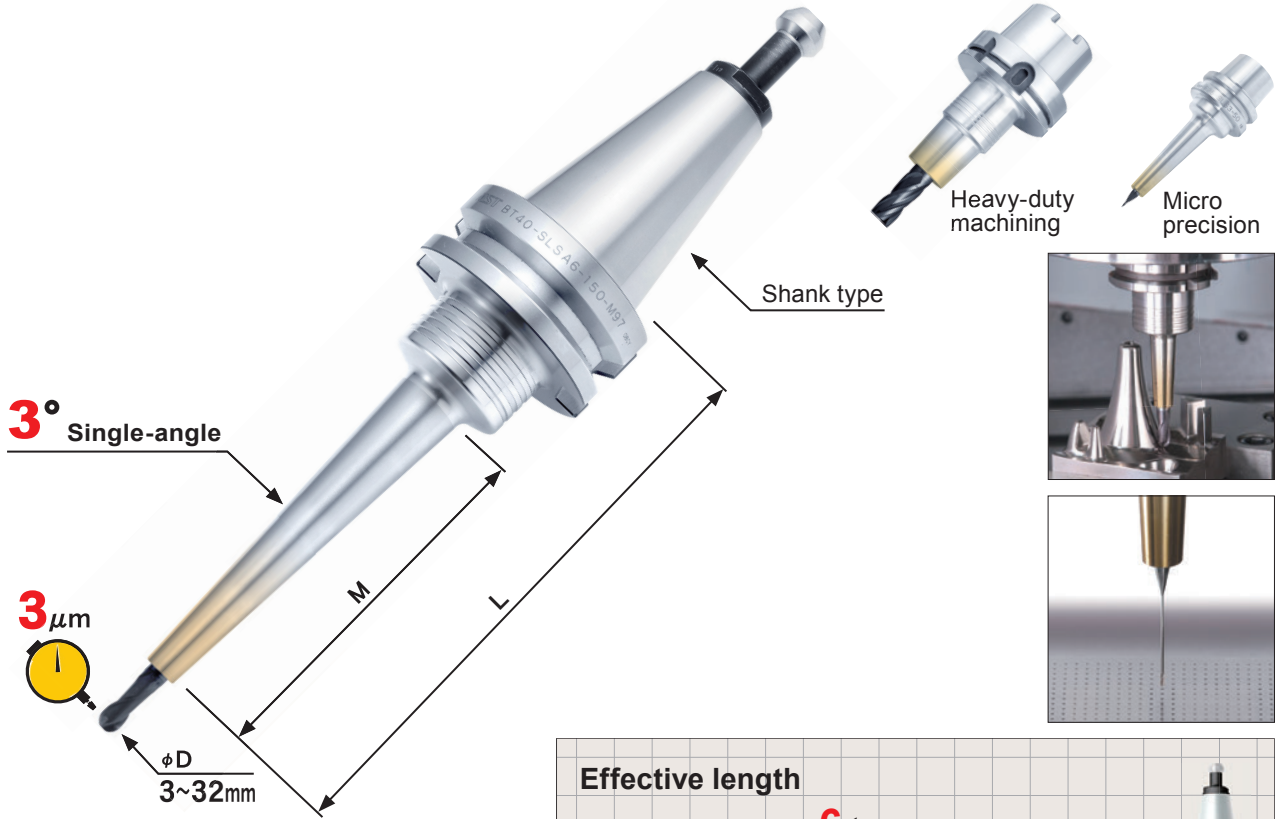


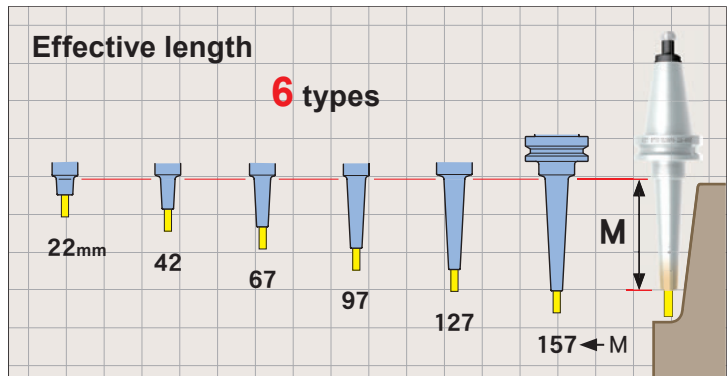
MONO SERIES

MONO 3°

■ An amazing line-up for all kinds of applications.



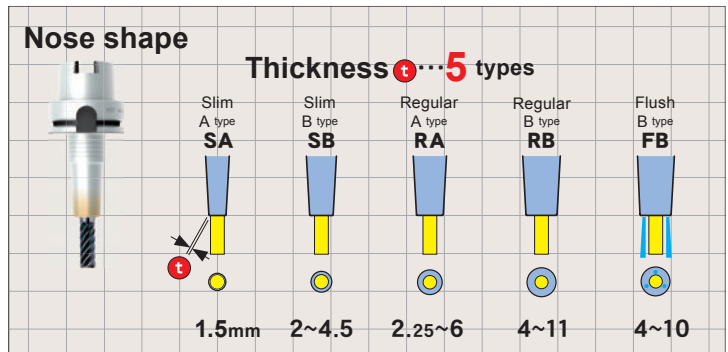
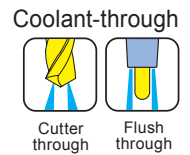
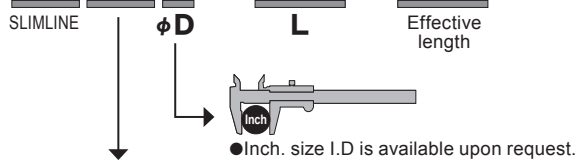
3,000
variations



BT50 - SL SA 3 - 110 - M42

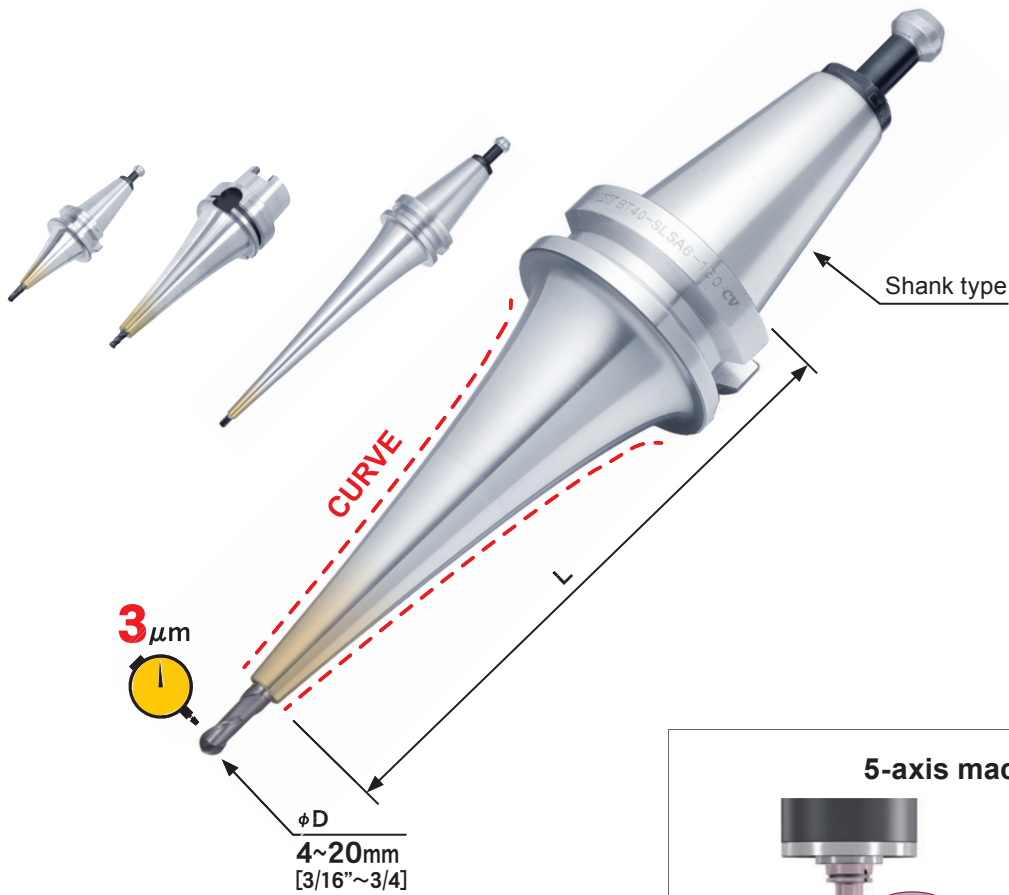
PAGE	Shank Type
20	BT30
23	BT40
47	BT50
70	A40
74	A50
78	A63
111	A100
140	E25
142	E32
146	E40
153	E50
163	F63
180	15T
181	S20T
182	RS20

● DIN and CAT. shank products are available upon request.

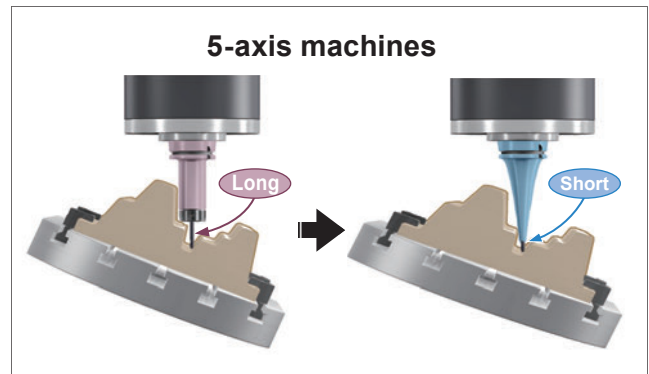


MONO CURVE

■ The slim tip and thick base provide great rigidity even in long holders.

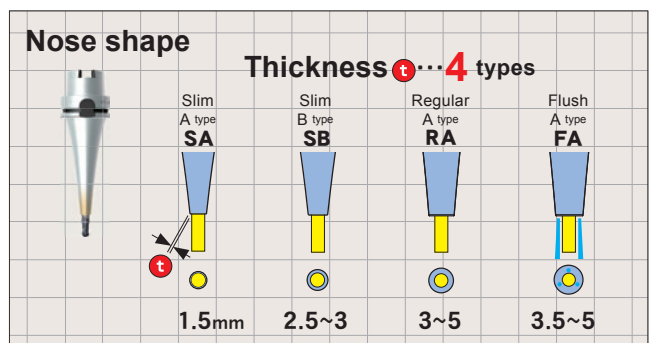
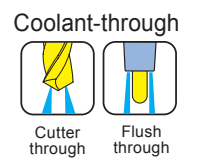


500
variations



BT50 - SL SA 4 - 165 CV

PAGE	Shank Type	Inch
20	BT30	—
23	BT40	—
47	BT50	—
74	A50	○
78	A63	○
111	A100	○
142	E32	○
146	E40	○
153	E50	○
163	F63	○
183	CT50	○



● DIN shank products are available upon request.

BT30

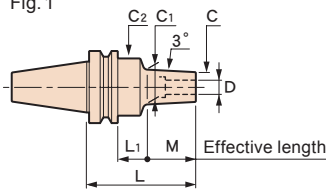
MONO 3°

Rigidity value (μm/kgf)
P.234

Imbalance value (N)
P.237

BT30-SLRA10-75-M22

Fig. 1

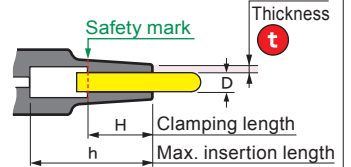


Option

- Retention knob → P.216

Caution

- Retention knob... Use a retention knob with hole, or remove the retention knob and heat it.
- Setting cutters... Be sure to insert the tool beyond the safety mark.



MONO CURVE

CV

Rigidity value (μm/kgf)
P.234

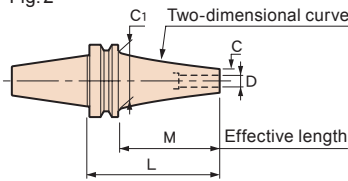
Imbalance value (N)
P.237

BT30-SLSA4-120 cv

CV : Curve

Thickness

Fig. 2



CODE	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	Scale model		
BT30-SLSA3- 75-M22	1	3	6	1.5	75	22	31	8.3	25	9	99	0.4	0.8	4.6	2		
- 95-M42					95	42		10.4			119				9.2	3	
-120-M67					120	67		13			144				0.5	1.6	14.9
-SLRA3- 75-M22	1	3	7.5	2.25	75	22	31	9.8	25	9	99	0.5	1.6	2.8	5		
BT30-SLSA3.175-75-M22	1	3.175	6.175	1.5	75	22	31	8.5	25	9	99	0.4	0.8	4.4	6		
-95-M42					95	42		10.6			119				8.8	7	
BT30-SLSA4- 75-M22	1	4	7	1.5	75	22	31	9.3	25	12	99	0.4	0.8	3.6	8		
- 95-M42					95	42		11.4			119				7.3	9	
-120-M67					120	67		14			144				0.5	1.6	11.9
-SLRA4- 75-M22	1	4	10	3	75	22	31	12.3	25	12	99	0.5	1.6	1.8	11		
-SLSA4- 75 CV	2	4	7	1.5	75	53	—	34	—	12	99	0.5	1	1.8	12		
- 90 CV					90	68					114				1.1	2.8	13
-120 CV					120	98					144				1.2	6.6	14
-SLRA4- 90 CV	2	4	10	3	90	68	—	34	—	12	114	0.5	1	2	15		
-120 CV					120	98					144				1.1	2.9	16
BT30-SLSA6- 75-M22	1	6	9	1.5	75	22	31	11.3	25	18	99	0.4	0.9	2.4	17		
- 95-M42					95	42		13.4			119				4.9	18	
-120-M67					120	67		16			144				0.5	1.7	8.3
-SLRA6- 75-M22	1	6	12	3	75	22	31	14.3	25	18	99	0.4	0.9	1.4	20		
-SLSA6- 75 CV	2	6	9	1.5	75	53	—	34	—	18	99	0.5	1.3	1.5	21		
- 90 CV					90	68					114				1	2.4	22
-120 CV					120	98					144				1.2	5.6	23
-SLRA6- 90 CV	2	6	13	3.5	90	68	—	34	—	18	114	0.5	1.1	1.6	24		
-120 CV					120	98					144				1.2	2.5	25
BT30-SLRA8- 75-M22	1	8	14	3	75	22	31	16.3	25	24	99	0.4	0.9	1.2	26		
-SLSA8- 75 CV	2	8	11	1.5	75	53	—	34	—	24	99	0.5	1.1	1.3	27		
- 90 CV					90	68					114				0.6	1.6	2.2
-SLRA8- 90 CV	2	8	16	4	90	68	—	34	—	24	114	0.5	1.2	1.1	29		

CODE	Fig.	ϕD	ϕC	t	L	M	L ₁	ϕC_1	ϕC_2	H	h	Kg	N	S	Scale model
BT30-SLRA10- 75-M22	1	10	16	3	75	22	31	18.3	25	30	99	0.4	1	1.1	30
-SLSA10- 75 CV	2	10	13	1.5	75	53	—	34	—	30	99	0.5	1.6	1.2	31
- 90 CV					90	68					114		1.4	2	32
-SLRA10- 90 CV	2	10	19	4.5	90	68	—	34	—	30	114	0.6	1.5	1.1	33
BT30-SLRA12- 75-M22	1	12	20	4	75	22	31	22.3	25	30	99	0.5	1.2	1	34
BT30-SLRA16- 60-M22	1	16	26	5	60	22	16	28.3	34	32	60	0.5	1.6	0.5	35
BT30-SLRA20- 65-M22	1	20	32	6	65	22	21	34.3	40	38	60	0.6	2.1	0.4	36

■ Cleaning tool for a spindle taper hole, STAR DUST

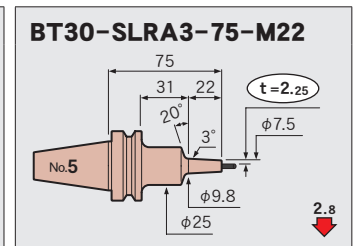
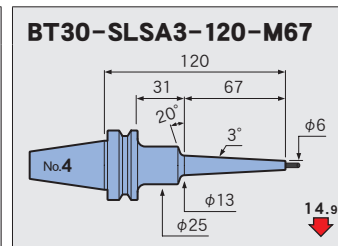
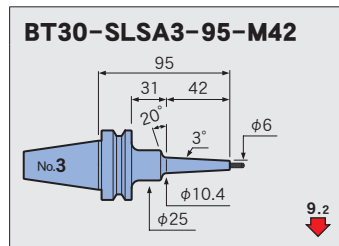
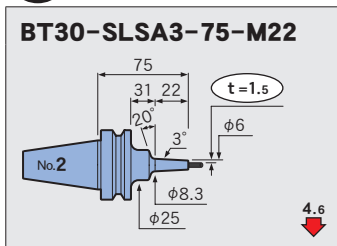
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CLT-NT30-G2

☎ P.226

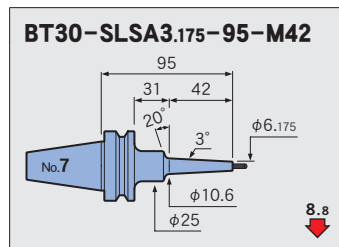
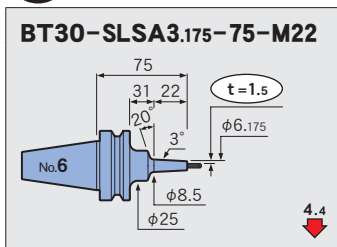


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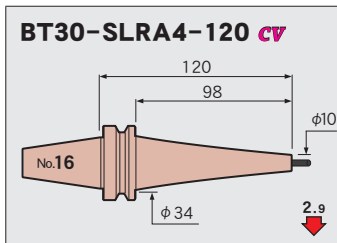
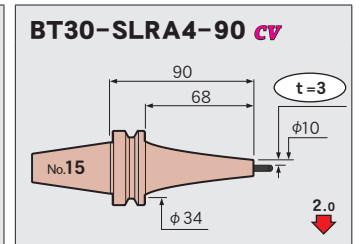
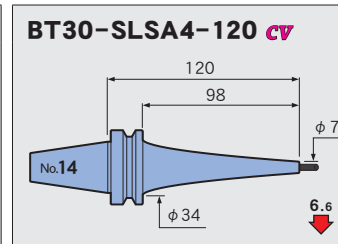
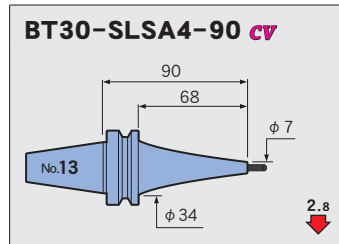
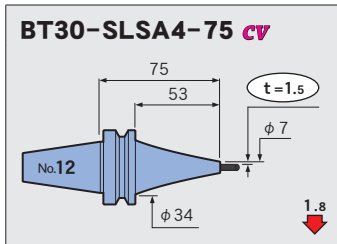
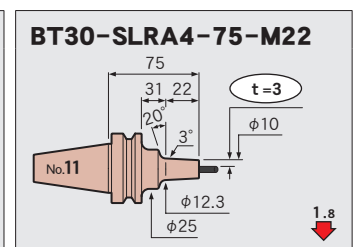
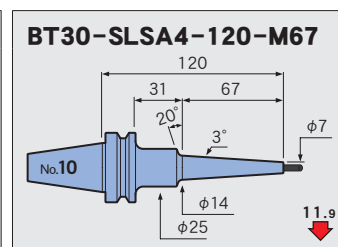
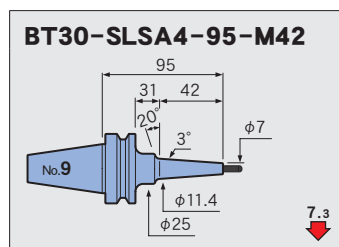
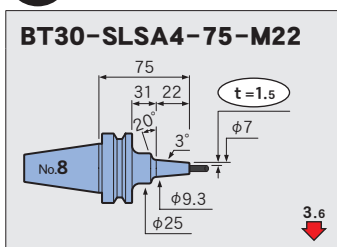
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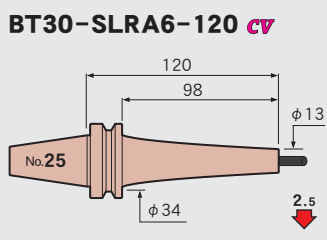
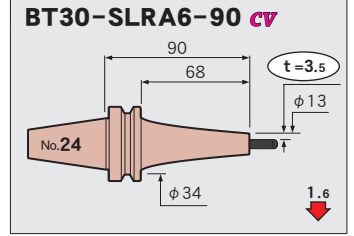
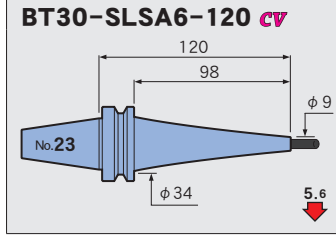
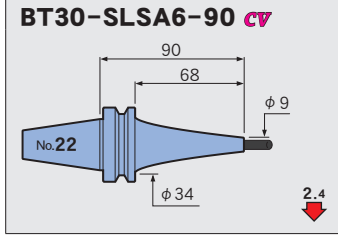
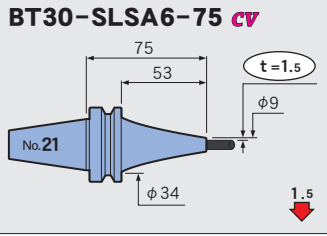
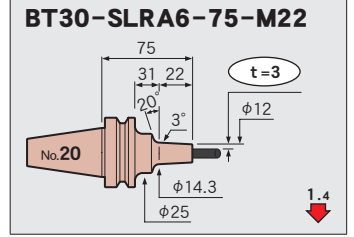
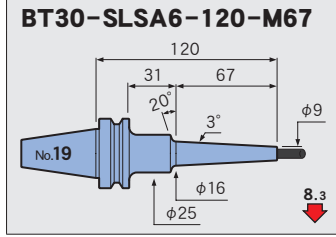
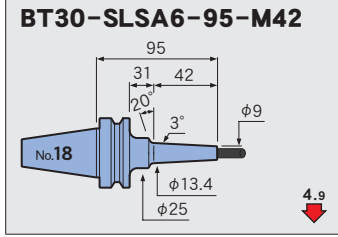
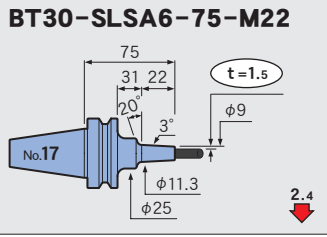
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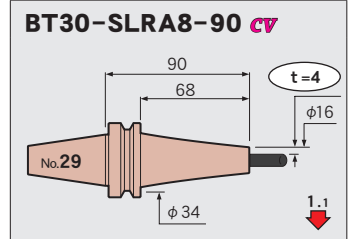
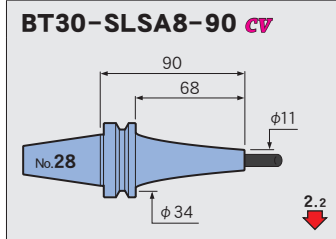
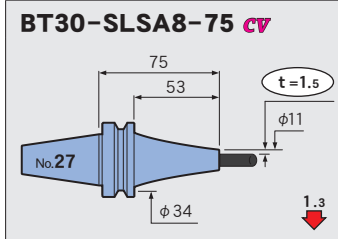
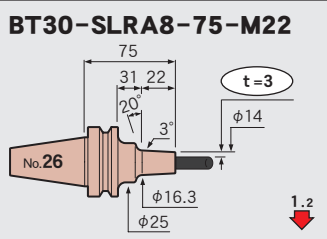
φ 4



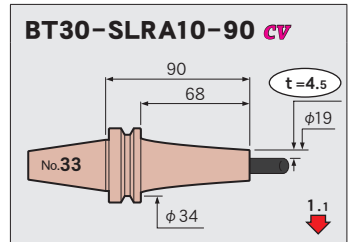
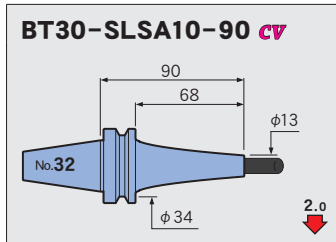
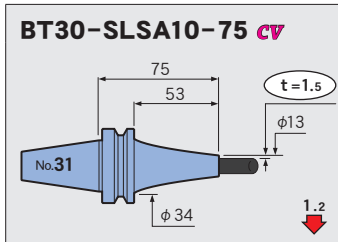
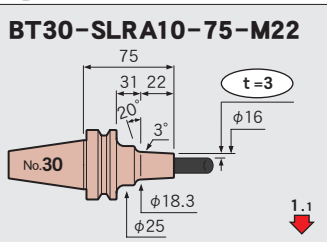
φ6



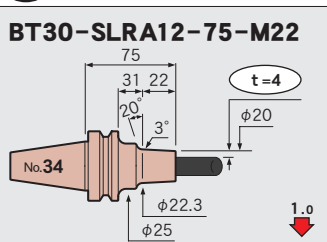
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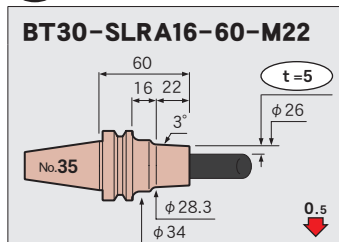
φ10



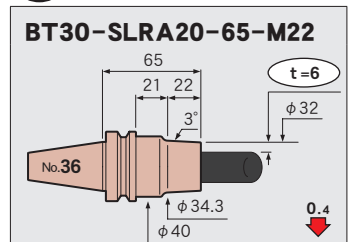
φ12



φ16



φ20



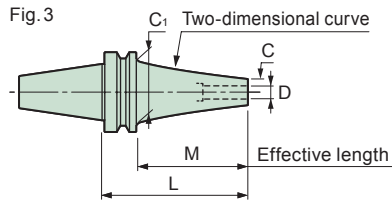
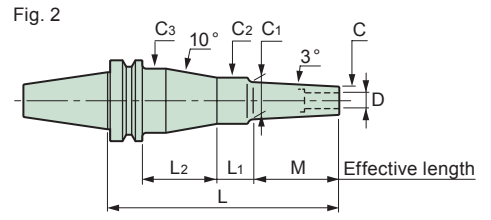
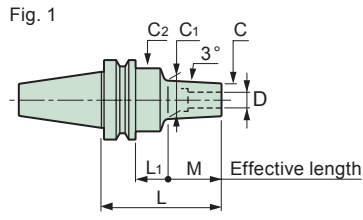
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

BT40

MONO 3°



MONO CURVE CV



Option

- Retention knob → P.216

Caution



- Retention knob... Use a retention knob with hole, or remove the retention knob and heat it.
- Setting cutters... Be sure to insert the tool beyond the safety mark.

Compatibility table for HRD-01S

[O] Available [x] Not available
[▲] Usable by raising the heating unit. → P.233

CV : Curve Thickness

























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BT40-SLSA3- 95-M 42	1	3	6	1.5	95	42	26	—	10.4	25	—	9	130	1	2.3	9.1	○				
-120-M 67					120	67	—	13	—	—	—	—	155	—	3.1	14.6	4				
-125-M 42					125	42	56	10.4	—	—	—	—	160	1.1	2.5	9.7	2				
-150-M 67					150	67	—	13	—	—	—	—	185	—	3.2	15.7	5				
-M 97					97	26	—	16.2	—	—	—	—	—	—	4	20.4	7				
-155-M 42	2	3	6	1.5	155	42	33	53	10.4	26	40	—	190	1.4	2.7	9.9	3				
-180-M 67					180	67	—	13	25	39	—	215	—	3.4	15.7	6					
-M 97	1	3	6	1.5	—	97	56	—	16.2	—	—	—	1.2	4.1	22.1	8					
-210-M 97	2	3	6	1.5	210	—	33	53	—	—	39	—	245	1.4	4.3	22.1	9				
-SLRA3- 75-M 22	1	3	7.5	2.25	75	22	26	—	9.8	25	—	9	110	1	2.6	2.7	○				
- 95-M 42					95	42	—	11.9	—	—	—	—	130	—	2.9	5.3	10				
-105-M 22					105	22	56	9.8	—	—	—	—	140	1.1	2.7	3.2	11				
-120-M 67					120	67	26	14.5	—	—	—	—	155	—	3.4	8.8	16				
-125-M 42					125	42	56	11.9	—	—	—	—	160	—	3	6	14				
-135-M 22					2	3	7.5	2.25	135	22	33	53	9.8	—	39	—	170	1.4	2.9	3.2	12
-150-M 67					1	3	7.5	2.25	150	67	56	—	14.5	—	—	—	185	1.2	3.5	14.5	17
-M 97									97	26	—	17.7	—	—	—	—	—	1.1	4.1	12.8	19
-155-M 42					2	3	7.5	2.25	155	42	33	53	11.9	—	39	—	190	1.4	3.2	6	15
-180-M 67									180	67	—	14.5	26	40	—	215	—	3.7	9.8	18	
-M 97	1	3	7.5	2.25	97	56	—	—	17.7	25	—	—	—	1.2	4.2	14.3	20				
-M127					127	26	—	20.8	36	—	—	—	—	1.1	5.4	15.7	22				
-210-M 97	2	3	7.5	2.25	210	97	33	53	17.7	25	39	—	245	1.5	4.4	14.4	21				
-M127	1	3	7.5	2.25	—	127	56	—	20.8	32	—	—	—	1.4	5.5	16.5	23				
-240-M127	2	3	7.5	2.25	240	—	28	58	—	36	50	—	275	1.8	5.8	16.3	24				

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model
BT40-SLFB3- 75-M 22	1	3	9.5	3.25	75	22	26	—	11.8	25	—	9	110	1	2.4	1.9	25
 - 95-M 42					95	42			13.9				130		2.7	3.2	28
-105-M 22					105	22	56		11.8				140	1.1	2.5	2.3	26
-120-M 67					120	67	26		16.5				155		3.4	5.3	31
-125-M 42					125	42	56		13.9				160		2.8	3.9	29
-135-M 22	2				135	22	33	53	11.8		39		170	1.4	2.7	2.3	27
-150-M 67	1				150	67	56	—	16.5		—		185	1.2	3.6	6.4	32
-155-M 42	2				155	42	33	53	13.9		39		190	1.4	3	3.9	30
-180-M 67					180	67			16.5	26	40		215		3.8	6.3	33
BT40-SLSA4- 95-M 42	1	4	7	1.5	95	42	26	—	11.4	25	—	12	130	1	3.1	7.1	34
-120-M 67					120	67			14				155			11.7	37
-125-M 42					125	42	56		11.4				160	1.1	3.3	7.9	35
-150-M 67					150	67			14				185			12.8	38
BT40 -M 97						97	26		17.2						4.1	16.5	40
-155-M 42	2				155	42	33	53	11.4		39		190	1.4	3.5	7.9	36
-180-M 67					180	67			14				215			12.8	39
-M 97	1					97	56	—	17.2		—			1.2	4.2	18.3	41
-210-M 97	2				210		33	53			39		245	1.5	4.4	18.2	42
-SLRA4- 75-M 22	1	4	10	3	75	22	26	—	12.3	25	—	12	110	1	2.7	1.7	43
- 95-M 42					95	42			14.4				130		3.1	3.1	46
-105-M 22					105	22	56		12.3				140	1.1	2.8	2.2	44
-120-M 67					120	67	26		17				155		3.9	5.1	49
-125-M 42					125	42	56		14.4				160		3.3	3.8	47
-135-M 22	2				135	22	33	53	12.3		39		170	1.4	3	2.2	45
-150-M 67	1				150	67	56	—	17		—		185	1.2	4	6.3	50
-M 97						97	26		20.2					1.1	4.8	7.7	52
-155-M 42	2				155	42	33	53	14.4		39		190	1.4	3.5	3.8	48
-180-M 67					180	67			17				215		4.2	6.2	51
-M 97	1					97	56	—	20.2		—			1.2	4.9	9.5	53
-M127					127	26			23.3	32					6.8	9.4	55
-210-M 97	2				210	97	33	53	20.2	25	39		245	1.5	5.1		54
-M127	1					127	56	—	23.3	32	—			1.4	7	10.3	56
-240-M127	2				240		30	56			46		275	1.8	7.3	10.4	57
-SLFB4- 75-M 22	1	4	12	4	75	22	26	—	14.3	25	—	12	110	1	2.5	1.3	58
 - 95-M 42					95	42			16.4				130	1.1	3	2.2	61
-105-M 22					105	22	56		14.3				140		2.7	1.8	59
-120-M 67					120	67	26		19				155		3.8	3.5	64
-125-M 42					125	42	56		16.4				160	1.2	3.1	2.9	62
-135-M 22	2				135	22	33	53	14.3		39		170	1.4	2.9	1.8	60
-150-M 67	1				150	67	56	—	19		—		185	1.2	4	4.7	65
-155-M 42	2				155	42	33	53	16.4		39		190	1.4	3.3	2.9	63
-180-M 67					180	67			19				215	1.5	4.2	4.7	66
-SLSA4- 90 CV	3	4	7	1.5	90	63	—	—	53	—	—	12	125	1.2	3.3	1.8	67
-120 CV					120	93							155	1.3	3.8	2.7	68
-150 CV					150	123							185	1.5	4.4	4	69
-180 CV					180	153							215		4.8	6.6	70
-210 CV					210	183							245	1.6	4.9	11.6	71
-240 CV					240	213							275	1.8	5.8	14	72
-SLRA4-120 CV	3	4	10	3	120	93	—	—	53	—	—	12	155	1.3	3.9	1.9	73
-150 CV					150	123							185	1.4	4.3	2.9	74
-180 CV					180	153							215	1.5	5.1	4.2	75
-210 CV					210	183							245	1.7	5.7	5.7	76

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	Feature
BT40-SLSA6- 95-M 42	1	6	9	1.5	95	42	26	—	13.4	25	—	18	130	1	3.3	4.8	○	77
-120-M 67					120	67			16				155	1.1	4.4	8		80
-125-M 42					125	42	56		13.4				160		3.5	5.6		78
-150-M 67					150	67			16				185	1.2	4.5	9.2		81
-M 97						97	26		19.2	32				1.1	5.9	11		83
-155-M 42	2				155	42	33	53	13.4	25	39		190	1.4	3.7	5.6		79
-180-M 67					180	67			16				215		4.7	9.2		82
-M 97	1					97	56	—	19.2	32	—			1.3	6.1	11.7		84
-210-M 97	2				210		30	56			46		245	1.7	6.4			85
-SLSB6- 95-M 42	1	6	10	2	95	42	26	—	14.4	25	—	18	130	1	4	3.6	○	86
-120-M 67					120	67			17				155	1.1	5.4	6.1		89
-125-M 42					125	42	56		14.4				160		4.1	4.5		87
-150-M 67					150	67			17				185	1.2	5.5	7.4		90
-M 97						97	26		20.2	32					7.2	8.5		92
-155-M 42	2				155	42	33	53	14.4	25	39		190	1.4	4.3	4.4		88
-180-M 67					180	67			17				215		5.7	7.4		91
-M 97	1					97	56	—	20.2	32	—			1.3	7.4	9.2		93
-M127						127	26		23.3					1.2	8.9	11		95
-210-M 97	2				210	97	30	56	20.2		46		245	1.7	7.7	9.2		94
-M127	1					127	56	—	23.3		—			1.4	9.1	12		96
-M157						157	26		26.5					1.3	10.6	13.2		98
-240-M127	2				240	127	30	56	23.3		46		275	1.8	9.4	12		97
-M157	1					157	56	—	26.5	36	—			1.7	10.8	14.5		99
-270-M157	2				270		30	56		32	46		305	1.9	11	14.6	▲	100
-SLRB6- 75-M 22	1	6	14	4	75	22	26	—	16.3	32	—	18	110	1.1	3.2	1	○	101
- 95-M 42					95	42			18.4				130		4.3	1.6		104
-105-M 22					105	22	56		16.3				140	1.2	3.3	1.2		102
-120-M 67					120	67	26		21				155		5.6	2.6		107
-125-M 42					125	42	56		18.4				160	1.3	4.4	1.9		105
-135-M 22	2				135	22	30	56	16.3		46		170	1.6	3.6	1.2		103
-150-M 67	1				150	67	56	—	21		—		185	1.3	5.8	3		108
-155-M 42	2				155	42	30	56	18.4		46		190	1.6	4.7	1.9		106
-180-M 67					180	67			21				215	1.7	6.1	3.1		109
-SLFB6- 75-M 22	1	6	14	4	75	22	26	—	16.3	32	—	18	110	1.1	3.2	1	○	110
- 95-M 42					95	42			18.4				130		4.3	1.6		113
-105-M 22					105	22	56		16.3				140	1.2	3.3	1.2		111
-120-M 67					120	67	26		21				155		5.6	2.6		116
-125-M 42					125	42	56		18.4				160	1.3	4.4	1.9		114
-135-M 22	2				135	22	30	56	16.3		46		170	1.6	3.6	1.2		112
-150-M 67	1				150	67	56	—	21		—		185	1.3	5.8	3		117
-155-M 42	2				155	42	30	56	18.4		46		190	1.6	4.7	1.9		115
-180-M 67					180	67			21				215	1.7	6.1	3.1		118
-SLSA6- 90 CV	3	6	9	1.5	90	63	—	—	53	—	—	18	125	1.2	3.3	1.6	○	119
-120 CV					120	93							155	1.3	3.8	2.3		120
-150 CV					150	123							185	1.5	4.3	3.6		121
-180 CV					180	153							215		4.9	5.7		122
-210 CV					210	183							245	1.7	5.7	7.3		123
-240 CV					240	213							275	1.8	5.9	12		124
-SLRA6- 90 CV	3	6	13	3.5	90	63	—	—	53	—	—	18	125	1.2	3.3	1.2	○	125
-120 CV					120	93							155	1.3	4	1.7		126
-150 CV					150	123							185	1.5	4.8	2.1		127
-180 CV					180	153							215	1.7	5.6	2.8		128
-210 CV					210	183							245		5.9	4.8		129
-SLFA6- 90 CV	3	6	13	3.5	90	63	—	—	53	—	—	18	125	1.2	3.3	1.2	○	130
-120 CV					120	93							155	1.3	4	1.7		131
-150 CV					150	123							185	1.5	4.8	2.1		132
-180 CV					180	153							215	1.7	5.6	2.8		133
-210 CV					210	183							245		5.9	4.8		134

BT40








CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	 Kg	 N	 S		Scale model
BT40-SLSA8- 95-M 42	1	8	11	1.5	95	42	26	—	15.4	25	—	24	130	1	4.6	3.4		135
-120-M 67					120	67			18	32			155	1.1	6.3	5.4		138
-125-M 42					125	42	56		15.4	25			160		4.7	4.3		136
-150-M 67					150	67			18	32			185	1.3	6.5	5.9		139
-M 97						97	26		21.2					1.2	8.4	7.9		141
-155-M 42	2				155	42	33	53	15.4	25	39		190	1.4	5	4.3		137
-180-M 67					180	67	30	56	18	32	46		215	1.6	6.7	5.9		140
-M 97	1					97	56	—	21.2		—			1.3	8.6	8.7		142
-210-M 97	2				210		28	58		36	50		245	1.9	8.8	8.4		143
-SLSB8- 95-M 42	1	8	13	2.5	95	42	26	—	17.4	32	—	24	130	1.1	5.3	2.1		144
-120-M 67					120	67			20				155		7.4	3.5		147
-125-M 42					125	42	56		17.4	36			160	1.3	5.5	2.3		145
-150-M 67					150	67			20	32			185		7.6	4		148
-M 97						97	26		23.2					1.2	10	5.2		150
-155-M 42	2				155	42	30	56	17.4		46		190	1.6	5.7	2.5		146
-180-M 67					180	67			20				215	1.7	7.9	4		149
-M 97	1					97	56	—	23.2		—			1.4	10.2	6		151
-M127						127	26		26.3					1.3	12.6	7		153
-210-M 97	2				210	97	30	56	23.2		46		245	1.7	10.4	6		152
-M127	1					127	56	—	26.3	32	—			1.4	12.7	8.1		154
-M157						157	26		29.5	36					15.1	8.5		156
-240-M127	2				240	127	30	56	26.3	32	46		275	1.8	13	8.1		155
-M157	1					157	56	—	29.5	42	—			1.7	15.3	8.6		157
-270-M157	2				270		28	58			53		305	2.2	15.6	8.7		158
-SLRB8- 75-M 22	1	8	18	5	75	22	26	—	20.3	32	—	24	110	1.1	3.6	0.7		159
- 95-M 42					95	42			22.4				130		5.3	1.1		162
-105-M 22					105	22	56		20.3				140	1.2	3.8	0.9		160
-120-M 67					120	67	26		25				155		7.5	1.7		165
BT40 -125-M 42					125	42	56		22.4				160	1.3	5.5	1.4		163
-135-M 22	2				135	22	30	56	20.3		46		170	1.6	4.1	1		161
-150-M 67	1				150	67	56	—	25		—		185	1.4	7.6	2.2		166
-155-M 42	2				155	42	30	56	22.4		46		190	1.7	5.8	1.5		164
-180-M 67					180	67			25				215	1.8	7.9	2.2		167
-SLFB8- 75-M 22	1	8	18	5	75	22	26	—	20.3	32	—	24	110	1.1	3.6	0.7		168
 - 95-M 42					95	42			22.4				130		5.3	1.1		171
-105-M 22					105	22	56		20.3				140	1.2	3.8	0.9		169
-120-M 67					120	67	26		25				155		7.5	1.7		174
-125-M 42					125	42	56		22.4				160	1.3	5.5	1.4		172
-135-M 22	2				135	22	30	56	20.3		46		170	1.6	4.1	1		170
-150-M 67	1				150	67	56	—	25		—		185	1.4	7.6	2.2		175
-155-M 42	2				155	42	30	56	22.4		46		190	1.7	5.8	1.5		173
-180-M 67					180	67	28	58	25	36	50		215	1.9	7.9	2		176
-SLSA8- 90 CV	3	8	11	1.5	90	63	—	—	53	—	—	24	125	1.2	3.3	1.4		177
-120 CV					120	93							155	1.3	4	2		178
-150 CV					150	123							185	1.5	4.8	2.7		179
-180 CV					180	153							215	1.6	4.9	5		180
-210 CV					210	183							245	1.7	5.8	6.6		181
-240 CV					240	213							275	1.9	6.7	8.3		182
-SLRA8- 90 CV	3	8	16	4	90	63	—	—	53	—	—	24	125	1.2	3.8	0.7		183
-120 CV					120	93							155	1.4	4.2	1.2		184
-150 CV					150	123							185	1.6	4.9	1.8		185
-180 CV					180	153							215	1.7	5.7	2.6		186
-210 CV					210	183							245	1.8	6.5	3.5		187
-SLFA8- 90 CV	3	8	16	4	90	63	—	—	53	—	—	24	125	1.2	3.8	0.7		188
 -120 CV					120	93							155	1.4	4.2	1.2		189
-150 CV					150	123							185	1.6	4.9	1.8		190
-180 CV					180	153							215	1.7	5.7	2.6		191
-210 CV					210	183							245	1.8	6.5	3.5		192

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	Feature	
BT40-SLSA10- 95-M 42	1	10	13	1.5	95	42	26	—	17.4	25	—	30	130	1	5.5	2.6	○	193	Shrink-fit Heater
-120-M 67					120	67			20	32			155	1.1	8.1	4		196	
-125-M 42					125	42	56		17.4	25			160		5.7	3.6		194	
-150-M 67					150	67			20	32			185	1.3	8.2	4.6		197	
-M 97						97	26		23.2					1.2		6		199	
-155-M 42	2				155	42	30	53	17.4	25	39		190	1.4	5.9	3.6		195	
-180-M 67					180	67	28	58	20	36	50		215	1.8	8.5	4.4		198	
-M 97	1					97	56	—	23.2	32	—			1.3		6.9		200	
-210-M 97	2				210		30	56			46		245	1.7				201	
-SLSB10- 95-M 42	1	10	16	3	95	42	26	—	20.4	32	—	30	130	1.1	6.3	1.4	○	202	MONO 3° MONO CURVE
-120-M 67					120	67			23				155	1.2	9.3	2.4		205	
-125-M 42					125	42	56		20.4				160	1.3	6.4	1.8		203	
-150-M 67					150	67			23				185		9.5	3		206	
-M 97						97	26		26.2						13	3.6		208	
-155-M 42	2				155	42	30	56	20.4		46		190	1.6	6.7	1.9		204	
-180-M 67					180	67			23				215	1.7	9.8	3		207	
BT40 -M 97	1					97	56	—	26.2		—			1.4	13.2	4.5		209	
-M127						127	26		29.3	42					17.4			211	
-210-M 97	2				210	97	30	56	26.2	32	46		245	1.8	13.5			210	
-M127	1					127	56	—	29.3	42	—			1.6	17.9	4.9		212	
-M157						157	26		32.5					1.5	21.1	5.6		214	
-240-M127					240	127	86		29.3	50			275	2.1	18.5	5	▲	213	
-M157						157	56		32.5					1.8	21.7	5.8		215	
-270-M157	2				270		28	58		42	53		305	2.3	22.2	6.3		216	
-SLRB10- 75-M 22	1	10	22	6	75	22	26	—	24.3	32	—	30	110	1.1	3.8	0.6	×	217	
- 95-M 42					95	42			26.4				130	1.2	6.3	0.8	○	220	
-105-M 22					105	22	56		24.3				140	1.3	4		×	218	
-120-M 67					120	67	26		29	42			155		9.4	1.1	○	223	
-125-M 42					125	42	56		26.4	32			160		6.5	1.2		221	
-135-M 22	2				135	22	30	56	24.3		46		170	1.7	4.3	0.9	×	219	
-150-M 67	1				150	67	56	—	29	42	—		185	1.5	9.6	1.3	○	224	
-155-M 42	2				155	42	30	56	26.4	32	46		190	1.7	6.8			222	
-180-M 67					180	67	28	58	29	42	53		215	2.1	9.8	1.4		225	
-SLFB10- 75-M 22	1	10	22	6	75	22	26	—	24.3	32	—	30	110	1.1	3.8	0.6	×	226	HYPER version
- 95-M 42					95	42			26.4				130	1.2	6.3	0.8	○	229	
-105-M 22					105	22	56		24.3				140	1.3	4		×	227	
-120-M 67					120	67	26		29	42			155		9.4	1.1	○	232	
-125-M 42					125	42	56		26.4	32			160		6.5	1.2		230	
-135-M 22	2				135	22	30	56	24.3		46		170	1.7	4.3	0.9	×	228	
-150-M 67	1				150	67	56	—	29	42	—		185	1.5	9.6	1.3	○	233	
-155-M 42	2				155	42	28	58	26.4	36	50		190	1.9	6.8	1.1		231	
-180-M 67					180	67			29	42	53		215	2.1	9.8	1.4		234	
-SLSA10- 90 CV	3	10	13	1.5	90	63	—	—	53	—	—	30	125	1.2	3.3	1.8	○	235	STRAIGHT arbor
-120 CV					120	93							155	1.5	4.3	1.3		236	
-150 CV					150	123							185	1.6	4.9	2.2		237	
-180 CV					180	153							215	1.7	5.6	3.4		238	
-210 CV					210	183							245		6	6		239	
-240 CV					240	213							275	2	7.9	5.8	▲	240	
-SLRA10- 90 CV	3	10	19	4.5	90	63	—	—	53	—	—	30	125	1.3	3.8	0.7	×	241	OTHERS
-120 CV					120	93							155	1.4	4.6	0.9	○	242	
-150 CV					150	123							185	1.6	5.4	1.4		243	
-180 CV					180	153							215	1.8	6.3	2		244	
-210 CV					210	183							245		7.2	3.1		245	
-SLFA10- 90 CV	3	10	19	4.5	90	63	—	—	53	—	—	30	125	1.3	3.8	0.7	×	246	PERIPHERALS
-120 CV					120	93							155	1.4	4.6	0.9	○	247	
-150 CV					150	123							185	1.6	5.4	1.4		248	
-180 CV					180	153							215	1.8	6.3	2		249	
-210 CV					210	183							245		7.2	3.1		250	





Scale model

Feature	CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	
Shrink-fit Heater	BT40-SLSA12- 95-M 42	1	12	15	1.5	95	42	26	—	19.4	32	—	30	130	1.1	7.1	1.8	○	251
	-120-M 67					120	67			22				155		10.7	3.3		254
	-125-M 42					125	42	56		19.4				160	1.2	7.3	2.3		252
	-150-M 67					150	67			22	36			185	1.4	10.9	3.6		255
	-M 97						97	26		25.2	32				1.2	15.3	4.9		257
	-155-M 42	2				155	42	30	56	19.4		46		190	1.6	7.5	2.3		253
	-180-M 67					180	67			22				215	1.7	11.2	3.9		256
	-M 97	1					97	56	—	25.2		—			1.4	15.5	5.8		258
	-210-M 97	2				210		30	56			46		245	1.7	15.8			259
MONO 3° MONO CURVE	-SLSB12- 95-M 42	1	12	19	3.5	95	42	26	—	23.4	32	—	30	130	1.1	8	1.1	○	260
	-120-M 67					120	67			26				155	1.2	12.2	1.8		263
	-125-M 42					125	42	56		23.4				160	1.3	8.2	1.5		261
	-150-M 67					150	67			26				185		12.4	2.5		264
	-M 97						97	26		29.2	42					17.9	2.4		266
	-155-M 42	2				155	42	30	56	23.4	32	46		190	1.7	8.4	1.6		262
	-180-M 67					180	67	28	58	26	36	50		215	1.9	12.6	2.2		265
	-M 97	1					97	56	—	29.2	50	—			1.7	18.4	2.6		267
	BT40 -M127						127	26		32.3	42				1.5	22.9	3.3		269
	-210-M 97	2				210	97	28	58	29.2		53		245	2.1	19	2.9		268
	-M127	1					127	56	—	32.3	50	—			1.9	23.5	3.5		270
	-M157						157	26		35.5	42				1.7	27.9	4.1		272
	-240-M127					240	127	86		32.3	50			275	2.2	24	3.8	▲	271
-M157						157	56		35.5	42				1.9	28.5	4.7		273	
-270-M157	2				270		28	58			53		305	2.4	29.1	4.8		274	
2PIECE type	-SLRB12- 75-M 22	1	12	26	7	75	22	26	—	28.3	42	—	30	110	1.2	6.9	0.4	×	275
	- 95-M 42					95	42			30.4				130		8.7	0.6		278
	-105-M 22					105	22	56		28.3				140	1.4	7.5	0.5		276
	-120-M 67					120	67	26		33				155		12.9	0.8		281
	-125-M 42					125	42	56		30.4				160	1.5	9.3	0.7		279
	-135-M 22					135	22	86		28.3	50			170	1.8	8.1	0.6		277
	-150-M 67					150	67	56		33	42			185	1.6	13.5	1.1		282
	-155-M 42	2				155	42	28	58	30.4		53		190	2	9.9	0.8		280
	-180-M 67					180	67			33				215	2.1	14.1	1.1		283
HYPER version	-SLFB12- 75-M 22	1	12	26	7	75	22	26	—	28.3	42	—	30	110	1.2	6.9	0.4	×	284
	- 95-M 42					95	42			30.4				130		8.7	0.6		287
	-105-M 22					105	22	56		28.3				140	1.4	7.5	0.5		285
	-120-M 67					120	67	26		33				155		12.9	0.8		290
	-125-M 42					125	42	56		30.4				160	1.5	9.3	0.7		288
	-135-M 22	2				135	22	28	58	28.3		53		170	1.9	8.1	0.6		286
	-150-M 67	1				150	67	56	—	33		—		185	1.6	13.5	1.1		291
	-155-M 42					155	42	86		30.4	50			190	2	9.9	0.8		289
	-180-M 67	2				180	67	28	58	33	42	53		215	2.1	14.1	1.1		292
OTHERS	-SLSA12- 90 CV	3	12	15	1.5	90	63	—	—	53	—	—	30	125	1.3	3.7	1.5	○	293
	-120 CV					120	93							155	1.5	4.6	1.2		294
	-150 CV					150	123							185		4.9	2.4		295
	-180 CV					180	153							215	1.7	5.7	3.3		296
	-210 CV					210	183							245	1.9	6.6	4.6		297
	-240 CV					240	213							275	2	8	5.5	▲	298
PERIPHERALS	-SLRA12- 90 CV	3	12	22	5	90	63	—	—	53	—	—	30	125	1.3	3.9	0.6	×	299
	-120 CV					120	93							155	1.6	5.1	0.7		300
	-150 CV					150	123							185	1.7	6	1.1	○	301
	-180 CV					180	153							215		6.9	1.9		302
	-210 CV					210	183							245	1.8	7.7	2.8		303
Technical Information	-SLFA12- 90 CV	3	12	22	5	90	63	—	—	53	—	—	30	125	1.3	3.9	0.6	×	304
	-120 CV					120	93							155	1.6	5.1	0.7		305
	-150 CV					150	123							185	1.7	6	1.1	○	306
	-180 CV					180	153							215		6.9	1.9		307
	-210 CV					210	183							245	1.8	7.7	2.8		308

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	 Kg	 N	 S	Scale model
BT40-SLSB16- 95-M 42	1	16	24	4	95	42	26	—	28.4	42	—	32	105	1.2	12.4	0.7	309
-120-M 67					120	67			31				130	1.3	19.3	1.1	312
-125-M 42					125	42	56		28.4				135	1.4	13	0.9	310
-150-M 67					150	67			31				160	1.5	19.8	1.4	313
-M 97						97	26		34.2					1.4	27.6	1.7	315
-155-M 42	2				155	42	28	58	28.4		53		165	1.9	13.5	1	311
-180-M 67					180	67			31				190	2	20.4	1.5	314
 -M 97	1					97	56	—	34.2		—			1.7	28.1	2.1	316
-M127						127	26		37.3	53					35.8	2.1	318
-210-M 97					210	97	86		34.2	50			220	2.1	28.7		317
-M127						127	56		37.3					2	36.4	2.5	319
-M157						157	26		40.5	53				1.9	44.1	2.7	321
-240-M127					240	127	86		37.3				250	2.5	37	2.6	320
-M157						157	56		40.5	50				2.2	44.7	3.1	322
-270-M157					270		86			53			280	2.7	45.3	3.5	323
-SLRB16- 75-M 22	1	16	32	8	75	22	26	—	34.3	42	—	32	85	1.2	6.9	0.3	324
- 95-M 42					95	42			36.4				105	1.3	12.5	0.5	327
-105-M 22					105	22	56		34.3				115	1.4	7.5		325
-120-M 67					120	67	26		39				130	1.5	19.4	0.7	330
-125-M 42					125	42	56		36.4				135	1.6	13		328
-135-M 22	2				135	22	28	58	34.3		53		145	2	8.1	0.5	326
-150-M 67	1				150	67	56	—	39		—		160	1.7	20	0.9	331
-155-M 42	2				155	42	28	58	36.4		53		165	2.1	13.6	0.7	329
-180-M 67					180	67			39				190	2.3	20.5	1	332
-SLFB16- 75-M 22	1	16	32	8	75	22	26	—	34.3	42	—	32	85	1.2	6.9	0.3	333
 - 95-M 42					95	42			36.4				105	1.3	12.5	0.5	336
-105-M 22					105	22	56		34.3				115	1.4	7.5		334
-120-M 67					120	67	26		39				130	1.5	19.4	0.7	339
-125-M 42					125	42	56		36.4				135	1.6	13		337
-135-M 22					135	22	86		34.3	50			145	1.9	8.1	0.5	335
-150-M 67					150	67	56		39	42			160	1.7	20	0.9	340
-155-M 42					155	42	86		36.4	50			165	2	13.6	0.7	338
-180-M 67	2				180	67	28	58	39	42	53		190	2.3	20.5	1	341
-SLSB16- 90 CV	3	16	21	2.5	90	63	—	—	53	—	—	32	100	1.3	4.2	0.6	342
-120 CV					120	93							130	1.5	5.5	0.8	343
-150 CV					150	123							160	1.6	6.2	1.5	344
-180 CV					180	153							190	1.9	7.5	1.9	345
-210 CV					210	183							220	2	8.2	3	346
-240 CV					240	213							250	2.2	9.5	3.7	347
BT40-SLSB20- 95-M 42	1	20	29	4.5	95	42	26	—	33.4	42	—	40	105	1.2	14.2	0.6	348
-120-M 67					120	67			36				130	1.3	24.5	0.9	351
-125-M 42					125	42	56		33.4				135	1.5	14.8	0.8	349
-150-M 67					150	67			36				160	1.6	25	1.2	352
-M 97						97	26		39.2	53					36.8		354
-155-M 42	2				155	42	28	58	33.4	42	53		165	2	15.3	0.9	350
-180-M 67	1				180	67	86	—	36	50	—		190		25.6	1.2	353
-M 97						97	56		39.2					1.9	37.4	1.4	355
-M127						127	26		42.3	53				1.8	50	1.6	357
-210-M 97					210	97	86		39.2				220	2.4	38	1.6	356
-M127						127	56		42.3	50				2.1	50.5	1.9	358
-M157						157	26		45.5					2	62.3	2.1	360
-240-M127					240	127	86		42.3				250	2.4	51.1	2.3	359
-M157						157	56		45.5						62.9	2.4	361
-270-M157					270		86			53			280	2.9	63.5	2.7	362

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

CODE	Fig.	ϕD	ϕC	t	L	M	L ₁	L ₂	ϕC_1	ϕC_2	ϕC_3	H	h	Kg	N	S	Scale model
BT40-SLRB20- 95-M 42	1	20	38	9	95	42	26	—	42.4	53	—	40	105	1.5	14.3	0.4	363
-120-M 67					120	67	45		130	1.7			24.6	0.5	366		
-125-M 42					125	42	56		42.4	135			1.9	14.9	364		
BT40 -150-M 67					150	67	45		50	160			2	25.2	0.7	367	
-155-M 42					155	42	86		42.4	53			165	2.2	15.4	0.6	365
-180-M 67					180	67	45		50	190			2.3	25.7	0.9	368	
-SLFB20- 95-M 42					1	20	38		9	95			42	26	—	42.4	53
 -120-M 67	120	67	45	130				1.7		24.6	0.5	372					
-125-M 42	125	42	56	42.4				135		1.9	14.9	370					
-150-M 67	150	67	45	50				160		2	25.2	0.7	373				
-155-M 42	155	42	86	42.4				165		2.1	15.4	371					
-180-M 67	180	67	45	50				190		2.3	25.7	0.9	374				
-SLSB20- 90 CV	3	20	26	3				90		63	—	—	50.5	—		—	40
-120 CV					120	93	53	130	1.5	5.8	0.8		376				
-150 CV					150	123	160	1.6	6.7	1.3	377						
-180 CV					180	153	190	1.9	8	1.8	378						
-210 CV					210	183	220	2.1	9.4	2.3	379						
-240 CV					240	213	250	2.4	10.7	3	380						
BT40-SLRB25- 95-M 42					1	25	45	10	95	42	26		—	49.4	53		
-125-M 42	125	56	135	1.9					17	0.4	382						
-155-M 42	155	86	165	2.3					17.5	0.6	383						
-SLFB25- 95-M 42	1	25	45	10					95	42	26	—				49.4	53
 -125-M 42					125	56	135	1.9	17	0.4	385						
-155-M 42					155	86	165	2.3	17.5	0.6	386						
BT40-SLRB32- 95-M 42	1	32	54	11	95	42	26	—	58.4	63	—	50	87	1.8	4.7	0.3	387

■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-NT40-G3

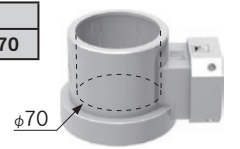
☎ P. 226



■ $\phi 70$ Nozzle (HRB-03S)

Required for shrinking the SLRB32.

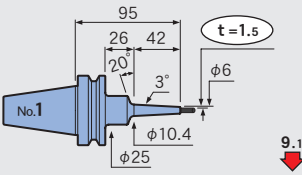
CODE
HRB-NZL70



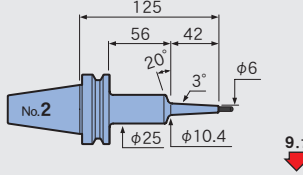
HEAT ROBO Baby 3000S

φ 3

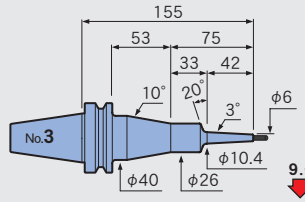
BT40-SLSA3-95-M42



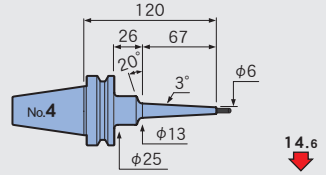
BT40-SLSA3-125-M42



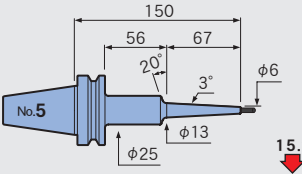
BT40-SLSA3-155-M42



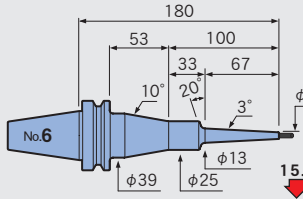
BT40-SLSA3-120-M67



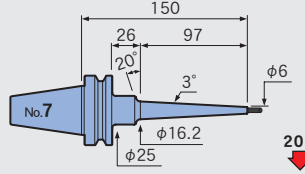
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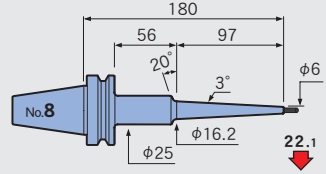
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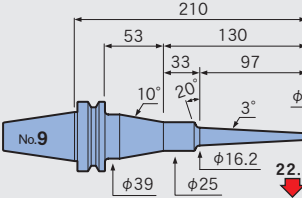
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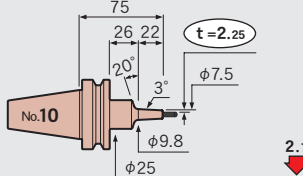
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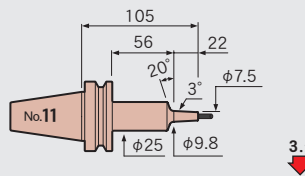
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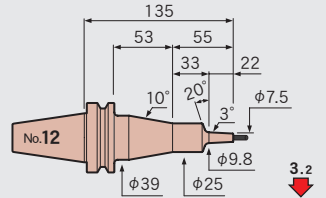
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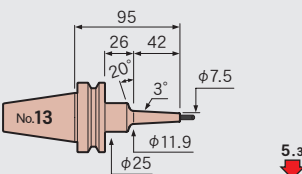
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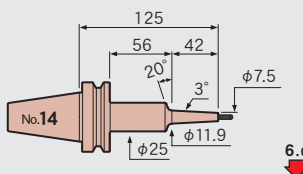
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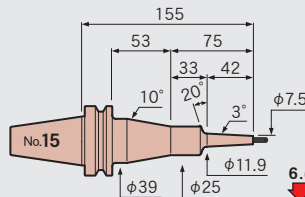
BT40-SLRA3-95-M42



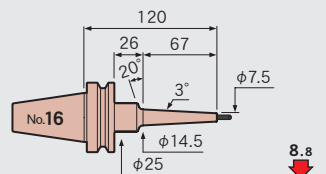
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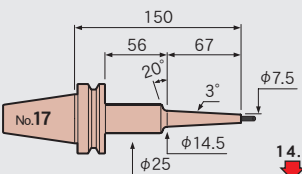
BT40-SLRA3-155-M42



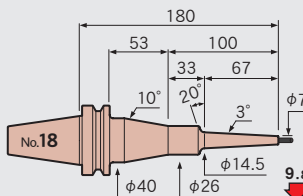
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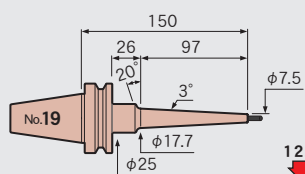
BT40-SLRA3-150-M67



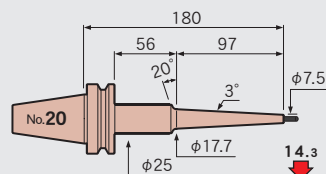
BT40-SLRA3-180-M67



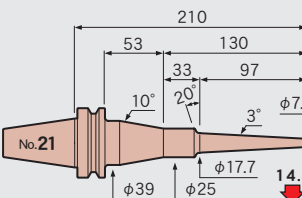
BT40-SLRA3-150-M97



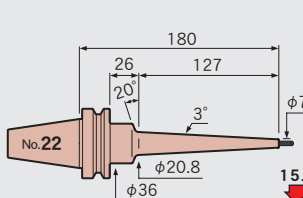
BT40-SLRA3-180-M97



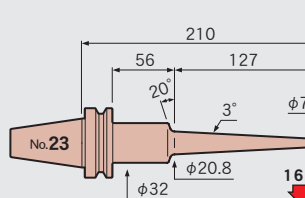
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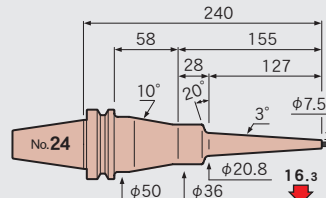
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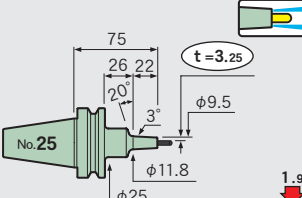
BT40-SLRA3-210-M127



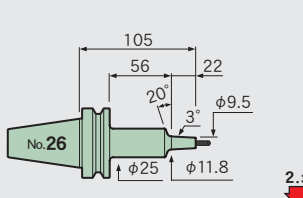
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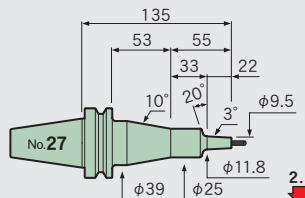
BT40-SLFB3-75-M22



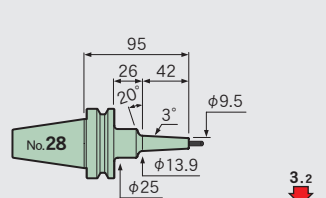
BT40-SLFB3-105-M22



BT40-SLFB3-135-M22



BT40-SLFB3-95-M42



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

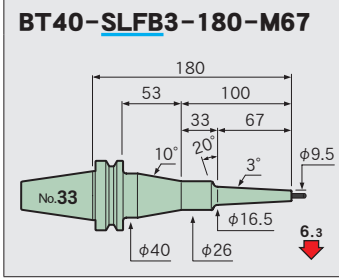
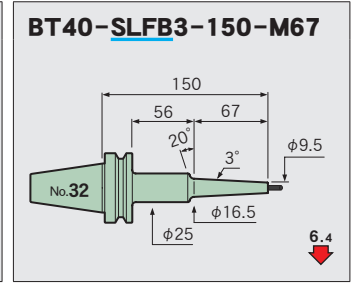
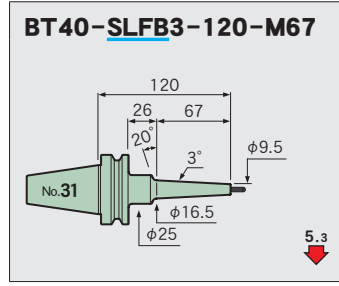
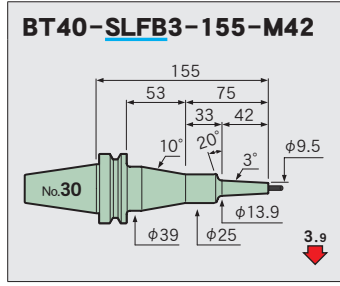
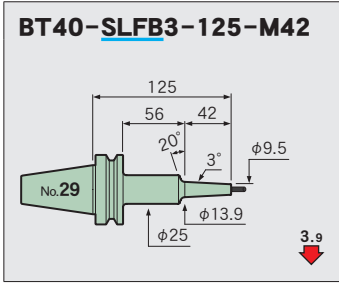
STRAIGHT
arbor

OTHERS

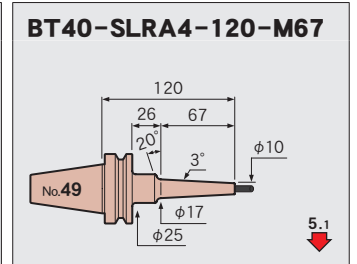
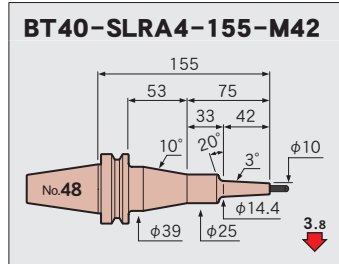
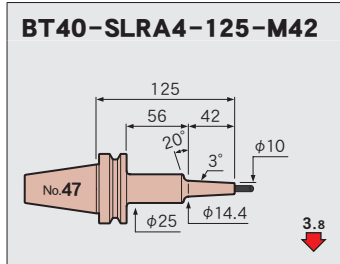
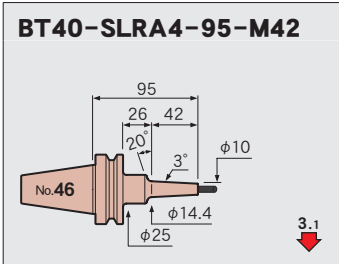
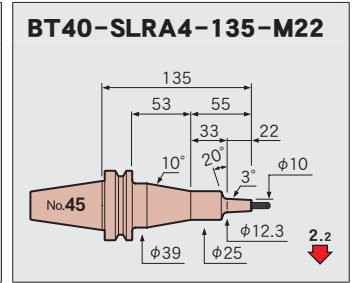
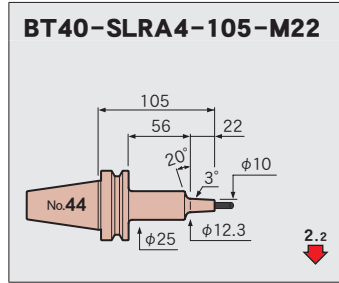
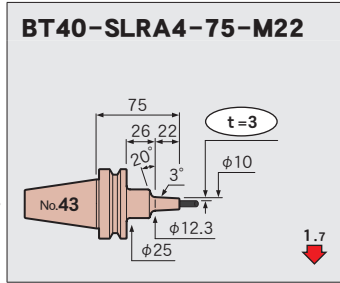
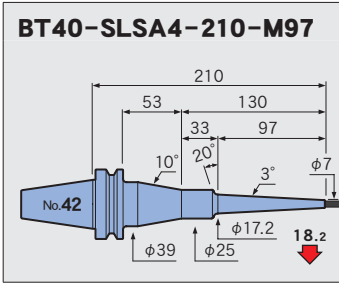
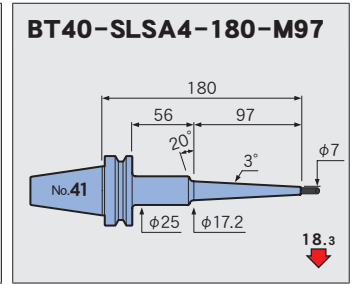
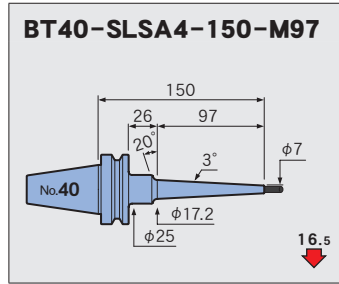
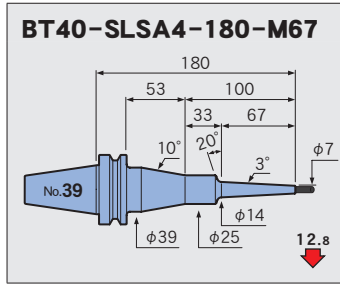
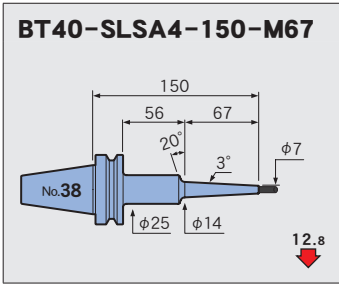
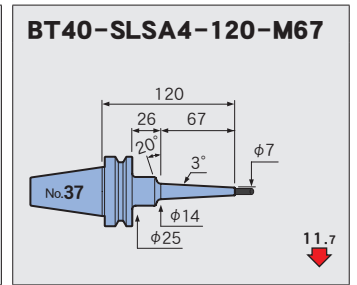
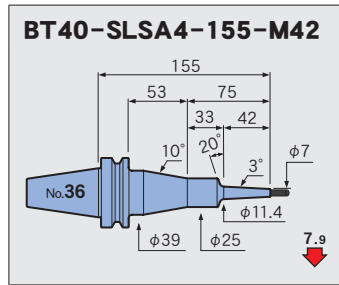
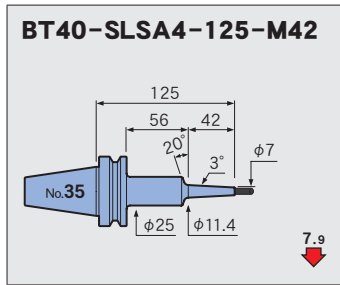
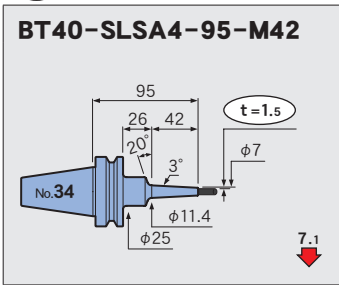
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Shrink-fit Heater
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MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
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<p>BT40-SLRA4-150-M67</p>	<p>BT40-SLRA4-180-M67</p>	<p>BT40-SLRA4-150-M97</p>	<p>BT40-SLRA4-180-M97</p>
<p>BT40-SLRA4-210-M97</p>	<p>BT40-SLRA4-180-M127</p>	<p>BT40-SLRA4-210-M127</p>	<p>BT40-SLRA4-240-M127</p>
<p>BT40-SLFB4-75-M22</p>	<p>BT40-SLFB4-105-M22</p>	<p>BT40-SLFB4-135-M22</p>	<p>BT40-SLFB4-95-M42</p>
<p>BT40-SLFB4-125-M42</p>	<p>BT40-SLFB4-155-M42</p>	<p>BT40-SLFB4-120-M67</p>	<p>BT40-SLFB4-150-M67</p>
<p>BT40-SLFB4-180-M67</p>	<p>BT40-SLSA4-90 CV</p>	<p>BT40-SLSA4-120 CV</p>	<p>BT40-SLSA4-150 CV</p>
<p>BT40-SLSA4-180 CV</p>	<p>BT40-SLSA4-210 CV</p>	<p>BT40-SLSA4-240 CV</p>	<p>BT40-SLRA4-120 CV</p>
<p>BT40-SLRA4-150 CV</p>	<p>BT40-SLRA4-180 CV</p>	<p>BT40-SLRA4-210 CV</p>	

Feature
Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

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Feature

Shrink-fit Heater

MONO 3° MONO CURVE

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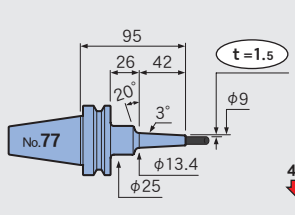
STRAIGHT anbor

OTHERS

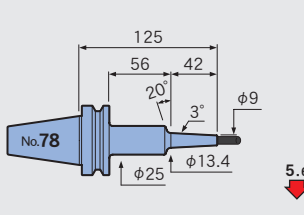
PERIPHERALS

Technical Information

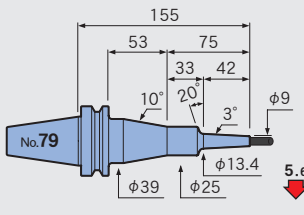
BT40-SLSA6-95-M42



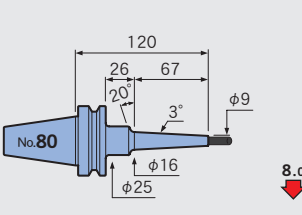
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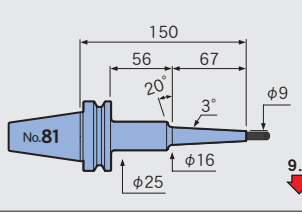
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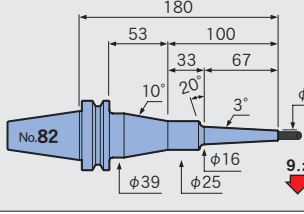
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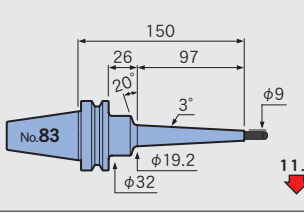
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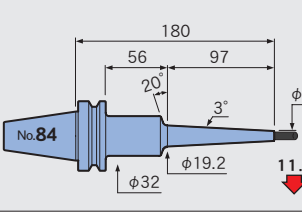
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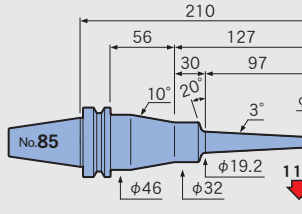
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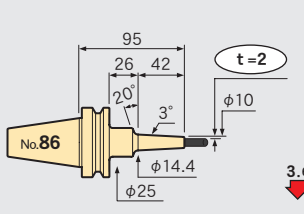
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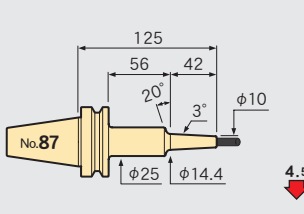
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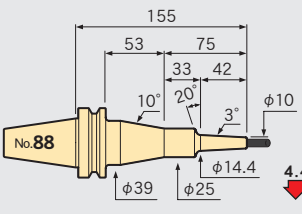
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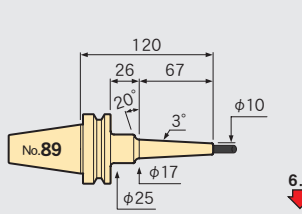
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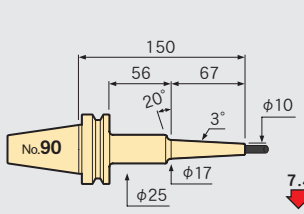
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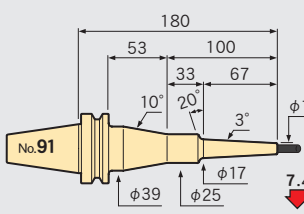
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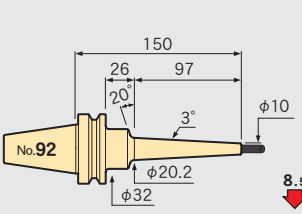
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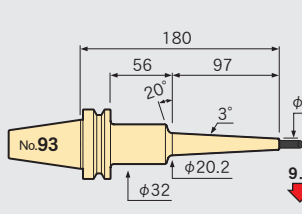
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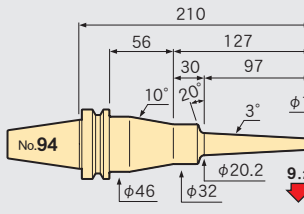
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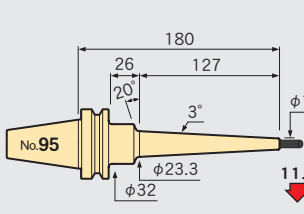
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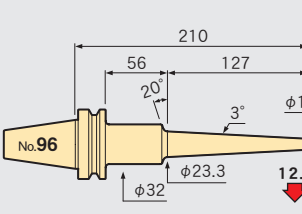
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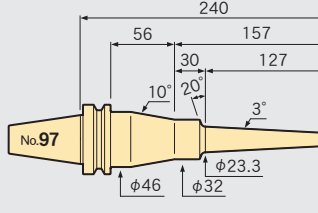
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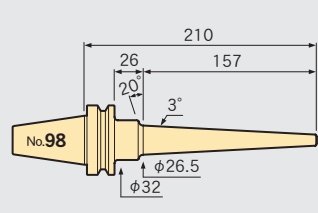
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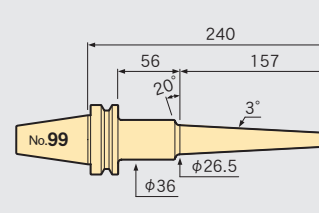
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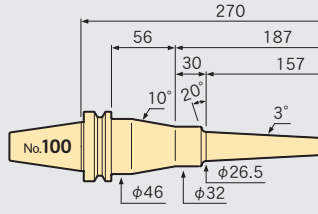
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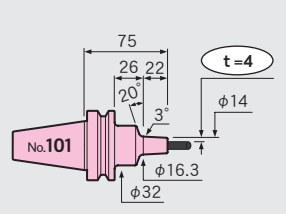
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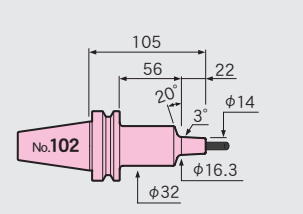
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BT40-SLRB6-75-M22



BT40-SLRB6-105-M22



<p>BT40-SLRB6-135-M22</p>	<p>BT40-SLRB6-95-M42</p>	<p>BT40-SLRB6-125-M42</p>	<p>BT40-SLRB6-155-M42</p>
<p>BT40-SLRB6-120-M67</p>	<p>BT40-SLRB6-150-M67</p>	<p>BT40-SLRB6-180-M67</p>	<p>BT40-SLFB6-75-M22</p>
<p>BT40-SLFB6-105-M22</p>	<p>BT40-SLFB6-135-M22</p>	<p>BT40-SLFB6-95-M42</p>	<p>BT40-SLFB6-125-M42</p>
<p>BT40-SLFB6-155-M42</p>	<p>BT40-SLFB6-120-M67</p>	<p>BT40-SLFB6-150-M67</p>	<p>BT40-SLFB6-180-M67</p>
<p>BT40-SLSA6-90 CV</p>	<p>BT40-SLSA6-120 CV</p>	<p>BT40-SLSA6-150 CV</p>	<p>BT40-SLSA6-180 CV</p>
<p>BT40-SLSA6-210 CV</p>	<p>BT40-SLSA6-240 CV</p>	<p>BT40-SLRA6-90 CV</p>	<p>BT40-SLRA6-120 CV</p>
<p>BT40-SLRA6-150 CV</p>	<p>BT40-SLRA6-180 CV</p>	<p>BT40-SLRA6-210 CV</p>	<p>BT40-SLFA6-90 CV</p>

Feature
Shrink-fit Heater

MONO 3°
MONO CURVE
MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
anbor

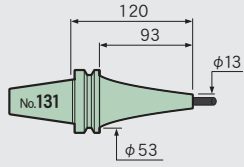
OTHERS

PERIPHERALS

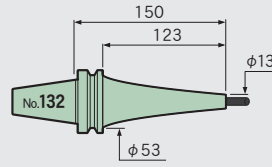
Technical
Information

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
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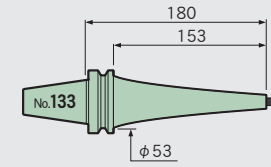
BT40-SLFA6-120 CV



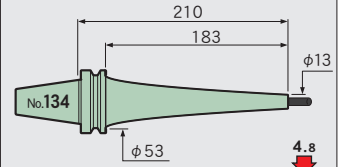
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BT40-SLFA6-180 CV

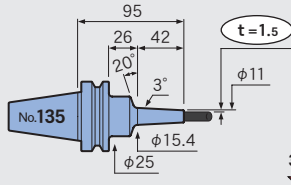


BT40-SLFA6-210 CV

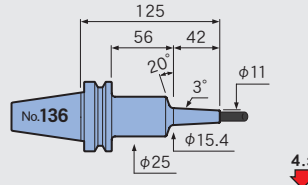


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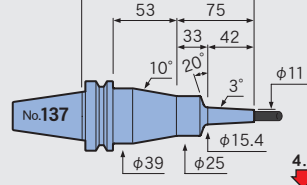
BT40-SLSA8-95-M42



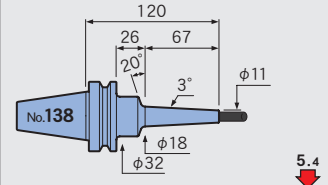
BT40-SLSA8-125-M42



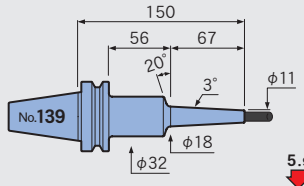
BT40-SLSA8-155-M42



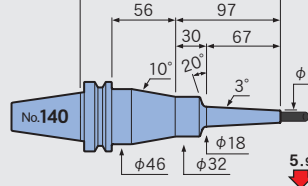
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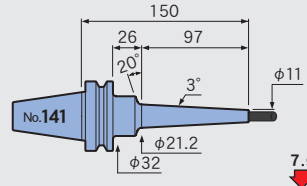
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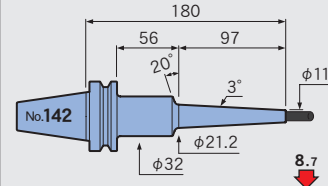
BT40-SLSA8-180-M67



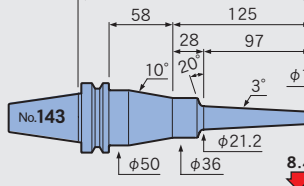
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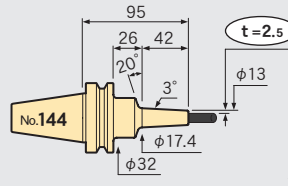
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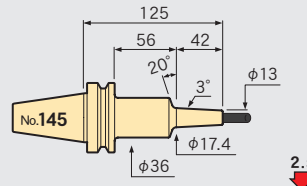
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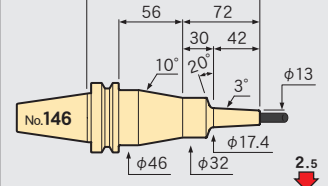
BT40-SLSB8-95-M42



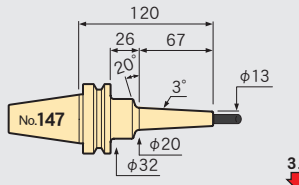
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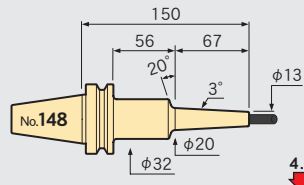
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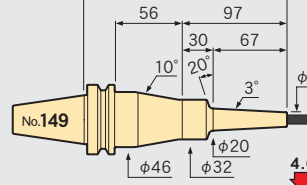
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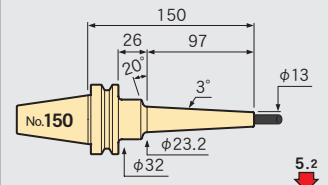
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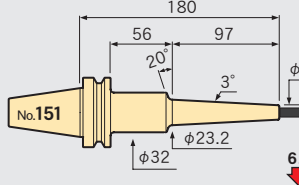
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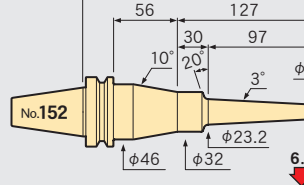
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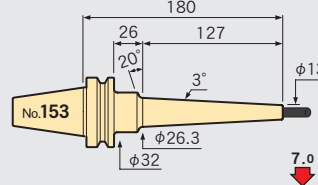
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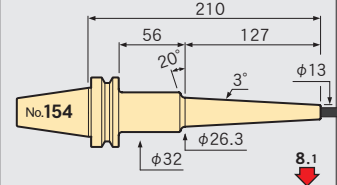
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BT40-SLSB8-180-M127



BT40-SLSB8-210-M127



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<p>BT40-SLSB8-270-M157</p> <p>No.158</p> <p>8.7</p>	<p>BT40-SLRB8-75-M22</p> <p>No.159</p> <p>0.7</p>	<p>BT40-SLRB8-105-M22</p> <p>No.160</p> <p>0.9</p>	
<p>BT40-SLRB8-135-M22</p> <p>No.161</p> <p>1.0</p>	<p>BT40-SLRB8-95-M42</p> <p>No.162</p> <p>1.1</p>	<p>BT40-SLRB8-125-M42</p> <p>No.163</p> <p>1.4</p>	<p>BT40-SLRB8-155-M42</p> <p>No.164</p> <p>1.5</p>
<p>BT40-SLRB8-120-M67</p> <p>No.165</p> <p>1.7</p>	<p>BT40-SLRB8-150-M67</p> <p>No.166</p> <p>2.2</p>	<p>BT40-SLRB8-180-M67</p> <p>No.167</p> <p>2.2</p>	<p>BT40-SLFB8-75-M22</p> <p>No.168</p> <p>0.7</p>
<p>BT40-SLFB8-105-M22</p> <p>No.169</p> <p>0.9</p>	<p>BT40-SLFB8-135-M22</p> <p>No.170</p> <p>1.0</p>	<p>BT40-SLFB8-95-M42</p> <p>No.171</p> <p>1.1</p>	<p>BT40-SLFB8-125-M42</p> <p>No.172</p> <p>1.4</p>
<p>BT40-SLFB8-155-M42</p> <p>No.173</p> <p>1.5</p>	<p>BT40-SLFB8-120-M67</p> <p>No.174</p> <p>1.7</p>	<p>BT40-SLFB8-150-M67</p> <p>No.175</p> <p>2.2</p>	<p>BT40-SLFB8-180-M67</p> <p>No.176</p> <p>2.0</p>
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Feature

Shrink-fit Heater

MONO 3°
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UNO

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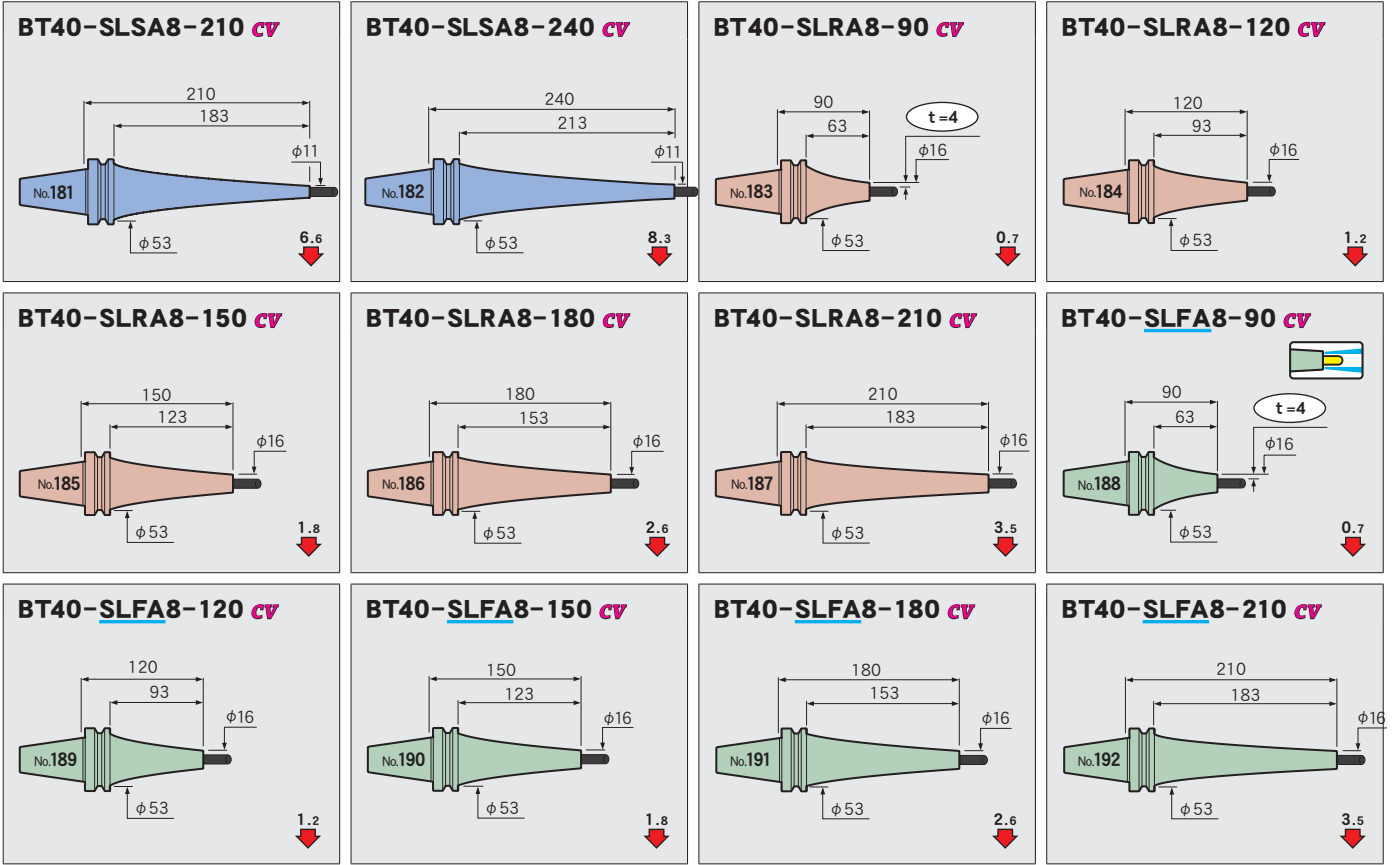
STRAIGHT
arbor

OTHERS

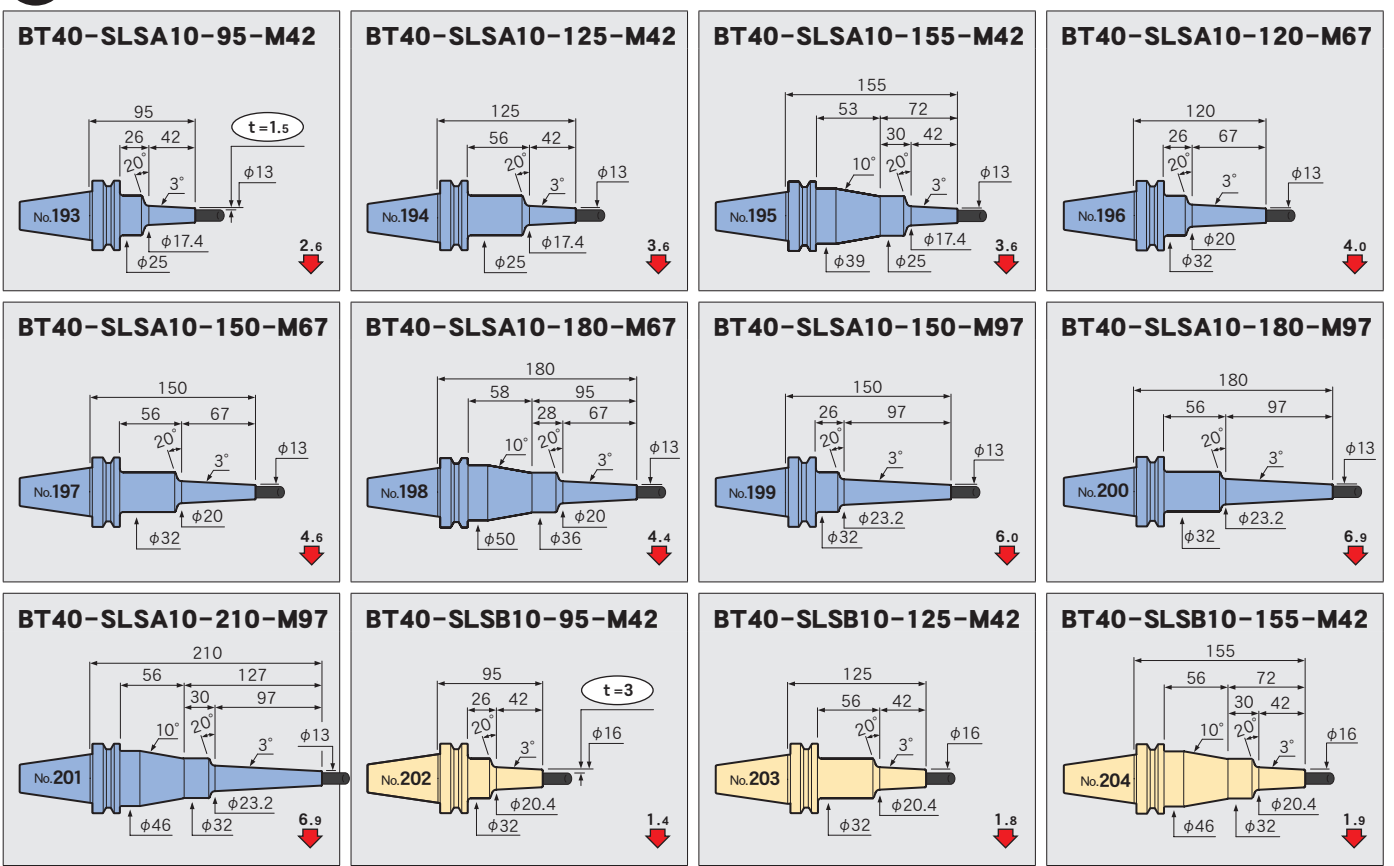
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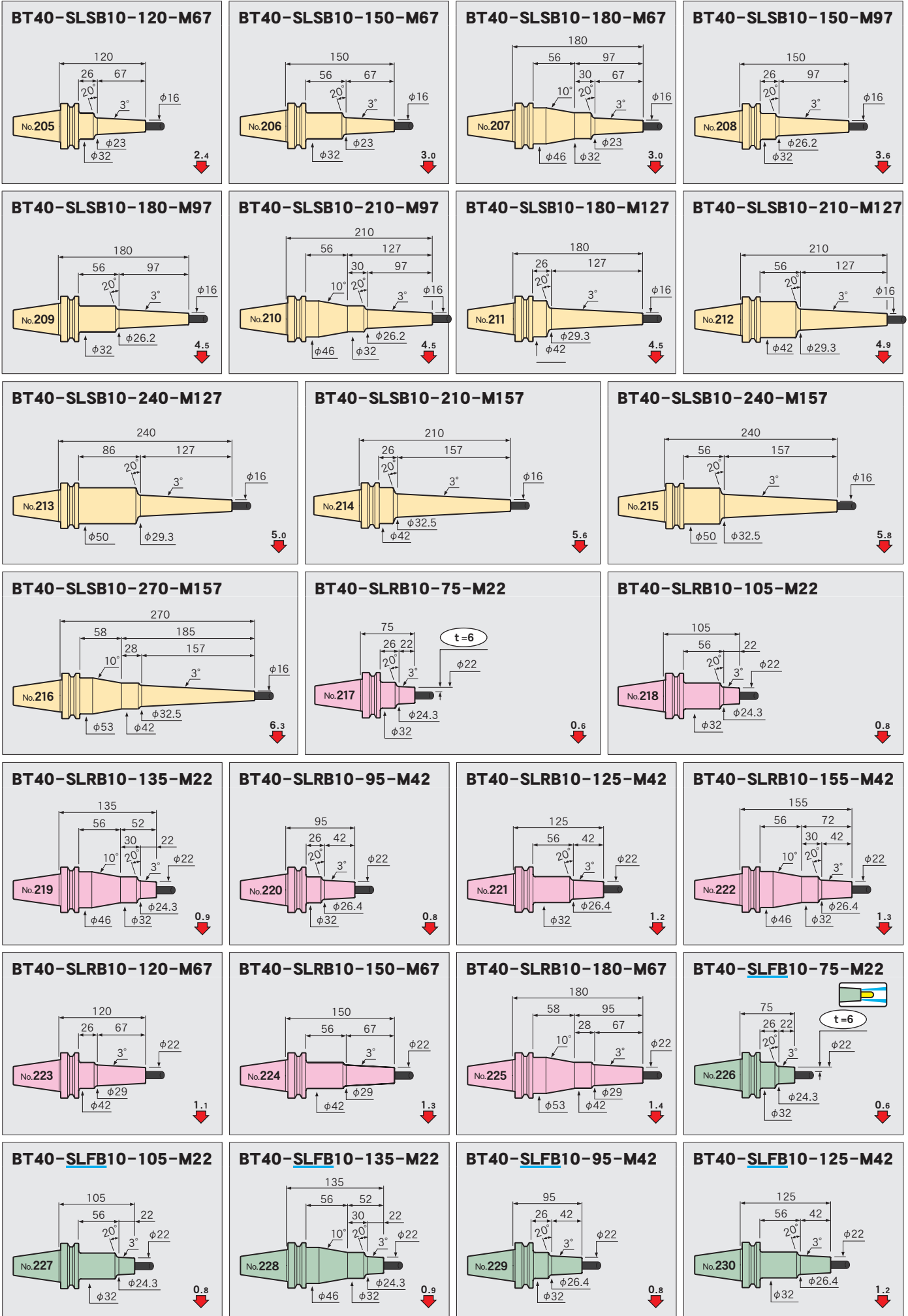
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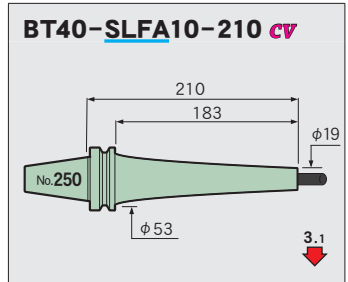
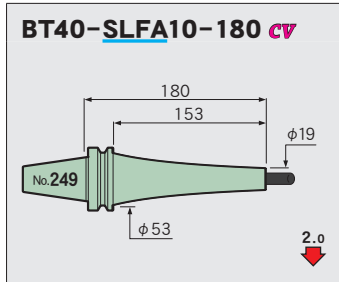
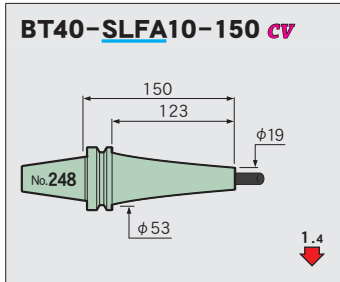
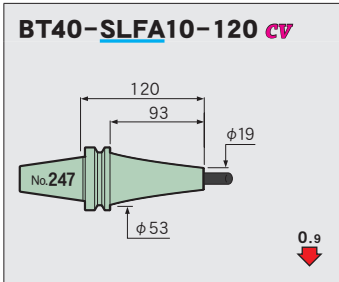
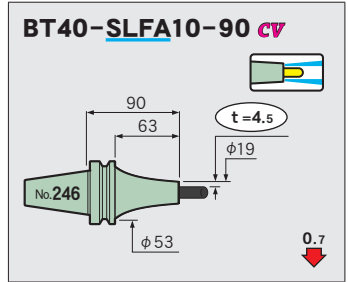
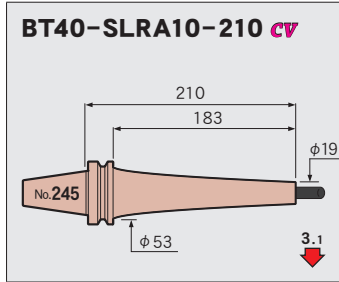
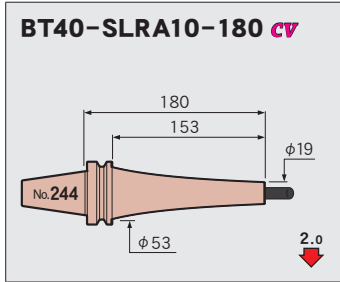
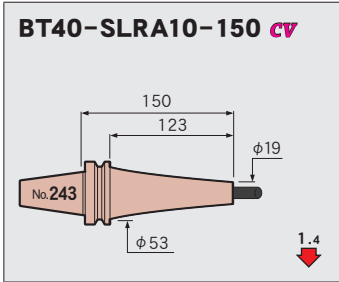
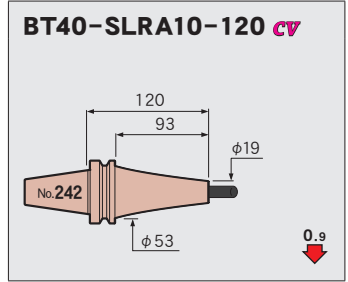
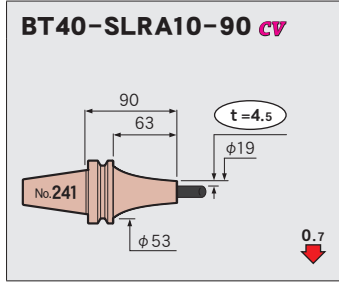
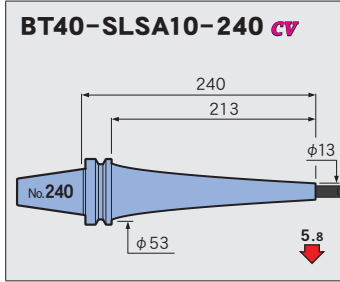
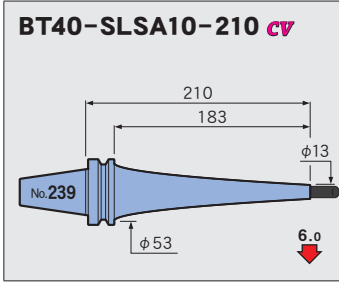
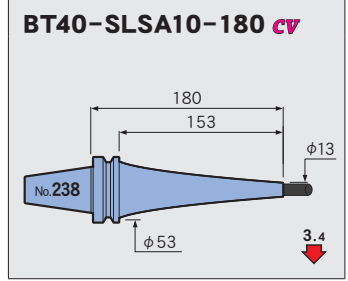
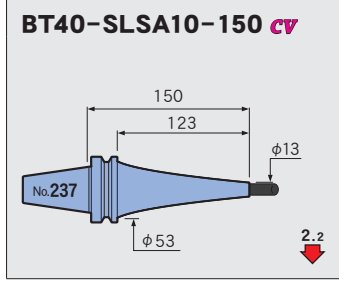
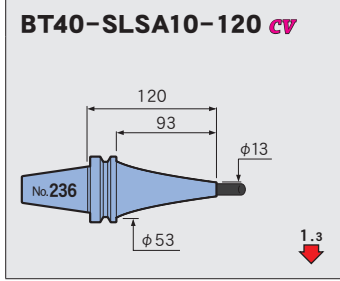
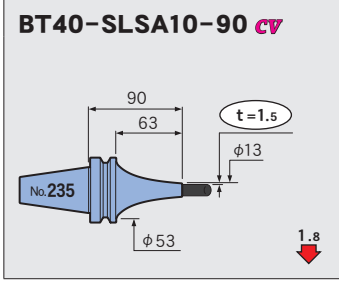
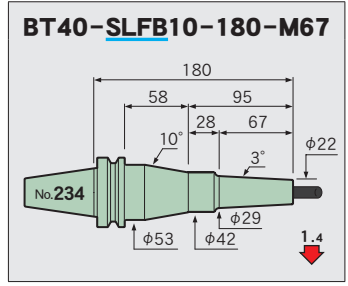
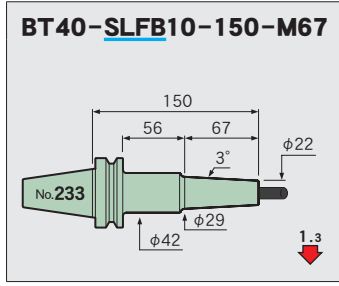
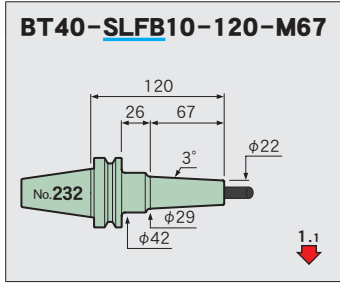
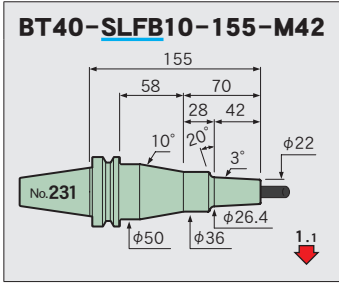
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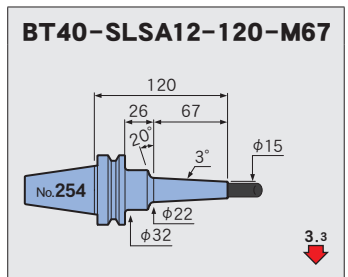
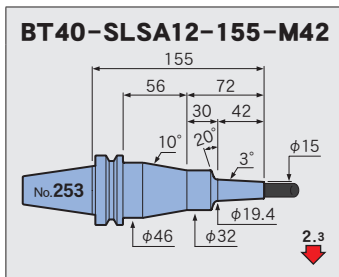
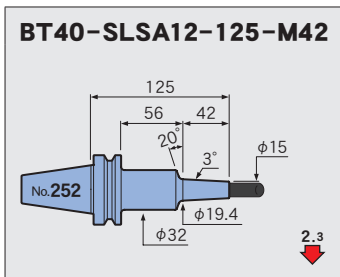
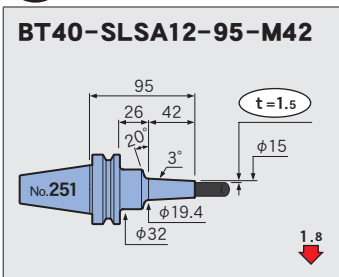
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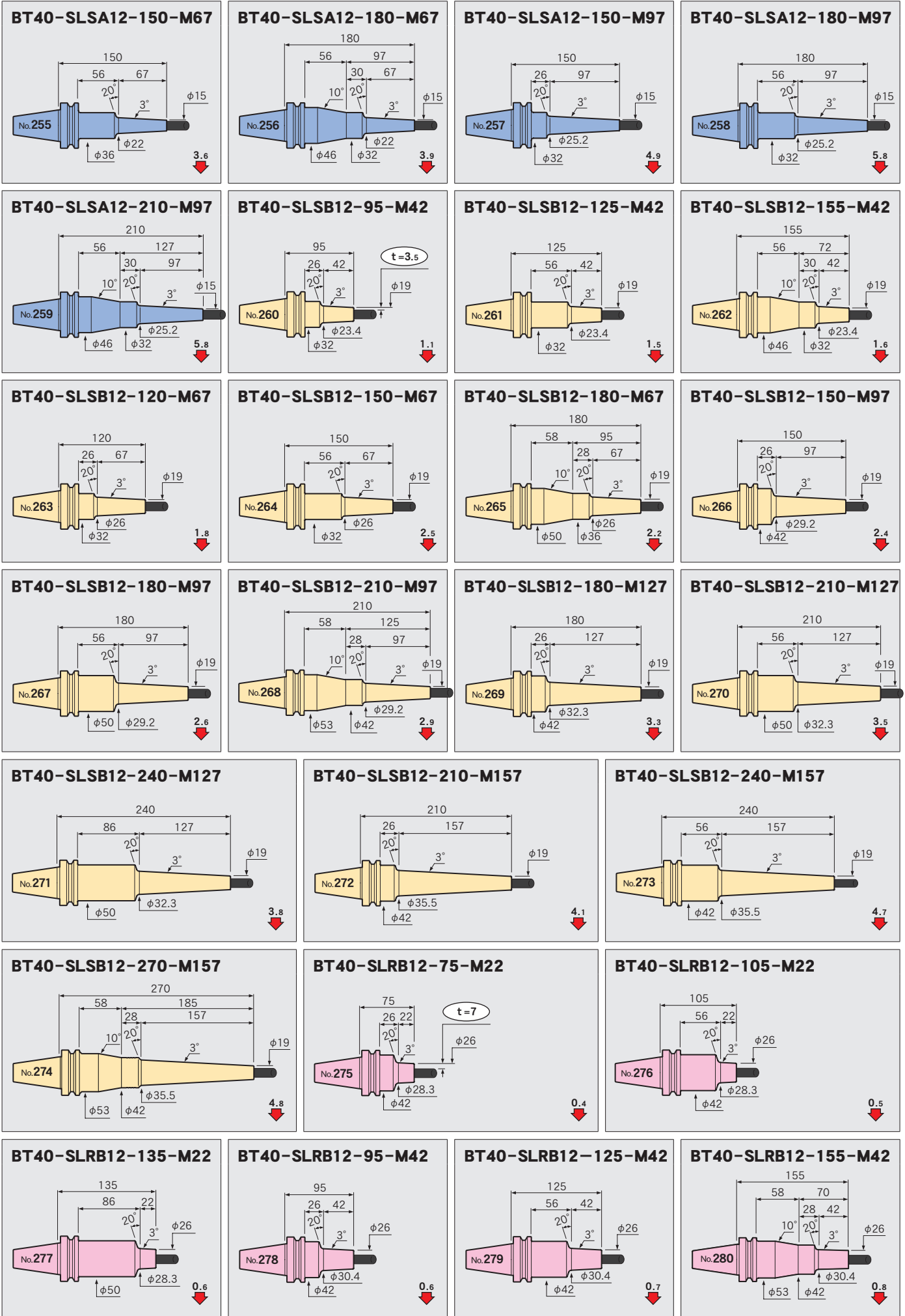
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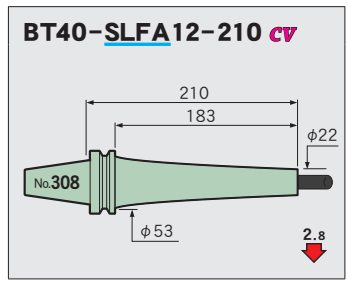
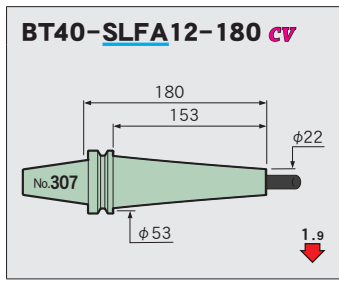
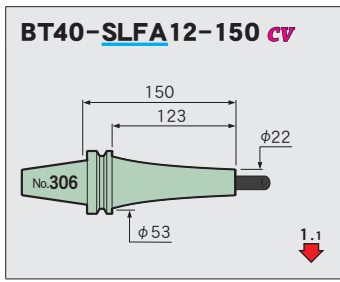
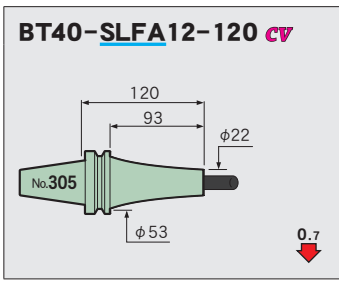
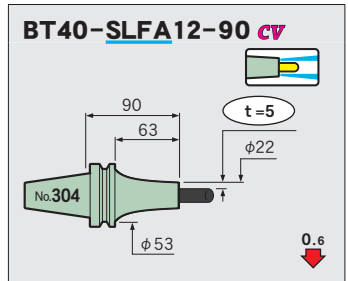
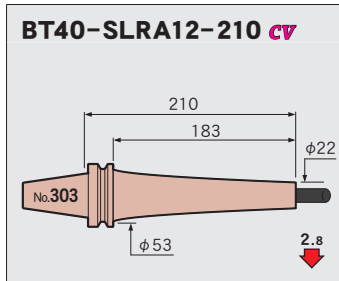
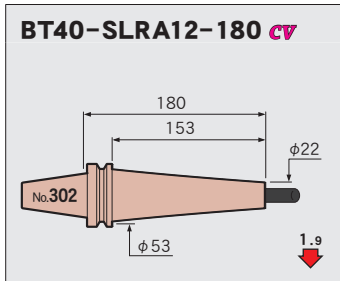
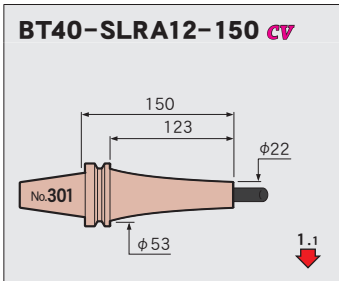
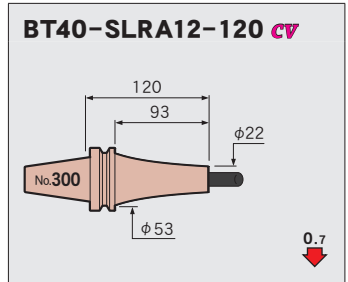
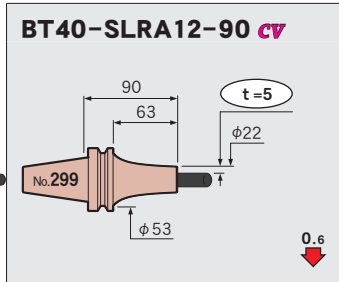
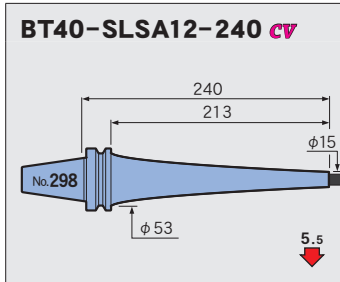
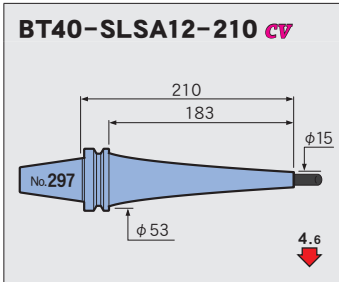
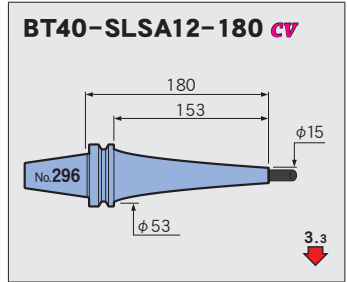
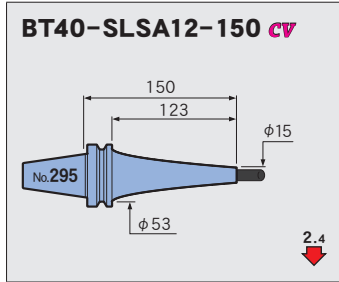
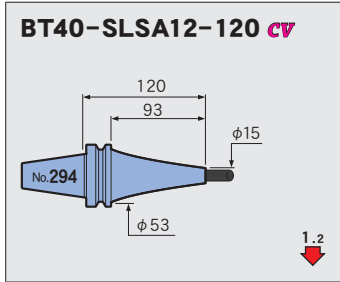
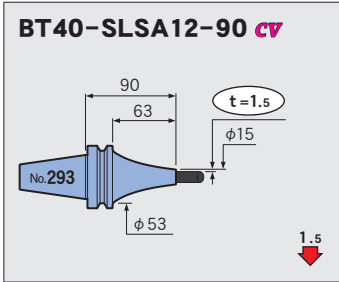
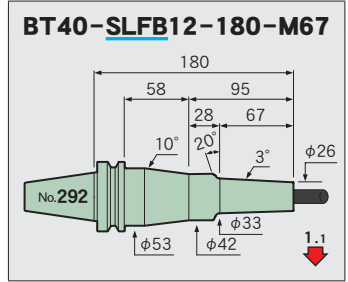
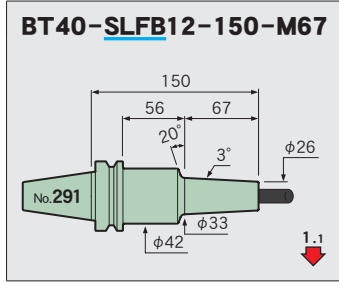
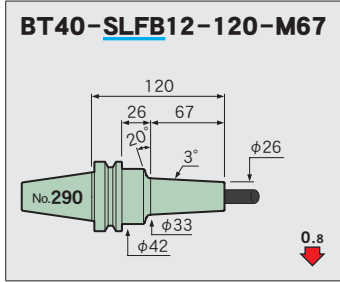
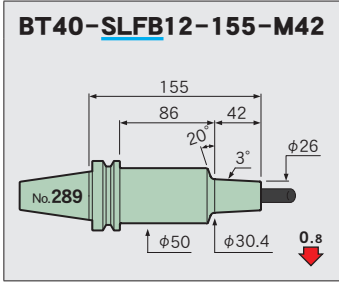
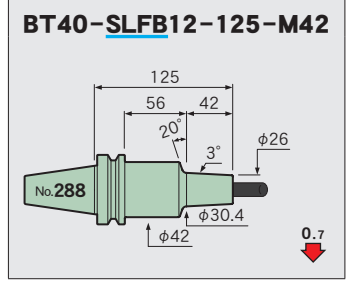
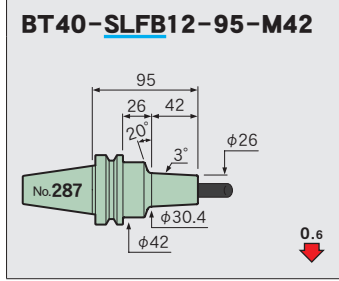
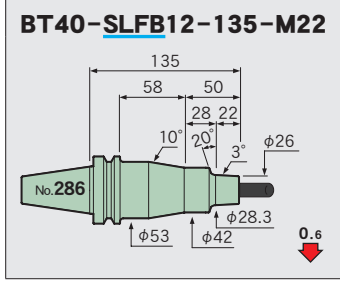
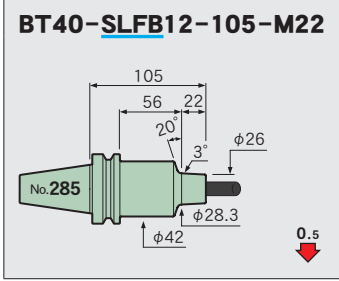
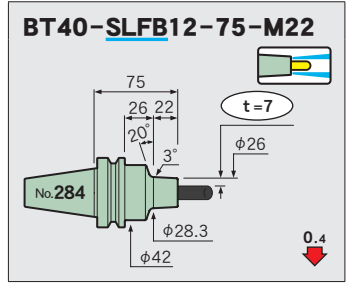
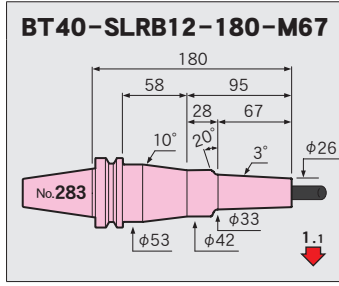
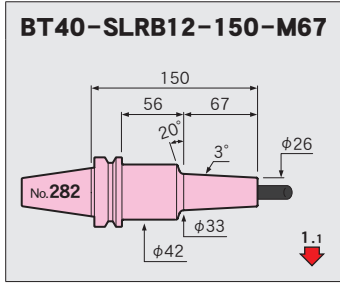
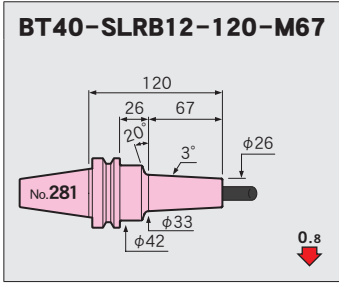
STRAIGHT
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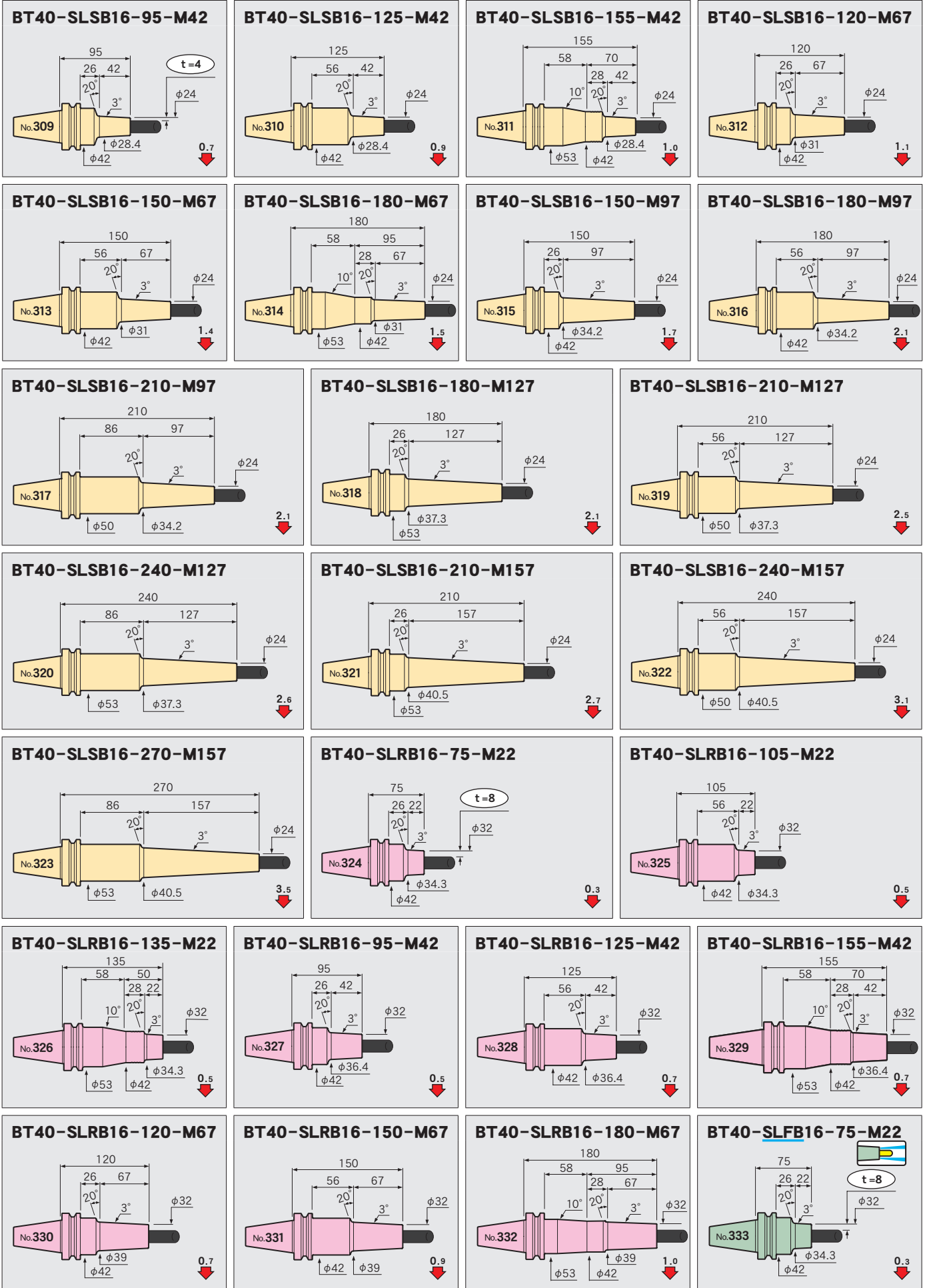
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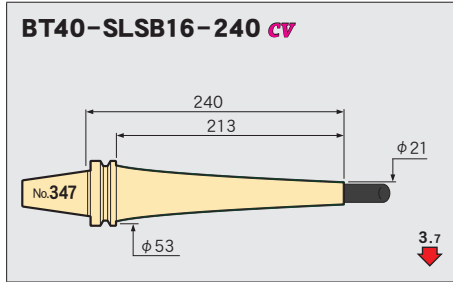
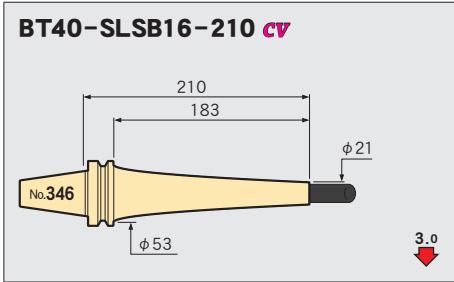
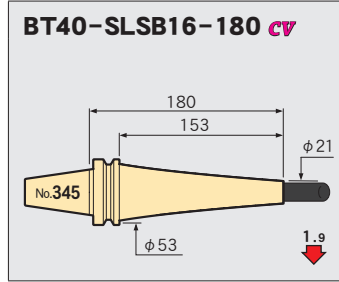
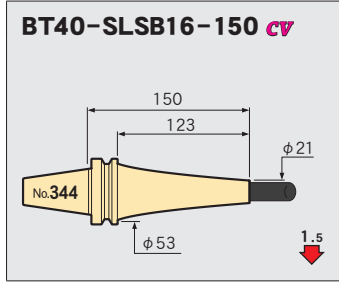
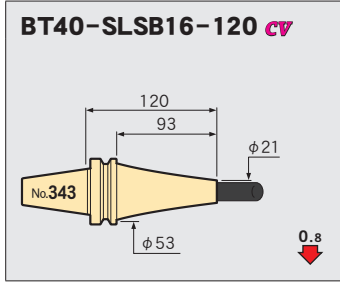
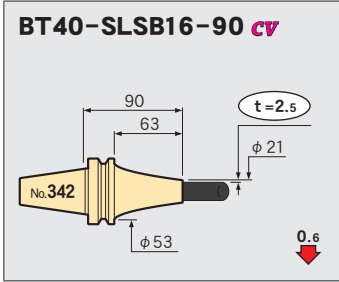
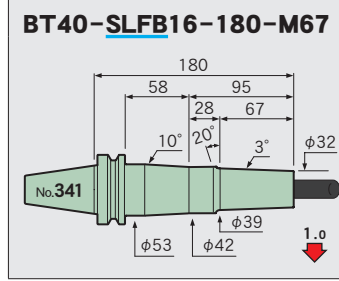
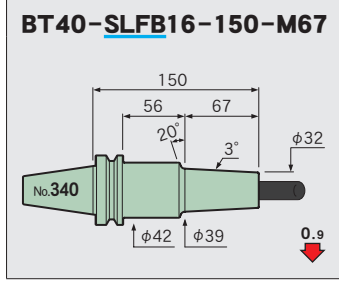
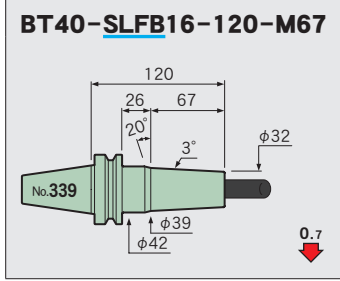
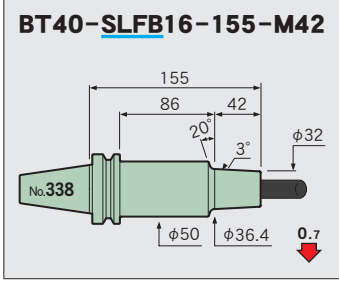
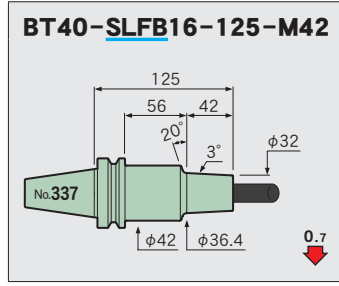
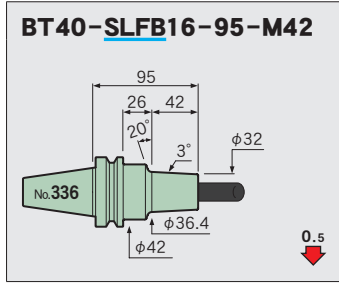
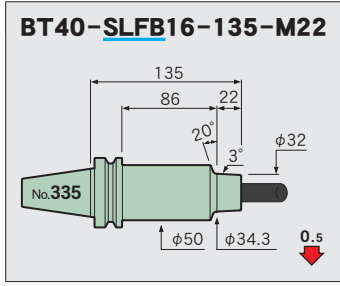
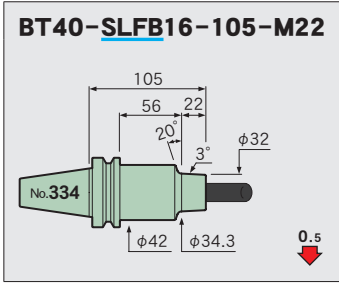
STRAIGHT
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OTHERS

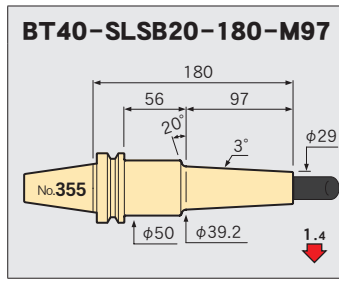
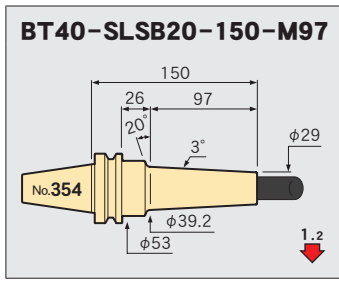
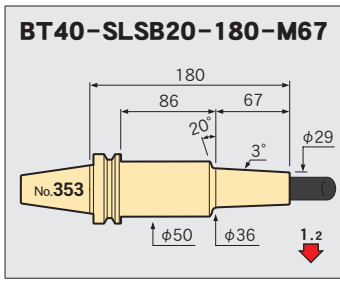
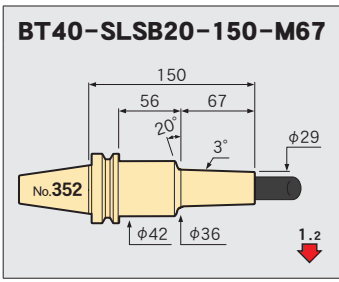
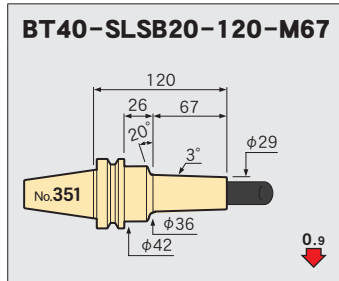
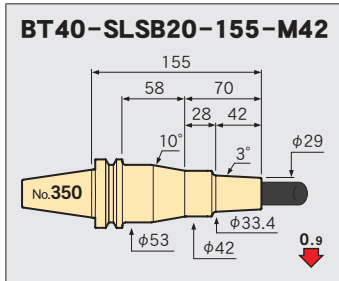
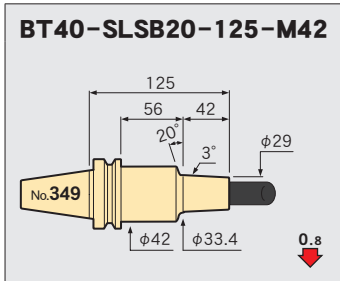
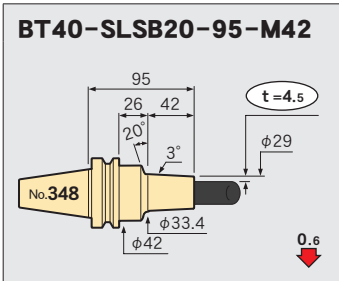
PERIPHERALS

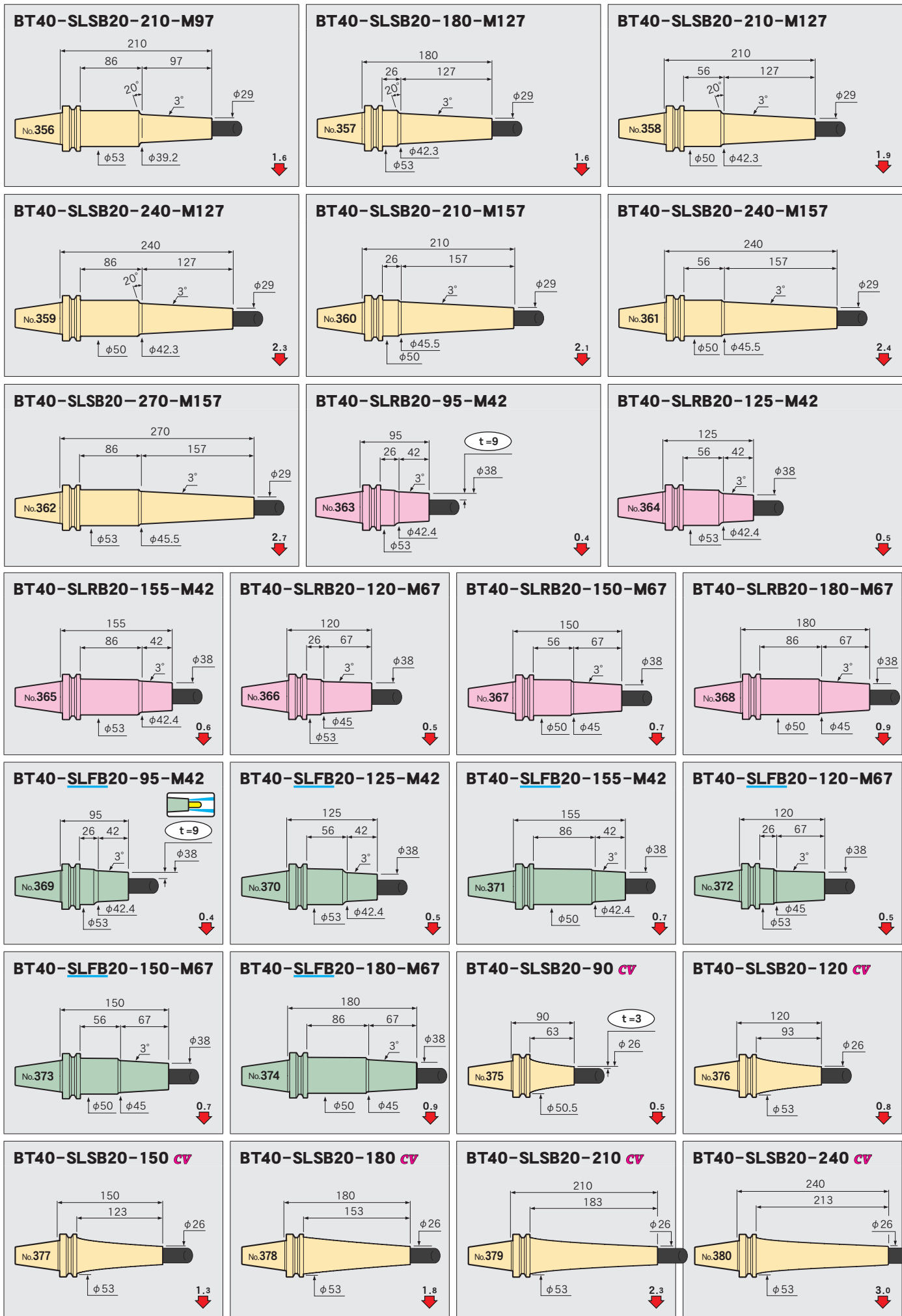
Technical
Information

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information



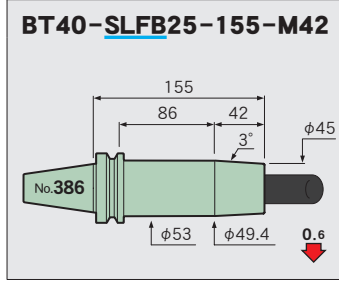
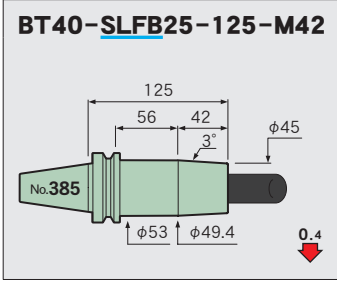
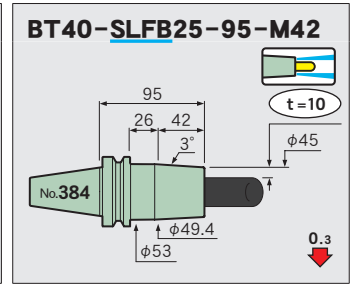
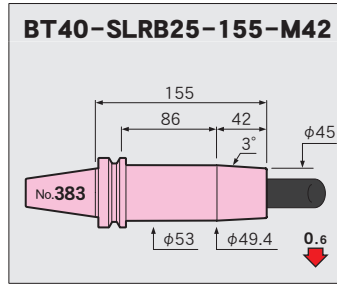
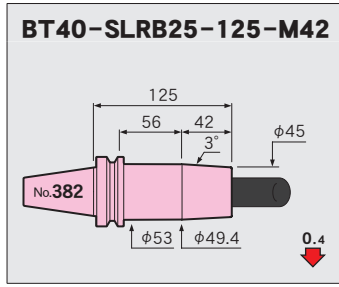
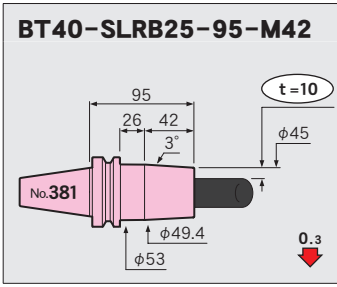
φ20



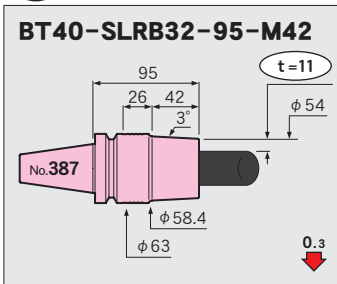


Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS

φ25



φ32



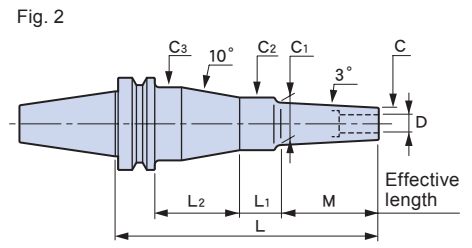
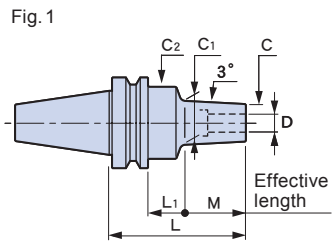
φ70 Nozzle (HRB-03S)
Required for shrinking the SLRB32.

CODE
HRB-NZL70

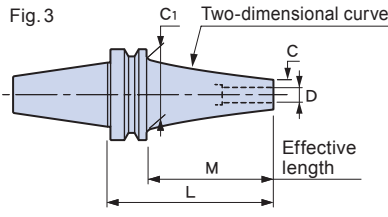
HEAT ROBO Baby 3000S

BT50

MONO 3°



MONO CURVE CV



Option

- Retention knob → P.216

Caution

- Retention knob... Use a retention knob with hole, or remove the retention knob and heat it.
- Setting cutters... Be sure to insert the tool beyond the safety mark.

Safety mark

Thickness t

H Clamping length

h Max. insertion length

Compatibility table for HRD-01S



[○] Available [x] Not available


[▲] Usable by raising the heating unit. → P.233

CV : Curve

Thickness

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model
BT50-SLSA3-110-M 42	1	3	6	1.5	110	42	30	—	10.4	25	—	9	165	3.6	4.4	9.1	○
-135-M 67					135	67			13				190		5.1	14.7	
-140-M 42					140	42	60		10.4				195	3.7	4.4	9.8	
-165-M 67					165	67			13				220		5.2	15.9	
-M 97						97	30		16.2	26					6	20.8	
-170-M 42	2				170	42	33	57	10.4		40		225	4.1	4.6	9.9	
-195-M 67					195	67			13	25	39		250	4	5.4	15.7	
-M 97	1					97	60	—	16.2	26	—			3.8	6.1	22.3	
-225-M 97	2				225		33	57			40		280	4.1	6.2	22.1	
-SLRA3- 90-M 22	1	3	7.5	2.25	90	22	30	—	9.8	25	—	9	145	3.6	4.6	2.8	○
-110-M 42					110	42			11.9				165	3.6	4.9	5.3	
-120-M 22					120	22	60		9.8				175	3.7	4.7	3.2	
-135-M 67					135	67	30		14.5				190		5.4	8.9	
-140-M 42					140	42	60		11.9	26			195	3.8	5	6	
-150-M 22	2				150	22	33	57	9.8	25	39		205	4	4.9	3.2	
-165-M 67	1				165	67	60	—	14.5		—		220	3.8	5.5	10	
-M 97						97	30		17.7	26				3.7	6.1	13	
-170-M 42	2				170	42	33	57	11.9	25	39		225	4	5.1	6	
-195-M 67					195	67			14.5				250		5.7	9.8	
-M 97	1					97	60	—	17.7	26	—			3.8	6.2	14.5	
-M127						127	30		20.8	32					7.7	15.7	
-225-M 97	2				225	97	33	57	17.7	25	39		280	4.1	6.3	14.4	
-M127	1					127	60	—	20.8	36	—				7.7	16.3	
-255-M127	2				255		30	60		32	46		310	4.4	8	16.5	

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model
BT50-SLFB3- 90-M 22	1	3	9.5	3.25	90	22	30	—	11.8	26	—	9	145	3.6	4.4	1.9	25
 -110-M 42					110	42			13.9				165	3.7	4.7	3.3	28
-120-M 22					120	22	60		11.8	25			175		4.5	2.4	26
-135-M 67					135	67	30		16.5	26			190		5.4	5.4	31
-140-M 42					140	42	60		13.9	25			195		4.8	4	29
-150-M 22	2				150	22	33	57	11.8		39		205	4	4.6	2.3	27
-165-M 67	1				165	67	60	—	16.5	26	—		220	3.8	5.5	6.4	32
-170-M 42	2				170	42	33	57	13.9	25	39		225	4	4.9	3.9	30
-195-M 67					195	67			16.5				250	4.1	5.7	6.4	33
BT50-SLSA4-110-M 42	1	4	7	1.5	110	42	30	—	11.4	25	—	12	165	3.6	5.1	7.2	34
-135-M 67					135	67			14				190		5.2	11.8	37
-140-M 42					140	42	60		11.4				195	3.7		8	35
-165-M 67					165	67			14				220			13	38
-M 97					97	30			17.2						6.1	16.7	40
-170-M 42	2				170	42	33	57	11.4		39		225	4	5.4	7.9	36
-195-M 67					195	67			14				250			12.8	39
-M 97	1				97	60	—		17.2	26	—			3.8	6.2	18.4	41
-225-M 97	2				225		33	57		25	39		280	4.1	6.3	18.2	42
-SLRA4- 90-M 22	1	4	10	3	90	22	30	—	12.3	25	—	12	145	3.6	4.7	1.7	43
-110-M 42					110	42			14.4				165		5.1	3.1	46
-120-M 22					120	22	60		12.3				175	3.7	4.8	2.2	44
-135-M 67					135	67	30		17				190		5.9	5.2	49
-140-M 42					140	42	60		14.4				195		5.2	3.9	47
BT50 -150-M 22	2				150	22	33	57	12.3		39		205	4	5	2.2	45
-165-M 67	1				165	67	60	—	17		—		220	3.8	5.9	6.4	50
-M 97					97	30			20.2					3.7	6.8	7.9	52
-170-M 42	2				170	42	33	57	14.4		39		225	4	5.4	3.8	48
-195-M 67					195	67			17				250	4.1	6.1	6.2	51
-M 97	1				97	60	—		20.2		—			3.8	6.9	9.7	53
-M127					127	30			23.3	32					9.2	9.4	55
-225-M 97	2				225	97		60	20.2	25	39		280	4.1	7.1		54
-M127	1				127	60	—		23.3	32	—			4	9.2	10.4	56
-255-M127	2				255		30	60			46		310	4.4	9.5	10.3	57
-SLFB4- 90-M 22	1	4	12	4	90	22	30	—	14.3	25	—	12	145	3.6	4.6	1.4	58
 -110-M 42					110	42			16.4				165	3.7	5	2.2	61
-120-M 22					120	22	60		14.3				175		4.6	1.9	59
-135-M 67					135	67	30		19	26			190		5.8	3.6	64
-140-M 42					140	42	60		16.4				195	3.8	5.1	2.9	62
-150-M 22	2				150	22	33	57	14.3	25	39		205	4	4.8	1.8	60
-165-M 67	1				165	67	60	—	19		—		220	3.8	5.9	4.8	65
-170-M 42	2				170	42	33	57	16.4	26	40		225	4.1	5.3	2.8	63
-195-M 67					195	67			19				250	4.2	6.1	4.5	66
-SLSA4-165 CV	3	4	7	1.5	165	127	—	—	85	—	—	12	220	5.2	15.4	1.8	67
-195 CV					195	157							250	5.3	15.9	2.6	68
-225 CV					225	187							280	5.5	16.4	3.8	69
-255 CV					255	217							310	5.6	16.9	5.7	70
-285 CV					285	247							340	6.4	19.5	5.9	71
-315 CV					315	277							370	8.3	26	7.7	72
BT50-SLSA6-110-M 42	1	6	9	1.5	110	42	30	—	13.4	25	—	18	165	3.6	5.4	4.8	73
-135-M 67					135	67			16				190	3.7	6.4	8.1	76
-140-M 42					140	42	60		13.4				195		5.4	5.7	74
-165-M 67					165	67			16				220	3.8	6.5	9.4	77
-M 97					97	30			19.2	32				3.7	8.3	11	79
-170-M 42	2				170	42	33	57	13.4	25	39		225	4	5.6	5.6	75
-195-M 67					195	67			16				250		6.6	9.2	78
-M 97	1				97	60	—		19.2	32	—			3.9	8.2	11.7	80
-225-M 97	2				225		30	60			46		280	4.3	8.5		81

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model				
BT50-SLSB6-110-M 42	1	6	10	2	110	42	30	—	14.4	25	—	18	165	3.6	6	3.7	○	82			
-135-M 67					135	67	—	17	—	—	—	—	—	—	190	3.7	7.4	6.2	○	85	
-140-M 42					140	42	60	14.4	—	—	—	—	—	—	195	—	6.1	4.6	○	83	
-165-M 67					165	67	—	17	—	—	—	—	—	—	220	3.8	7.4	7.6	○	86	
-M 97					—	97	30	20.2	32	—	—	—	—	—	—	—	9.6	8.5	○	88	
-170-M 42					2	170	42	33	57	14.4	25	39	—	—	—	225	4	6.2	4.4	○	84
-195-M 67						195	67	—	17	—	—	—	—	—	250	4.1	7.6	7.3	○	87	
-M 97					1	97	60	—	20.2	32	—	—	—	—	—	—	3.9	9.6	9.2	○	89
BT50 -M127						127	30	—	23.3	—	—	—	—	—	—	—	3.8	11.3	11.1	○	91
-225-M 97					2	225	97	—	60	20.2	—	46	—	—	—	280	4.3	9.9	9.2	○	90
-M127	1	127	60	—		23.3	—	—	—	—	—	—	4	11.2	12.1	○	92				
-M157		2	157	30	—	26.5	—	—	—	—	—	—	3.9	13	13.3	○	94				
-255-M127	2		255	127	—	60	23.3	32	46	—	—	—	310	4.4	11.5	12	▲	93			
-M157		1	157	60	—	26.5	—	—	—	—	—	—	4.1	12.9	14.7	○	95				
-285-M157	2		285	—	30	60	—	—	46	—	—	—	340	4.5	13.2	14.5	○	96			
-SLRB6- 90-M 22		1	6	14	4	90	22	30	—	16.3	32	—	18	145	3.7	5.5	1	○	97		
-110-M 42	110					42	—	18.4	—	—	—	—	—	—	165	—	6.6	1.6	○	100	
-120-M 22	120					22	60	16.3	—	—	—	—	—	—	175	3.8	5.5	1.2	○	98	
-135-M 67	135					67	30	21	—	—	—	—	—	—	190	—	8	2.6	○	103	
-140-M 42	140					42	60	18.4	—	—	—	—	—	—	195	3.9	6.6	1.9	○	101	
-150-M 22	2					150	22	30	60	16.3	—	46	—	—	—	205	4.2	5.8	1.2	○	99
-165-M 67						1	165	67	60	—	21	—	—	—	—	220	3.9	8	3.1	○	104
-170-M 42	2						170	42	30	60	18.4	—	46	—	—	225	4.3	6.9	1.9	○	102
-195-M 67						1	195	67	—	21	—	—	—	—	—	250	—	8.3	3	○	105
-SLFB6- 90-M 22	1						6	14	4	90	22	30	—	16.3	32	—	18	145	3.7	5.5	1
 -110-M 42		110	42	—	18.4	—				—	—	—	—	—	165	—	6.6	1.6	○	109	
-120-M 22		120	22	60	16.3	—				—	—	—	—	—	175	3.8	5.5	1.2	○	107	
-135-M 67		135	67	30	21	—				—	—	—	—	—	190	—	8	2.6	○	112	
-140-M 42		140	42	60	18.4	—				—	—	—	—	—	195	3.9	6.6	1.9	○	110	
-150-M 22		2	150	22	30	60				16.3	—	46	—	—	—	205	4.2	5.8	1.2	○	108
-165-M 67			1	165	67	60				—	21	—	—	—	—	220	3.9	8	3.1	○	113
-170-M 42		2		170	42	30				60	18.4	—	46	—	—	225	4.3	6.9	1.9	○	111
-195-M 67			1	195	67	—				21	—	—	—	—	—	250	—	8.3	3	○	114
-SLSA6-165 cv		3		6	9	1.5				165	127	—	—	85	—	—	18	220	5.1	15.1	1.5
-195 cv	195		157				—	—	—	—	—	—	—	—	250	5.2	15.5	2.4	○	116	
-225 cv	225		187				—	—	—	—	—	—	—	—	280	5.7	16.8	2.9	○	117	
-255 cv	255		217				—	—	—	—	—	—	—	—	310	5.9	18.4	4	▲	118	
-285 cv	285		247				—	—	—	—	—	—	—	—	340	6.2	19.5	5.2	○	119	
-315 cv	315		277				—	—	—	—	—	—	—	—	370	8.4	26.8	6.9	○	120	
BT50-SLSA8-110-M 42	1	8	11	1.5	110	42	30	—	15.4	25	—	24	165	3.6	6.9	3.5	○	121			
-135-M 67					135	67	—	18	32	—	—	—	—	—	190	3.7	8.7	5.4	○	124	
-140-M 42					140	42	60	15.4	25	—	—	—	—	—	195	—	6.9	4.4	○	122	
-165-M 67					165	67	—	18	32	—	—	—	—	—	220	3.9	8.6	5.9	○	125	
-M 97					—	97	30	21.2	—	—	—	—	—	—	—	—	3.8	10.8	7.9	○	127
-170-M 42					2	170	42	33	57	15.4	25	39	—	—	—	225	4	7.2	4.3	○	123
-195-M 67						1	195	67	30	60	18	32	46	—	—	—	250	4.3	8.9	5.9	○
-M 97					2		97	60	—	21.2	—	—	—	—	—	—	—	3.9	10.7	8.7	○
-225-M 97						2	225	—	30	60	—	—	46	—	—	—	280	4.3	11	8.6	○

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO



HYPER
version


STRAIGHT
arbor

OTHERS

PERIPHERALS



Technical
Information

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	
BT50-SLSB8-110-M 42	1	8	13	2.5	110	42	30	—	17.4	32	—	24	165	3.7	7.7	2.1	○	130
-135-M 67					135	67			20				190		9.8	3.5		133
-140-M 42					140	42	60		17.4				195	3.8	7.6	2.4		131
-165-M 67					165	67			20				220	3.9	9.8	4		134
-M 97						97	30		23.2					3.8	12.4	5.3		136
-170-M 42	2				170	42		60	17.4		46		225	4.3	7.9	2.4		132
-195-M 67					195	67			20				250		10.1	4		135
BT50 -M 97	1					97	60	—	23.2		—			4	12.3	6.1		137
-M127						127	30		26.3					3.9	14.9	7.1		139
-225-M 97	2				225	97		60	23.2		46		280	4.4	12.6	6		138
-M127	1					127	60	—	26.3		—			4	14.9	8.2		140
-M157						157	30		29.5	42					17.5	8		142
-255-M127	2				255	127		60	26.3	32	46		310	4.5	15.2	8.1	▲	141
-M157	1					157	60	—	29.5	42	—			4.3	17.5	8.5		143
-285-M157	2				285		28	62			56		340	4.9	17.8			144
-SLRB8- 90-M 22	1	8	18	5	90	22	30	—	20.3	32	—	24	145	3.7	6	0.7	×	145
-110-M 42					110	42			22.4				165		7.7	1.1	○	148
-120-M 22					120	22	60		20.3				175	3.8	5.9	0.9	×	146
-135-M 67					135	67	30		25				190		9.8	1.7	○	151
-140-M 42					140	42	60		22.4				195	3.9	7.7	1.4		149
-150-M 22	2				150	22	30	60	20.3		46		205	4.3	6.2	0.9	×	147
-165-M 67	1				165	67	60	—	25		—		220	4	9.8	2.2	○	152
-170-M 42	2				170	42	30	60	22.4	32	46		225	4.3	8	1.4		150
-195-M 67					195	67			25				250	4.4	10.1	2.2		153
-SLFB8- 90-M 22	1	8	18	5	90	22	30	—	20.3	32	—	24	145	3.7	6	0.7	×	154
 -110-M 42					110	42			22.4				165		7.7	1.1	○	157
-120-M 22					120	22	60		20.3				175	3.8	5.9	0.9	×	155
-135-M 67					135	67	30		25				190		9.8	1.7	○	160
-140-M 42					140	42	60		22.4				195	3.9	7.7	1.4		158
-150-M 22	2				150	22	30	60	20.3		46		205	4.3	6.2	0.9	×	156
-165-M 67	1				165	67	60	—	25		—		220	4	9.8	2.2	○	161
-170-M 42	2				170	42	30	60	22.4		46		225	4.3	8	1.4		159
-195-M 67					195	67			25				250	4.4	10.1	2.2		162
-SLSA8-165 CV	3	8	11	1.5	165	127	—	—	85	—	—	24	220	4.9	14.7	1.4	○	163
-195 CV					195	157							250	5.3	16.1	1.9		164
-225 CV					225	187							280	5.8	17.7	2.3		165
-255 CV					255	217							310		17.9	3.7	▲	166
-285 CV					285	247							340	6	19.1	4.9		167
-315 CV					315	277							370	8.4	28	5		168
-SLRA8-195 CV	3	8	16	4	195	157	—	—	85	—	—	24	250	5.4	17.3	1.1	○	169
-225 CV					225	187							280	5.6	18.3	1.5		170
-255 CV					255	217							310	5.8	19.1	2.2	▲	171
-285 CV					285	247							340	5.9	19.9	3		172
-SLFA8-195 CV	3	8	16	4	195	157	—	—	85	—	—	24	250	5.4	17.3	1.1	○	173
 -225 CV					225	187							280	5.6	18.3	1.5		174
-255 CV					255	217							310	5.8	19.1	2.2	▲	175
-285 CV					285	247							340	5.9	19.9	3		176

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	Feature	
BT50-SLSA10-110-M 42	1	10	13	1.5	110	42	30	—	17.4	25	—	30	165	3.6	7.9	2.6	○	177	Shrink-fit Heater
-135-M 67					135	67			20	32			190	3.7	10.4	4		180	
-140-M 42					140	42	60		17.4	25			195		7.8	3.7		178	
-165-M 67					165	67			20	32			220	3.9	10.4	4.6		181	
-M 97						97	30		23.2					3.8	13.6	6		183	
-170-M 42	2				170	42	33	57	17.4	25	39		225	4	8.1	3.5		179	
-195-M 67					195	67	30	60	20	32	46		250	4.3	10.7	4.6		182	
-M 97	1					97	60	—	23.2		—			3.9	13.5	6.9		184	
-225-M 97	2				225		30	60			46		280	4.4	13.8	6.8	▲	185	
-SLSB10-110-M 42	1	10	16	3	110	42	30	—	20.4	32	—	30	165	3.7	8.6	1.4	○	186	MONO 3° MONO CURVE
-135-M 67					135	67			23				190	3.8	11.7	2.4		189	
-140-M 42					140	42	60		20.4				195	3.9	8.6	1.8		187	
BT50 -165-M 67					165	67			23				220		11.7	3		190	
-M 97						97	30		26.2						15.4	3.7		192	
-170-M 42	2				170	42		60	20.4		46		225	4.3	8.9	1.8		188	
-195-M 67					195	67			23				250		12	3		191	
-M 97	1					97	60	—	26.2		—			4	15.3	4.5		193	
-M127					127	30			29.3	42					20			195	
-225-M 97	2				225	97		60	26.2	32	46		280	4.4	15.6	4.4	▲	194	
-M127	1				127	60	—		29.3	42	—			4.2	20.6	4.9		196	
-M157					157	30			32.5					4.1	23.7	5.6		198	
-255-M127	2				255	127	28	62	29.3		56		310	4.8	21.1	4.9		197	
-M157	1					157	60	—	32.5		—			4.4	24.3	6.1		199	
-285-M157	2				285		28	62			56		340	5	24.8			200	
-SLRB10- 90-M 22	1	10	22	6	90	22	30	—	24.3	32	—	30	145	3.7	6.2	0.6	×	201	UNO
-110-M 42					110	42			26.4				165	3.8	8.7	0.8	○	204	
-120-M 22					120	22	60		24.3				175	3.9	6.2		×	202	
-135-M 67					135	67	30		29	42			190		11.8	1.1	○	207	
-140-M 42					140	42	60		26.4	32			195		8.6	1.2		205	
-150-M 22	2				150	22	30	60	24.3		46		205	4.3	6.5	0.8	×	203	
-165-M 67	1				165	67	60	—	29	42	—		220	4.1	11.7	1.3	○	208	
-170-M 42	2				170	42	30	60	26.4	32	46		225	4.3	8.9	1.2		206	
-195-M 67					195	67	28	62	29	42	56		250	4.7	12	1.3		209	
-SLFB10- 90-M 22	1	10	22	6	90	22	30	—	24.3	32	—	30	145	3.7	6.2	0.6	×	210	STRAIGHT arbor
 -110-M 42					110	42			26.4				165	3.8	8.7	0.8	○	213	
-120-M 22					120	22	60		24.3				175	3.9	6.2		×	211	
-135-M 67					135	67	30		29	42			190		11.8	1.1	○	216	
-140-M 42					140	42	60		26.4	32			195		8.6	1.2		214	
-150-M 22	2				150	22	30	60	24.3	32	46		205	4.3	6.5	0.8	×	212	
-165-M 67	1				165	67	60	—	29	42	—		220	4.1	11.7	1.3	○	217	
-170-M 42	2				170	42	30	60	26.4	32	46		225	4.3	8.9	1.2		215	
-195-M 67					195	67	28	62	29	42	56		250	4.7	12	1.3		218	
-SLSA10-165 CV	3	10	13	1.5	165	127	—	—	85	—	—	30	220	4.9	14.9	1.2	○	219	PERIPHERALS
-195 CV					195	157							250	5.5	16.9	1.5		220	
-225 CV					225	187							280	5.4	16.8	2.4	▲	221	
-255 CV					255	217							310	6.1	19.8	2.6		222	
-285 CV					285	247							340	6.3	21.2	3.7		223	
-315 CV					315	277							370	8.4	28.6	4.6		224	

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	
BT50-SLRA10-165 CV	3	10	19	4.5	165	127	—	—	85	—	—	30	220	5.1	15.9	0.7	×	225
-195 CV					195	157	—	—					250	5.2	16.6	1.1	○	226
-225 CV					225	187	—	—					280	5.9	19.7	1.2	▲	227
-255 CV					255	217	—	—					310	6.1	20.3	1.7	▲	228
-285 CV					285	247	—	—					340	6.2	21.1	2.4	▲	229
-SLFA10-165 CV	3	10	19	4.5	165	127	—	—	85	—	—	30	220	5.1	15.9	0.7	×	230
-195 CV					195	157	—	—					250	5.2	16.6	1.1	○	231
-225 CV					225	187	—	—					280	5.9	19.7	1.2	▲	232
-255 CV					255	217	—	—					310	6.1	20.3	1.7	▲	233
-285 CV					285	247	—	—					340	6.2	21.1	2.4	▲	234
BT50-SLSA12-110-M 42	1	12	15	1.5	110	42	30	—	19.4	32	—	30	165	3.7	9.5	1.9	○	235
-135-M 67					135	67	—	—					190	—	13.1	3.3	○	238
-140-M 42	1	12	15	1.5	140	42	60	—	19.4	—	—	30	195	3.8	9.4	2.3	○	236
-165-M 67					165	67	—	—					220	3.9	13	3.9	○	239
-M 97	2	12	15	1.5	97	30	—	—	25.2	—	—	30	—	3.8	17.7	4.9	○	241
-170-M 42					170	42	60	—					19.4	46	225	4.3	9.7	2.3
-195-M 67	1	12	15	1.5	195	67	—	—	22	—	—	30	250	—	13.3	3.9	○	240
-M 97					97	60	—	—					25.2	—	4	17.7	5.9	○
-225-M 97	2	12	15	1.5	225	—	30	60	—	—	46	280	4.4	18	5.8	▲	243	
-SLSB12-110-M 42	1	12	19	3.5	110	42	30	—	23.4	32	—	30	165	3.7	10.4	1.1	○	244
-135-M 67					135	67	—	—					190	3.8	14.6	1.9	○	247
-140-M 42					140	42	60	—					195	3.9	10.3	1.6	○	245
-165-M 67					165	67	—	—					220	—	14.5	2.5	○	248
-M 97					97	30	—	—					29.2	42	20.5	2.4	○	250
-170-M 42	2	12	19	3.5	170	42	60	—	23.4	32	46	30	225	4.3	10.6	1.5	○	246
-195-M 67					195	67	—	—					26	250	4.4	14.8	2.4	○
-M 97	1	12	19	3.5	97	60	—	—	29.2	42	—	30	4.2	21.1	2.7	○	251	
-M127					127	30	—	—					32.3	4.1	25.5	3.3	○	253
-225-M 97	2	12	19	3.5	225	97	28	62	29.2	56	280	4.8	21.6	2.8	▲	252		
-M127	1	12	19	3.5	127	60	—	—	32.3	—	—	30	4.3	26.1	3.7	○	254	
-M157					157	30	—	—					35.5	30.6	4.1	○	256	
-255-M127	2	12	19	3.5	255	127	28	62	32.3	56	310	4.9	26.7	3.7	○	255		
-M157	1	12	19	3.5	157	60	—	—	35.5	—	—	30	4.5	31.1	4.7	○	257	
-285-M157					285	28	62	—					56	340	5.1	31.7	○	258
-SLRB12- 90-M 22	1	12	26	7	90	22	30	—	28.3	42	—	30	145	3.7	9.5	0.4	×	259
-110-M 42					110	42	—	—					30.4	165	3.8	11.4	0.6	○
-120-M 22	1	12	26	7	120	22	60	—	28.3	—	—	30	175	4	10.1	0.5	○	260
-135-M 67					135	67	30	—					33	190	—	15.5	0.8	○
-140-M 42	2	12	26	7	140	42	60	—	30.4	—	—	30	195	4.1	11.9	0.7	○	263
-150-M 22					150	22	28	62					28.3	56	205	4.6	10.7	0.5
-165-M 67	1	12	26	7	165	67	60	—	33	—	—	220	4.2	16.1	1	○	266	
-170-M 42	2	12	26	7	170	42	28	62	30.4	56	225	4.7	12.5	0.7	○	264		
-195-M 67					195	67	—	—	33	250	4.8	16.7	1.1	○	267			
-SLFB12- 90-M 22	1	12	26	7	90	22	30	—	28.3	42	—	30	145	3.7	9.5	0.4	×	268
-110-M 42					110	42	—	—					30.4	165	3.8	11.4	0.6	○
-120-M 22	1	12	26	7	120	22	60	—	28.3	—	—	30	175	4	10.1	0.5	○	269
-135-M 67					135	67	30	—					33	190	—	15.5	0.8	○
-140-M 42	2	12	26	7	140	42	60	—	30.4	—	—	30	195	4.1	11.9	0.7	○	272
-150-M 22					150	22	28	62					28.3	56	205	4.6	10.7	0.5
-165-M 67	1	12	26	7	165	67	60	—	33	—	—	220	4.2	16.1	1	○	275	
-170-M 42	2	12	26	7	170	42	28	62	30.4	56	225	4.7	12.5	0.7	○	273		
-195-M 67					195	67	—	—	33	250	4.8	16.7	1.1	○	276			

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	Feature					
BT50-SLSA12-165 CV	3	12	15	1.5	165	127	—	—	84	—	—	30	220	4.8	14.6	1.2	○	277	Shrink-fit Heater				
-195 CV					195	157	—	—	85	—	—	30	250	5.6	17.6	—	—	—		—	○	278	
-225 CV					225	187	—	—	—	—	—	30	280	5.8	18.5	1.8	—	—		—	▲	279	
-255 CV					255	217	—	—	—	—	—	30	310	6	19.3	2.6	—	—		—	○	280	
-285 CV					285	247	—	—	—	—	—	30	340	6.2	21.2	3.5	—	—		—	○	281	
-315 CV					315	277	—	—	—	—	—	30	370	8.5	29.2	3.6	—	—		—	○	282	
-SLRA12-165 CV	3	12	22	5	165	127	—	—	85	—	—	30	220	5.1	16.1	0.7	×	283	MONO 3° MONO CURVE				
-195 CV					195	157	—	—	—	—	30	250	5.6	18	0.8	—	—	—		×	284		
-225 CV					225	187	—	—	—	—	30	280	—	18.6	1.3	—	—	—		▲	285		
-255 CV					255	217	—	—	—	—	30	310	5.8	20.7	1.6	—	—	—		—	—	286	
-285 CV					285	247	—	—	—	—	30	340	6.1	22.4	2.1	—	—	—		—	—	287	
-SLFA12-165 CV	3	12	22	5	165	127	—	—	85	—	—	30	220	5.1	16.1	0.7	×	288	MONO Series				
-195 CV					195	157	—	—	—	—	30	250	5.6	18	0.8	—	—	—		×	289		
-225 CV					225	187	—	—	—	—	30	280	—	18.6	1.3	—	—	—		▲	290		
-255 CV					255	217	—	—	—	—	30	310	5.8	20.7	1.6	—	—	—		—	—	291	
-285 CV					285	247	—	—	—	—	30	340	6.1	22.4	2.1	—	—	—		—	—	292	
BT50-SLSB16-110-M 42	1	16	24	4	110	42	30	—	28.4	42	—	32	165	3.8	15	0.7	—	293	2PIECE type				
-135-M 67					135	67	—	—	31	—	—	32	190	3.9	21.9	1.1	—	—		—	—	296	
-140-M 42					140	42	60	—	28.4	—	—	32	195	4	15.6	0.9	—	—		—	—	294	
-165-M 67					165	67	—	—	31	—	—	32	220	4.1	22.5	1.4	—	—		—	—	297	
-M 97					—	97	30	—	34.2	—	—	32	—	4	30.2	1.7	—	—		—	—	299	
-170-M 42					2	170	42	28	62	28.4	—	56	32	225	4.6	16.2	0.9	—		—	—	—	295
-195-M 67						195	67	—	—	31	—	—	32	250	4.7	23	1.4	—		—	—	—	298
-M 97					1	97	60	—	34.2	—	—	—	32	—	4.3	30.7	2	—		—	—	—	300
-M127						127	30	—	37.3	53	—	—	32	—	4.2	38.5	2.1	—		—	—	—	302
-225-M 97					2	225	97	28	62	34.2	42	56	32	280	4.9	31.3	—	—		—	—	—	301
-M127	1	127	60	—		37.3	53	—	—	32	—	4.6	39	2.3	—	—	—	—	303				
-M157		2	157	30	—	40.5	—	—	—	32	—	4.4	46.8	2.6	—	—	—	—	305				
-255-M127	2		255	127	28	62	37.3	—	67	32	310	5.5	39.6	2.3	—	—	—	—	304				
-M157		1	157	60	—	40.5	—	—	—	32	—	4.8	47.3	2.8	—	—	—	—	306				
-285-M157	2		285	—	28	62	—	—	67	32	340	5.7	47.9	2.9	—	—	—	—	307				
-SLRB16- 90-M 22		1	16	32	8	90	22	30	—	34.3	42	—	32	145	3.8	9.6	0.3	—	308	HYPER version			
-110-M 42	110					42	—	—	36.4	—	—	32	165	3.9	15.1	0.5	—	—	—		—	311	
-120-M 22	120					22	60	—	34.3	—	—	32	175	4	10.1	—	—	—	—		—	309	
-135-M 67	135					67	30	—	39	—	—	32	190	4.1	22	0.6	—	—	—		—	314	
-140-M 42	140					42	60	—	36.4	—	—	32	195	4.2	15.7	—	—	—	—		—	312	
-150-M 22	2					150	22	28	62	34.3	—	56	32	205	4.6	10.7	0.5	—	—		—	—	310
-165-M 67						1	165	67	60	—	39	—	—	32	220	4.3	22.6	0.9	—		—	—	—
-170-M 42	2						170	42	28	62	36.4	—	56	32	225	4.8	16.2	0.7	—		—	—	—
-195-M 67						1	195	67	—	—	39	—	—	32	250	4.9	23.2	0.9	—		—	—	—
-SLFB16- 90-M 22	1	16	32	8	90		22	30	—	34.3	42	—	32	145	3.8	9.6	0.3	—	317	STRAIGHT arbor			
-110-M 42					110	42	—	—	36.4	—	—	32	165	3.9	15.1	0.5	—	—	—		—	320	
-120-M 22					120	22	60	—	34.3	—	—	32	175	4	10.1	—	—	—	—		—	318	
-135-M 67					135	67	30	—	39	—	—	32	190	4.1	22	0.6	—	—	—		—	323	
-140-M 42					140	42	60	—	36.4	—	—	32	195	4.2	15.7	—	—	—	—		—	321	
-150-M 22					2	150	22	28	62	34.3	—	56	32	205	4.6	10.7	0.5	—	—		—	—	319
-165-M 67						1	165	67	60	—	39	—	—	32	220	4.3	22.6	0.9	—		—	—	—
-170-M 42					2		170	42	28	62	36.4	—	56	32	225	4.8	16.2	0.7	—		—	—	—
-195-M 67						1	195	67	—	—	39	—	—	32	250	4.9	23.2	0.9	—		—	—	—
-SLSB16-165 CV	3	16	21	2.5	165		127	—	—	85	—	—	32	220	5.4	17.8	0.6	—	326	PERIPHERALS			
-195 CV					195	157	—	—	—	—	—	32	250	—	17.7	1.1	—	—	—		—	327	
-225 CV					225	187	—	—	—	—	—	32	280	6.3	21.1	1.2	—	—	—		—	328	
-255 CV					255	217	—	—	—	—	—	32	310	6.1	20.9	2	—	—	—		—	329	
-285 CV					285	247	—	—	—	—	—	32	340	7	24.3	—	—	—	—		—	330	
-315 CV					315	277	—	—	—	—	—	32	370	8.6	30.9	2.6	—	—	—		—	331	

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model
BT50-SLSB20-110-M 42	1	20	29	4.5	110	42	30	—	33.4	42	—	40	165	3.8	16.8	0.5	332
-135-M 67					135	67			36				190	3.9	27.1	0.9	335
-140-M 42					140	42	60		33.4				195	4.1	17.4	0.8	333
BT50 -165-M 67					165	67			36				220	4.2	27.7	1.2	336
-M 97						97	30		39.2	53				4.1	39.4	1.1	338
-170-M 42	2				170	42	28	62	33.4	42	56		225	4.7	18	0.8	334
-195-M 67					195	67			36				250	4.8	28.2	1.2	337
-M 97	1					97	60	—	39.2	53	—			4.5	40	1.3	339
-M127						127	30		42.3					4.3	52.6	1.5	341
-225-M 97	2				225	97	28	62	39.2		67		280	5.4	40.6	1.3	340
-M127	1					127	60	—	42.3		—			4.7	53.2	1.8	342
-M157						157	30		45.5					4.6	65	1.7	344
-255-M127	2				255	127	28	62	42.3		67		310	5.6	53.7		343
-M157	1					157	60	—	45.5		—			5	65.5	2.2	345
-285-M157	2				285		28	62			67		340	5.9	66.1		346
-SLRB20-110-M 42	1	20	38	9	110	42	30	—	42.4	53	—	40	165	4	16.9	0.3	347
-135-M 67					135	67			45				190	4.2	27.2	0.4	350
-140-M 42					140	42	60		42.4				195	4.4	17.5		348
-165-M 67					165	67			45				220	4.6	27.8	0.6	351
-170-M 42	2				170	42	28	62	42.4		67		225	5.3	18.1	0.4	349
-195-M 67					195	67			45				250	5.5	28.4	0.6	352
-SLFB20-110-M 42	1	20	38	9	110	42	30	—	42.4	53	—	40	165	4	16.9	0.3	353
 -135-M 67					135	67			45				190	4.2	27.2	0.4	356
-140-M 42					140	42	60		42.4				195	4.4	17.5		354
-165-M 67					165	67			45				220	4.6	27.8	0.6	357
-170-M 42	2				170	42	28	62	42.4		67		225	5.3	18.1	0.4	355
-195-M 67					195	67			45				250	5.5	28.4	0.6	358
-SLSB20-165 CV	3	20	26	3	165	127	—	—	85	—	—	40	220	5.4	17.4	0.6	359
-195 CV					195	157							250	6.1	20.8	0.7	360
-225 CV					225	187							280	5.8	20.5	1.2	361
-255 CV					255	217							310	6.7	23.9	1.3	362
-285 CV					285	247							340	7	25.4	1.7	363
-315 CV					315	277							370	8.9	32.4	2.3	364
BT50-SLRB25-110-M 42	1	25	45	10	110	42	30	—	49.4	53	—	45	165	4.1	19	0.3	365
-140-M 42					140		60						195	4.5	19.6	0.4	366
-170-M 42	2				170		28	62			67			5.3	20.2		367
-SLFB25-110-M 42	1	25	45	10	110	42	30	—	49.4	53	—	45	165	4.1	19	0.3	368
 -140-M 42					140		60						195	4.5	19.6	0.4	369
-170-M 42	2				170		28	62			67			5.4	20.2		370
BT50-SLRB32-110-M 42	1	32	54	11	110	42	30	—	58.4	63	—	50	160	4.0	11.2	0.2	371
-140-M 42					140		60						171	4.6	13.4	0.3	372
-170-M 42	2				170		28	62			77			5.8	19.6		373

■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-NT50-G3

☎ P.226

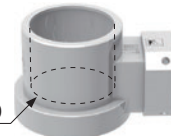


■ φ70 Nozzle (HRB-03S)

Required for shrinking the SLRB32.

CODE
HRB-NZL70

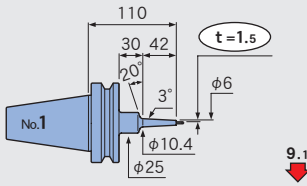
φ70



HEAT ROBO Baby 3000S

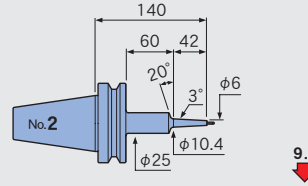
φ 3

BT50-SLSA3-110-M42



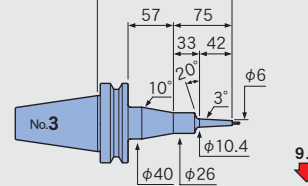
9.1

BT50-SLSA3-140-M42



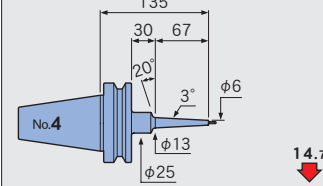
9.8

BT50-SLSA3-170-M42



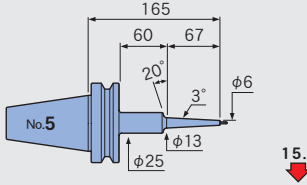
9.9

BT50-SLSA3-135-M67



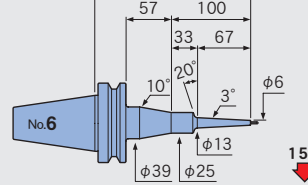
14.7

BT50-SLSA3-165-M67



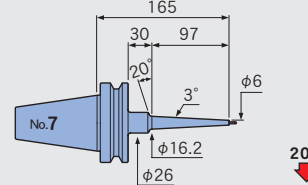
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BT50-SLSA3-195-M67



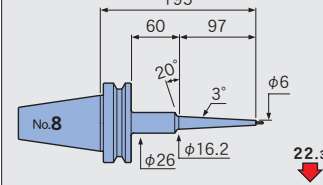
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BT50-SLSA3-165-M97



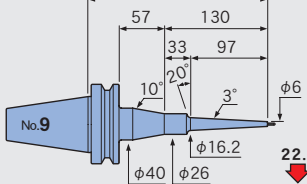
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BT50-SLSA3-195-M97



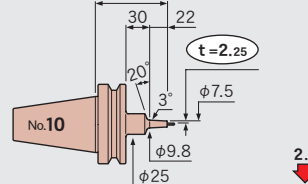
22.3

BT50-SLSA3-225-M97



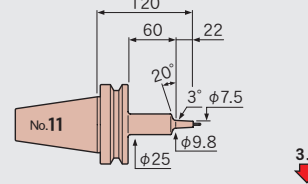
22.1

BT50-SLRA3-90-M22



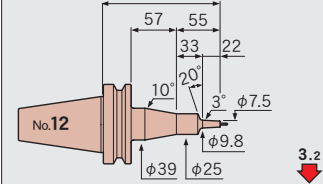
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BT50-SLRA3-120-M22



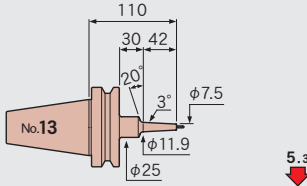
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BT50-SLRA3-150-M22



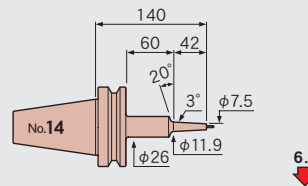
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BT50-SLRA3-110-M42



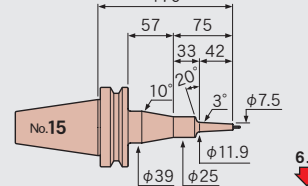
5.3

BT50-SLRA3-140-M42



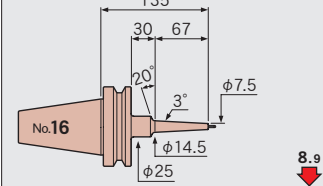
6.0

BT50-SLRA3-170-M42



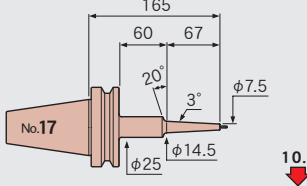
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BT50-SLRA3-135-M67



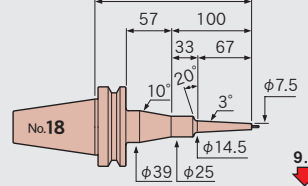
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BT50-SLRA3-165-M67



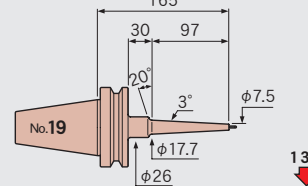
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BT50-SLRA3-195-M67



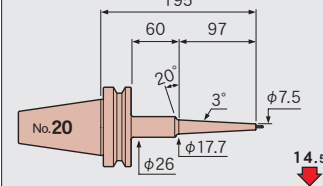
9.8

BT50-SLRA3-165-M97



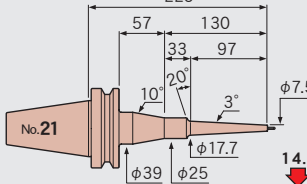
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BT50-SLRA3-195-M97



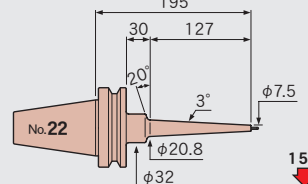
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BT50-SLRA3-225-M97



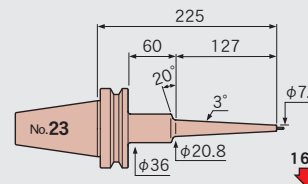
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BT50-SLRA3-195-M127



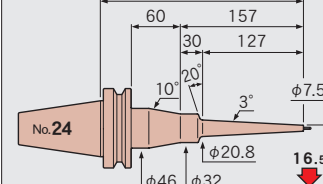
15.7

BT50-SLRA3-225-M127



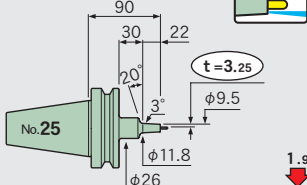
16.3

BT50-SLRA3-255-M127



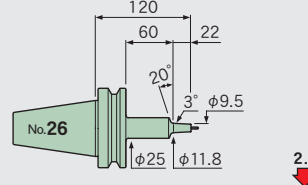
16.5

BT50-SLFB3-90-M22



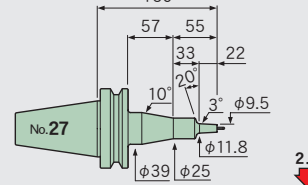
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BT50-SLFB3-120-M22



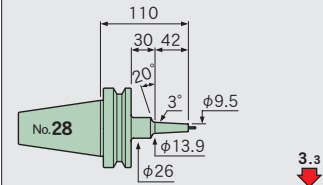
2.4

BT50-SLFB3-150-M22



2.3

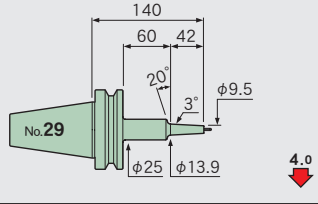
BT50-SLFB3-110-M42



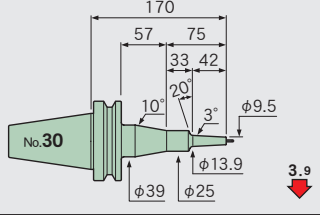
3.3

Feature
 Shrink-fit Heater
 MONO 3° MONO CURVE
 MONO Series
 2PIECE type
 UNO
 HYPER version
 STRAIGHT anbor
 OTHERS
 PERIPHERALS
 Technical Information

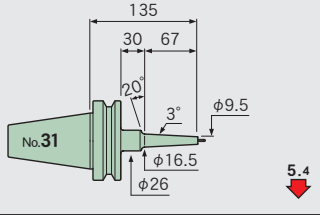
BT50-SLFB3-140-M42



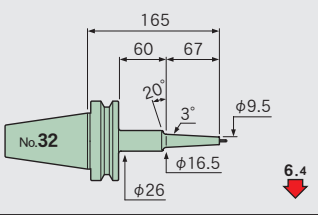
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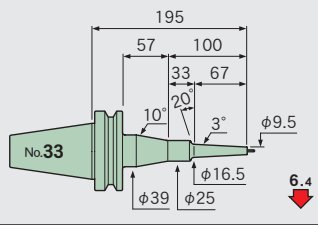
BT50-SLFB3-135-M67



BT50-SLFB3-165-M67

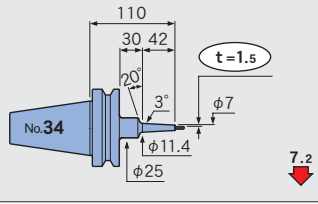


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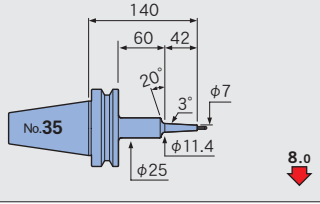


φ4

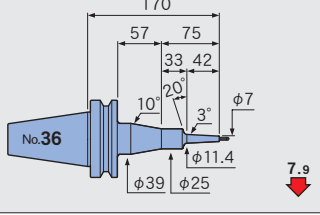
BT50-SLSA4-110-M42



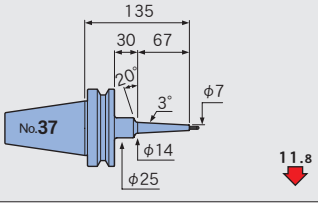
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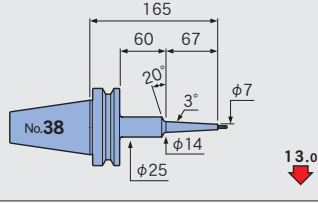
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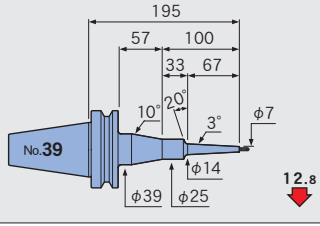
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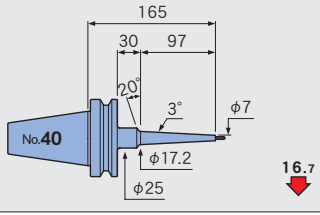
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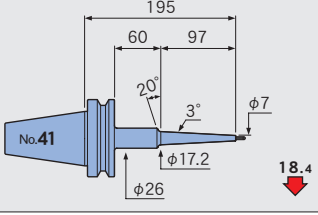
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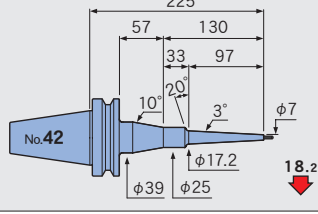
BT50-SLSA4-165-M97



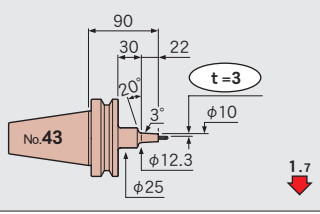
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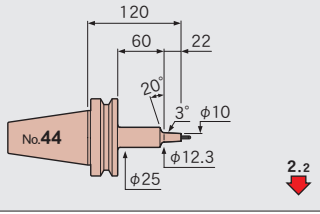
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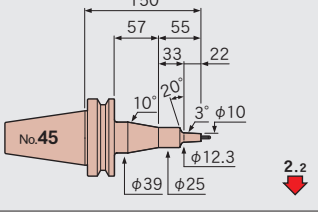
BT50-SLRA4-90-M22



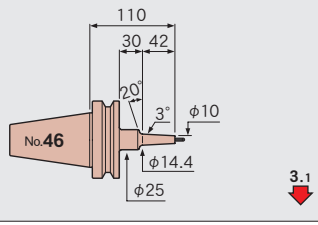
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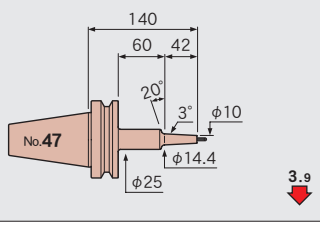
BT50-SLRA4-150-M22



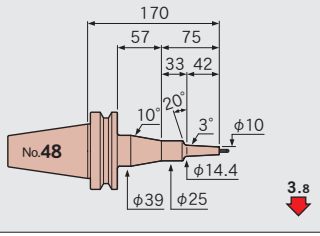
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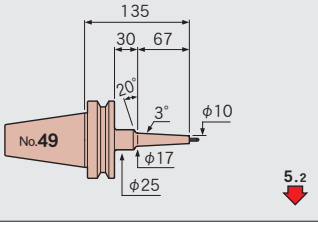
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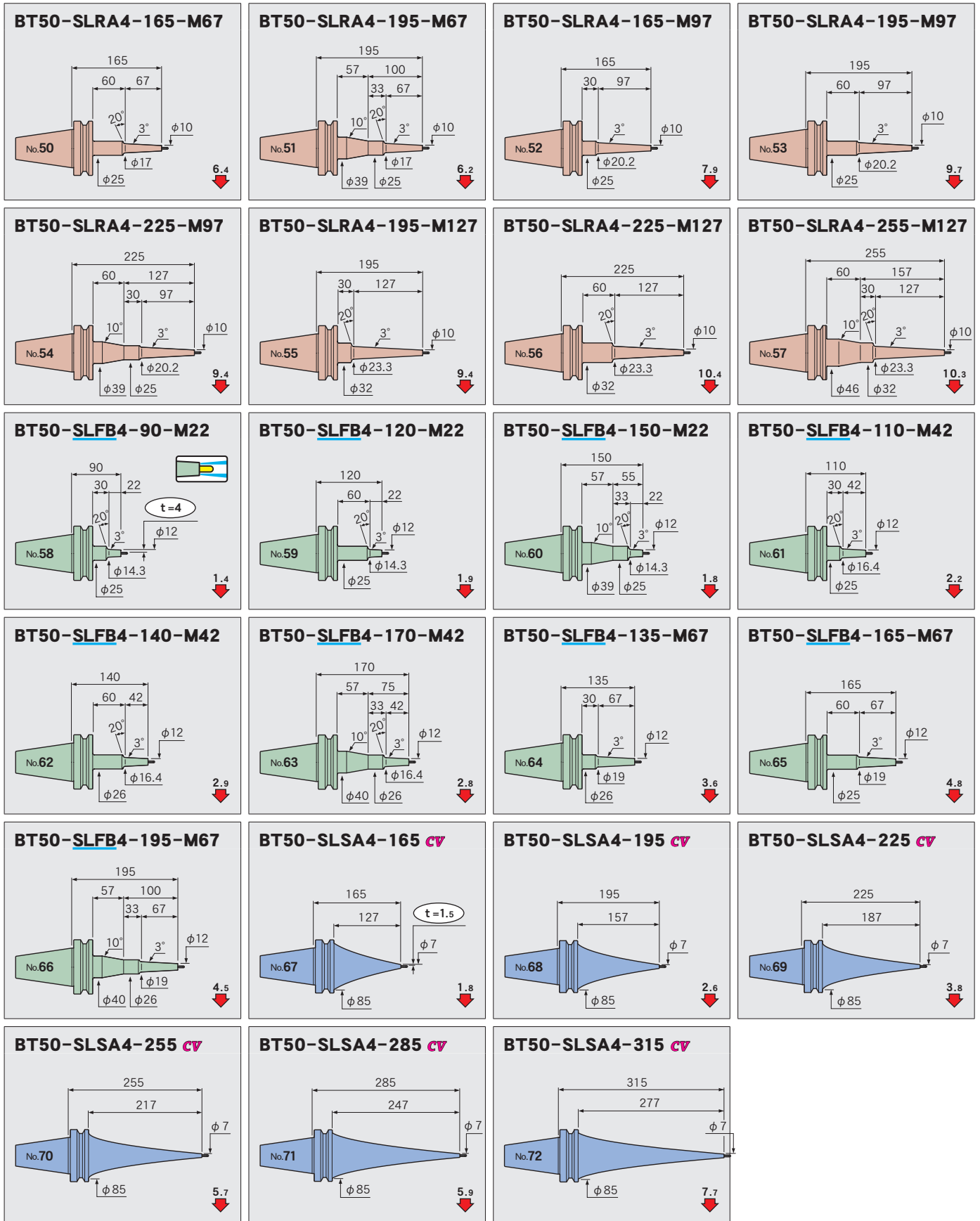


BT50-SLRA4-170-M42



BT50-SLRA4-135-M67





Feature
Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

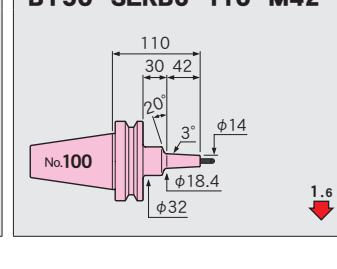
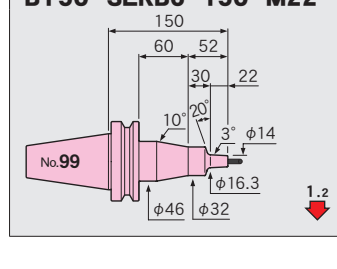
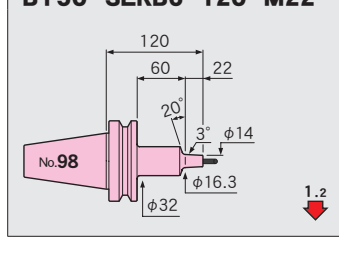
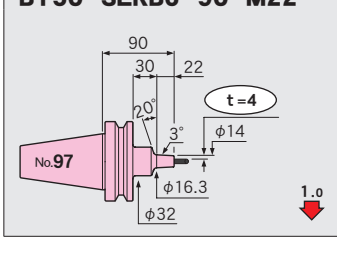
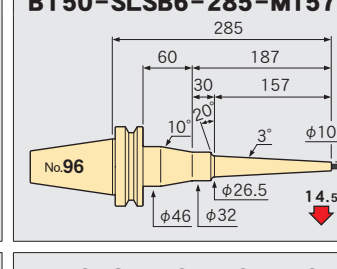
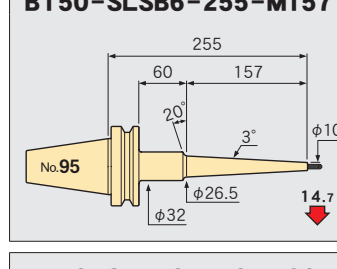
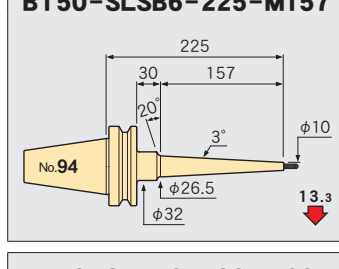
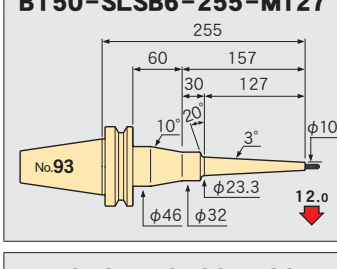
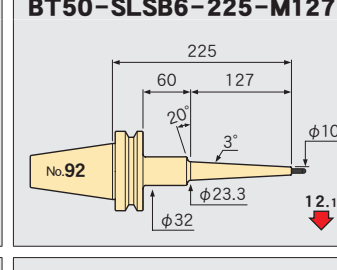
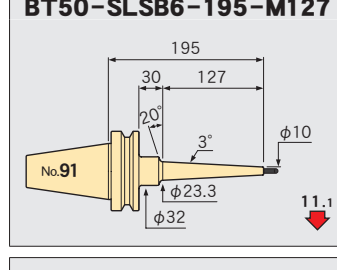
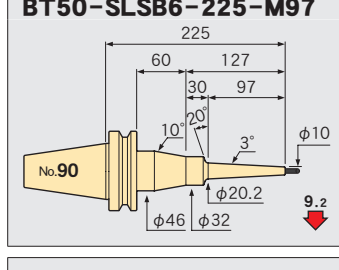
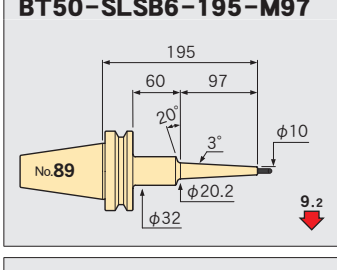
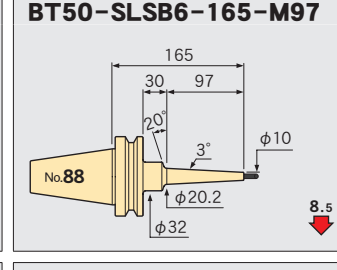
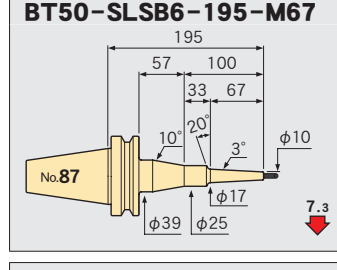
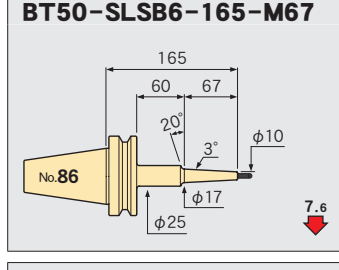
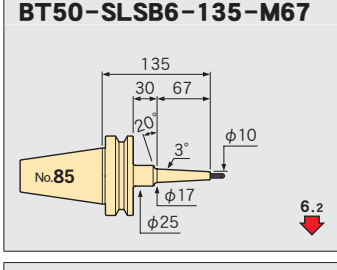
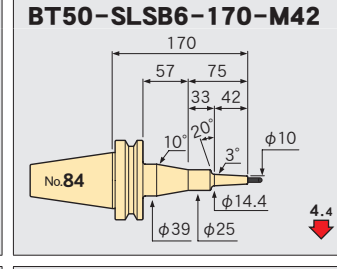
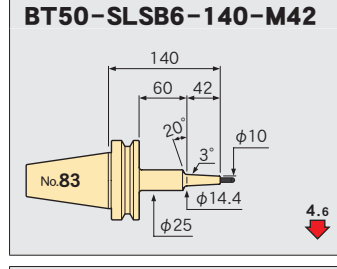
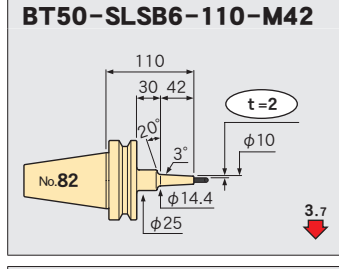
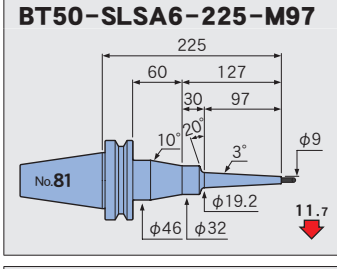
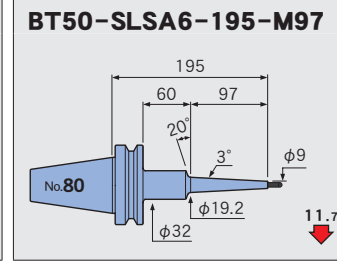
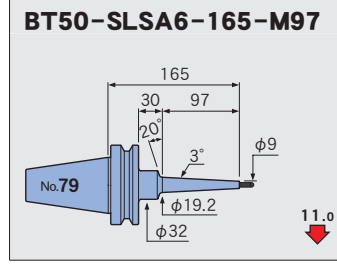
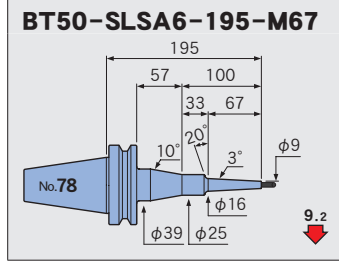
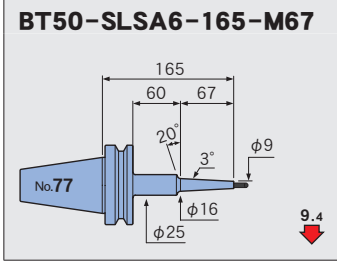
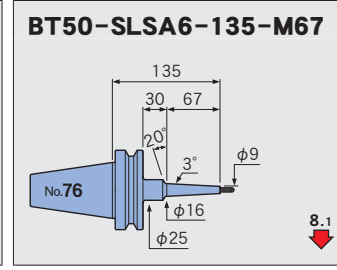
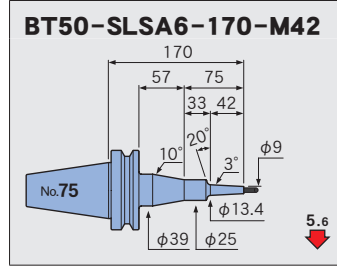
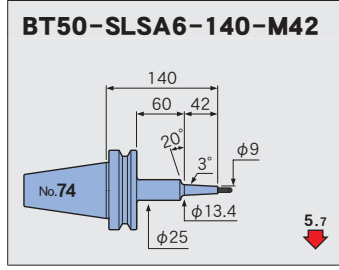
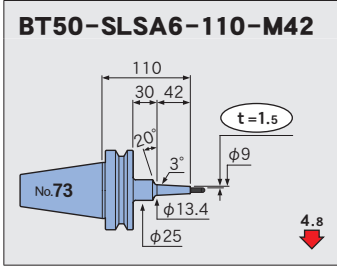
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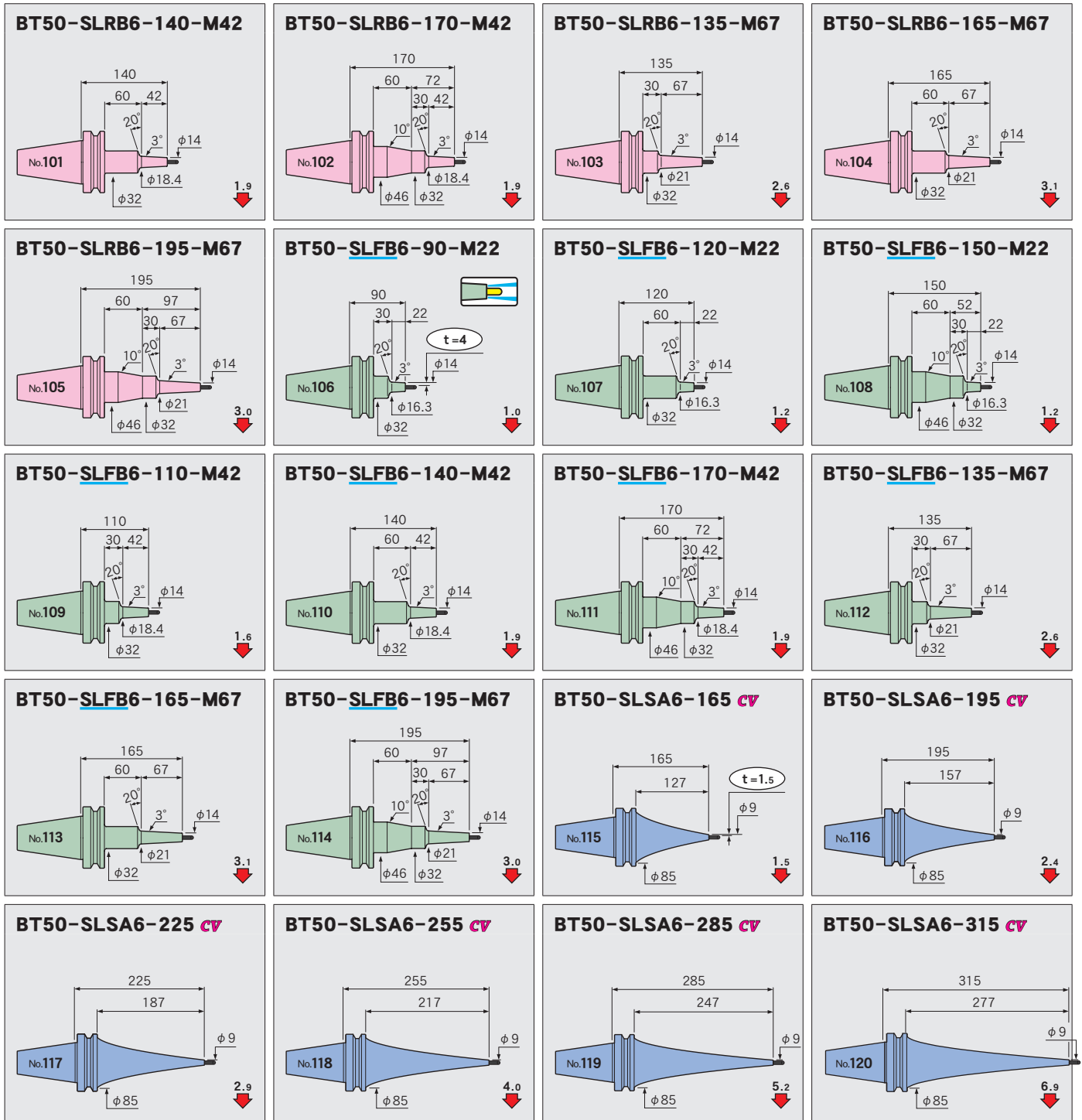
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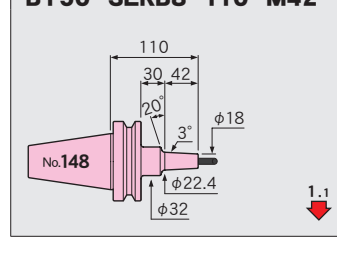
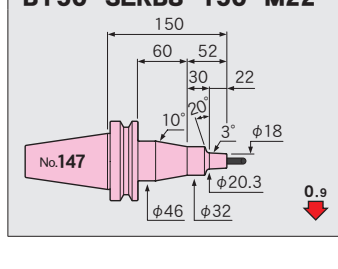
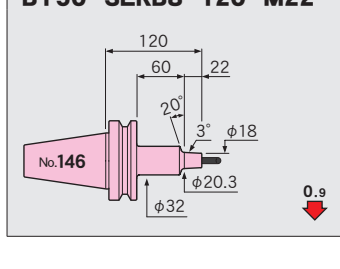
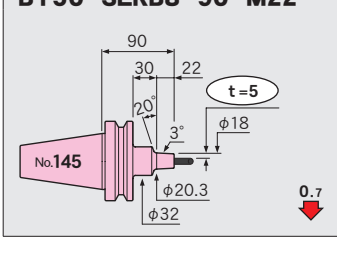
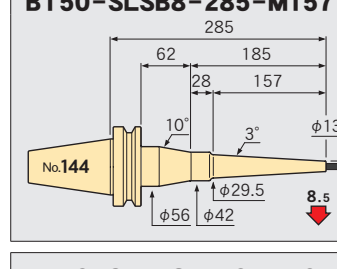
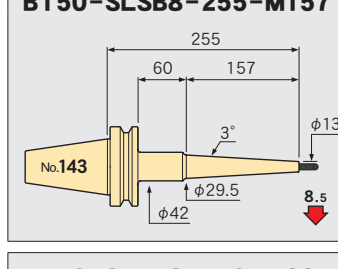
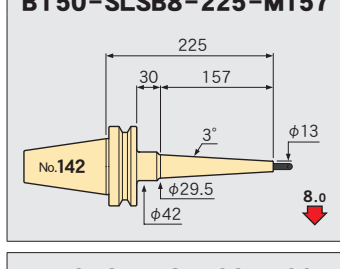
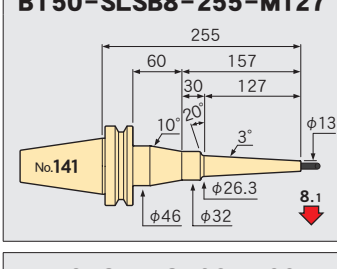
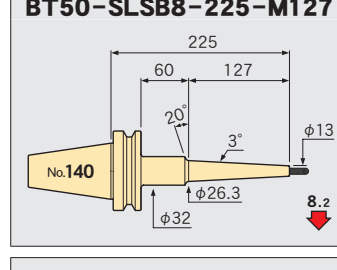
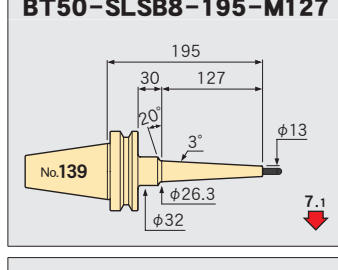
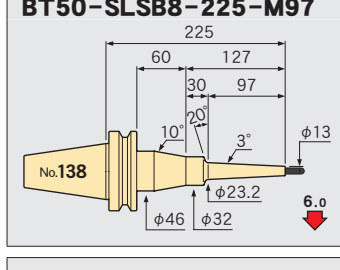
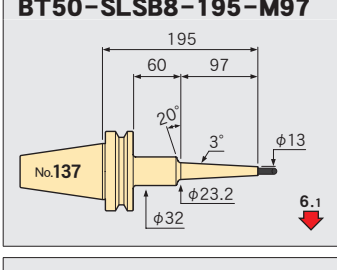
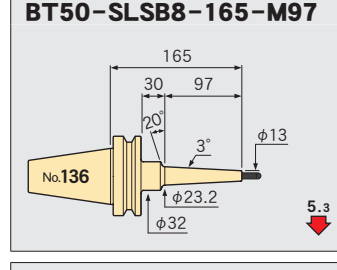
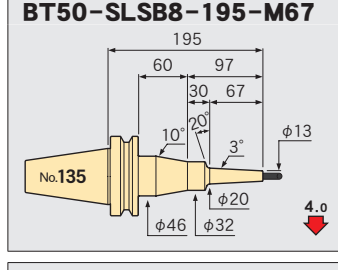
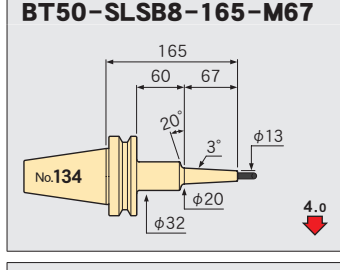
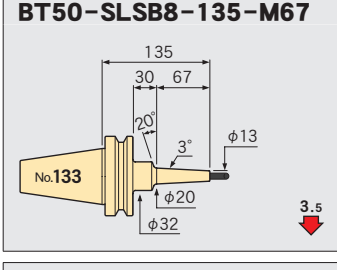
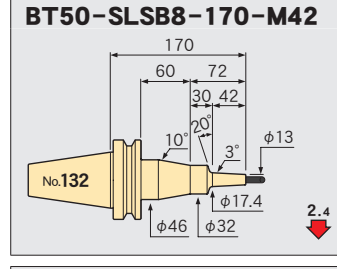
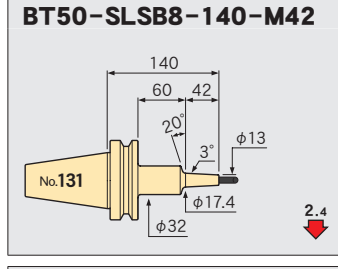
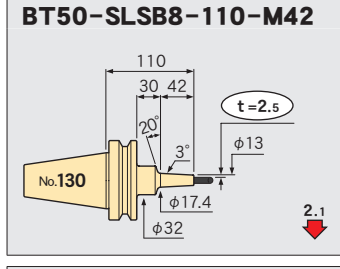
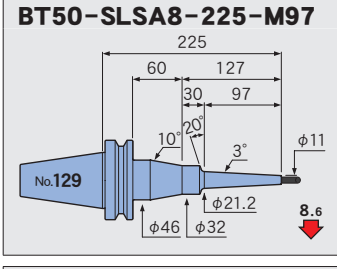
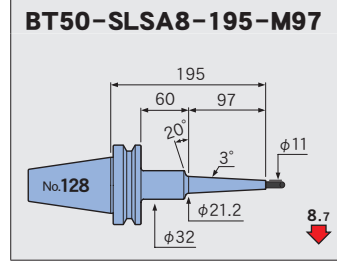
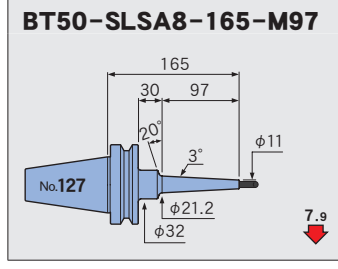
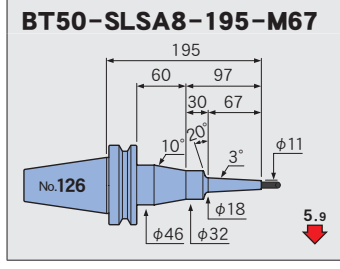
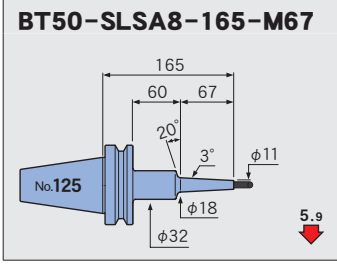
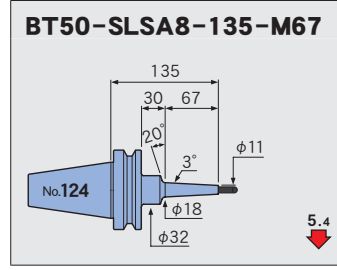
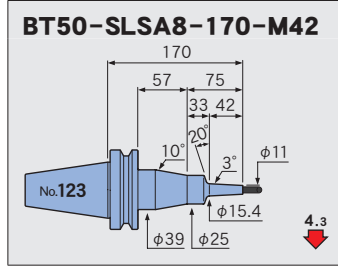
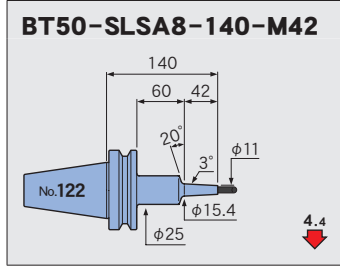
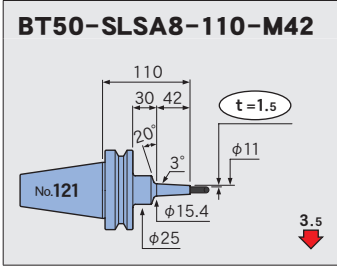
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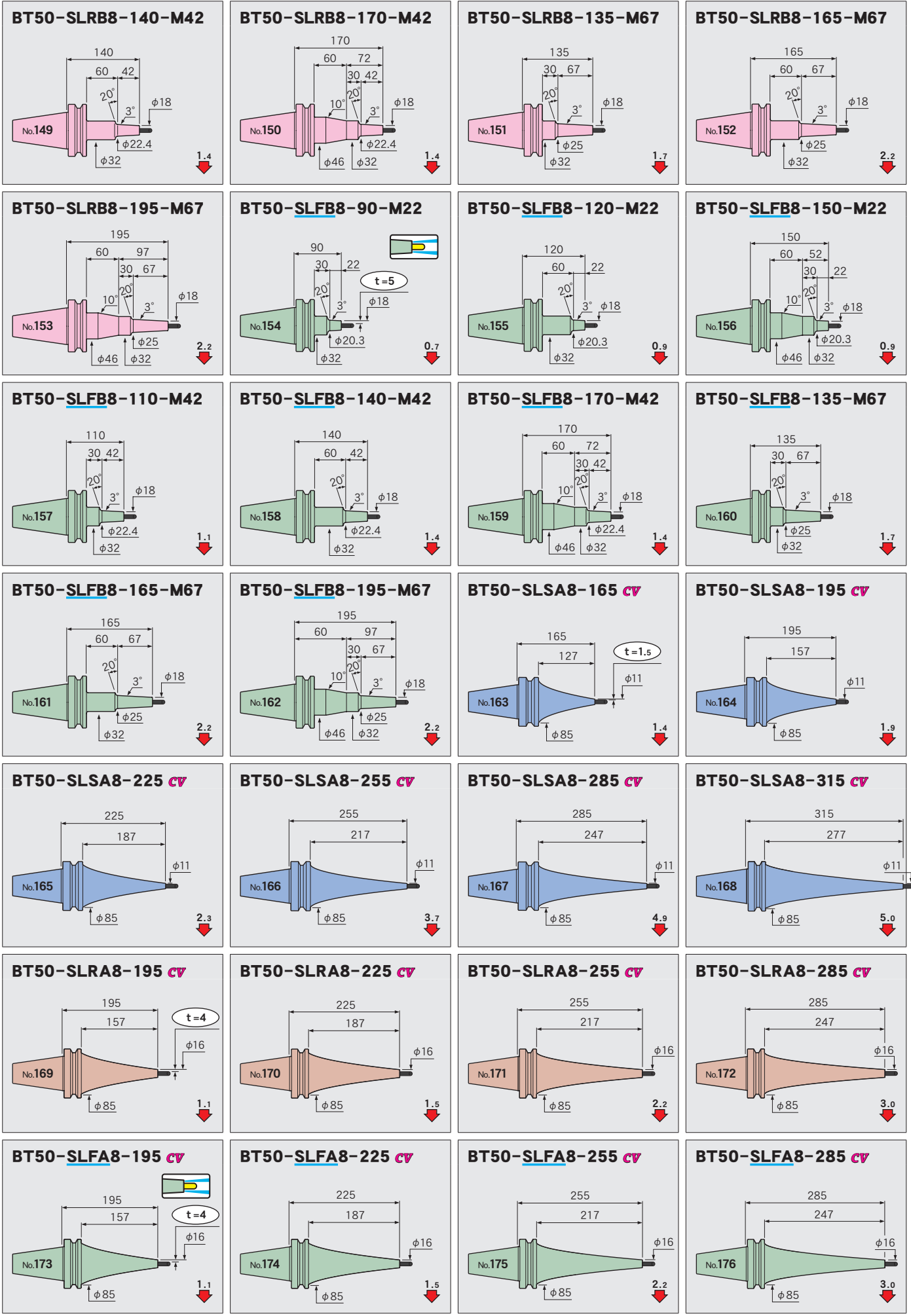
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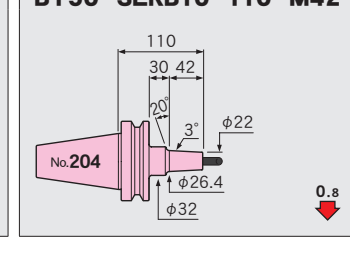
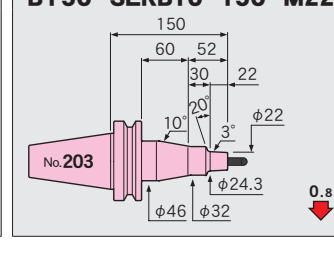
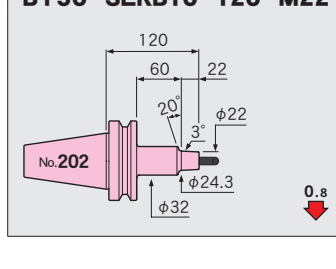
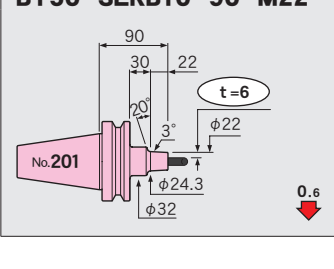
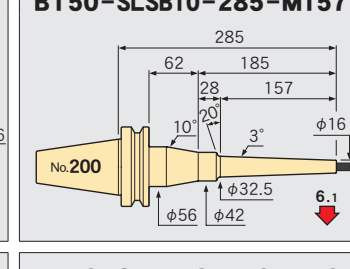
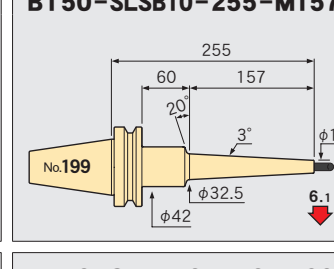
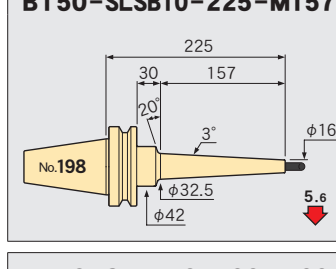
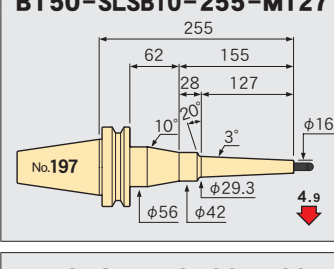
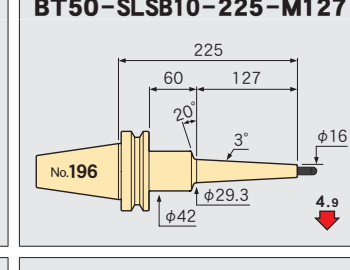
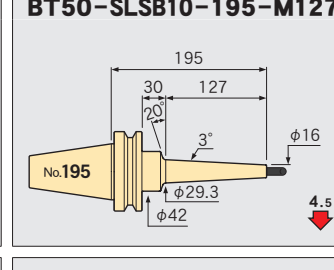
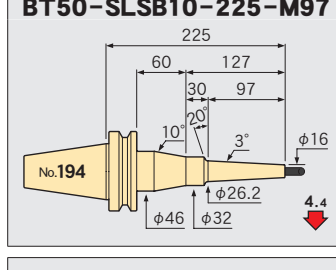
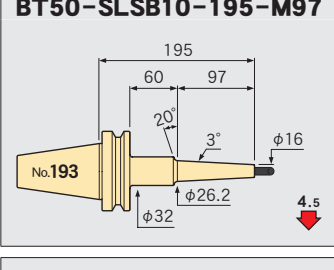
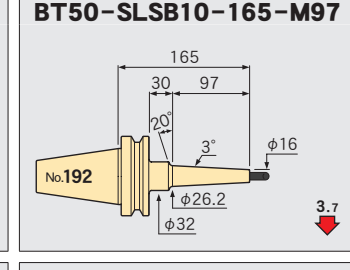
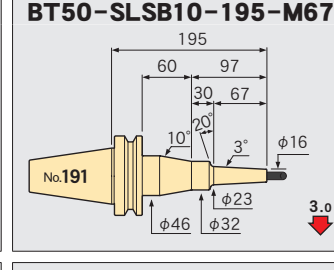
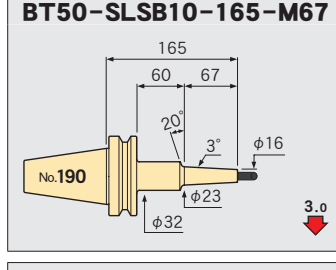
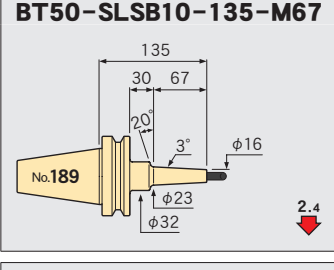
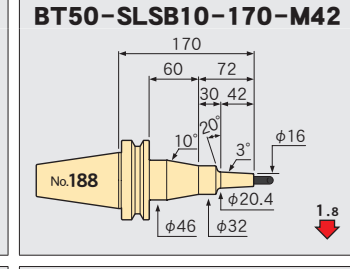
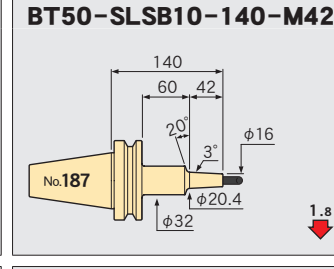
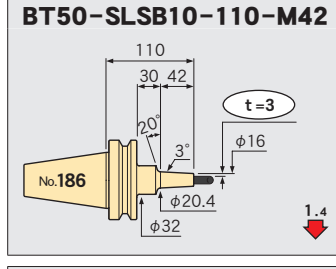
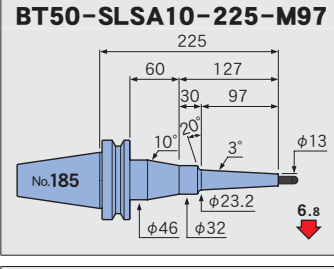
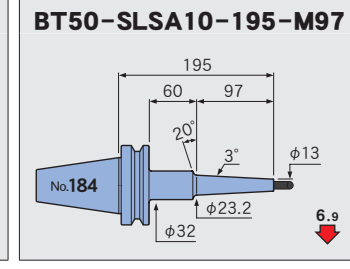
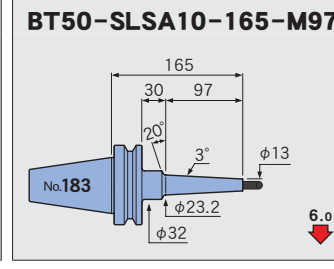
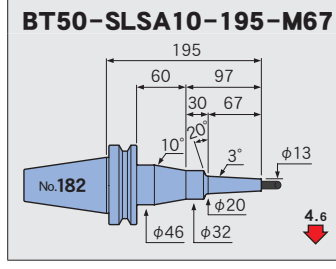
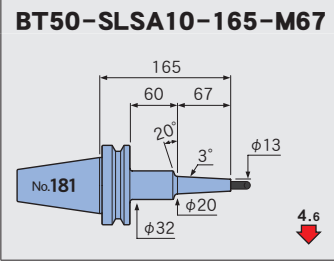
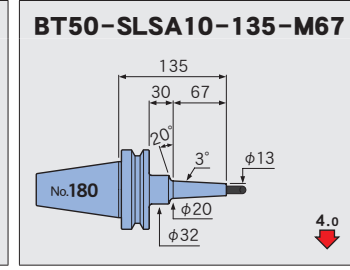
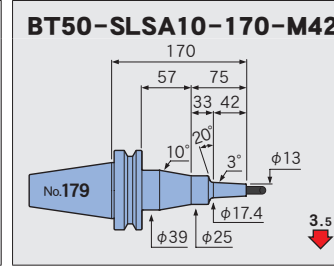
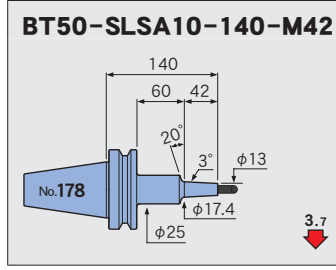
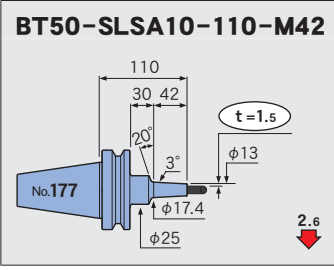
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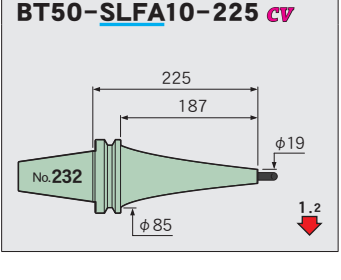
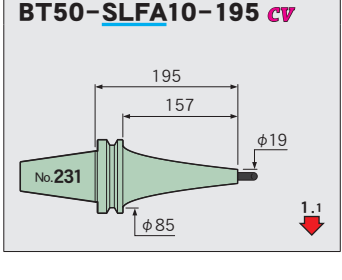
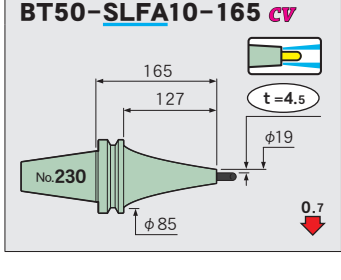
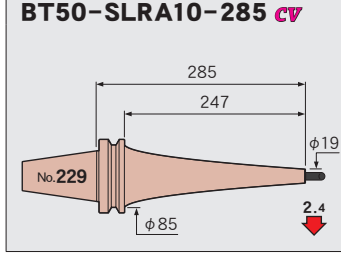
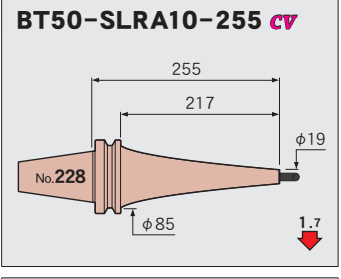
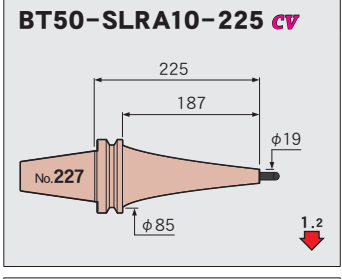
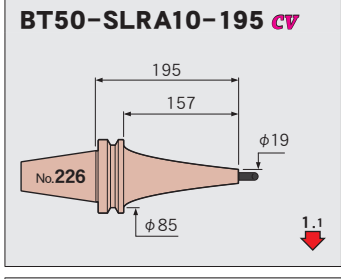
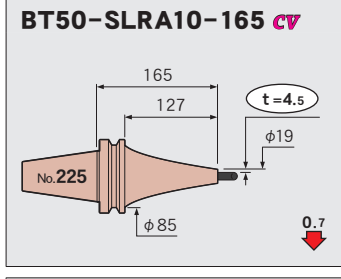
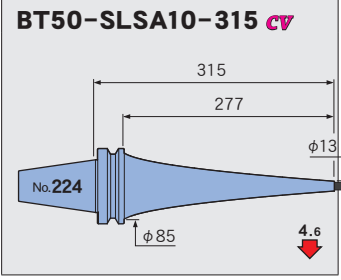
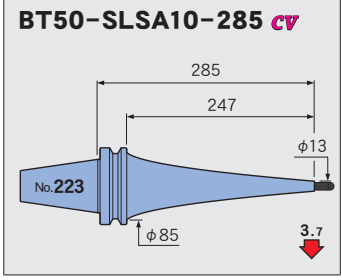
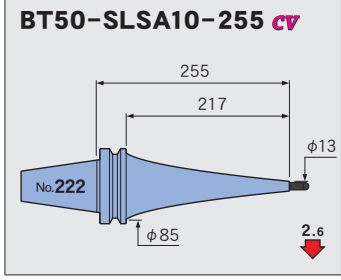
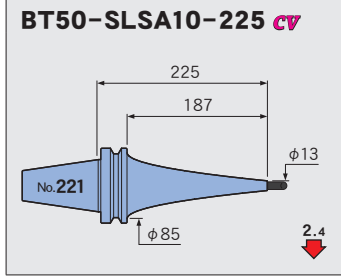
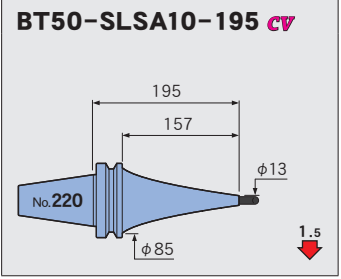
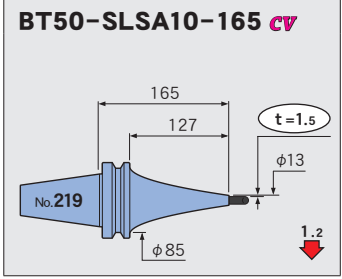
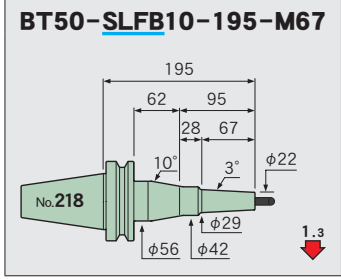
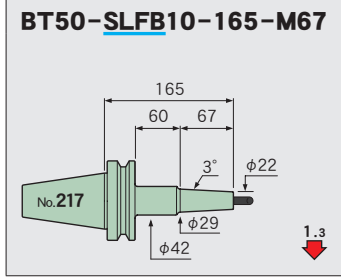
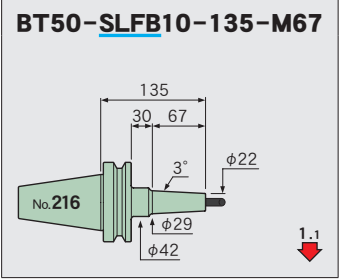
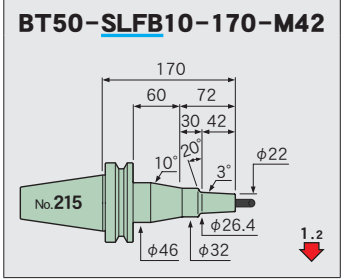
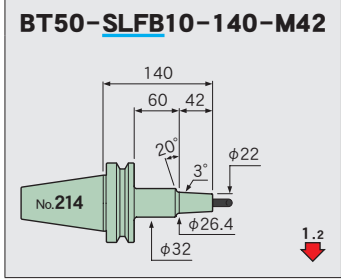
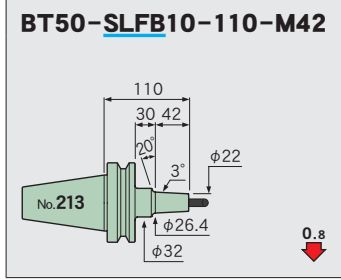
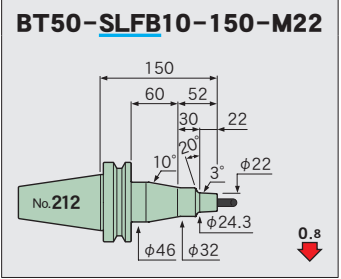
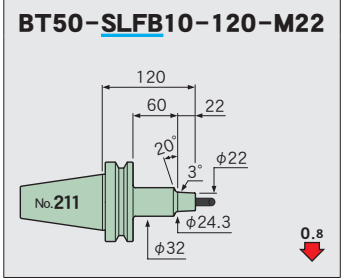
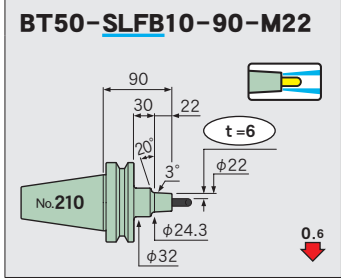
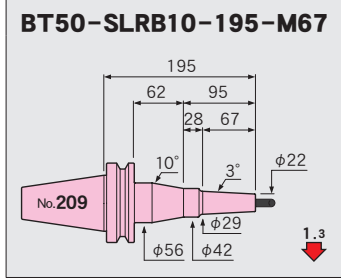
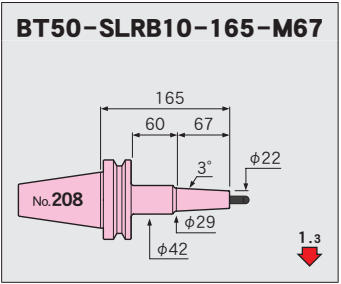
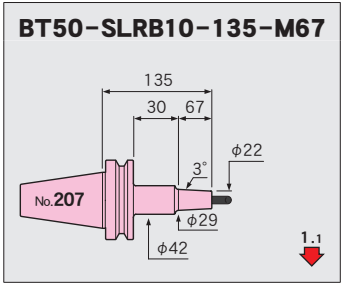
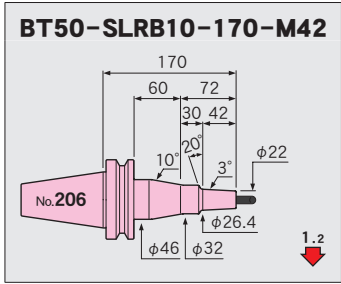
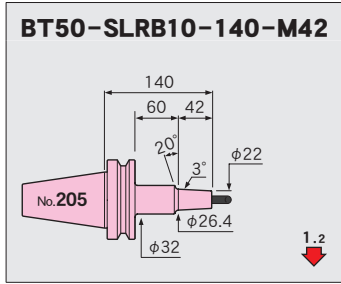
STRAIGHT anbor

OTHERS

PERIPHERALS

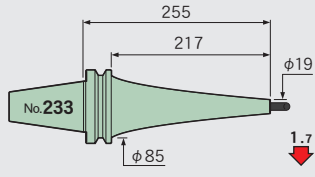
Technical Information



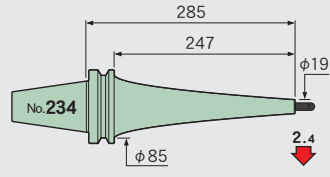


Feature
Shrink-fit Heater
MONO 3°
MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

BT50-SLFA10-255 CV

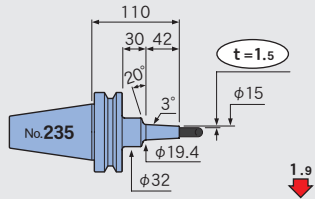


BT50-SLFA10-285 CV

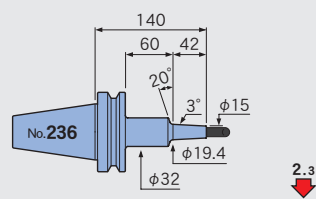


φ12

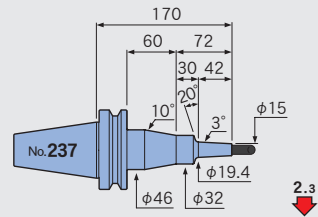
BT50-SLSA12-110-M42



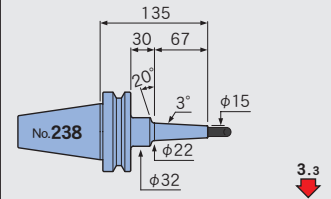
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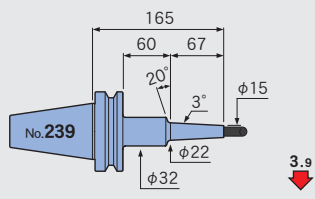
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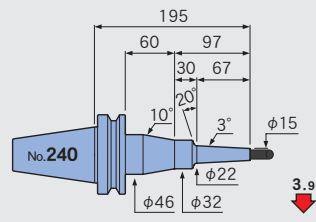
BT50-SLSA12-135-M67



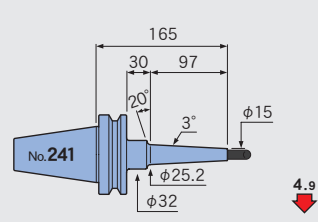
BT50-SLSA12-165-M67



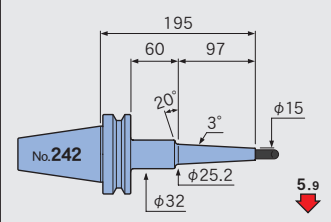
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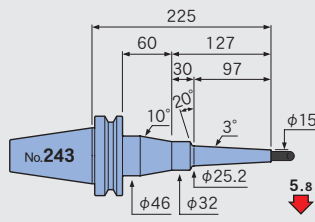
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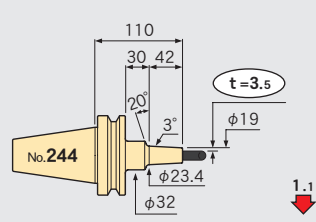
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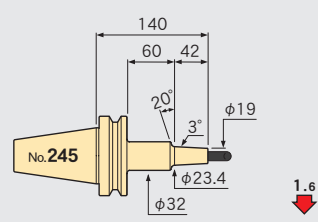
BT50-SLSA12-225-M97



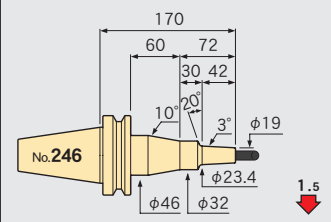
BT50-SLSB12-110-M42



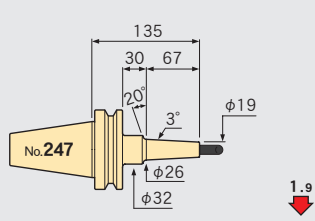
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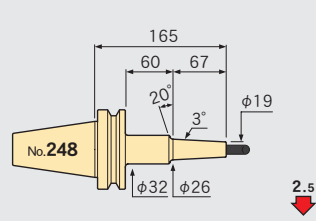
BT50-SLSB12-170-M42



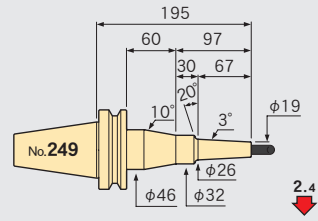
BT50-SLSB12-135-M67



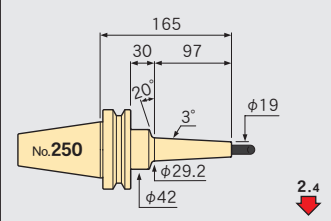
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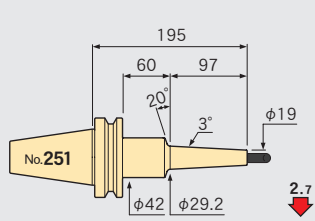
BT50-SLSB12-195-M67



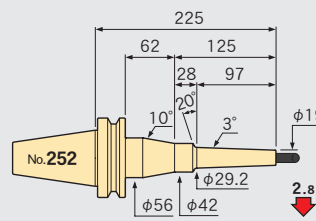
BT50-SLSB12-165-M97



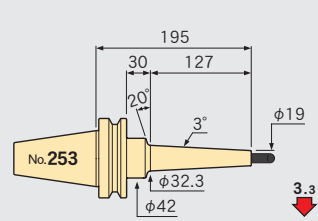
BT50-SLSB12-195-M97



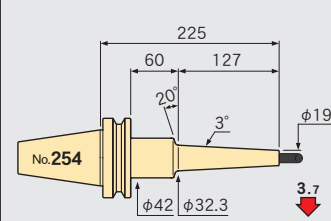
BT50-SLSB12-225-M97

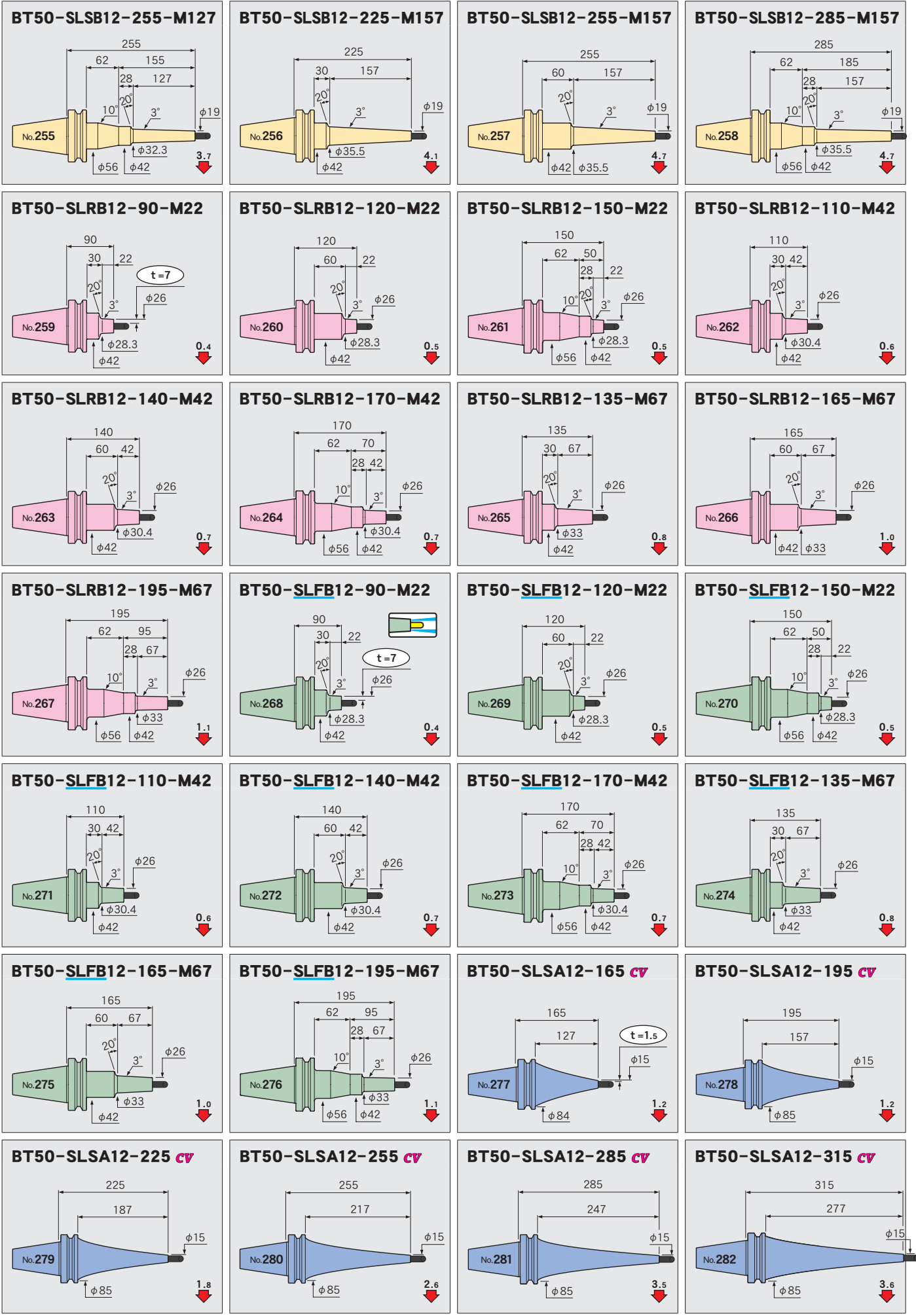


BT50-SLSB12-195-M127



BT50-SLSB12-225-M127





Feature
 Shrink-fit Heater
 MONO 3°
 MONO CURVE
 MONO Series
 2PIECE type
 UNO
 HYPER version
 STRAIGHT arbor
 OTHERS
 PERIPHERALS
 Technical Information

Feature

Shrink-fit Heater

MONO 3° MONO CURVE

MONO Series

2PIECE type

UNO

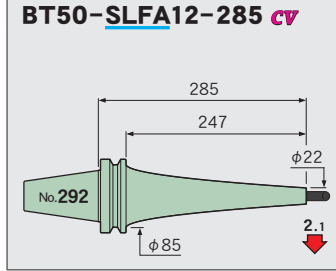
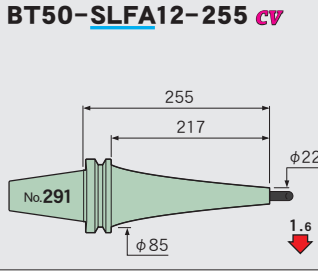
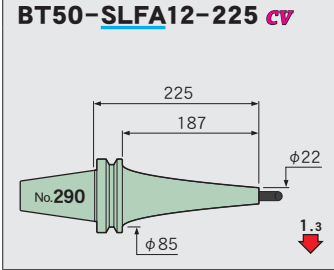
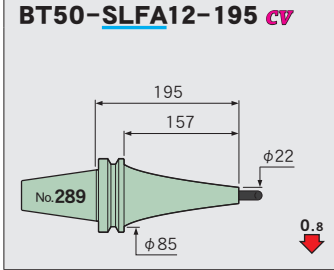
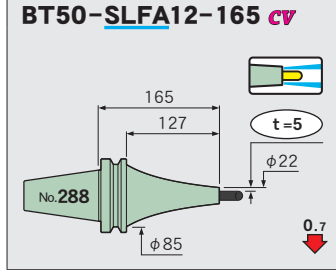
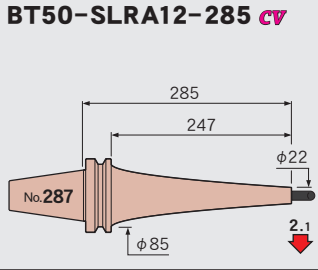
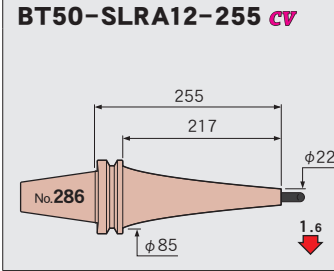
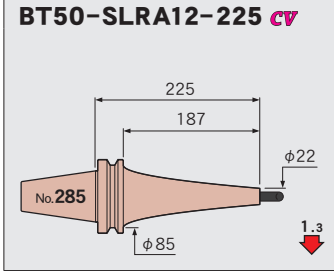
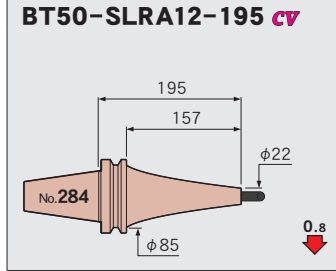
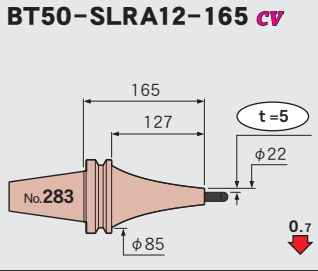
HYPER version

STRAIGHT anbor

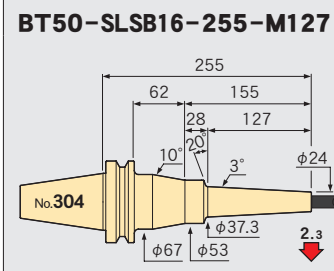
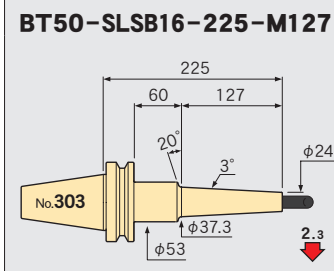
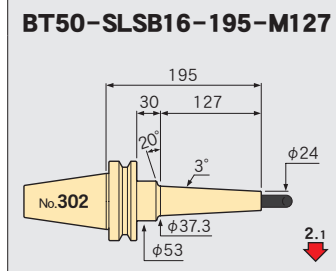
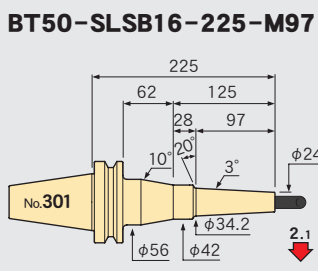
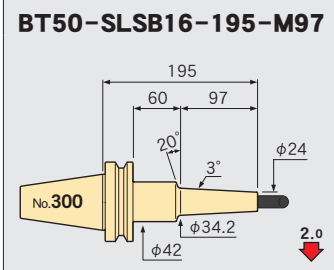
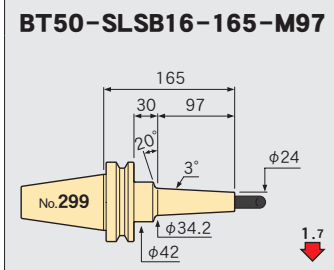
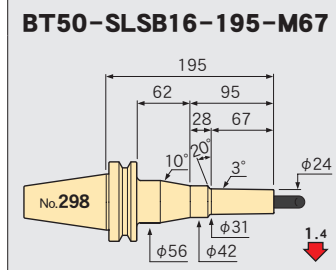
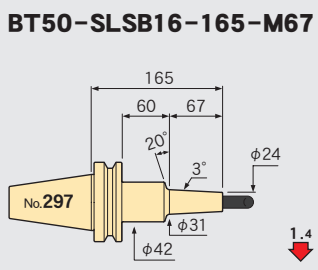
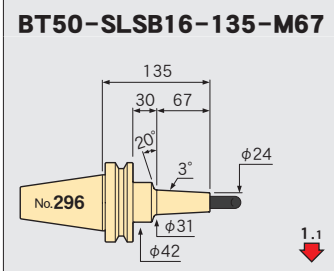
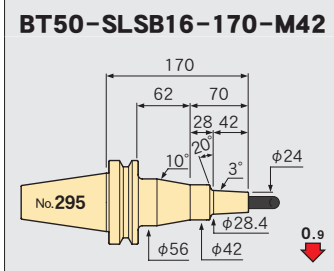
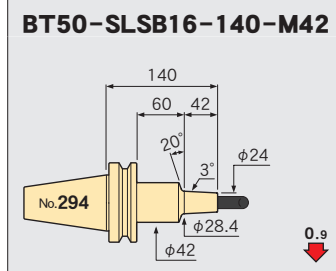
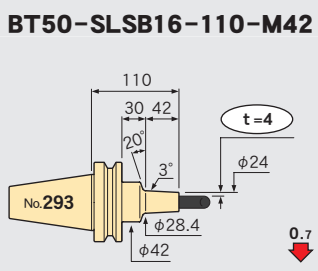
OTHERS

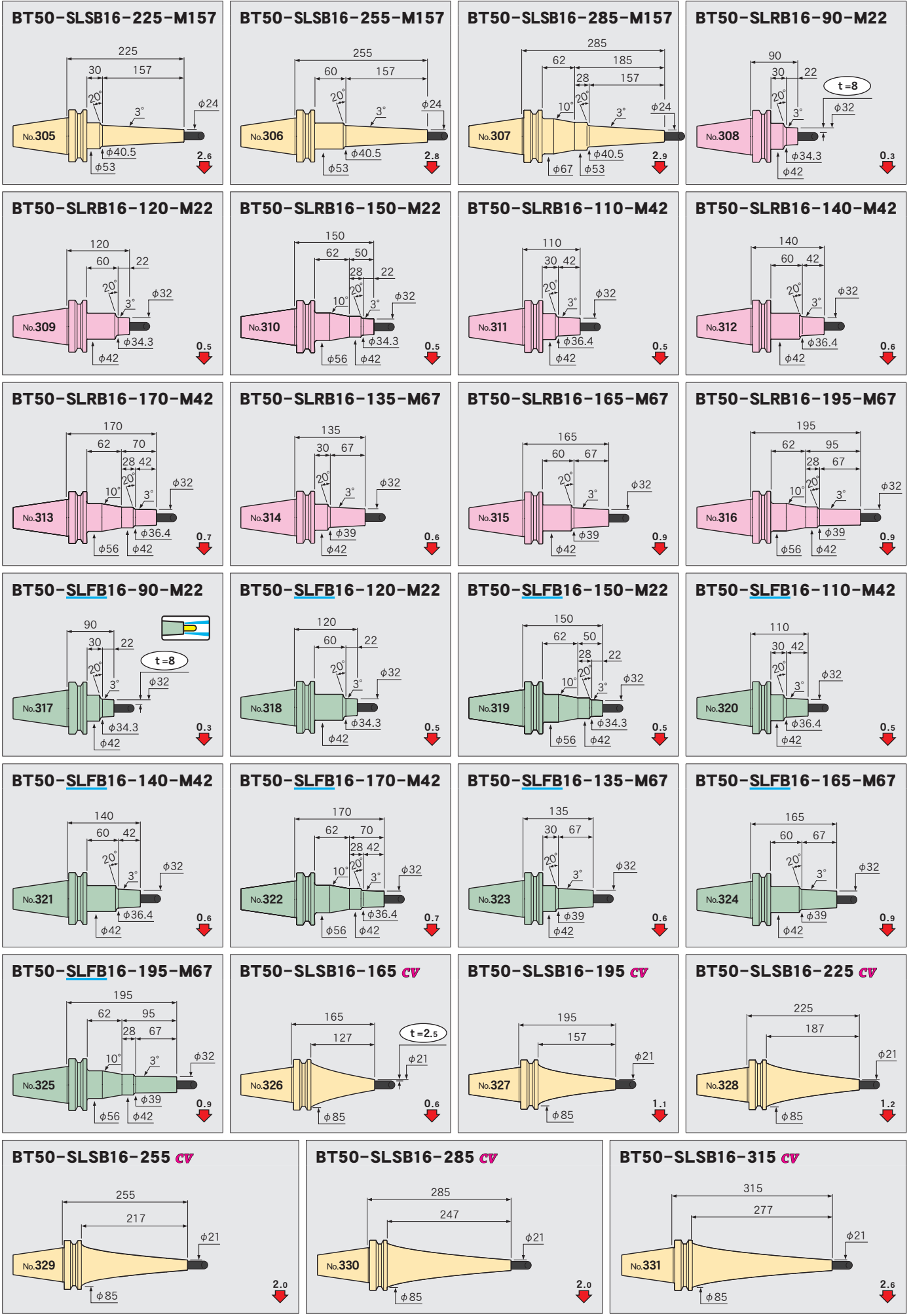
PERIPHERALS

Technical Information



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Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
anbor

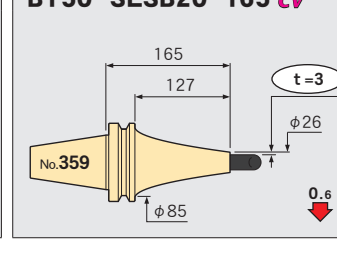
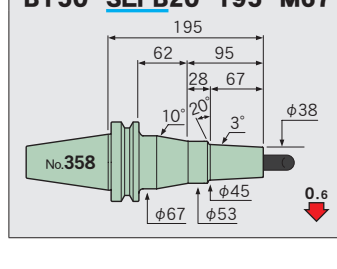
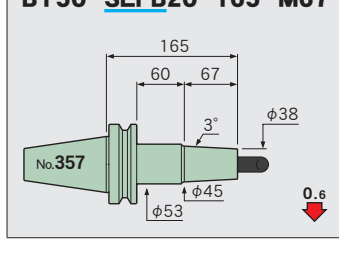
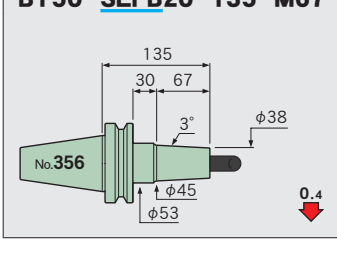
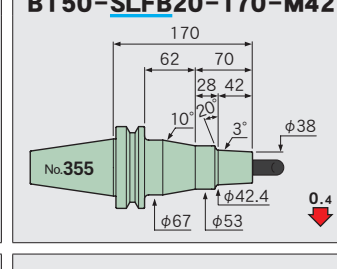
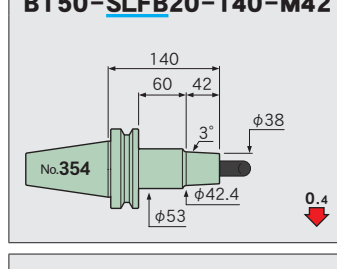
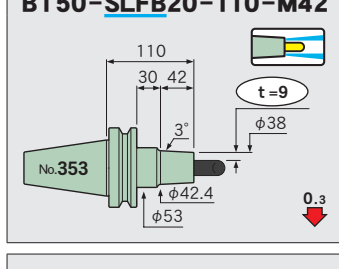
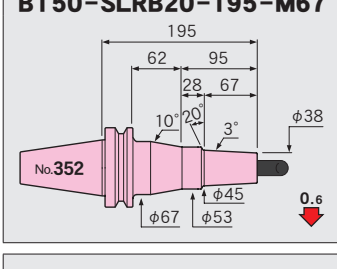
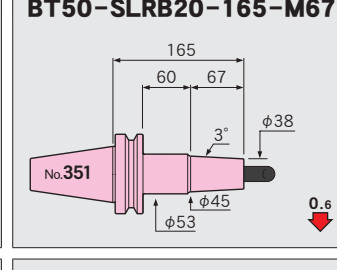
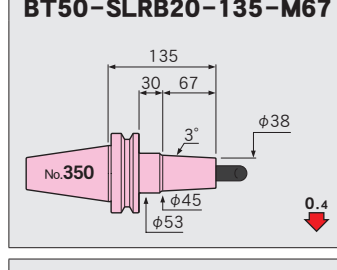
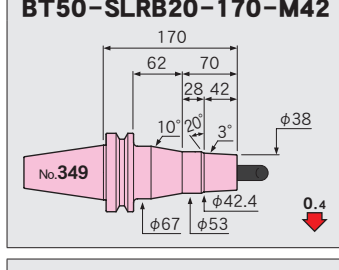
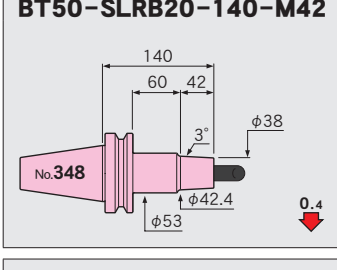
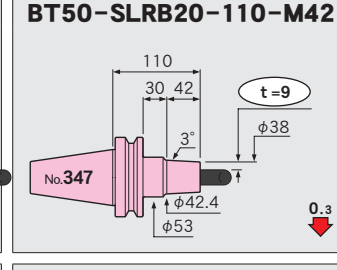
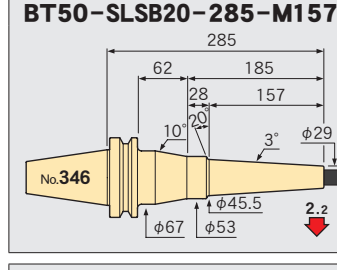
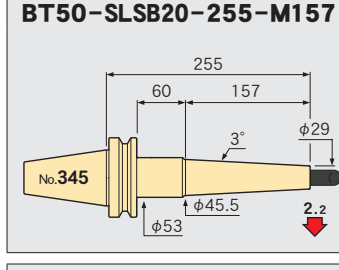
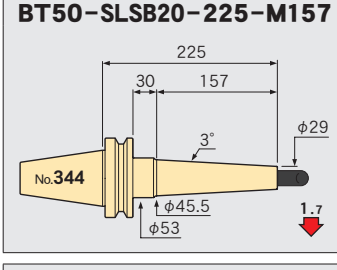
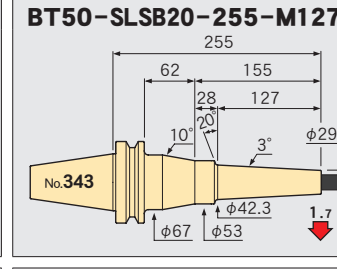
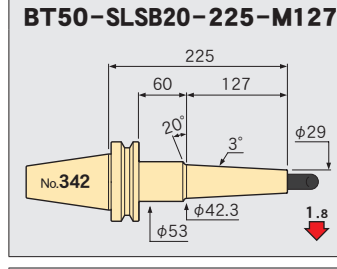
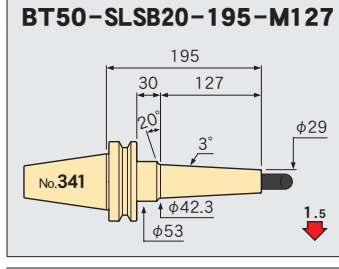
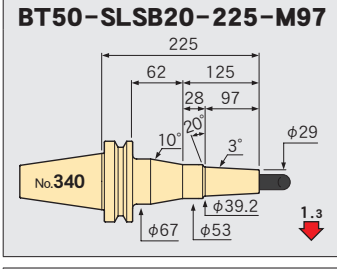
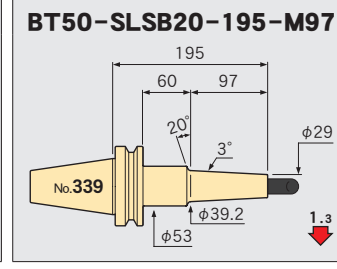
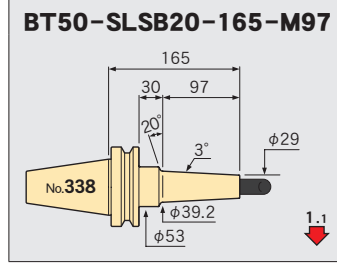
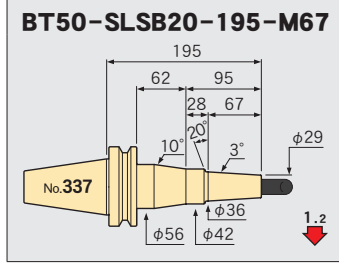
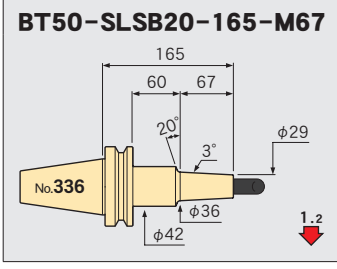
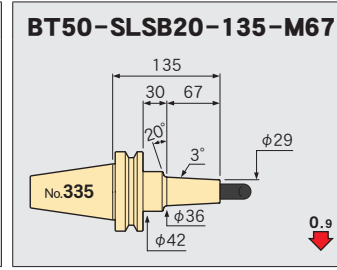
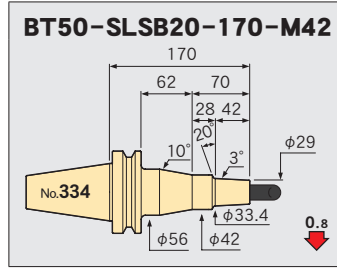
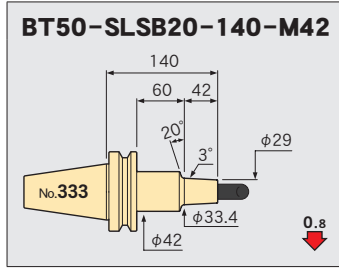
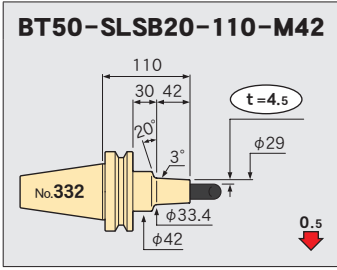
OTHERS

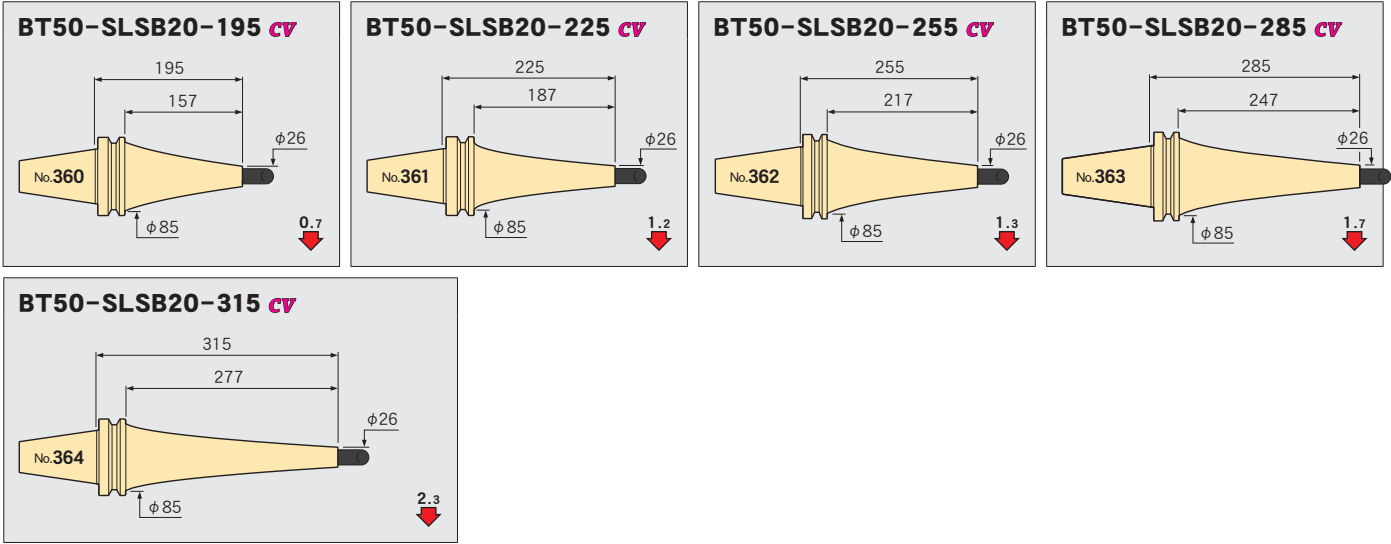
PERIPHERALS

Technical
Information

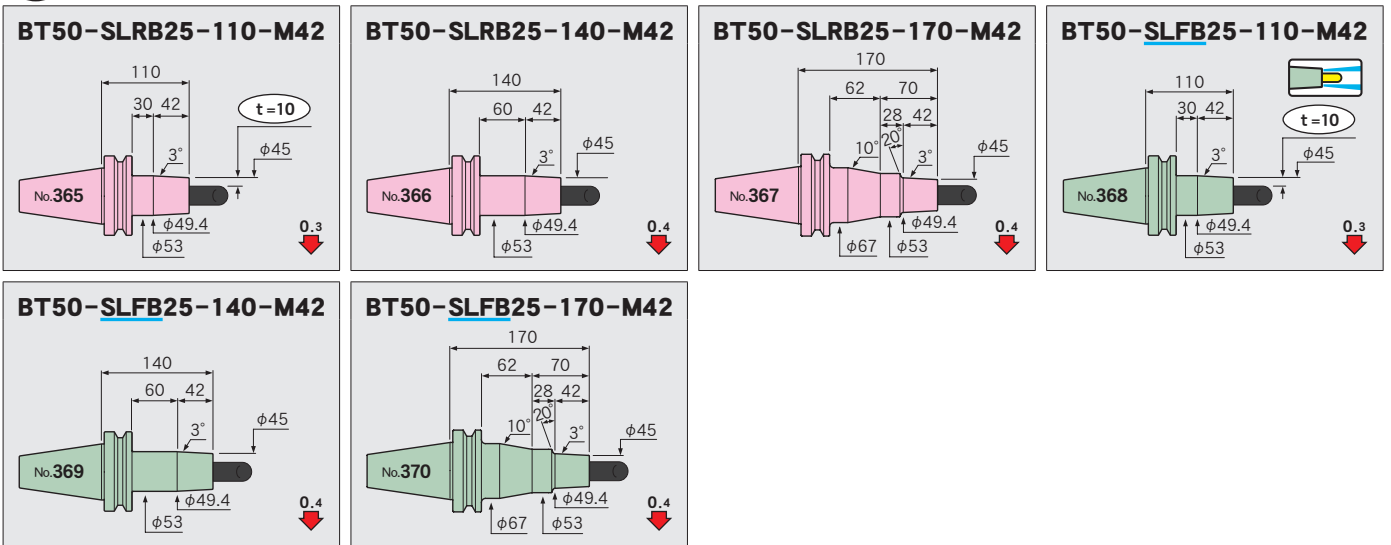
φ20

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

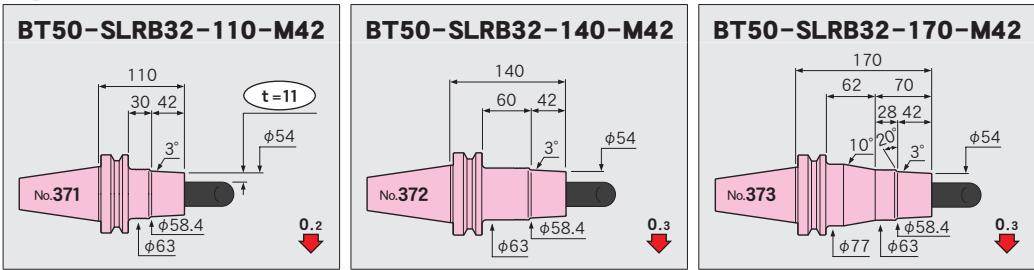




$\phi 25$



$\phi 32$



φ70 Nozzle(HRB-03S)
 Required for shrinking the SLRB32.

CODE
HRB-NZL70

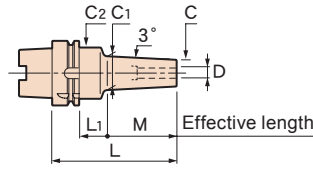
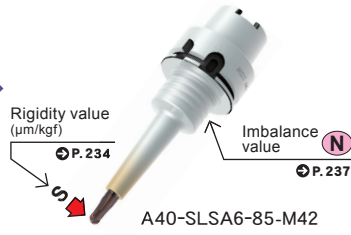
$\phi 70$



Feature
 Shrink-fit Heater
 MONO 3°
 MONO CURVE
 MONO Series
 2PIECE type
 UNO
 HYPER version
 STRAIGHT arbor
 OTHERS
 PERIPHERALS
 Technical information

A40

MONO 3°



■ **Std.Access.**
 ● Coolant duct (fixed type)→P.218

■ **Note**
 ● Swing type coolant ducts are available upon request.
 For details, please contact us.

■ **Caution**
 ● Setting cutters...Be sure to insert the tool beyond the safety mark.

Compatibility table for HRD-01S
 Available Not available

CODE	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	Scale model	
A40-SLSA3- 65-M22	3	6	1.5	65	22	23	8.3	25	9	44	0.3	3	4.5	○	1
				85	42		10.4		64		3.2	9.1	2		
				100		38		78		3.3	9.3	3			
-SLRA3- 65-M22	3	7.5	2.25	65	22	23	9.8	25	9	44	0.3	3	2.7	○	4
				85	42		11.9		64		3.2	5.3	5		
-SLFB3- 65-M22	3	9.5	3.25	65	22	23	11.8	25	9	44	0.3	3	1.2	○	6
				85	42		13.9		64		3.3	3.2	7		
A40-SLSA4- 60	4	7	1.5	60	22	18	9.3	20	12	44	0.2	1.4	3.8	○	8
				65		23		25		0.3	3.1	3.5	9		
				80	42	18	11.4	20	64	0.2	1.4	7.5	10		
				85		23		25		0.3	3.4	7.1	11		
				100		38		78		3.5	7.4	12			
-SLRA4- 65-M22	4	10	3	65	22	23	12.3	25	12	44	0.3	3.1	1.7	○	13
				85	42		14.4		64		3.5	3.1	14		
-SLFB4- 65-M22	4	12	4	65	22	23	14.3	25	12	44	0.3	3.2	1.3	○	15
				85	42		16.4		64		3.5	2.2	16		
A40-SLSA6- 65-M22	6	9	1.5	65	22	23	11.3	25	18	44	0.3	3.2	2.3	○	17
				80	42	18	13.4	20	54	0.2	1.5	5.1	18		
				85		23		25	64	0.3	3.9	4.8	19		
				100		38		78		4	5.1	20			
SLRA6- 65-M22	6	12	3	65	22	23	14.3	25	18	44	0.3	3.2	1.3		21
				85	42		16.4		64		3.9	2.4	22		
-SLFB6- 70-M22	6	14	4	70	22	28	16.3	32	18	48	0.4	4.1	1	○	23
				90	42		18.4		68		4.7	1.6	24		
A40-SLSA8- 65-M22	8	11	1.5	65	22	23	13.3	25	24	44	0.3	3.2	1.6	○	25
				85	42	23	15.4		64		4.3	3.4	26		
				100		38		78		4.4	3.8	27			
-SLRA8- 65-M22	8	14	3	65	22	23	16.3	25	24	44	0.3	3.2	1.1	○	28
				85	42		18.4		64		4.3	2	29		
-SLFB8- 70-M22	8	18	5	70	22	28	20.3	32	24	48	0.4	4.1	0.7	×	30
				90	42		22.4		68		5.2	1.1	31		
A40-SLSA10- 65-M22	10	13	1.5	65	22	23	15.3	25	30	44	0.3	3	1.2	○	32
				85	42		17.4		64		4.6	2.6	33		
				90		28		26		1.9		34			
				100		38		25		4.7	3	35			
-SLRA10- 65	10	16	3	65	22	23	18.3	26	25	44	0.3	1.6	0.9	○	36
								25	30		3	1	37		
				90	42	28	20.4	32	69	0.4	5.4	1.5	38		
-SLFB10- 70-M22	10	22	6	70	22	28	24.3	32	30	48	0.4	3.9	0.6	×	39
				90	42		26.4		68	0.5	5.6	0.9	40		



CODE	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg	N	S	Scale model
A40-SLSA12- 65-M22	12	15	1.5	65	22	23	17.3	25	30	44	0.3	3.3	1.1	41
- 90-M42				90	42	28	19.4	32		68	0.4	6.1	1.9	42
-SLRA12- 65-M22	12	20	4	65	22	23	22.3	25	30	44	0.3	3.3	0.8	43
-SLFB12- 70-M22	12	26	7	70	22	28	28.3	32	30	48	0.4	4.2	0.6	44
A40-SLRA16- 65-M22	16	26	5	65	22	23	28.3	33.5	32	43	0.4	2	0.5	45
A40-SLRA20- 70-M50	20	32	6	70	50	-	33.5	-	38	48	0.4	2.4	0.6	46



■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-A40-G2
P. 226

MAKINO
N2-5XA

S=1:4

φ 3

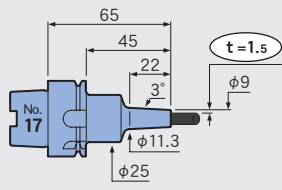
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<p>A40-SLRA3-65-M22</p> <p>2.7</p>	<p>A40-SLRA3-85-M42</p> <p>5.3</p>	<p>A40-SLFB3-65-M22</p> <p>1.2</p>
		<p>A40-SLFB3-85-M42</p> <p>3.2</p>

φ 4

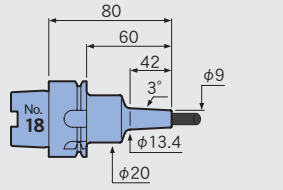
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<p>A40-SLSA4-100-M42</p> <p>7.4</p>	<p>A40-SLRA4-65-M22</p> <p>1.7</p>	<p>A40-SLRA4-85-M42</p> <p>3.1</p>	<p>A40-SLFB4-65-M22</p> <p>1.3</p>
<p>A40-SLFB4-85-M42</p> <p>2.2</p>			

φ6

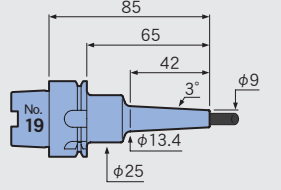
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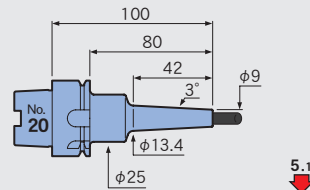
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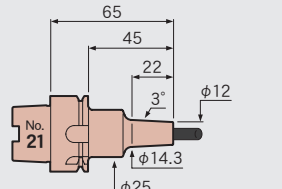
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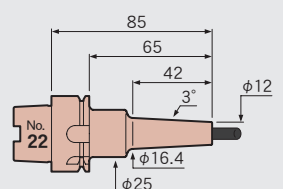
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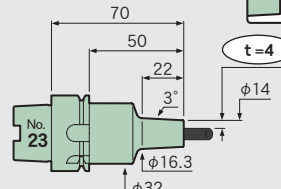
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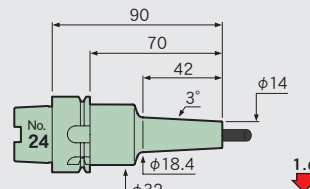
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A40-SLFB6-70-M22

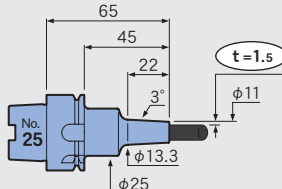


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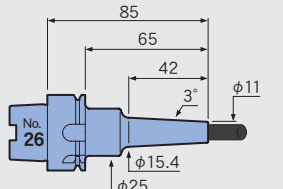


φ8

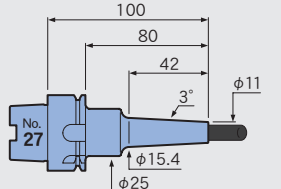
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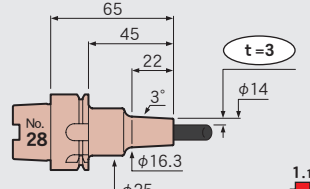
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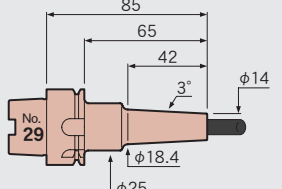
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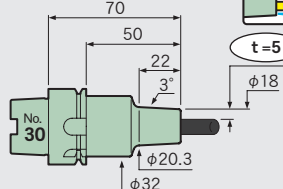
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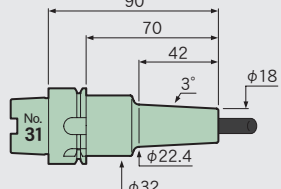
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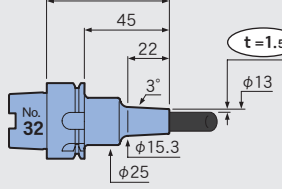


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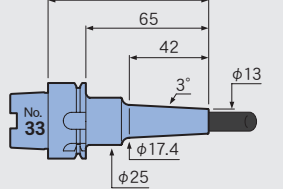


φ10

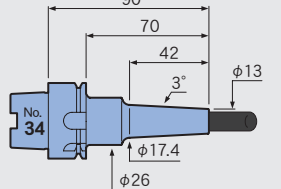
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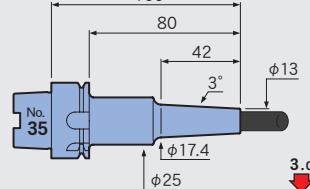
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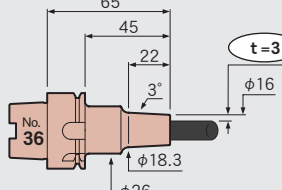
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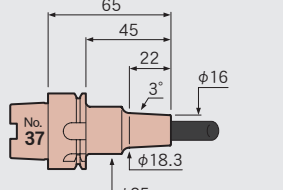
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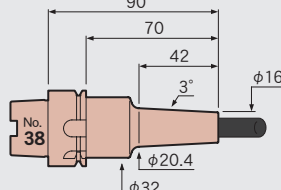
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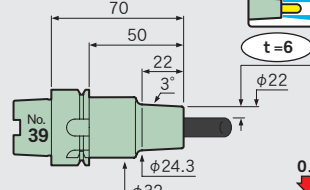
A40-SLRA10-65-M22



A40-SLRA10-90-M42

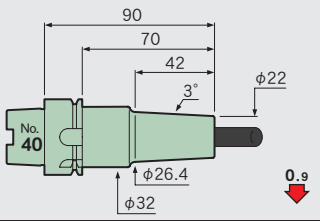


A40-SLFB10-70-M22



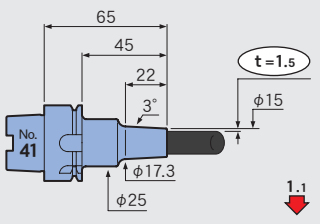
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

A40-SLFB10-90-M42

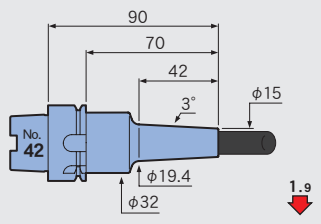


φ12

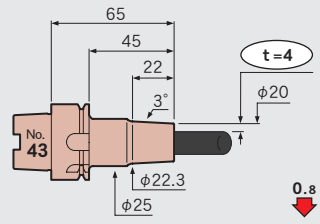
A40-SLSA12-65-M22



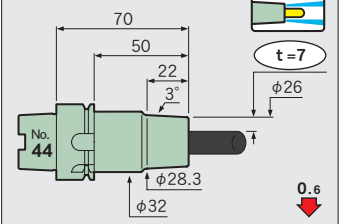
A40-SLSA12-90-M42



A40-SLRA12-65-M22

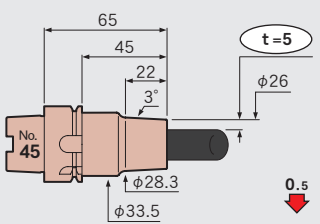


A40-SLFB12-70-M22



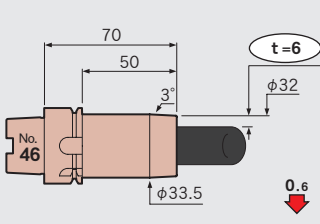
φ16

A40-SLRA16-65-M22



φ20

A40-SLRA20-70-M50



Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

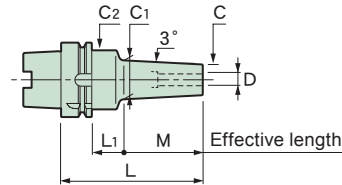
OTHERS

PERIPHERALS

Technical
Information

A50

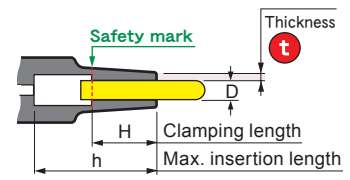
MONO 3°



Std. Access.
• Coolant duct (fixed type)→P.218

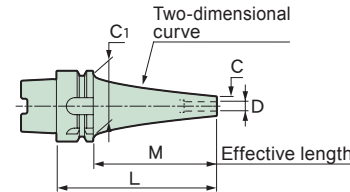
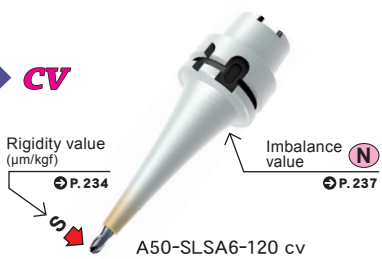
Note
• Swing type coolant ducts are available upon request. For details, please contact us.

Caution
• Setting cutters---Be sure to insert the tool beyond the safety mark.
• The undercut area of the A50M is different from the standards. Please be careful to check for interference with the ATC arm.



NEW

MONO CURVE CV



Compatibility table for HRD-01S
[O] Available [X] Not available

CV : Curve

Thickness

CODE	Fig	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	Scale model						
A50-SLSA 3- 95-M42	1	3	6	1.5	95	42	27	10.4	25	9	71	0.5	5.8	9.1	○	1					
-125-M42					125		57				101					0.6	6.5	9.8	2		
-SLRA 3- 75-M22	1	3	7.5	2.25	75	22	27	9.8	25	9	51	0.5	6.2	2.8	○	3					
- 95-M42					95						42					11.9	71	6.6	5.3	4	
-125-M42					125						57					101	0.6	7.3	6	5	
A50-SLSA 4- 95-M42					1						4					7	1.5	95	42	27	11.4
-125-M42	125	57	101	0.6		7.7	7.9	7													
-SLRA 4- 75-M22	1	4	10	3	75	22	27	12.3	25	12	51	0.5	6.3	1.7	○	8					
- 95-M42					95						42					14.4	71	7	3.1	9	
-125-M42					125						57					101	0.6	7.7	3.8	10	
-SLSA 4- 90 CV					2						4					7	1.5	90	64	-	42
-120 CV	120	94	96	5		4.2	12														
-150 CV	150	124	126	0.7		5.8	6	13													
-180 CV	180	154	156	0.7		5.9	12	14													
-SLRA 4-120 CV	2	4	10	3		120	94	-	42	-		12	95	0.6	5.1			2.7			
-150 CV					150	124					126		0.7			5.8	4.1		16		
A50-SLSA 6- 95-M42	1	6	9	1.5	95	42	27	13.4	25	18	71	0.5	7.3	4.8	○	17					
-125-M42					125		57				101					0.6	8	5.6	18		
-SLRB 6- 75-M22	1	6	14	4	75	22	27	16.3	32	18	50	0.5	7.2	1	○	19					
- 95-M42					95						42					18.4	70	0.6	8.9	1.6	20
-125-M42					125						57					100	0.7	10.2	1.9	21	
-SLSA 6- 90 CV					2						6					9	1.5	90	64	-	42
-120 CV	120	94	95	0.6		5.1	3.5	23													
-150 CV	150	124	126	0.7		5.8	5.4	24													
-180 CV	180	154	156	0.8		6.6	7.6	25													
-SLRA 6-120 CV	2	6	13	3.5		120	94	-	42	-		18	96	0.8	5.7			1.8			
-150 CV					150	124					126		0.8			6.4	2.7		27		
A50-SLSA 8- 95-M42	1	8	11	1.5	95	42	27	15.4	25	24	71	0.5	9.3	3.4	○	28					
-125-M42					125		57				101					0.6	11.8	4.4	29		
-SLRB 8- 75-M22	1	8	18	5	75	22	27	20.3	32	24	50	0.6	7.9	0.7	X	30					
- 95-M42					95						42					22.4	70	10.5	1.1	31	
-125-M42					125						57					100	0.8	11.8	1.5	32	

CODE	Fig	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg	N	S	Scale model	
NEW A50-SLSA 8- 90 CV -120 CV -150 CV -180 CV	2	8	11	1.5	90	64	-	42	-	24	66	0.6	4.9	1.4	○	33
					120	94					96	0.7	5.7	2.2		34
					150	124					126		5.9	4.9		35
					180	154					156	0.8	6.7	7.1		36
-SLRA 8-120 CV -150 CV	2	8	16	4	120	94	-	42	-	24	96	0.8	6.2	1.3	○	37
					150	124					126		6.5	2.7		38
A50-SLSA10- 95-M42 -125-M42	1	10	13	1.5	95	42	27	17.4	25	30	71	0.5	10.7	2.6	○	39
					125		57				101	0.6	12.1	3.7		40
-SLRB10- 75-M22 - 95-M42 -125-M42	1	10	22	6	75	22	27	24.3	32	30	50	0.6	8.3	0.6	×	41
					95	42		26.4			70		11.9	0.9		42
					125		57				100	0.8	13.3	1.3		43
NEW A50-SLSA10- 90 CV -120 CV -150 CV -180 CV	2	10	13	1.5	90	64	-	42	-	30	66	0.6	4.9	1.3	○	44
					120	94					96	0.7	5.7	2.1		45
					150	124					126	0.8	6.5	3.4		46
					180	154					156		6.8	6.9		47
A50-SLRA10-150 CV	2	10	19	4.5	150	124	-	42	-	30	126	0.9	6.9	2.2	○	48
A50-SLRB12- 75-M22 - 95-M42 -125-M42	1	12	26	7	75	22	27	28.3	42	30	52	0.7	6.2	0.4	×	49
					95	42		30.4			72	0.8	6.3	0.6		50
					125		57			98	1	22.9	0.8	51		
A50-SLRB16- 75-M22 -105-M22	1	16	32	8	75	22	27	34.3	42	32	52	0.7	6.3	0.4	○	52
					105		57			78	1	19	0.5	53		
A50M-SLRB20- 75-M22* -105-M22*	1	20	38	9	75	22	27	40.3	49	40	51	0.8	6.4	0.3	○	54
					105		57			76	1.2	15.1	0.4	55		

*When shrinking the SLRB20 with HEAT ROBO DENJI 5000(HRD-02SH), the standard heating coil cannot be used. Please use the heating coil No.4.


■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-A50-G2

☎ P.226

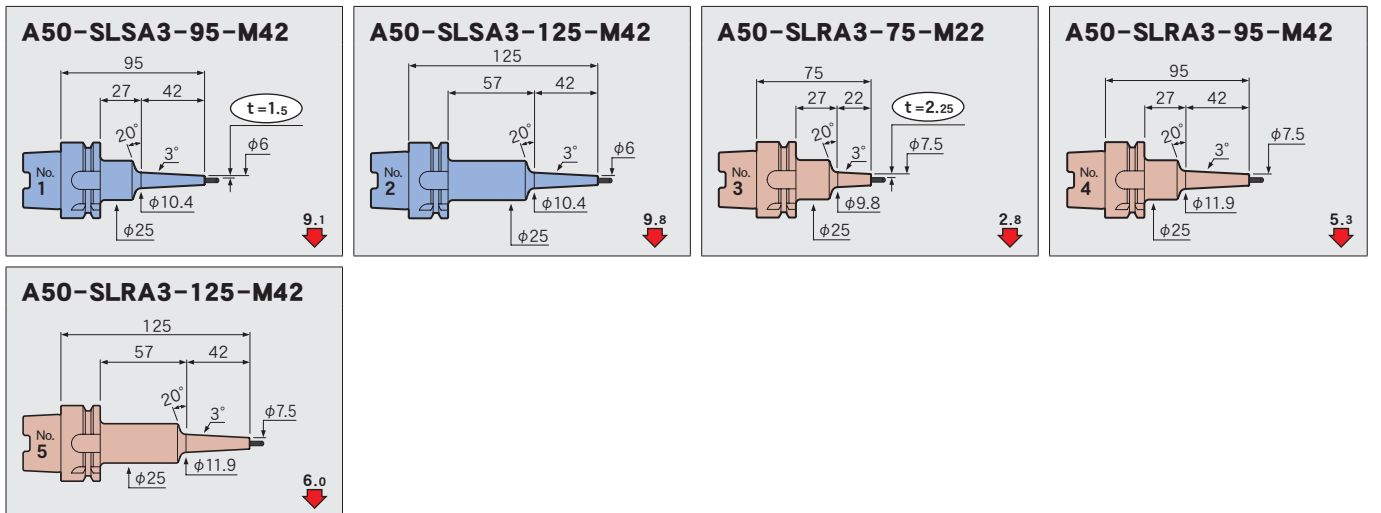


HORKOS NJ 50
MAKINO J J3 / L2
SUGINO SC Dual

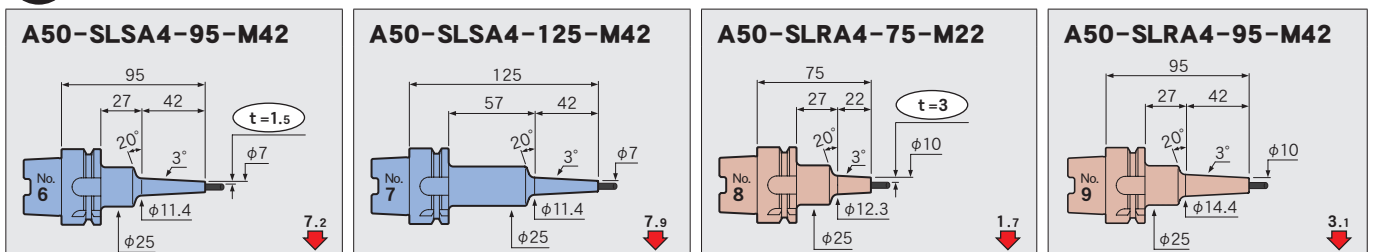


S=1:5

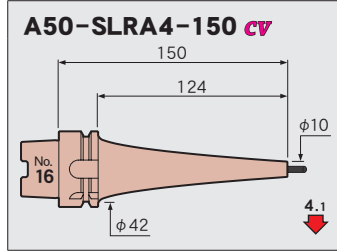
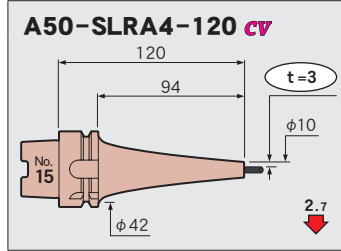
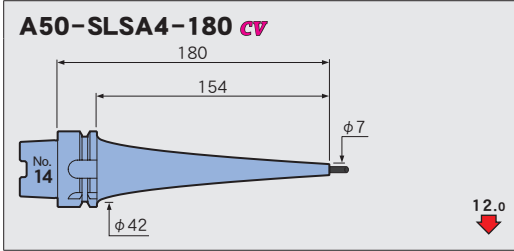
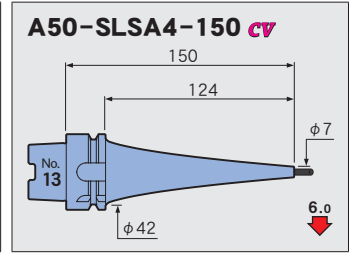
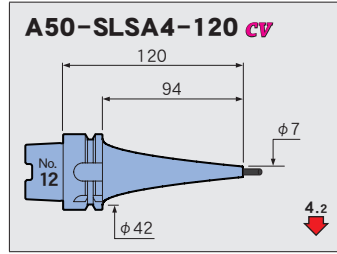
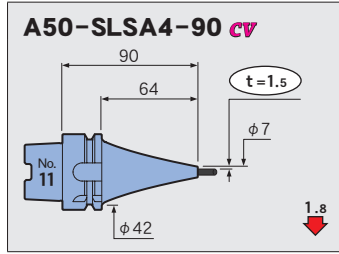
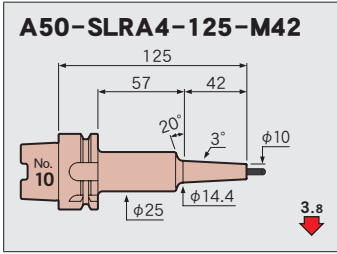
φ3



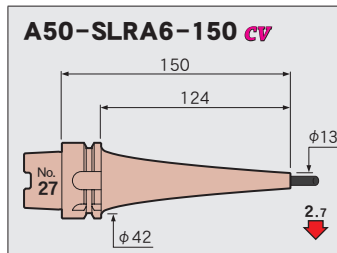
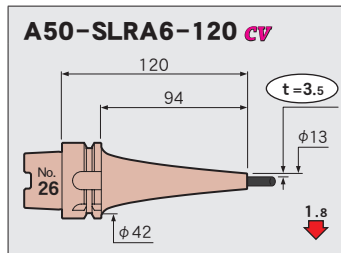
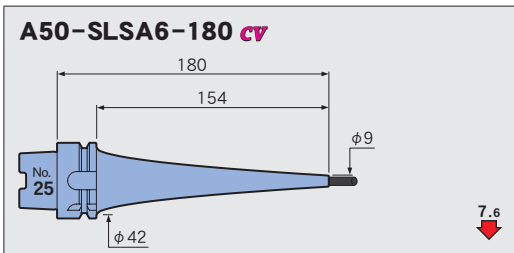
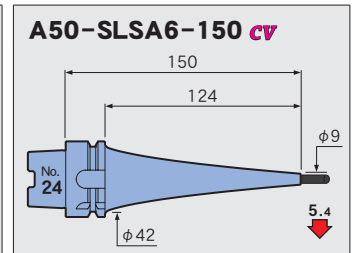
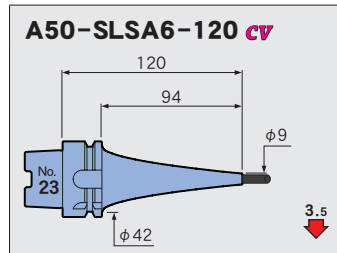
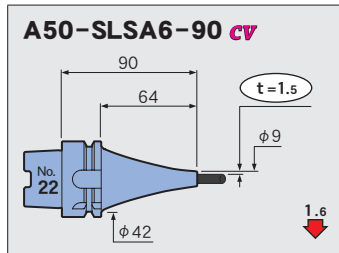
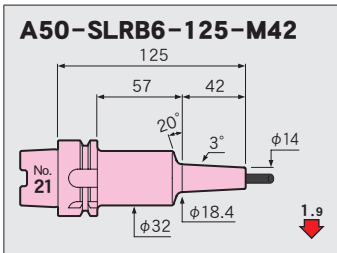
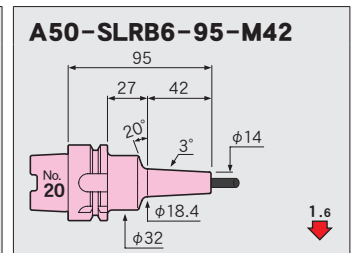
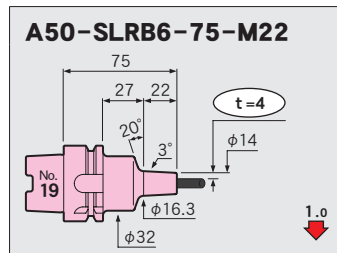
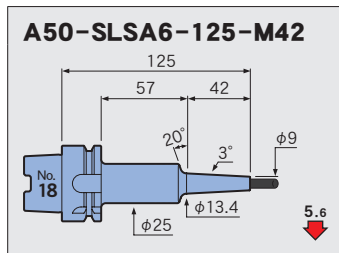
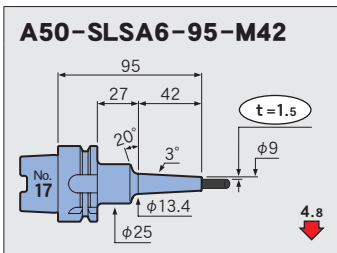
φ4



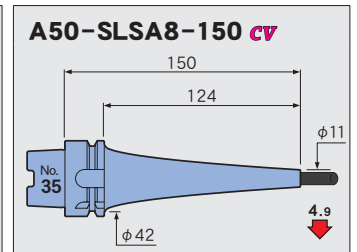
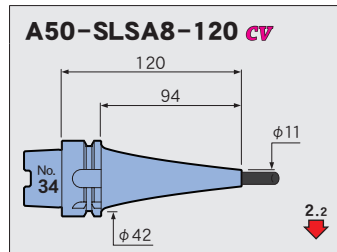
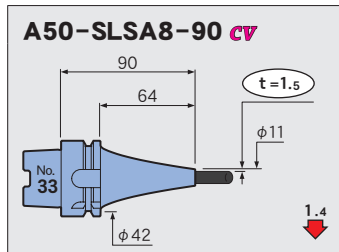
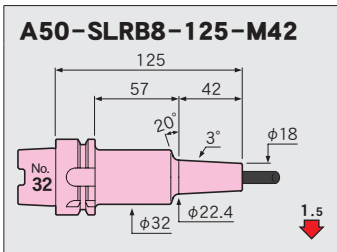
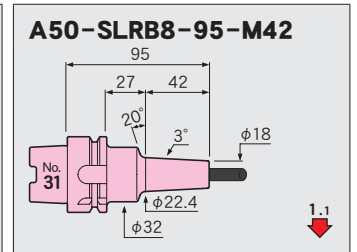
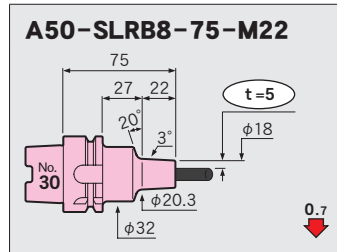
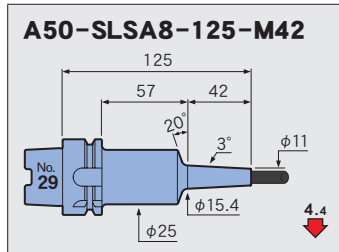
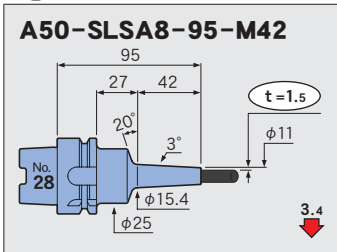
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

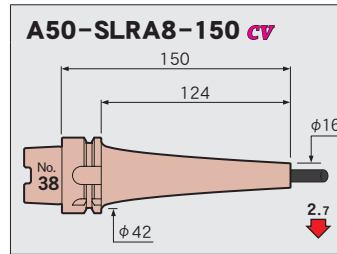
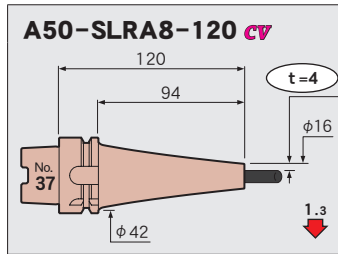
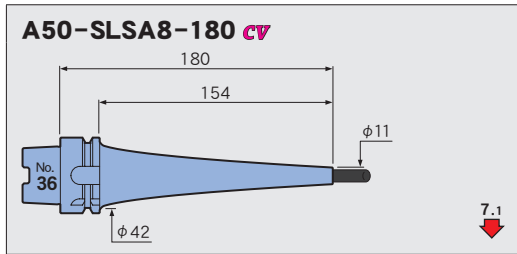


φ6

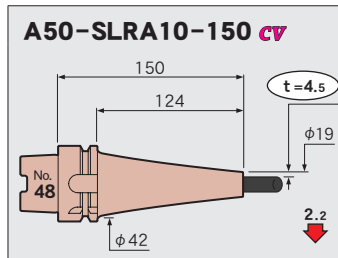
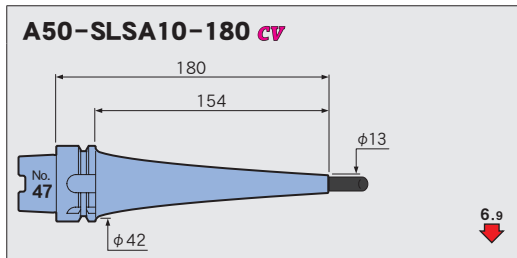
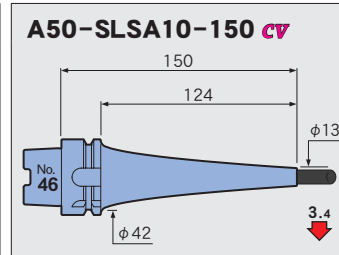
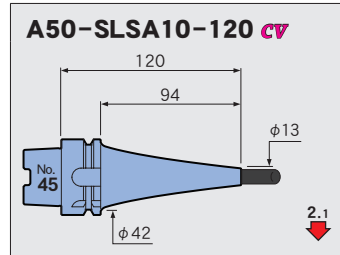
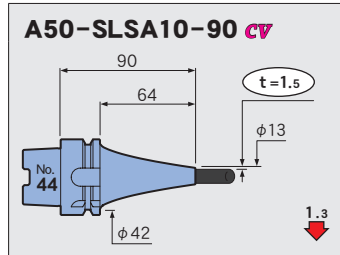
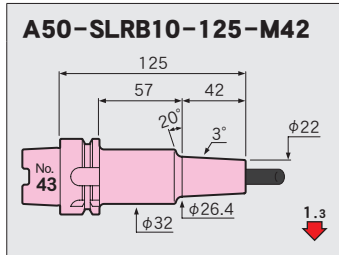
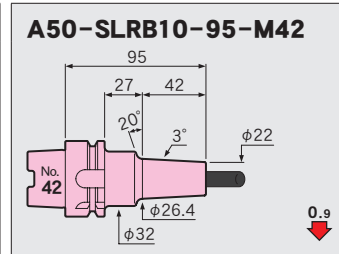
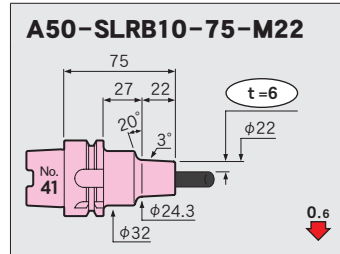
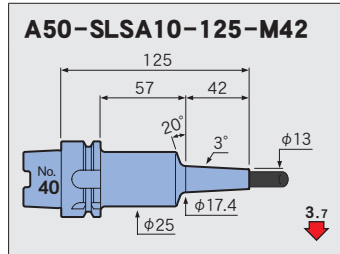
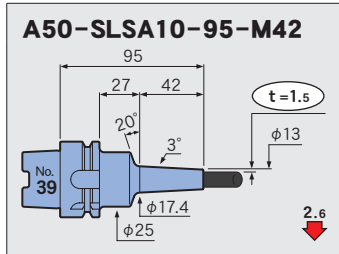


φ8

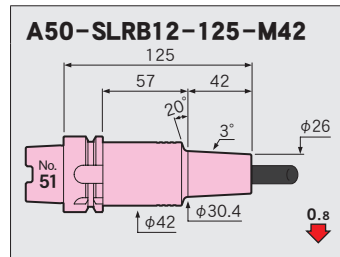
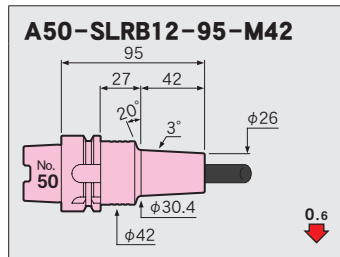
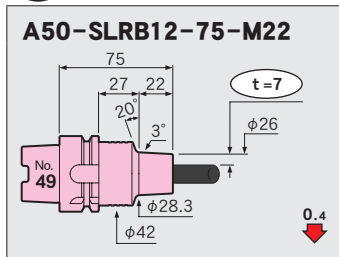




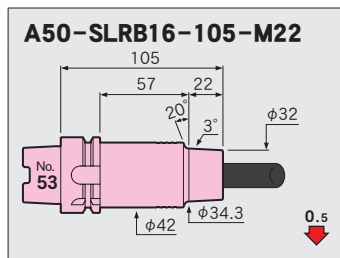
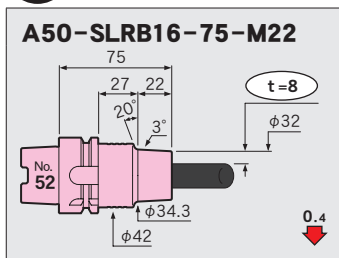
φ10



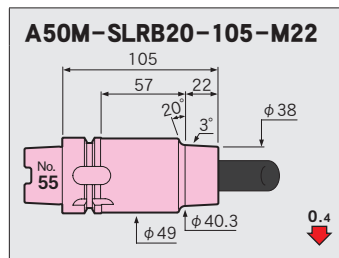
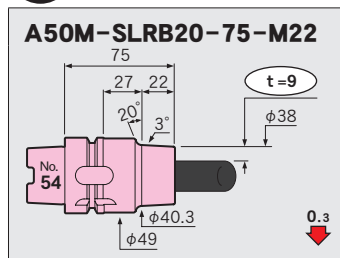
φ12



φ16



φ20



A63

MONO 3°

Rigidity value (μm/kgf)
P. 234

Imbalance value
P. 237



A63-SLSA6-150-M97

Fig. 1

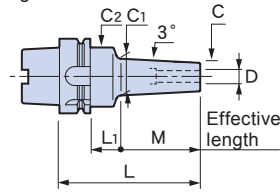
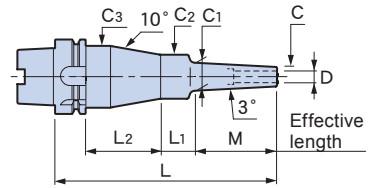


Fig. 2



MONO CURVE

CV

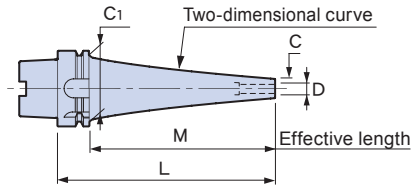
Rigidity value (μm/kgf)
P. 234

Imbalance value
P. 237



A63-SLSA8-150 cv

Fig. 3



Std. Access.

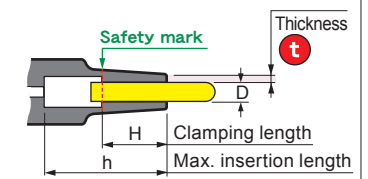
- Coolant duct (fixed type) →P.218

Note

- Swing type coolant ducts are available upon request. →P.218

Caution

- Setting cutters...Be sure to insert the tool beyond the safety mark.





Compatibility table for HRD-01S

[○] Available [x] Not available
[▲] Usable by raising the heating unit. →P.233
[★] Use heating coil No. 2.


CV : Curve

Thickness

CODE	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	kg	N	S	Scale model
A63-SLSA3- 95-M 42	1	3	6	1.5	95	42	27	—	10.4	25	—	9	70	0.7	8.1	9.1	1
-120-M 67					120	67			13				95	0.8	9.2	14.7	4
-125-M 42					125	42	57		10.4				100		8.2	9.8	2
-150-M 67					150	67			13				125		9.3	15.8	5
-M 97						97	27		16.2						10.5	20.5	7
-155-M 42	2				155	42	33	54	10.4	26	40		130	1.2	8.4	9.9	3
-180-M 67					180	67			13	25	39		155	1.1	9.6	15.7	6
-M 97	1					97	57	—	16.2		—			0.9	10.6	22.2	8
-210-M 97	2				210		33	54			39		185	1.2	10.8	22.1	9
-SLRA3- 75-M 22	1	3	7.5	2.25	75	22	27	—	9.8	25	—	9	50	0.7	8.4	2.8	10
- 95-M 42					95	42			11.9				70		8.9	5.3	13
-105-M 22					105	22	57		9.8				80	0.8	8.6	3.2	11
-120-M 67					120	67	27		14.5				95		9.6	8.8	16
-125-M 42					125	42	57		11.9				100		9	6	14
-135-M 22	2				135	22	33	54	9.8		39		110	1.1	8.8	3.2	12
-150-M 67	1				150	67	57	—	14.5		—		125	0.9	9.8	9.9	17
-M 97						97	27		17.7					0.8	10.6	12.9	19
-155-M 42	2				155	42	33	54	11.9	25	39		130	1.1	9.2	6	15
-180-M 67					180	67			14.5	26	40		155	1.2	10	9.8	18
-M 97	1					97	57	—	17.7	25	—			0.9	10.8	14.6	20
-M127						127	27		20.8	36					12.6	15.7	22
-210-M 97	2				210	97	33	54	17.7	25	39		185	1.2	11	14.4	21
-M127	1					127	57	—	20.8	32	—		184	1.1	12.8	16.6	23
-240-M127	2				240		30	57			46		214	1.5	13.2	16.5	24

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model
A63-SLFB3- 75-M 22	1	3	9.5	3.25	75	22	27	—	11.8	25	—	9	50	0.7	8.1	1.9	25
 - 95-M 42					95	42			13.9				70	0.8	8.5	3.2	28
-105-M 22					105	22	57		11.8	26			80	0.9	8.2	2.3	26
-120-M 67					120	67	27		16.5	25			95	0.8	9.7	5.3	31
-125-M 42					125	42	57		13.9	26			100	0.9	8.7	3.8	29
-135-M 22	2				135	22	33	54	11.8	25	39		110	1.1	8.5	2.3	27
-150-M 67	1				150	67	57	—	16.5		—		125	0.9	9.8	6.4	32
-155-M 42	2				155	42	33	54	13.9		39		130	1.1	8.9	3.9	30
-180-M 67					180	67			16.5				155	1.2	10	6.4	33
A63-SLSA4- 95-M 42	1	4	7	1.5	95	42	27	—	11.4	25	—	12	70	0.7	9.2	7.2	34
-120-M 67					120	67			14				95	0.8		11.7	37
-125-M 42					125	42	57		11.4				100		9.4	7.9	35
-150-M 67					150	67			14				125	0.9		12.8	38
-M 97						97	27		17.2					0.8	10.6	16.6	40
-155-M 42	2				155	42	33	54	11.4		39		130	1.1	9.6	7.9	36
-180-M 67					180	67			14				155			12.8	39
-M 97	1					97	57	—	17.2		—			0.9	10.8	18.4	41
-210-M 97	2				210		33	54			39		185	1.2	11	18.2	42
-SLRA4- 75-M 22	1	4	10	3	75	22	27	—	12.3	25	—	12	50	0.7	8.6	1.7	43
- 95-M 42					95	42			14.4				70	0.8	9.2	3.1	46
-105-M 22					105	22	57		12.3				80		8.7	2.2	44
-120-M 67					120	67	27		17				95		10.3	5.1	49
-125-M 42					125	42	57		14.4				100		9.3	3.8	47
-135-M 22	2				135	22	33	54	12.3		39		110	1.1	8.9	2.2	45
A63 -150-M 67	1				150	67	57	—	17		—		125	0.9	10.4	6.3	50
-M 97						97	27		20.2				124	0.8	11.7	7.7	52
-155-M 42	2				155	42	33	54	14.4		39		130	1.1	9.6	3.8	48
-180-M 67					180	67			17				155	1.2	10.7	6.2	51
-M 97	1					97	57	—	20.2		—		154	0.9	11.8	9.5	53
-M127						127	27		23.3	32				1	14.8	9.4	55
-210-M 97	2				210	97	33	54	20.2	25	39		184	1.2	12.1		54
-M127	1					127	57	—	23.3	32	—			1.1	15.1	10.4	56
-240-M127	2				240		30	57			46		214	1.5	15.4	10.3	57
-SLFB4- 75-M 22	1	4	12	4	75	22	27	—	14.3	25	—	12	50	0.7	8.4	1.3	58
 - 95-M 42					95	42			16.4				70	0.8	9	2.2	61
-105-M 22					105	22	57		14.3				80		8.5	1.8	59
-120-M 67					120	67	27		19				95		10.3	3.6	64
-125-M 42					125	42	57		16.4				100	0.9	9.1	2.9	62
-135-M 22	2				135	22	33	54	14.3		39		110	1.1	8.7	1.8	60
-150-M 67	1				150	67	57	—	19		—		125	0.9	10.4	4.7	65
-155-M 42	2				155	42	33	54	16.4		39		130	1.1	9.4	2.9	63
-180-M 67					180	67			19				155	1.2	10.6	4.6	66
-SLSA4- 90 CV	3	4	7	1.5	90	64	—	—	53	—	—	12	65	1	9.3	1.8	67
-120 CV					120	94							95	1.1	10.1	2.7	68
-150 CV					150	124							125	1.3	11	4	69
-180 CV					180	154							154	1.4	11.6	6.6	70
-210 CV					210	184							185		11.8	11.6	71
-240 CV					240	214							214	1.6	13.1	14	72
-270 CV					270	244							245	2	15.4	11.9	73
-300 CV					300	274							275	2.1	16.3	15.9	74
-SLRA4-120 CV	3	4	10	3	120	94	—	—	53	—	—	12	95	1	8.6	1.9	75
-150 CV					150	124							125	1.1	9.3	2.9	76
-180 CV					180	154							155	1.4	10.9	3.3	77
-210 CV					210	184							185		11.3	5.6	78

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

Feature	CODE	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg lbs	N	S	Scale model
Shrink-fit Heater	A63-SLSA3/16- 90 CV	3	3/16	.31	.06	3.54	2.52	—	—	2.87	—	—	.59	2.56	1.9	7.6	2	79
	-120 CV					4.72	3.70							3.74	2.2	8.5	2.6	80
	-150 CV					5.91	4.88							4.92	2.5	9.4	4	81
	-180 CV					7.09	6.06							6.06	2.7	10.3	6.5	82
	-210 CV					8.27	7.24							7.24	3.1	11.8	8.4	83
	-240 CV					9.45	8.43							8.43	3.5	12.9	10.6	84
	-270 CV					10.63	9.61							9.61	4.0	14.2	13.2	85
	-300 CV					11.81	10.79							10.83	4.5	15.1	16.1	86
MONO 3° MONO CURVE	-SLRA3/16-120 CV	3	3/16	.42	.12	4.72	3.70	—	—	2.87	—	—	.59	3.70	2.2	8.7	1.8	87
	-150 CV					5.91	4.88							4.88	2.6	10	2.4	88
	-180 CV					7.09	6.06							6.10	2.8	10.2	4.3	89
	-210 CV					8.27	7.24							7.24	3.1	12	5.7	90
MONO Series	A63-SLSA6- 95-M 42	1	6	9	1.5	95	42	27	—	13.4	25	—	18	70	0.7	9.5	4.8	91
	-120-M 67					120	67			16				95	0.8	11.1	8	94
	-125-M 42					125	42	57		13.4				100		9.7	5.6	92
	-150-M 67					150	67			16				125	0.9	11.2	9.3	95
	-M 97						97	27		19.2	32			124		13.4	11	97
	-155-M 42	2				155	42	33	54	13.4	25	39		130	1.1	9.9	5.6	93
	-180-M 67					180	67			16				155		11.5	9.2	96
	-M 97	1					97	57	—	19.2	32	—		154	1	13.6	11.7	98
	-210-M 97	2				210		30	57			46		184	1.4	14		99
	2PIECE type	-SLSB6- 95-M 42	1	6	10	2	95	42	27	—	14.4	25	—	18	70	0.7	10.5	3.7
-120-M 67						120	67			17				95	0.8	12.6	6.2	103
-125-M 42						125	42	57		14.4				100		10.6	4.5	101
-150-M 67						150	67			17				125	0.9	12.7	7.4	104
-M 97							97	27		20.2	32			124		15.4	8.5	106
-155-M 42		2				155	42	33	54	14.4	25	39		130	1.1	10.9	4.4	102
-180-M 67						180	67			17				155		12.9	7.3	105
A63 -M 97		1					97	57	—	20.2	32	—		154	1	15.7	9.2	107
-M127							127	27		23.3					0.9	17.9	11	109
-210-M 97		2				210	97	30	57	20.2		46		184	1.4	16	9.2	108
-M127		1					127	57	—	23.3		—			1.1	18.2	12	110
-M157							157	27		26.5						20.4	13.2	112
-240-M127		2				240	127	30	57	23.3		46		214	1.5	18.5	12	111
-M157		1					157	57	—	26.5		—			1.2	20.7	14.6	113
-270-M157	2				270		30	57			46		244	1.6	21		114	
STRAIGHT anbor	-SLRB6- 75-M 22	1	6	14	4	75	22	27	—	16.3	32	—	18	49	0.8	9.3	1	115
	- 95-M 42					95	42			18.4				69		10.9	1.6	118
	-105-M 22					105	22	57		16.3				79	0.9	9.5	1.2	116
	-120-M 67					120	67	27		21				94		13	2.6	121
	-125-M 42					125	42	57		18.4				99	1	11.2	1.9	119
	-135-M 22	2				135	22	30	57	16.3		46		109	1.3	9.9	1.2	117
	-150-M 67	1				150	67	57	—	21		—		124	1	13.2	3	122
	-155-M 42	2				155	42	30	57	18.4		46		129	1.4	11.5	1.9	120
	-180-M 67					180	67			21				154		13.6	3.1	123
	PERIPHERALS	-SLFB6- 75-M 22	1	6	14	4	75	22	27	—	16.3	32	—	18	49	0.8	9.3	1
 - 95-M 42						95	42			18.4				69		10.9	1.6	127
-105-M 22						105	22	57		16.3				79	0.9	9.5	1.2	125
-120-M 67						120	67	27		21				94		13	2.6	130
-125-M 42						125	42	57		18.4				99	1	11.2	1.9	128
-135-M 22		2				135	22	30	57	16.3		46		109	1.3	9.9	1.2	126
-150-M 67		1				150	67	57	—	21		—		124	1	13.2	3	131
-155-M 42		2				155	42	30	57	18.4		46		129	1.4	11.5	1.9	129
-180-M 67						180	67			21				154		13.6	3.1	132





















CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg lbs	N	S	Scale model		
A63-SLSA6- 90 CV	3	6	9	1.5	90	64	—	—	53	—	—	18	65	1	9.4	1.6	○	133	
-120 CV					120	94	95	1.1					10.1	2.3	○	134			
-150 CV					150	124	125	1.3					11	3.6	○	135			
-180 CV					180	154	154	1.4					11.7	5.7	○	136			
-210 CV					210	184	184	1.6					13	7.3	○	137			
-240 CV					240	214	214						13.3	12	○	138			
-270 CV					270	244	245	2.1					16.3	8.5	▲	139			
-300 CV					300	274	275	2.3					17.2	11.7	▲	140			
-SLRA6- 90 CV	3	6	13	3.5	90	64	—	—	53	—	—	18	65	1	8.3	0.8	★	141	
-120 CV					120	94	95	1.1					9.3	1.2	○	142			
-150 CV					150	124	125	1.3					10.1	1.9	○	143			
-180 CV					180	154	155	1.4					11.1	2.8	○	144			
-210 CV					210	184	185						11.5	4.8	○	145			
-SLFA6- 90 CV	3	6	13	3.5	90	64	—	—	53	—	—	18	65	1	8.3	0.8	★	146	
-120 CV					120	94	95	1.1					9.3	1.2	○	147			
-150 CV					150	124	125	1.3					10.1	1.9	○	148			
-180 CV					180	154	155	1.4					11.1	2.8	○	149			
-210 CV					210	184	185						11.5	4.8	○	150			
A63-SLSA1/4- 90 CV	3	1/4	.37	.06	3.54	2.52	—	—	2.87	—	—	.71	2.56	1.9	7.7	1.6	○	151	
-120 CV					4.72	3.70	3.74	2.2					8.5	2.4	○	152			
-150 CV					5.91	4.88	4.92	2.5					9.4	3.7	○	153			
-180 CV					7.09	6.06	6.10	2.8					10.4	5.5	○	154			
-210 CV					8.27	7.24	7.24	3.1					12.1	7.5	○	155			
-240 CV					9.45	8.43	8.43	3.5					13.2	9.6	○	156			
-270 CV					10.63	9.61	9.65	4.1					14.2	11.3	▲	157			
-300 CV					11.81	10.79	10.79	4.7					16.9	11.8	▲	158			
-SLRA1/4- 90 CV	3	1/4	.53	.14	3.54	2.52	—	—	2.87	—	—	.71	2.52	2.1	8.4	0.8	○	159	
-120 CV					4.72	3.70	3.74	2.5					9.2	1.2	○	160			
-150 CV					5.91	4.88	4.92	2.8					10.2	1.9	○	161			
-180 CV					7.09	6.06	6.06	3.1					11.6	2.9	○	162			
-210 CV					8.27	7.24	7.24	3.2					12.2	4.9	○	163			
-SLFA1/4- 90 CV	3	1/4	.53	.14	3.54	2.52	—	—	2.87	—	—	.71	2.52	2.1	8.4	0.8	○	164	
-120 CV					4.72	3.70	3.74	2.5					9.2	1.2	○	165			
-150 CV					5.91	4.88	4.92	2.8					10.2	1.9	○	166			
-180 CV					7.09	6.06	6.06	3.1					11.6	2.9	○	167			
-210 CV					8.27	7.24	7.24	3.2					12.2	4.9	○	168			
A63-SLSA8- 95-M 42	1	8	11	1.5	95	42	27	—	15.4	25	—	24	70	0.7	11.4	3.4	○	169	
-120-M 67					120	67	—	18	32	94	0.8		14	5.4	○	172			
-125-M 42					125	42	57	15.4	25	100			11.6	4.3	○	170			
-150-M 67					150	67	—	18	32	124	1		14.2	5.9	○	173			
-M 97						97	27	21.2			0.9		17.1	7.9	○	175			
-155-M 42					2	155	42	33	54	15.4	25		39	130	1.1	12	4.3	○	171
-180-M 67						180	67	30	57	18	32		46	154	1.4	14.6	5.9	○	174
-M 97					1		97	57	—	21.2			—		1	17.4	8.7	○	176
-210-M 97					2		210	30	57				46	184	1.4	17.7		○	177
-SLSB8- 95-M 42					1	8	13	2.5	95	42	27		—	17.4	32	—	24	69	0.8
-120-M 67	120	67	—	20						94	0.9	15.7	3.5	○	181				
-125-M 42	125	42	57	17.4						99	1	12.7	2.4	○	179				
-150-M 67	150	67	—	20						124		15.9	4	○	182				
-M 97		97	27	23.2							0.9	19.5	5.2	○	184				
-155-M 42	2	155	42	30					57	17.4		46	129	1.4	13.1	2.4		○	180
-180-M 67		180	67	—					20		154		16.3	4	○	183			
-M 97	1		97	57					—	23.2		—		1.1	19.8	6		○	185
-M127		127	27	26.3							1	23.4	7	○	187				
-210-M 97	2		210	97					30	57	23.2		46	184	1.5	20.2		6	○
-M127	1			127	57	—	26.3		—		1.2	23.7	8.1	○	188				
-M157		157	27	29.5	42				185		27.3	8	○	190					
-240-M127	2		240	127	30	57	26.3	32	46	214	1.6	24	8.1	▲	189				
-M157	1			157	57	—	29.5	42	—		1.5	27.5	8.6	○	191				
-270-M157	2			270		28	59		53	242	2	27.9	8.7	○	192				








Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h					Scale model
A63-SLRB8- 75-M 22	1	8	18	5	75	22	27	—	20.3	32	—	24	49	0.8	10	0.7	×	193
- 95-M 42					95	42			22.4				69	0.9	12.5	1.1	○	196
-105-M 22					105	22	57		20.3				79	1	10.2	0.9	×	194
-120-M 67					120	67	27		25				94	0.9	15.7	1.7	○	199
-125-M 42					125	42	57		22.4				99	1	12.8	1.4		197
-135-M 22	2				135	22	30	57	20.3		46		109	1.4	10.6	1	×	195
-150-M 67	1				150	67	57	—	25		—		124	1.1	16	2.2	○	200
-155-M 42	2				155	42	30	57	22.4		46		129	1.4	13.2	1.4		198
-180-M 67					180	67			25				155	1.5	16.4	2.2		201
-SLFB8- 75-M 22	1	8	18	5	75	22	27	—	20.3	32	—	24	49	0.8	10	0.7	×	202
- 95-M 42					95	42			22.4				69	0.9	12.5	1.1	○	205
-105-M 22					105	22	57		20.3				79	1	10.2	0.9	×	203
-120-M 67					120	67	27		25				94	0.9	15.7	1.7	○	208
-125-M 42					125	42	57		22.4				99	1	12.8	1.4		206
-135-M 22	2				135	22	30	57	20.3		46		109	1.4	10.6	1	×	204
-150-M 67	1				150	67	57	—	25		—		124	1.1	16	2.2	○	209
-155-M 42	2				155	42	30	57	22.4		46		129	1.4	13.2	1.4		207
-180-M 67					180	67			25				154	1.5	16.4	2.2		210
-SLSA8- 90 CV	3	8	11	1.5	90	64	—	—	53	—	—	24	65	1	9.4	1.4	○	211
-120 CV					120	94							94	1.1	10.3	2		212
A63 -150 CV					150	124							124	1.3	11.5	2.7		213
-180 CV					180	154							155	1.4	11.8	5		214
-210 CV					210	184							184	1.6	13.2	6.6	▲	215
-240 CV					240	214							214	1.8	14.4	8.3		216
-270 CV					270	244							244	2.2	17.2	6.9		217
-300 CV					300	274							274	2.4	18.5	8.9		218
-SLRA8- 90 CV	3	8	16	4	90	64	—	—	53	—	—	24	65	1	8.4	0.7	○	219
-120 CV					120	94							95	1.2	9.6	1		220
-150 CV					150	124							125	1.4	10.8	1.4		221
-180 CV					180	154							155	1.5	12	2		222
-210 CV					210	184							185	1.6	12.5	3.5		223
-SLFA8- 90 CV	3	8	16	4	90	64	—	—	53	—	—	24	65	1	8.4	0.7	○	224
-120 CV					120	94							95	1.2	9.6	1		225
-150 CV					150	124							125	1.4	10.8	1.4		226
-180 CV					180	154							155	1.5	12	2		227
-210 CV					210	184							185	1.6	12.5	3.5		228
A63-SLSA5/16- 90 CV	3	5/16	.43	.06	3.54	2.52	—	—	2.09	—	—	.94	2.56	1.9	7.7	1.5	○	229
-120 CV					4.72	3.70							3.70	2.2	8.9	2		230
-150 CV					5.91	4.88							4.88	2.6	10.2	2.8		231
-180 CV					7.09	6.06							6.10	2.7	10.4	5.2		232
-210 CV					8.27	7.24							7.17	3.1	13.6	6		233
-240 CV					9.45	8.43							8.43	3.8	14.5	6.8	▲	234
-270 CV					10.63	9.61							9.65	4.4	15.1	8.5		235
-300 CV					11.81	10.79							10.79	5.0	18.1	9		236
-SLRA5/16- 90 CV	3	5/16	.63	.16	3.54	2.52	—	—	2.09	—	—	.94	2.52	2.1	8.4	0.7	○	237
-120 CV					4.72	3.70							3.70	2.6	9.8	1		238
-150 CV					5.91	4.88							4.88	3.0	11.1	1.5		239
-180 CV					7.09	6.06							6.06	3.4	12.5	2.1		240
-210 CV					8.27	7.24							7.24	3.5	13.4	3.6		241
-SLFA5/16- 90 CV	3	5/16	.63	.16	3.54	2.52	—	—	2.09	—	—	.94	2.52	2.1	8.4	0.7	○	242
-120 CV					4.72	3.70							3.70	2.6	9.8	1		243
-150 CV					5.91	4.88							4.88	3.0	11.1	1.5		244
-180 CV					7.09	6.06							6.06	3.4	12.5	2.1		245
-210 CV					8.27	7.24							7.24	3.5	13.4	3.6		246

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model	Feature		
A63-SLSA10- 95-M 42	1	10	13	1.5	95	42	27	—	17.4	25	—	30	70	0.8	12.8	2.6	○	247	Shrink-fit Heater	
-120-M 67					120	67			20	32			94		16.6	4		250		
-125-M 42					125	42	57		17.4	25			100		13	3.6		248		
-150-M 67					150	67			20	32			124	1	16.9	4.6		251		
-M 97						97	27		23.2					0.9	21.3	6		253		
-155-M 42	2				155	42	33	54	17.4	25	39		130	1.1	13.4	3.5		249		
-180-M 67					180	67	30	57	20	32	46		154	1.4	17.3	4.6		252		
-M 97	1					97	57	—	23.2		—			1.1	21.6	6.9		254		
-210-M 97	2				210		30	57			46		184	1.5	21.9			255		
-SLSB10- 95-M 42	1	10	16	3	95	42	27	—	20.4	32	—	30	69	0.8	13.9	1.4	○	256		MONO 3° MONO CURVE
-120-M 67					120	67			23				94	0.9	18.5	2.4		259		
-125-M 42					125	42	57		20.4				99	1	14.2	1.8		257		
-150-M 67					150	67			23				124		18.8	3		260		
-M 97						97	27		26.2						24	3.6		262		
-155-M 42	2				155	42	30	57	20.4	32	46		129	1.4	14.6	1.8		258		
-180-M 67					180	67			23				154		19.2	3		261		
A63 -M 97	1					97	57	—	26.2		—			1.1	24.3	4.5		263		
-M127						127	27		29.3	42			155	1.2	30.2			265		
-210-M 97	2				210	97	30	57	26.2	32	46		184	1.5	24.7			264		
-M127	1					127	57	—	29.3	42	—		182	1.4	31	4.9		266		
-M157						157	27		32.5				185	1.3	35.7	5.6		268		
-240-M127	2				240	127	28	59	29.3		53		212	1.9	31.8	5.0	▲	267		
-M157	1					157	57	—	32.5		—		215	1.8	36.5	5.8		269		
-270-M157	2				270		28	59			53		242	2.1	37.4	6.2		270		
-SLRB10- 75-M 22	1	10	22	6	75	22	27	—	24.3	32	—	30	49	0.8	10.3	0.6	×	271	UNO	
- 95-M 42					95	42			26.4				68	0.9	14	0.8	○	274		
-105-M 22					105	22	57		24.3				79	1	10.6		×	272		
-120-M 67					120	67	27		29	42			94	1.1	18.6	1.1	○	277		
-125-M 42					125	42	57		26.4	32			99		14.2	1.2		275		
-135-M 22	2				135	22	30	57	24.3		46		109	1.4	10.9	0.9	×	273		
-150-M 67	1				150	67	57	—	29	42	—		124	1.3	18.9	1.3	○	278		
-155-M 42	2				155	42	30	57	26.4	32	46		129	1.5	14.6	1.2		276		
-180-M 67					180	67	28	59	29	42	53		154	1.8	19.2	1.3		279		
-SLFB10- 75-M 22	1	10	22	6	75	22	27	—	24.3	32	—	30	49	0.8	10.3	0.6	×	280		STRAIGHT arbor
- 95-M 42					95	42			26.4				69	0.9	14	0.8	○	283		
-105-M 22					105	22	57		24.3				79	1	10.6		×	281		
-120-M 67					120	67	27		29	42			94	1.1	18.6	1.1	○	286		
-125-M 42					125	42	57		26.4	32			99		14.2	1.2		284		
-135-M 22	2				135	22	30	57	24.3		46		109	1.4	10.9	0.9	×	282		
-150-M 67	1				150	67	57	—	29	42	—		124	1.3	18.9	1.3	○	287		
-155-M 42	2				155	42	30	57	26.4	32	46		129	1.5	14.6	1.2		285		
-180-M 67					180	67	28	59	29	42	53		154	1.8	19.2	1.3		288		
-SLSA10- 90 CV	3	10	13	1.5	90	64	—	—	53	—	—	30	65	1	9.4	1.3	○	289	PERIPHERALS	
-120 CV					120	94							95	1.3	10.9			290		
-150 CV					150	124							125	1.4	11.8	2.2		291		
-180 CV					180	154							154	1.6	12.9	3.4		292		
-210 CV					210	184							184		13.3	6		293		
-240 CV					240	214							212	2.1	16	5.8	▲	294		
-270 CV					270	244							244		17.5	6.6		295		
-300 CV					300	274							274	2.3	18.7	8.6		296		





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UNO
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CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h					Scale model
A63-SLRA10- 90 CV	3	10	19	4.5	90	64	—	—	53	—	—	30	65	1	8.5	0.6		297
-120 CV					120	94							95	1.2	9.6	0.9		298
-150 CV					150	124							125	1.3	10.9	1.4		299
A63 -180 CV					180	154							155	1.5	12.1	2		300
-210 CV					210	184							185	1.6	13.3	3.1		301
-SLFA10- 90 CV	3	10	19	4.5	90	64	—	—	53	—	—	30	65	1	8.5	0.6		302
 -120 CV					120	94							95	1.2	9.6	0.9		303
-150 CV					150	124							125	1.3	10.9	1.4		304
-180 CV					180	154							155	1.5	12.1	2		305
-210 CV					210	184							185	1.6	13.3	3.1		306
A63-SLSA3/8- 90 CV	3	3/8	.49	.06	3.54	2.52	—	—	2.09	—	—	1.18	2.56	1.9	7.7	1.3		307
-120 CV					4.72	3.70							3.74	2.2	8.7	2.2		308
-150 CV					5.91	4.88							4.88	2.6	10.4	2.6		309
-180 CV					7.09	6.06							6.06	3.0	11.8	3.6		310
-210 CV					8.27	7.24							7.24	3.4	13.4	4.9		311
-240 CV					9.45	8.43							8.46	4.0	14.2	6		312
-270 CV					10.63	9.61							9.61	4.5	17.1	6.8		313
-300 CV					11.81	10.79							10.79	5.0	18.5	8.8		314
-SLRA3/8- 90 CV	3	3/8	.73	.185	3.54	2.52	—	—	2.09	—	—	1.18	2.52	2.1	8.4	0.7		315
-120 CV					4.72	3.70							3.70	2.6	9.7	1		316
-150 CV					5.91	4.88							4.88	3.0	11.2	1.4		317
-180 CV					7.09	6.06							6.06	3.4	12.7	2		318
-210 CV					8.27	7.24							7.28	3.8	13.2	2.9		319
-SLFA3/8- 90 CV	3	3/8	.73	.185	3.54	2.52	—	—	2.09	—	—	1.18	2.52	2.1	8.4	0.7		320
 -120 CV					4.72	3.70							3.70	2.6	9.7	1		321
-150 CV					5.91	4.88							4.88	3.0	11.2	1.4		322
-180 CV					7.09	6.06							6.06	3.4	12.7	2		323
-210 CV					8.27	7.24							7.28	3.8	13.2	2.9		324
A63-SLSA12- 95-M 42	1	12	15	1.5	95	42	27	—	19.4	32	—	30	69	0.8	15.2	1.8		325
-120-M 67					120	67			22				94		20.6	3.3		328
-125-M 42					125	42	57		19.4				99	1	15.4	2.3		326
-150-M 67					150	67			22				124		20.8	3.9		329
-M 97					97	27			25.2					0.9	27.5	4.9		331
-155-M 42	2				155	42	30	57	19.4		46		129	1.4	15.8	2.3		327
-180-M 67					180	67			22				154		21.2	3.9		330
-M 97	1				97	57	—		25.2		—			1.1	27.8	5.8		332
-210-M 97	2				210		30	57			46		184	1.5	28.2			333
-SLSB12- 95-M 42	1	12	19	3.5	95	42	27	—	23.4	32	—	30	69	0.8	16.5	1.1		334
-120-M 67					120	67			26				94	0.9	22.8	1.8		337
-125-M 42					125	42	57		23.4				99	1	16.8	1.5		335
-150-M 67					150	67			26				124	1.1	23.1	2.5		338
-M 97					97	27			29.2	42			125		30.9	2.4		340
-155-M 42	2				155	42	30	57	23.4	32	46		129	1.4	17.2	1.6		336
-180-M 67					180	67			26				154	1.5	23.4	2.5		339
-M 97	1				97	57	—		29.2	42	—		152	1.4	31.7	2.8		341
-M127					127	27			32.3				155	1.3	38.5	3.3		343
-210-M 97					210	97	87		29.2	50			180	1.9	32.6	2.8		342
-M127					127	57			32.3					1.7	39.3	3.5		344
-M157					157	27			35.5	42			185	1.4	46	4.1		346
-240-M127					240	127	87		32.3	50			215	2.1	40.1	3.8		345
-M157					157	57			35.5	42			212	1.7	46.8	4.7		347
-270-M157	2				270		28	59			53		242	2.2	47.7	4.8		348

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h					Scale model
A63-SLRB12- 75-M 22	1	12	26	7	75	22	27	—	28.3	42	—	30	50	0.9	14.5	0.4	×	349
- 95-M 42					95	42			30.4				70	1	17.2	0.6		352
-105-M 22					105	22	57		28.3				77	1.2	15.3	0.5		350
-120-M 67					120	67	27		33				95		23.5	0.8		355
-125-M 42					125	42	57		30.4				97	1.3	18	0.7		353
-135-M 22	2				135	22	28	59	28.3		53		107	1.7	16.2	0.6		351
-150-M 67	1				150	67	57	—	33		—		122	1.4	24.3	1.1		356
-155-M 42	2				155	42	28	59	30.4		53		127	1.8	18.9	0.8		354
-180-M 67					180	67			33				152	1.9	25.2	1.1		357
-SLFB12- 75-M 22	1	12	26	7	75	22	27	—	28.3	42	—	30	50	0.9	14.5	0.4	×	358
 - 95-M 42					95	42			30.4				70	1	17.2	0.6		361
-105-M 22					105	22	57		28.3				77	1.2	15.3	0.5		359
-120-M 67					120	67	27		33				95		23.5	0.8		364
-125-M 42					125	42	57		30.4				97	1.3	18	0.7		362
-135-M 22	2				135	22	28	59	28.3		53		107	1.7	16.2	0.6		360
-150-M 67	1				150	67	57	—	33		—		122	1.4	24.3	1.1		365
-155-M 42	2				155	42	28	59	30.4	42	53		127	1.8	18.9	0.8		363
-180-M 67					180	67			33				152	1.9	25.2	1.1		366
-SLSA12- 90 CV	3	12	15	1.5	90	64	—	—	53	—	—	30	64	1.1	9.9	0.9	○	367
-120 CV					120	94							94	1.3	11.3	1.2		368
-150 CV					150	124							124	1.4	11.8	2.4		369
A63 -180 CV					180	154							154	1.6	13	3.3		370
-210 CV					210	184							184	1.8	14.3	4.6		371
-240 CV					240	214							212	2.1	16.2	5.5	▲	372
-270 CV					270	244							244	2.3	18.4	5.4		373
-SLRA12- 90 CV	3	12	22	5	90	64	—	—	53	—	—	30	64	1	8.5	0.6	×	374
-120 CV					120	94							94	1.3	10.4	0.7		375
-150 CV					150	124							124	1.5	11.7	1.1	○	376
-180 CV					180	154							154		12.8	1.8		377
-210 CV					210	184							184	1.6	14	2.8		378
-SLFA12- 90 CV	3	12	22	5	90	64	—	—	53	—	—	30	64	1	8.5	0.6	×	379
 -120 CV					120	94							94	1.3	10.4	0.7		380
-150 CV					150	124							124	1.5	11.7	1.1	○	381
-180 CV					180	154							154		12.8	1.8		382
-210 CV					210	184							184	1.6	14	2.8		383
A63-SLSA1/2- 90 CV	3	1/2	.62	.06	3.54	2.52	—	—	2.09	—	—	1.18	2.52	2.1	8.4	0.8	○	384
-120 CV					4.72	3.70							3.70	2.5	10	1.2		385
-150 CV					5.91	4.88							4.88		10.9	2.4		386
-180 CV					7.09	6.06							6.06	2.9	12.4	3.4		387
-210 CV					8.27	7.24							7.17	3.5	16.3	3.6		388
-240 CV					9.45	8.43							8.35	4.0	19.1	4.3	▲	389
-270 CV					10.63	9.61							9.53	4.7	20.9	5.1		390
-SLRA1/2- 90 CV	3	1/2	.89	.20	3.54	2.52	—	—	2.09	—	—	1.18	2.44	2.2	9.3	0.5	×	391
-120 CV					4.72	3.70							3.70	2.8	10.6	0.7		392
-150 CV					5.91	4.88							4.88	3.2	12.1	1.1	○	393
-180 CV					7.09	6.06							5.98		15.5	1.9		394
-210 CV					8.27	7.24							7.24	4.4	15.7	2		395
-SLFA1/2- 90 CV	3	1/2	.89	.20	3.54	2.52	—	—	2.09	—	—	1.18	2.44	2.2	9.3	0.5	×	396
 -120 CV					4.72	3.70							3.70	2.8	10.6	0.7		397
-150 CV					5.91	4.88							4.88	3.2	12.1	1.1	○	398
-180 CV					7.09	6.06							5.98		15.5	1.9		399
-210 CV					8.27	7.24							7.24	4.4	15.7	2		400

Feature
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CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h				Scale model
A63-SLSB16- 95-M 42	1	16	24	4	95	42	27	—	28.4	42	—	32	70	1	22.7	0.7	401
-120-M 67					120	67			31				95	1.1	33	1.1	404
-125-M 42					125	42	57		28.4				97	1.2	23.5	0.9	402
-150-M 67					150	67			31				122	1.3	33.8	1.4	405
-M 97						97	27		34.2				125	1.2	45.5	1.7	407
A63 -155-M 42					155	42	87		28.4	50			130	1.7	24.4	0.9	403
-180-M 67	2				180	67	28	59	31	42	53		152	1.8	34.7	1.5	406
-M 97	1					97	57	—	34.2		—			1.4	46.3	2.1	408
-M127						127	27		37.3	53			155	1.5	57.9		410
-210-M 97	2				210	97	28	59	34.2	42	53		182	2	47.1		409
-M127	1					127	57	—	37.3	53	—		181	1.9	58.7	2.3	411
-M157						157	27		40.5				185	1.7	70.3	2.7	413
-240-M127					240	127	87		37.3				211	2.3	59.5	2.6	412
-M157						157	57		40.5				215	2.1	71.1	2.9	414
-270-M157					270		87						241	2.5	72	3.2	415
-SLRB16- 75-M 22	1	16	32	8	75	22	27	—	34.3	42	—	32	50	1	14.5	0.3	416
- 95-M 42					95	42			36.4				70	1.1	22.8	0.5	419
-105-M 22					105	22	57		34.3				77	1.2	15.3		417
-120-M 67					120	67	27		39				95	1.3	33.2	0.7	422
-125-M 42					125	42	57		36.4				97		23.6		420
-135-M 22	2				135	22	28	59	34.3		53		107	1.7	16.2	0.5	418
-150-M 67	1				150	67	57	—	39		—		122	1.5	34	0.9	423
-155-M 42	2				155	42	28	59	36.4		53		127	1.9	24.5	0.7	421
-180-M 67					180	67			39				152	2	34.9	1	424
-SLFB16- 75-M 22	1	16	32	8	75	22	27	—	34.3	42	—	32	50	1	14.5	0.3	425
 - 95-M 42					95	42			36.4				70	1.1	22.8	0.5	428
-105-M 22					105	22	57		34.3				77	1.2	15.3		426
-120-M 67					120	67	27		39				95	1.3	33.2	0.7	431
-125-M 42					125	42	57		36.4				97		23.6		429
-135-M 22	2				135	22	28	59	34.3		53		107	1.7	16.2	0.5	427
-150-M 67	1				150	67	57	—	39	50	—		120		34	0.7	432
-155-M 42	2				155	42	28	59	36.4	42	53		127	1.9	24.5		430
-180-M 67					180	67			39				152	2	34.9	1	433
-SLSB16- 90 CV	3	16	21	2.5	90	64	—	—	53	—	—	32	62	1.1	10.5	0.6	434
-120 CV					120	94							92	1.5	12.4	0.8	435
-150 CV					150	124							122	1.6	13.5	1.5	436
-180 CV					180	154							152	1.9	15.4	1.9	437
-210 CV					210	184							182	2.1	16.5	3	438
-240 CV					240	214							212	2.4	18.4	3.7	439
-270 CV					270	244							242	2.7	20.3	4.6	440
A63-SLSB5/8- 90 CV	3	5/8	.82	.10	3.54	2.52	—	—	2.09	—	—	1.26	2.44	2.1	9.3	0.6	441
-120 CV					4.72	3.70							3.62	2.6	11.7	0.8	442
-150 CV					5.91	4.88							4.80	2.9	13.4	1.5	443
-180 CV					7.09	6.06							5.98	3.4	15.8	1.9	444
-210 CV					8.27	7.24							7.17	3.6	17.5	3	445
-240 CV					9.45	8.43							8.35	4.2	19.9	3.7	446
-270 CV					10.63	9.61							9.53	4.8	22.3	4.6	447

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg lbs	N	S	Scale model
A63-SLSB20- 95-M 42	1	20	29	4.5	95	42	27	—	33.4	42	—	40	70	1	25.4	0.5	448
-120-M 67					120	67			36				95	1.1	40.8	0.9	451
-125-M 42					125	42	57		33.4				97	1.2	26.2	0.8	449
-150-M 67					150	67			36				122	1.4	41.6	1.2	452
-M 97						97	27		39.2	53			125		59.3	1.1	454
A63 -155-M 42					155	42	87		33.4	50			130	1.8	27.1	0.8	450
-180-M 67	2				180	67	28	59	36	42	53		152	1.9	42.5	1.2	453
-M 97	1					97	57	—	39.2	53	—		151	1.8	60.1	1.3	455
-M127						127	27		42.3				155	1.6	79.1	1.5	457
-210-M 97					210	97	87		39.2				181	2.2	61	1.6	456
-M127						127	57		42.3				2	79.9	1.8		458
-M157						157	27		45.5				185	1.9	97.6	1.9	460
-240-M127					240	127	87		42.3				211	2.3	80.7	2.1	459
-M157						157	57		45.5				2	98.4	2.2		461
-270-M157					270		87						241	2.7	99.3	2.6	462
-SLRB20- 95-M 42	1	20	38	9	95	42	27	—	42.4	53	—	40	70	1.3	25.6	0.3	463
-120-M 67					120	67			45				95	1.5	41	0.5	466
-125-M 42					125	42	57		42.4				96	1.7	26.4	0.4	464
-150-M 67					150	67			45				121	1.9	41.8	0.6	467
-155-M 42					155	42	87		42.4				126	2.1	27.2		465
-180-M 67					180	67			45				151	2.3	42.7	0.8	468
-SLFB20- 95-M 42	1	20	38	9	95	42	27	—	42.4	53	—	40	70	1.3	25.6	0.3	469
 -120-M 67					120	67			45				95	1.5	41	0.5	472
-125-M 42					125	42	57		42.4				96	1.7	26.4	0.4	470
-150-M 67					150	67			45				121	1.9	41.8	0.6	473
-155-M 42					155	42	87		42.4	50			125	2	27.2	0.6	471
-180-M 67					180	67			45	53			151	2.3	42.7	0.8	474
-SLSB20- 90 CV	3	20	26	3	90	64	—	—	51	—	—	40	62	1.2	10.7	0.5	475
-120 CV					120	94			53				92	1.5	12.8	0.8	476
-150 CV					150	124							122	1.7	14.1	1.3	477
-180 CV					180	154							152	2	16.2	1.8	478
-210 CV					210	184							182	2.4	18.2	2.3	479
-240 CV					240	214							212	2.7	20.2	3	480
-270 CV					270	244							242	3.1	22.8	3.4	481
A63-SLSB3/4- 90 CV	3	3/4	.99	.12	3.54	2.52	—	—	2.09	—	—	1.50	2.44	2.1	9.5	0.6	482
-120 CV					4.72	3.70							3.62	2.6	12.2	0.8	483
-150 CV					5.91	4.88							4.80	2.9	14.5	1.4	484
-180 CV					7.09	6.06							5.98	3.4	17.1	1.8	485
-210 CV					8.27	7.24							7.17	3.9	19.8	2.4	486
-240 CV					9.45	8.43							8.35	4.5	22.4	3.1	487
-270 CV					10.63	9.61							9.53	5.0	25	3.9	488
A63-SLRB25- 95-M 42	1	25	45	10	95	42	27	—	49.4	53	—	45	70	1.4	28.7	0.3	489
-125-M 42					125		57						96	1.8	29.5	0.4	490
-155-M 42					155		87						126	2.2	30.4	0.6	491
-SLFB25- 95-M 42	1	25	45	10	95	42	27	—	49.4	53	—	45	70	1.4	28.7	0.3	492
 -125-M 42					125		57						96	1.8	29.5	0.4	493
-155-M 42					155		87						126	2.2	30.4	0.6	494
A63-SLRB32-110-M 42	1	32	54	11	110	42	42	—	58.4	63	—	50	84	1.8	13.3	0.3	495

■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-A63-G3

● P.226



■ φ70 Nozzle (HRB-03S)
Required for shrinking the SLRB32.

CODE
HRB-NZL70

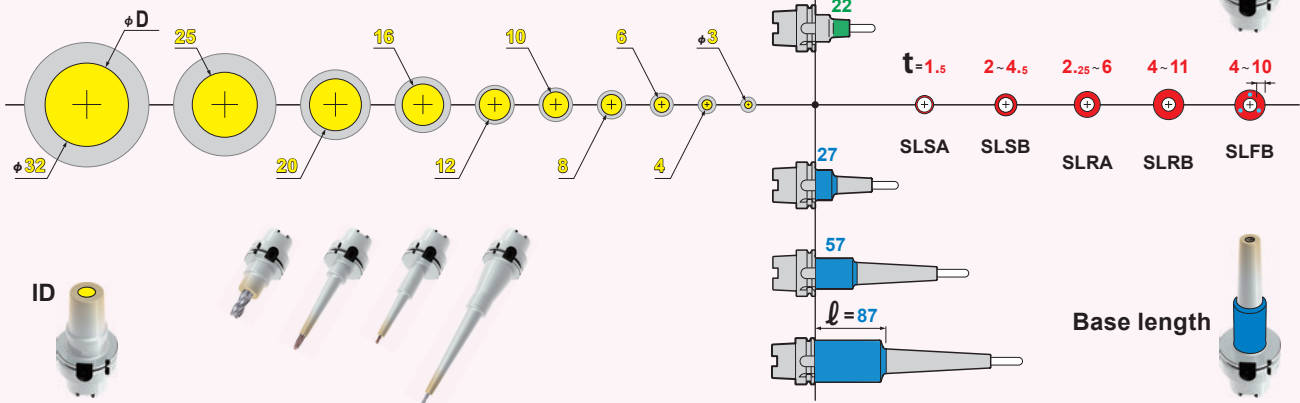
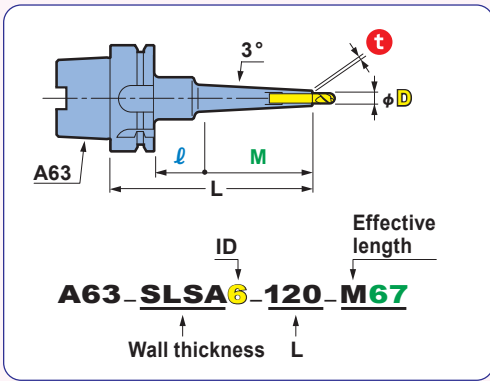



HEAT ROBO Baby 3000S

300 Variations

SYSTEM HSK-A63

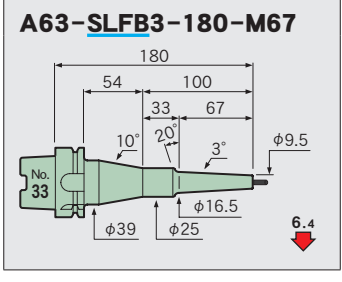
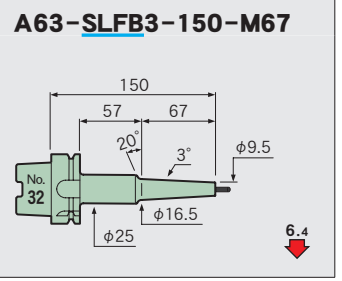
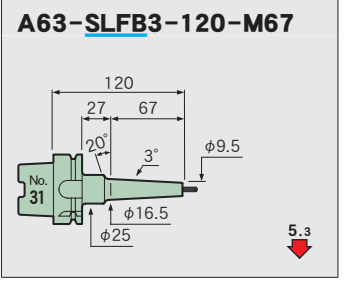
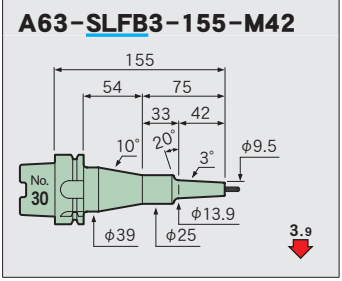
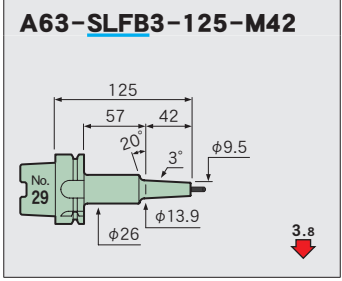
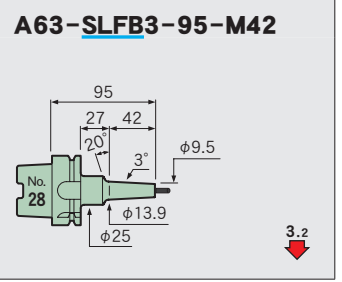
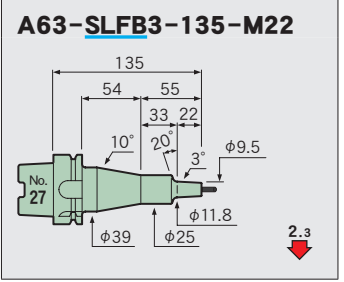
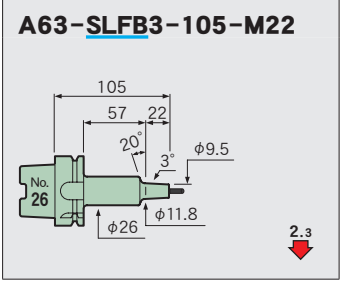
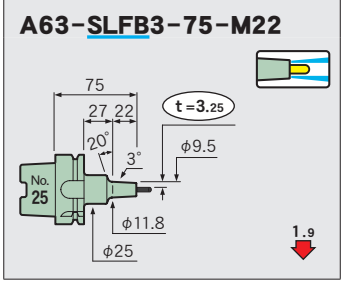
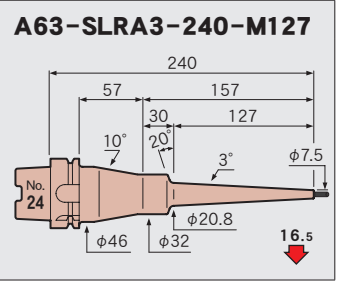
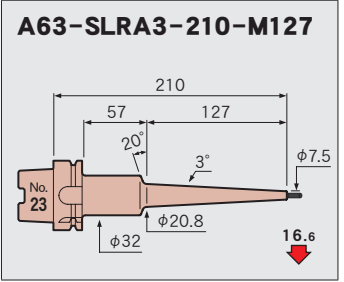
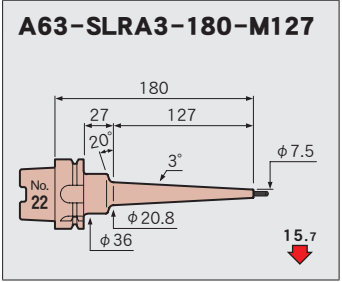
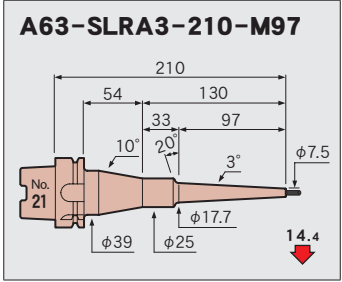
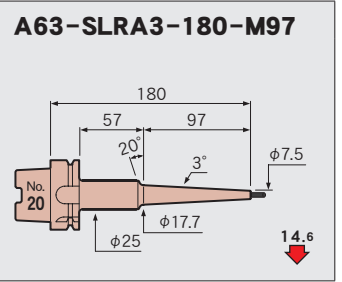
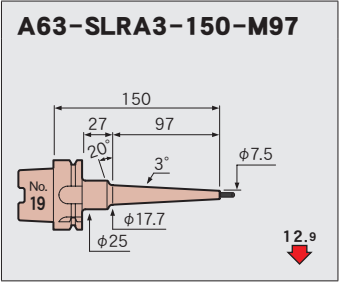
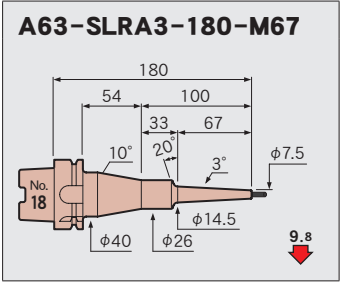
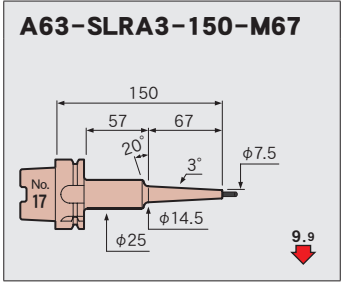
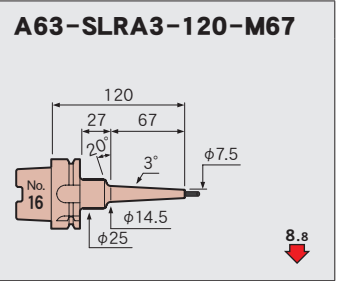
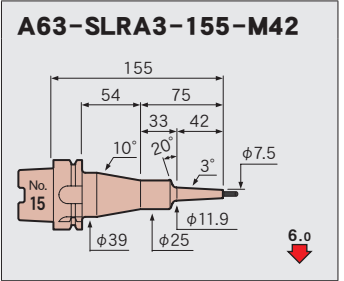
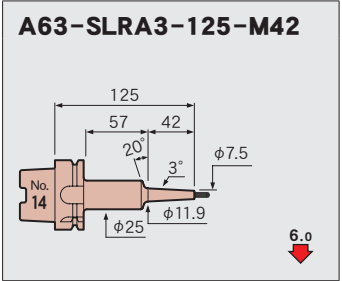
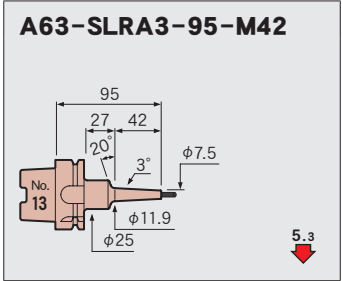
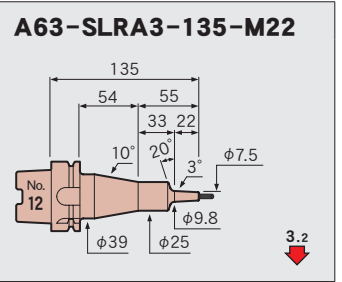
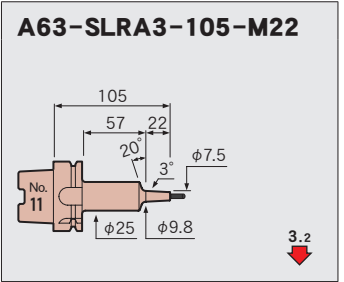
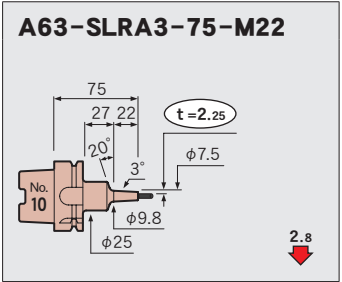
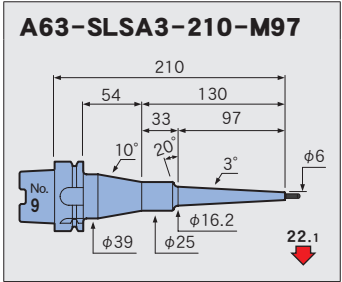
You can select the optimum holder for all kinds of applications from a lineup with 300 variations in **ID**, **Base length**, **Effective length**, and **Wall thickness**



Feature: Shrink-fit Heater, MONO 3° MONO CURVE, MONO Series, 2PIECE type, UNO, HYPER version, STRAIGHT anbor, OTHERS, PERIPHERALS, Technical Information

φ 3

<p>A63-SLSA3-95-M42</p>	<p>A63-SLSA3-125-M42</p>	<p>A63-SLSA3-155-M42</p>	<p>A63-SLSA3-120-M67</p>
<p>A63-SLSA3-150-M67</p>	<p>A63-SLSA3-180-M67</p>	<p>A63-SLSA3-150-M97</p>	<p>A63-SLSA3-180-M97</p>



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

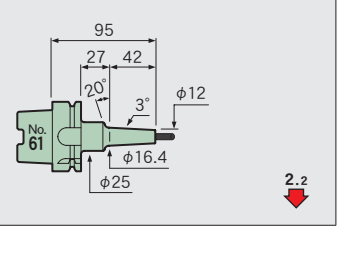
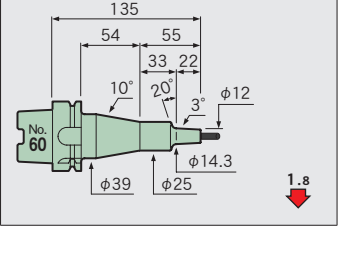
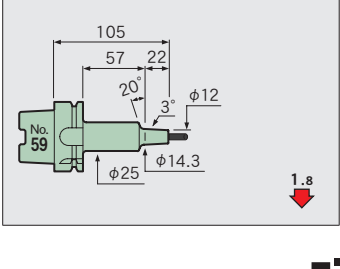
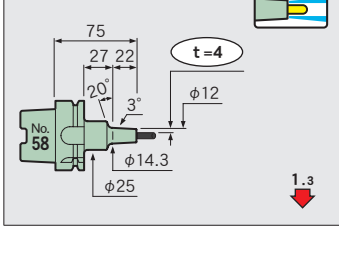
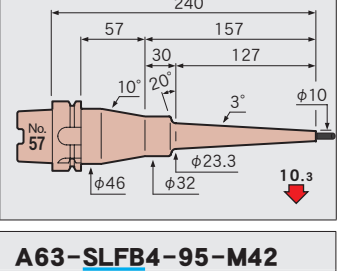
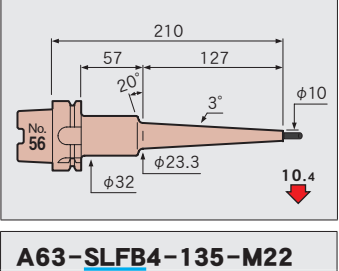
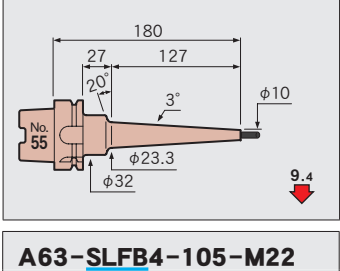
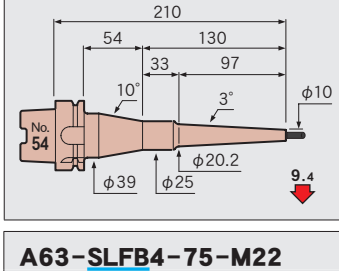
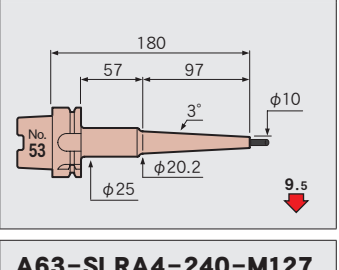
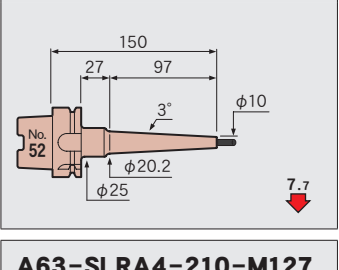
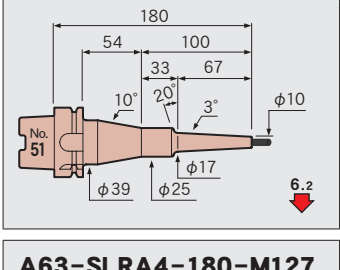
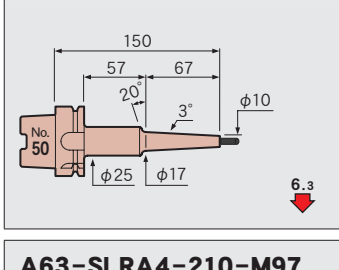
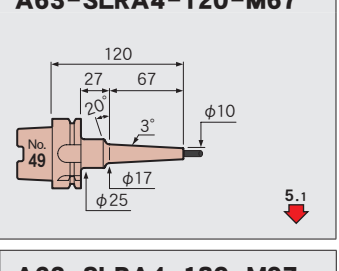
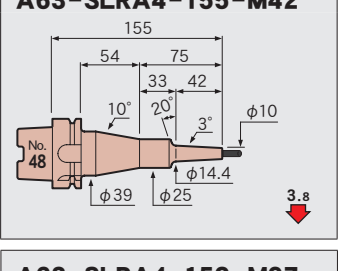
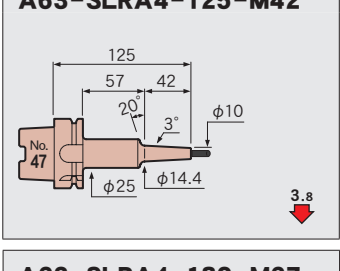
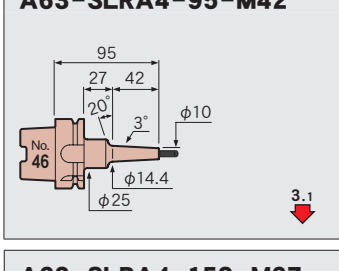
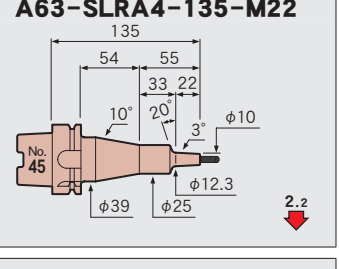
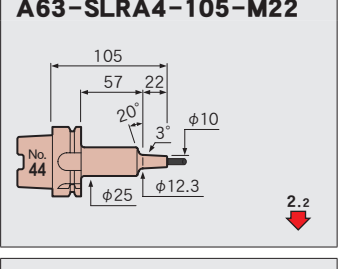
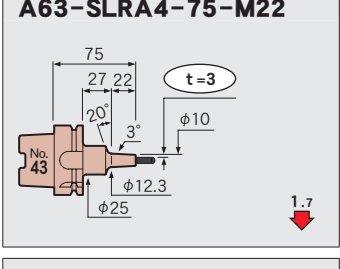
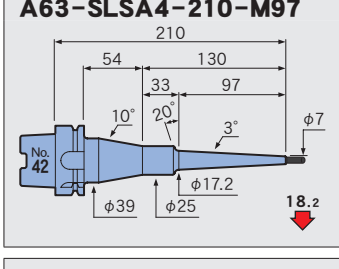
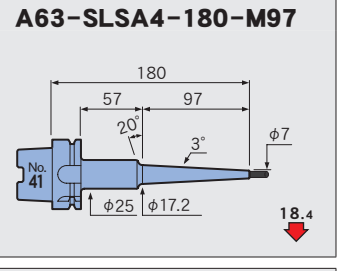
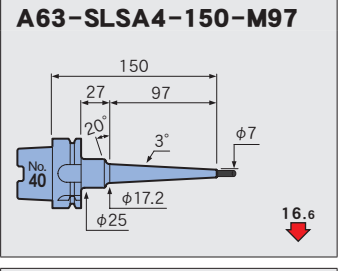
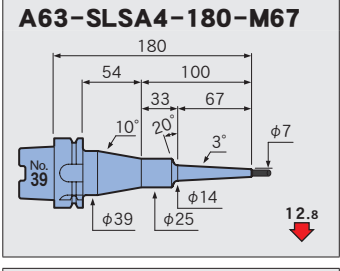
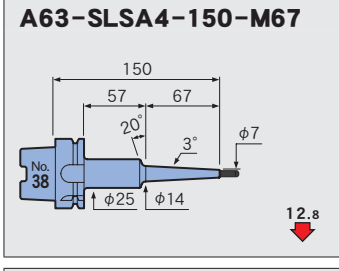
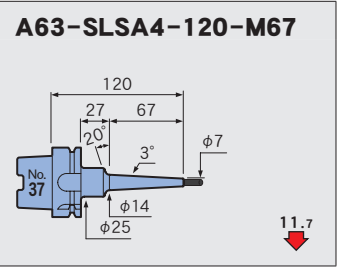
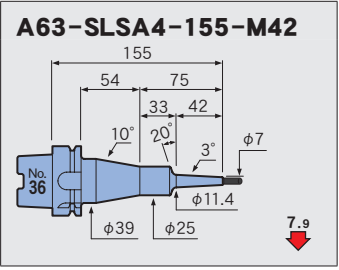
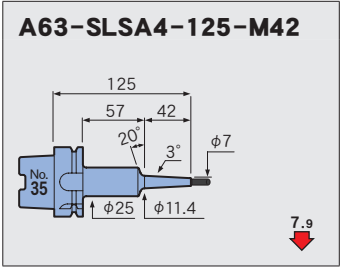
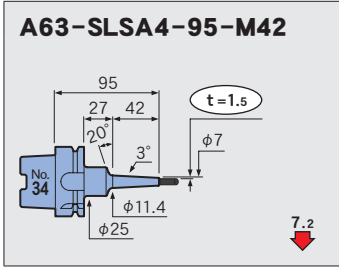
OTHERS

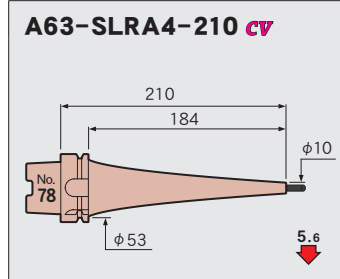
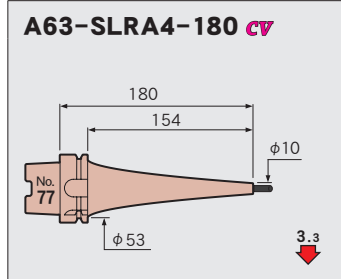
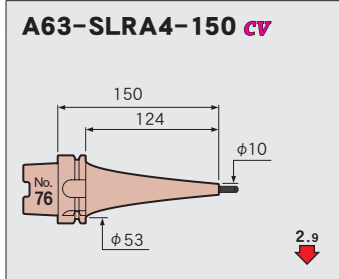
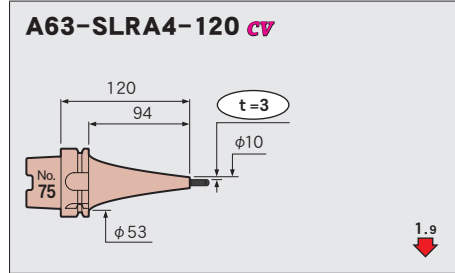
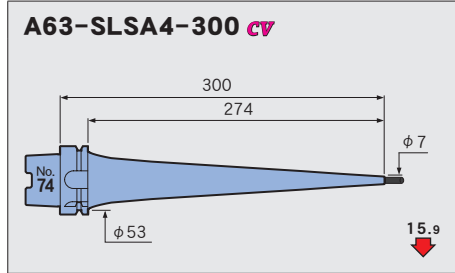
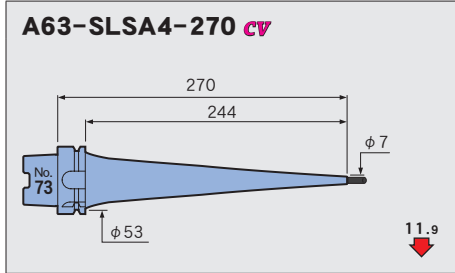
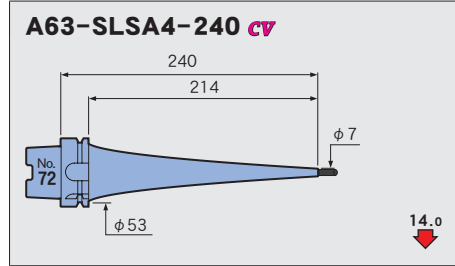
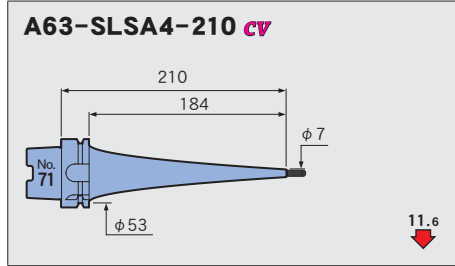
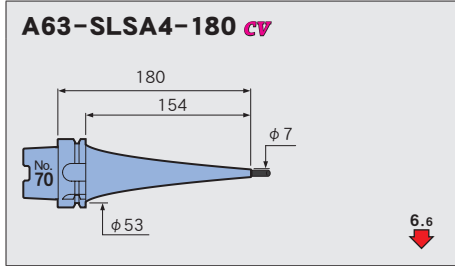
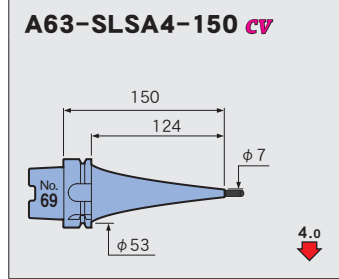
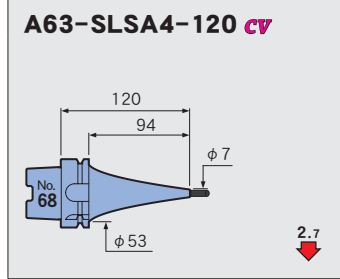
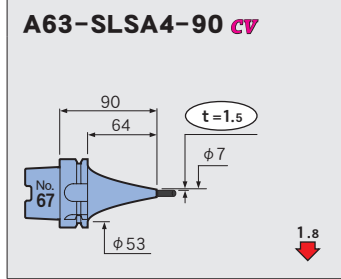
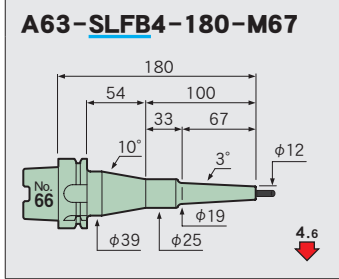
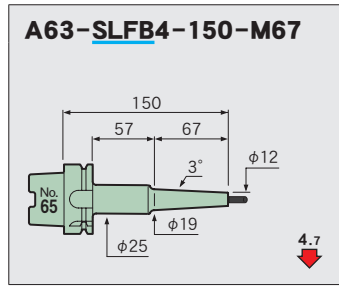
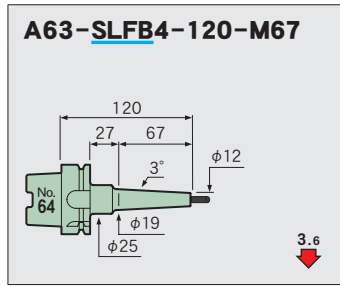
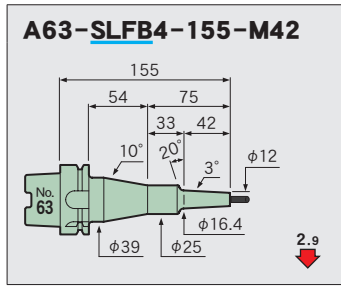
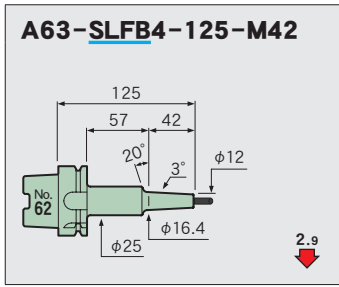
PERIPHERALS

Technical
information

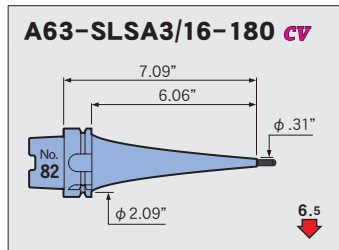
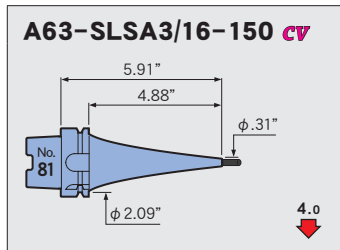
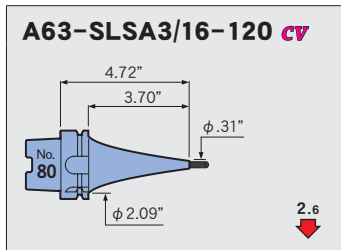
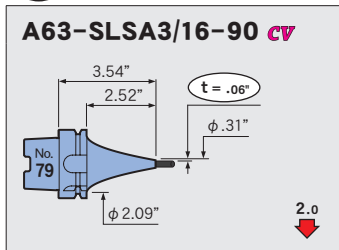
φ 4

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information



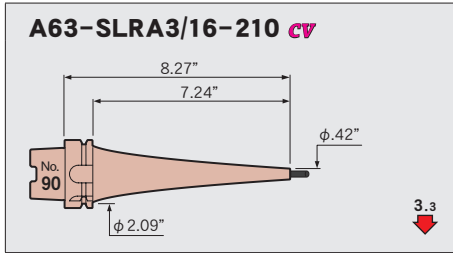
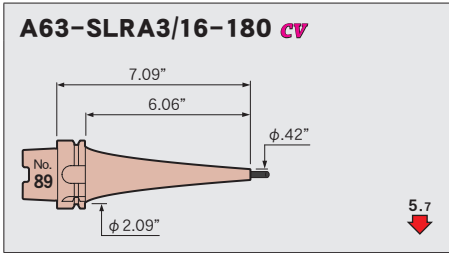
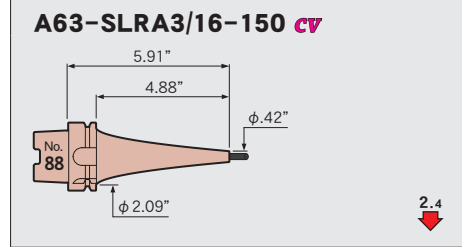
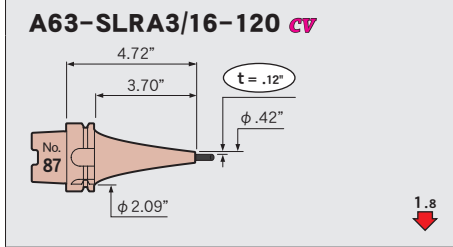
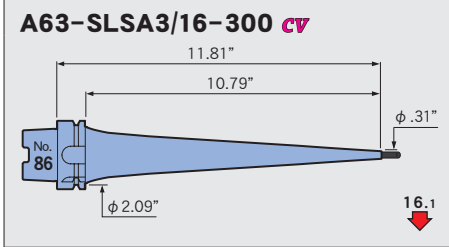
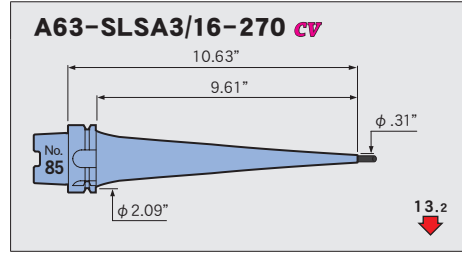
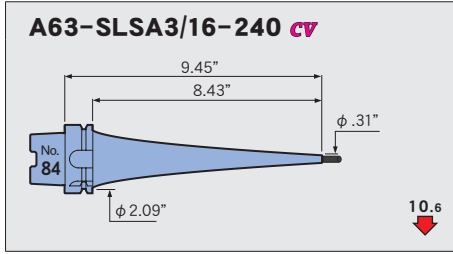
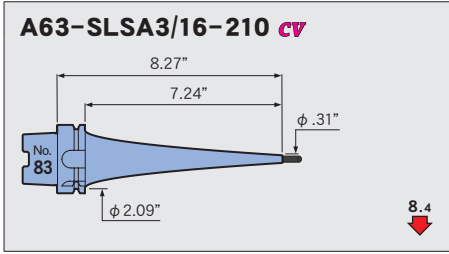


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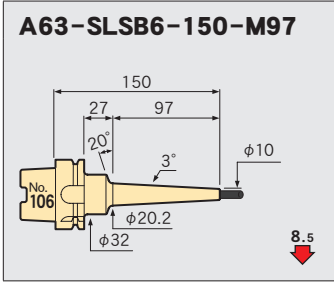
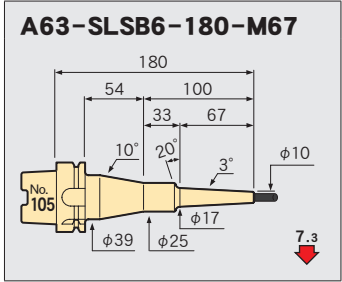
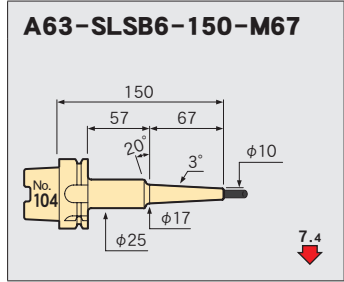
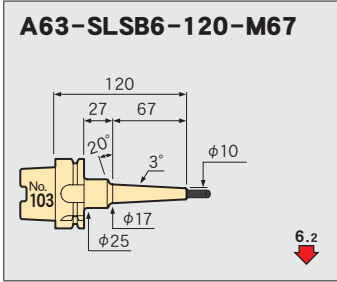
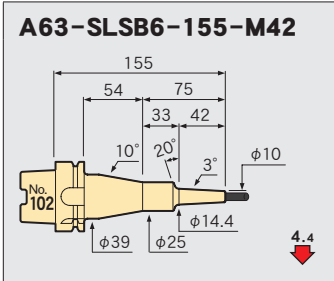
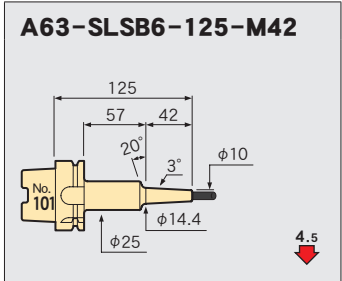
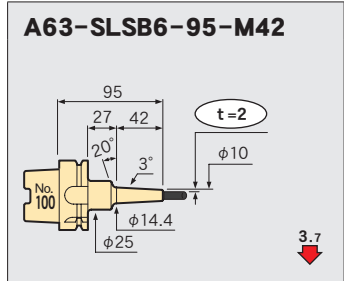
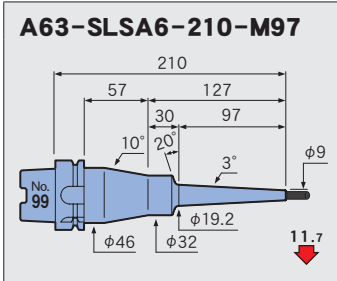
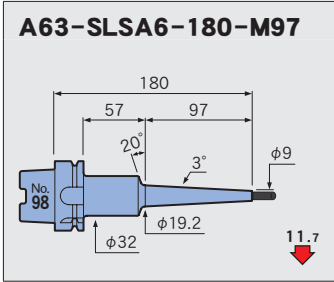
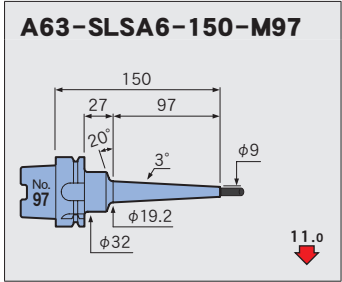
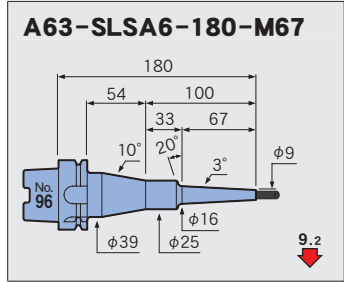
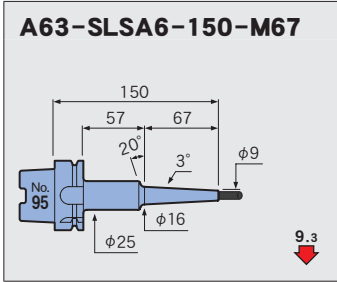
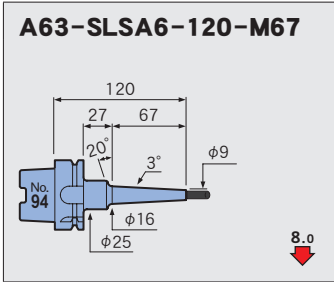
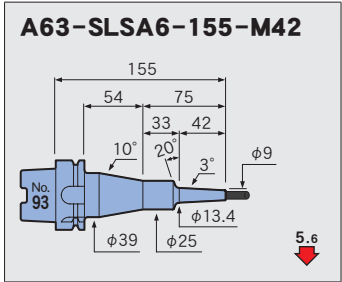
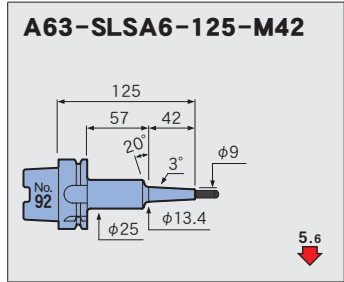
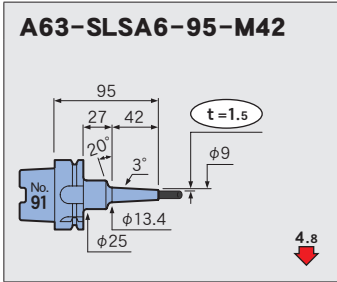


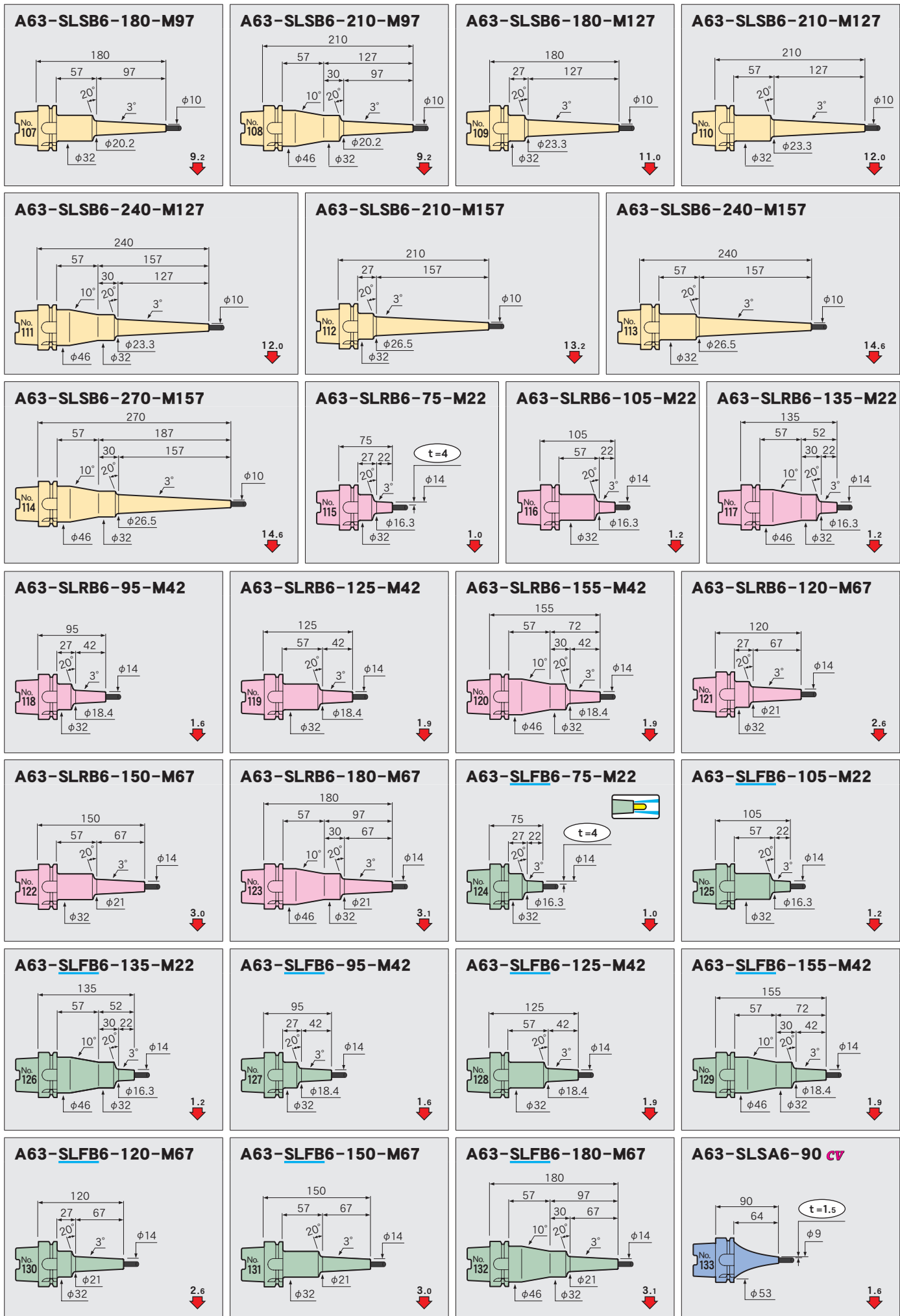
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical information

Feature
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Feature
Shrink-fit Heater

MONO 3°
MONO CURVE

2PIECE type

UNO

HYPER
version

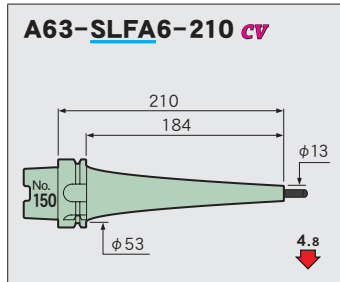
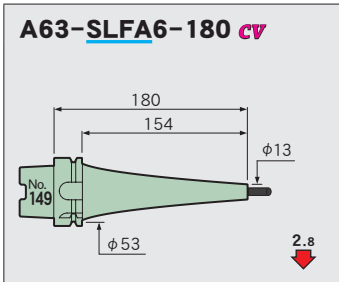
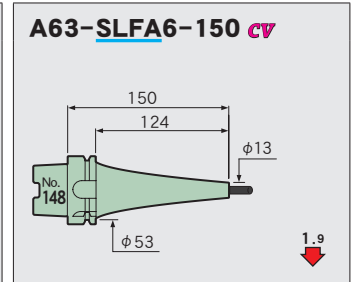
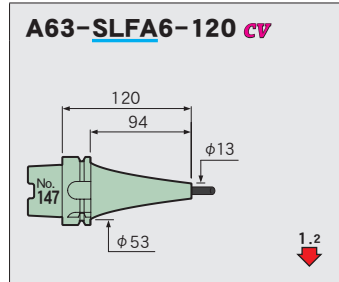
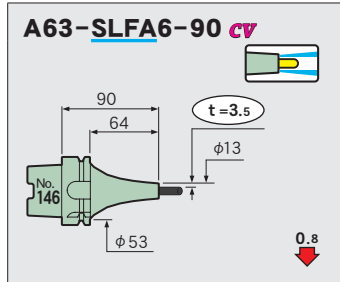
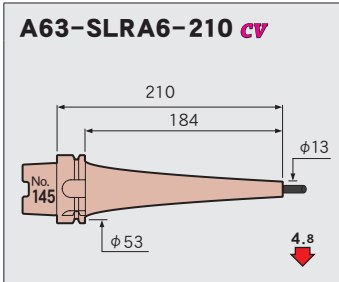
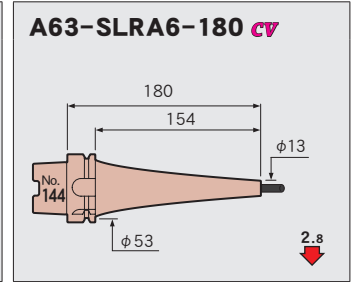
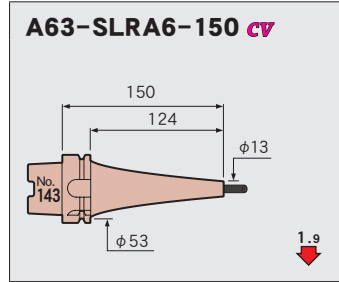
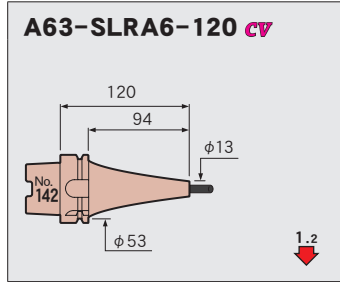
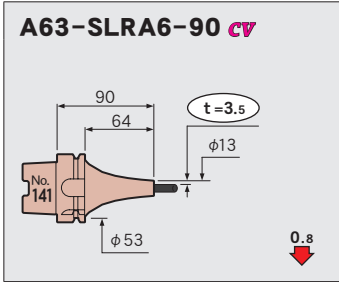
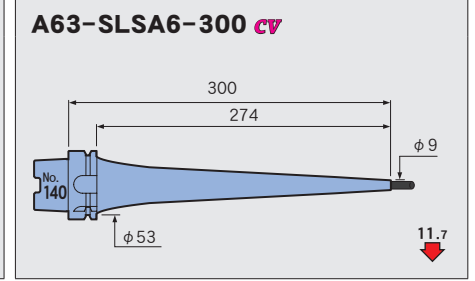
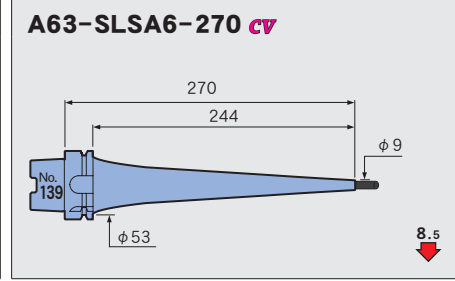
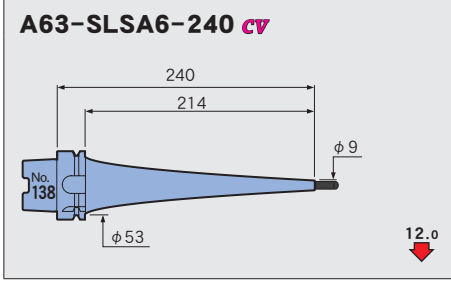
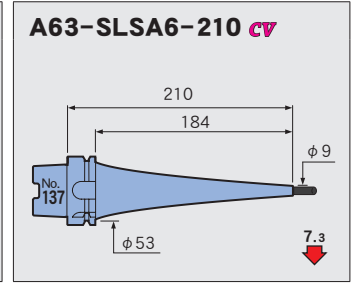
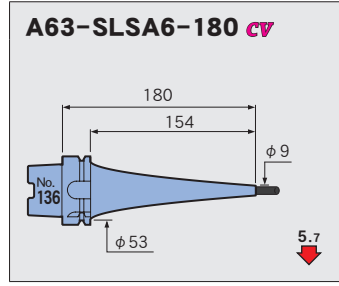
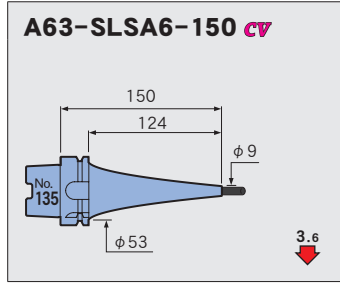
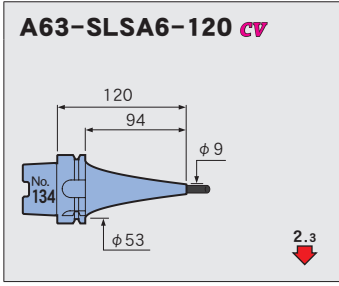
STRAIGHT
airbor

OTHERS

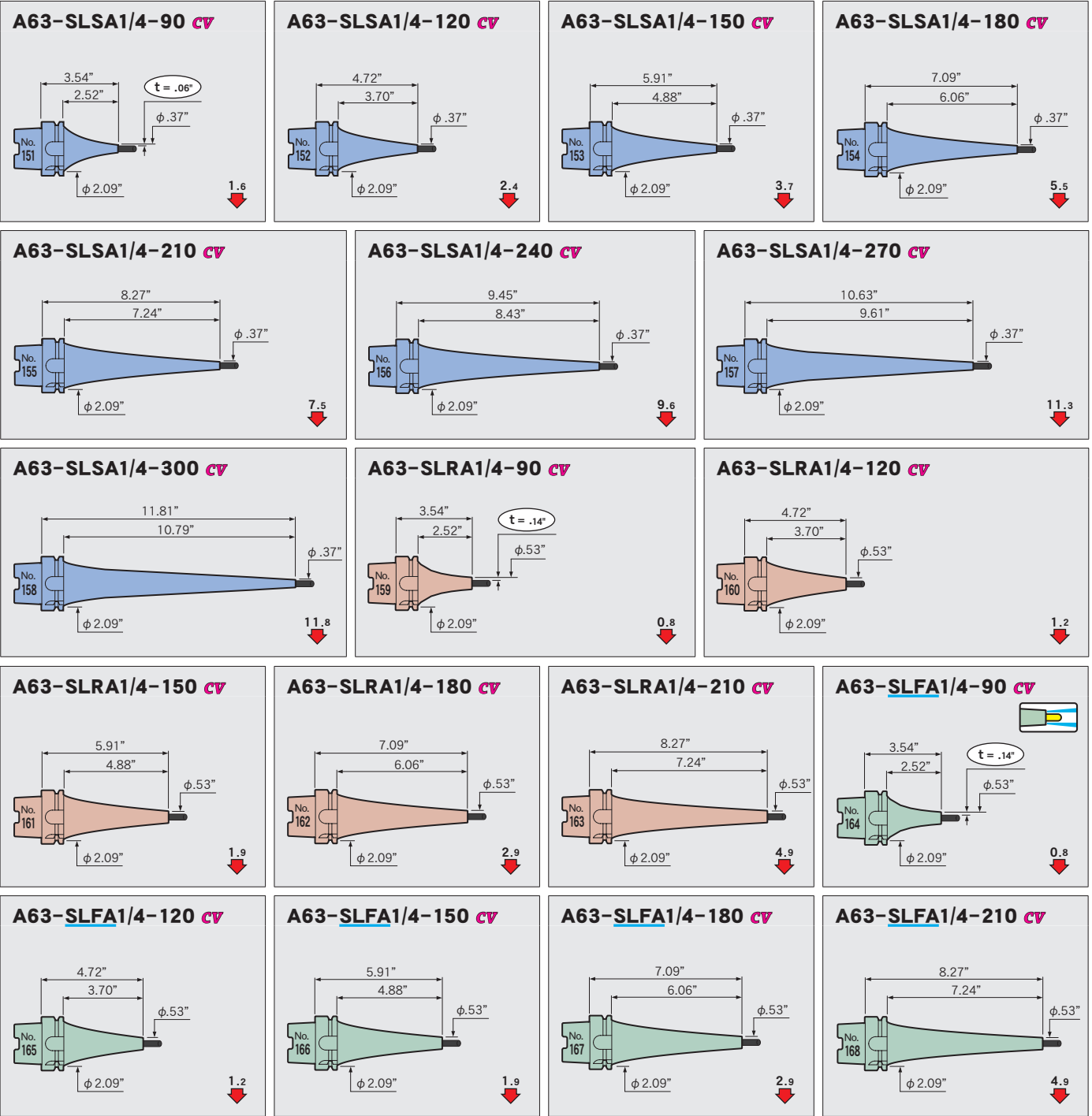
PERIPHERALS

Technical
Information

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
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Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

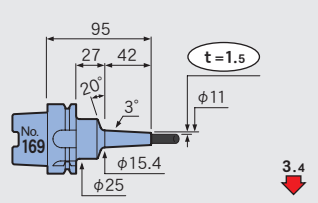
STRAIGHT
arbor

OTHERS

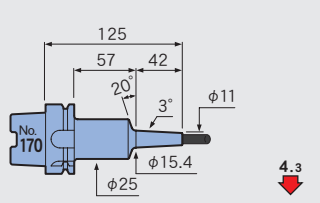
PERIPHERALS

Technical
Information

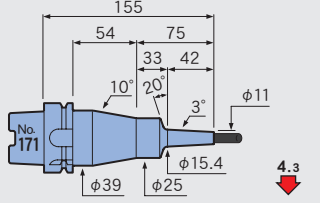
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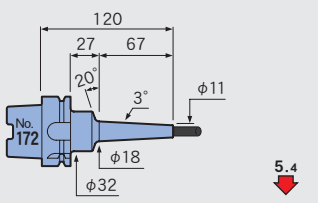
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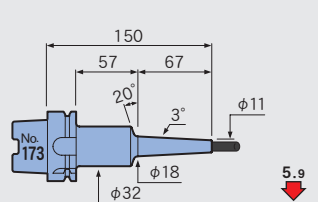
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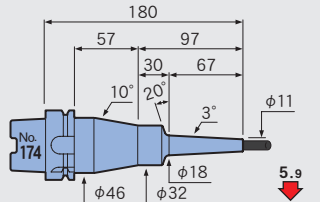
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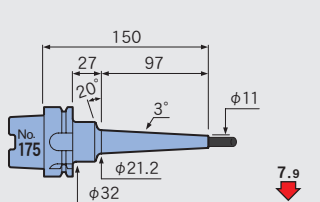
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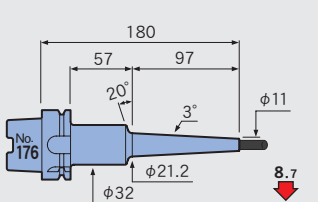
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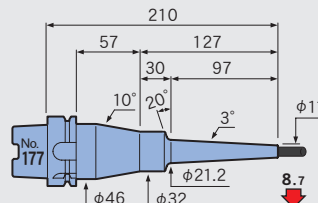
A63-SLSA8-150-M97



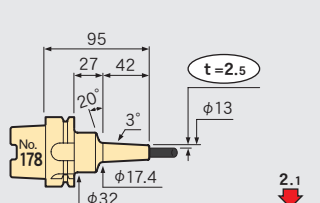
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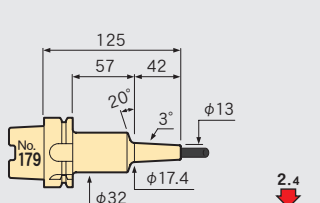
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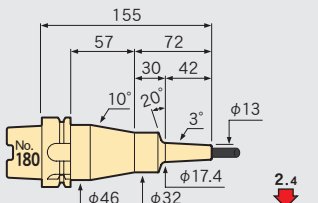
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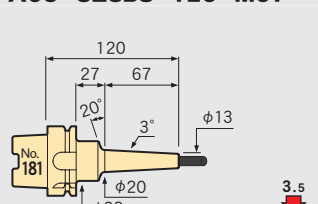
A63-SLSB8-125-M42



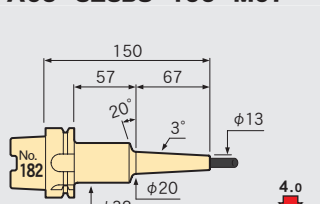
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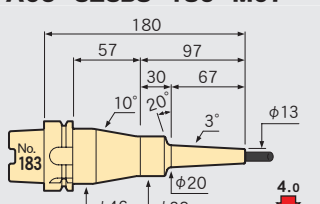
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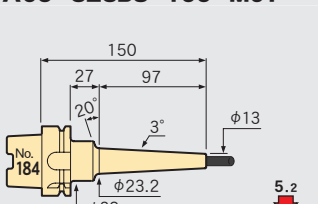
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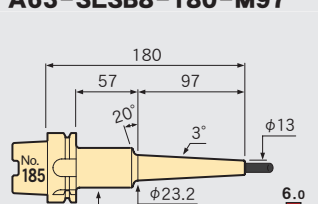
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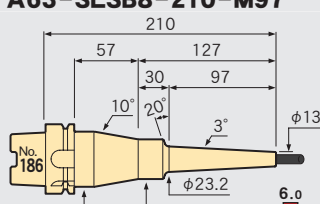
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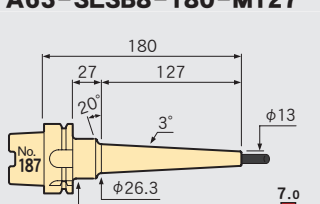
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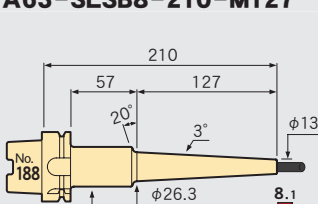
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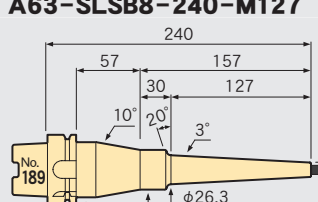
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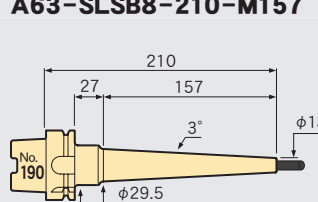
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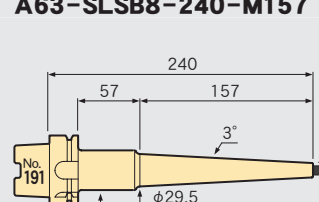
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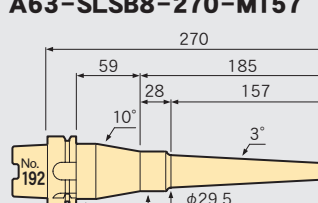
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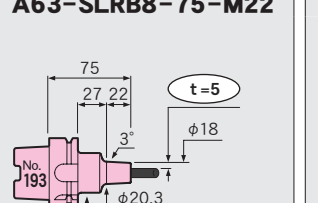
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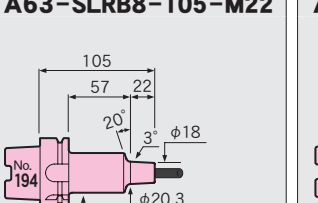
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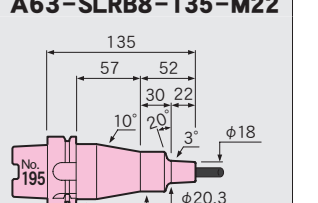
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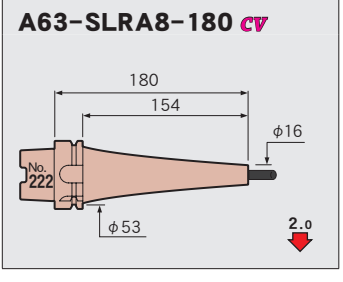
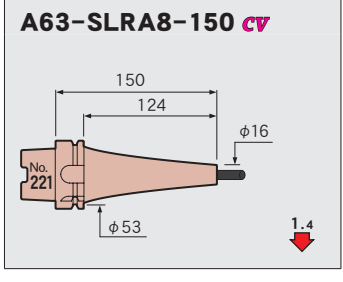
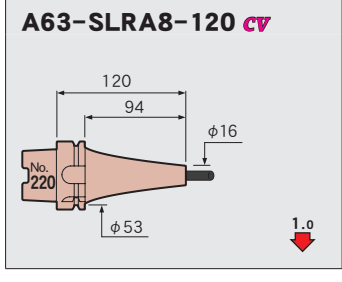
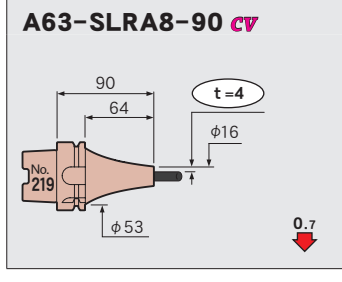
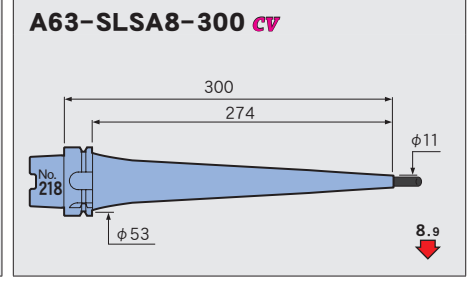
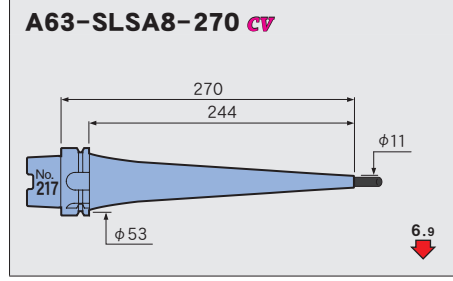
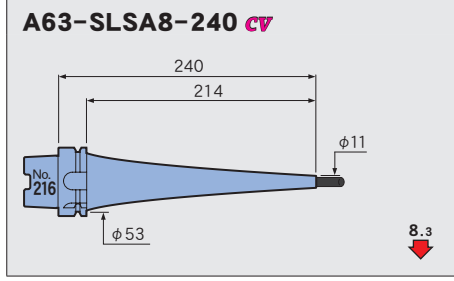
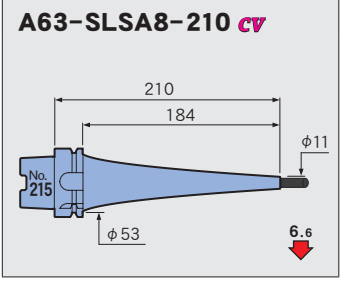
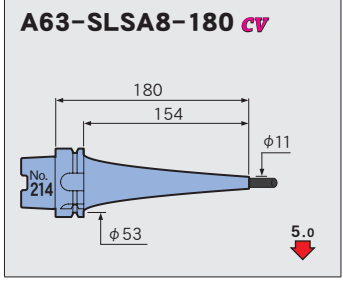
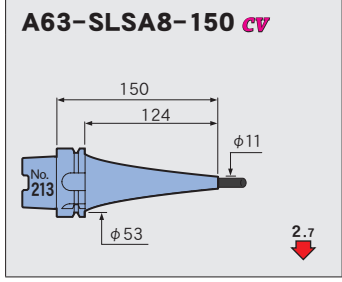
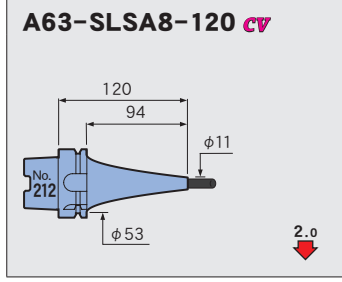
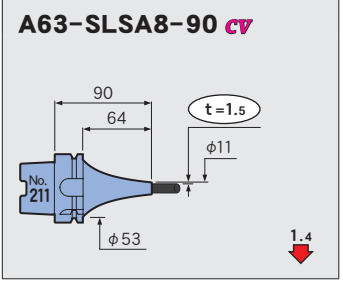
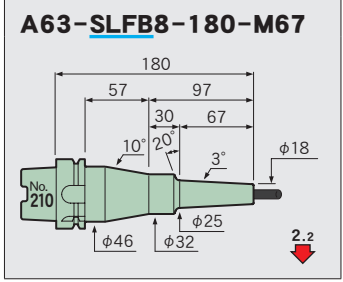
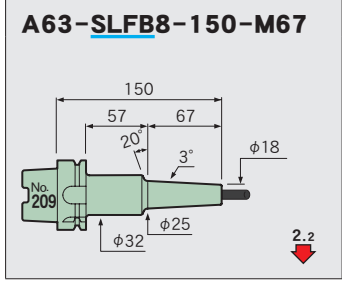
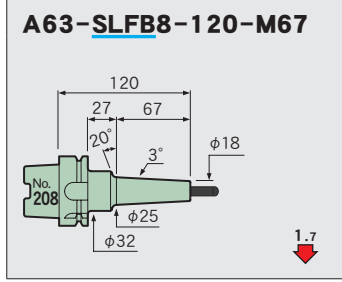
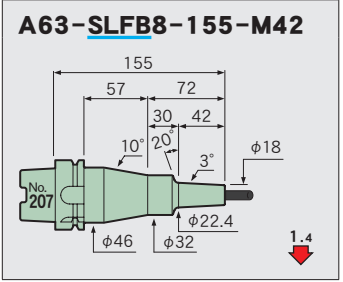
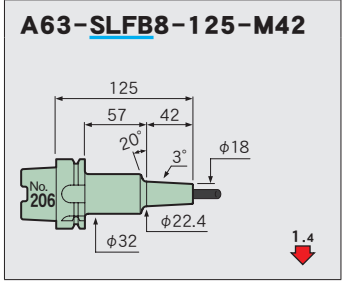
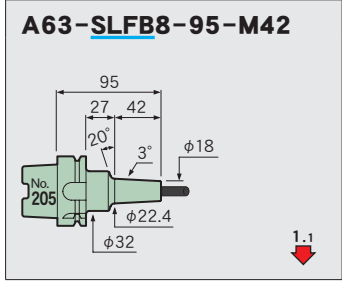
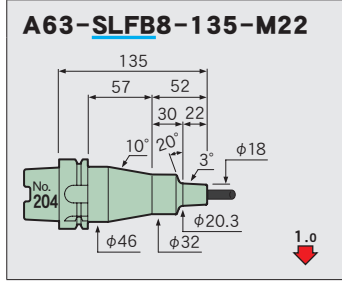
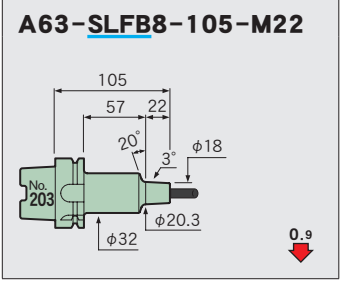
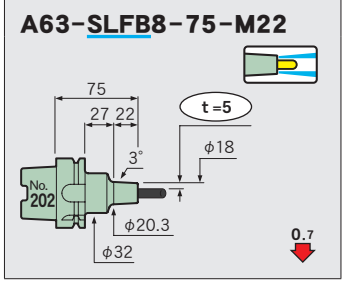
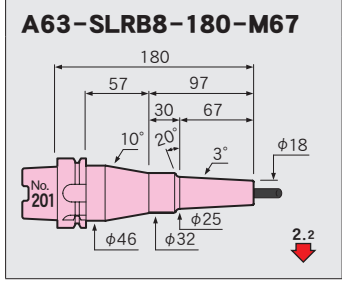
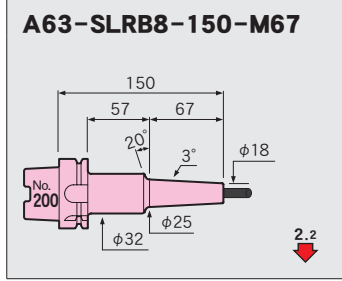
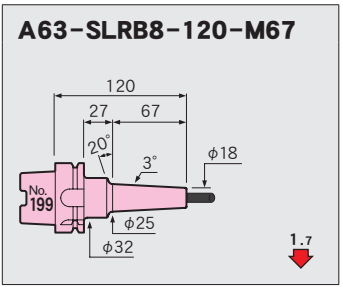
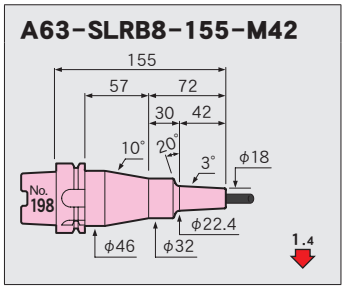
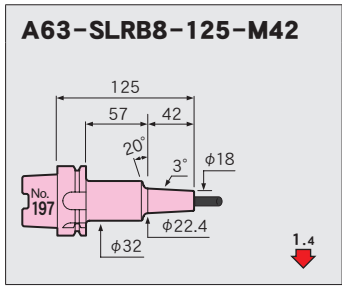
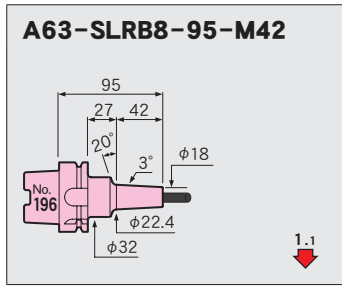


A63-SLRB8-105-M22



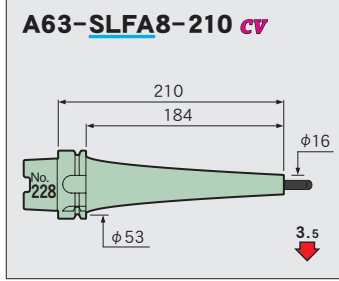
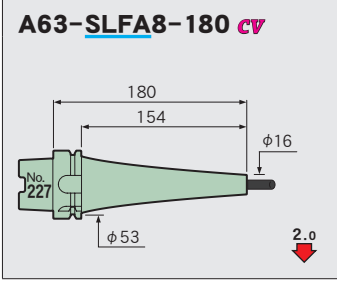
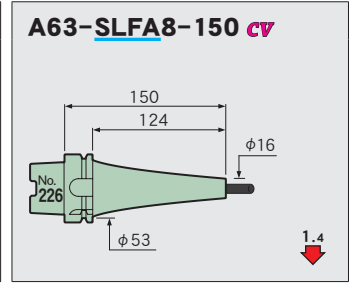
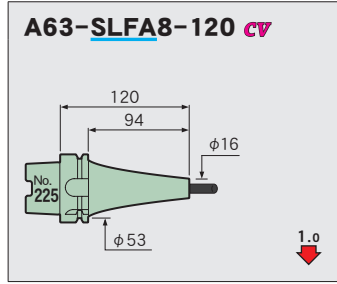
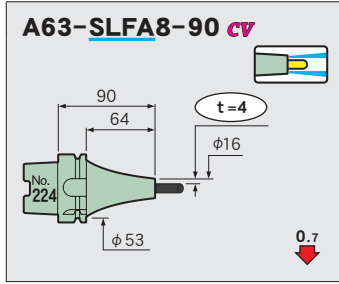
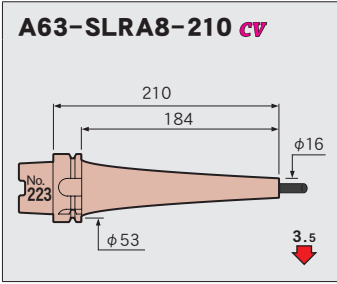
A63-SLRB8-135-M22



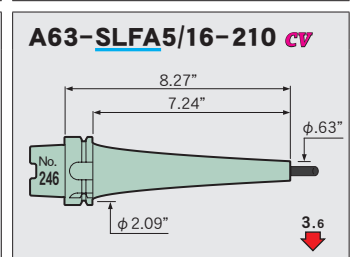
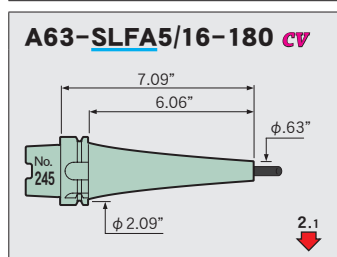
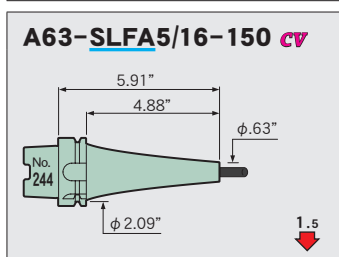
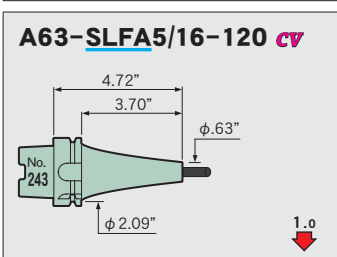
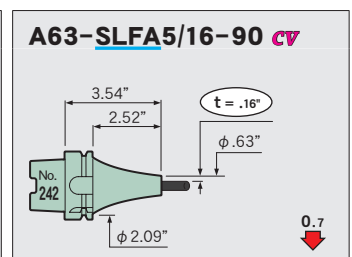
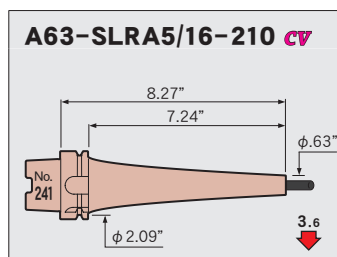
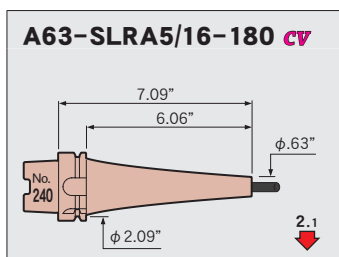
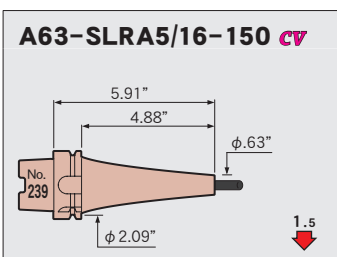
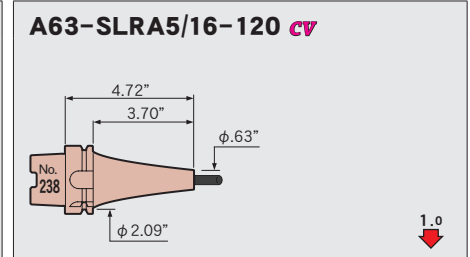
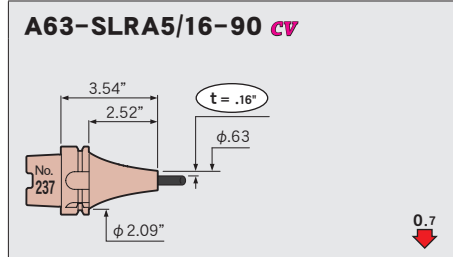
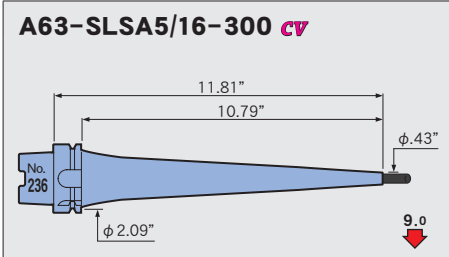
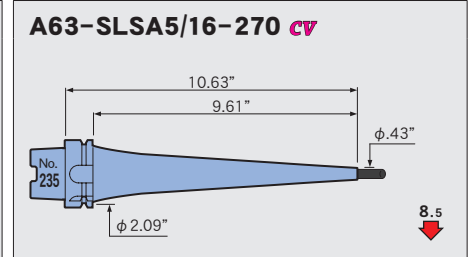
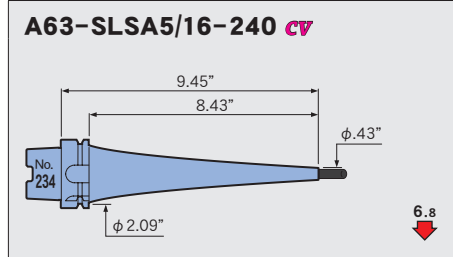
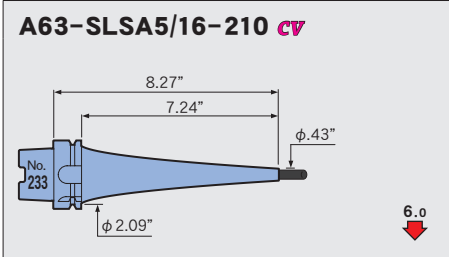
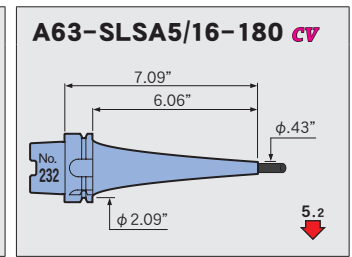
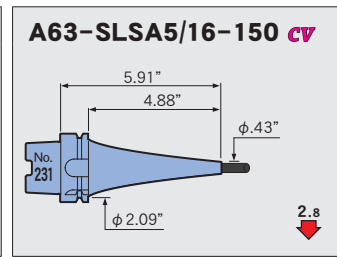
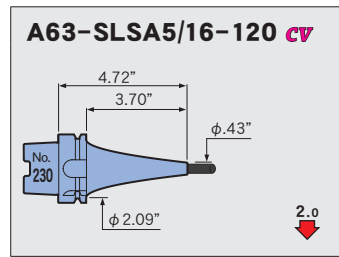
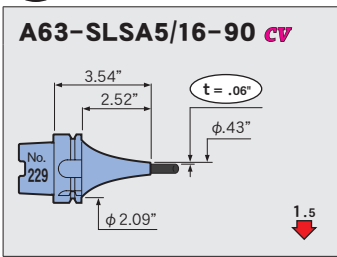


Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

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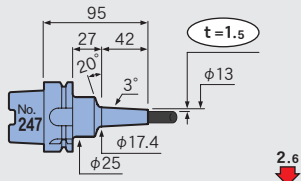


$\phi 5/16$

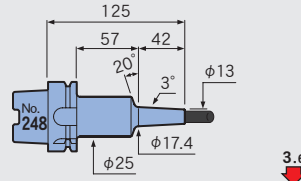


φ10

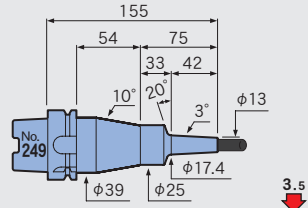
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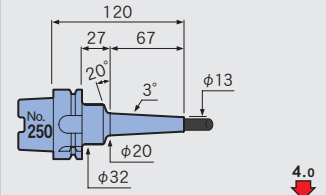
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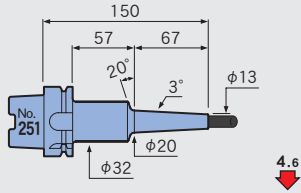
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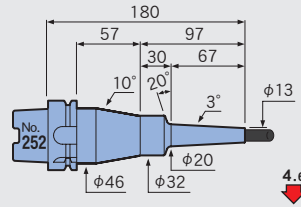
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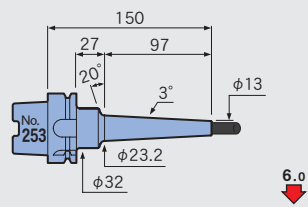
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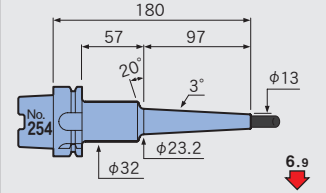
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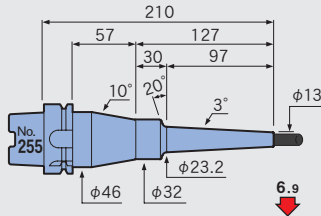
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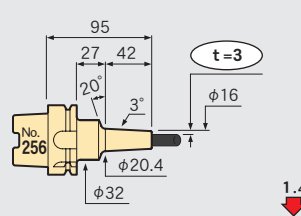
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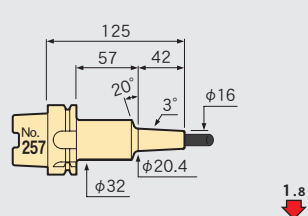
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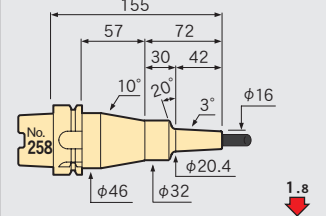
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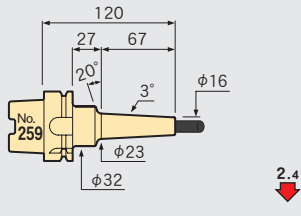
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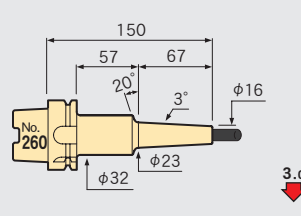
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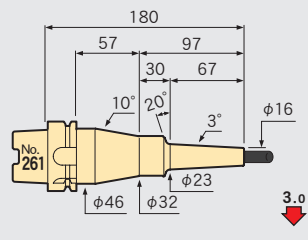
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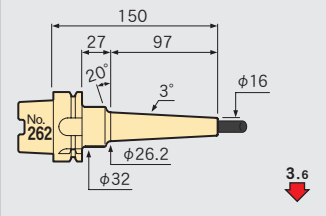
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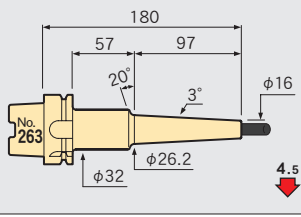
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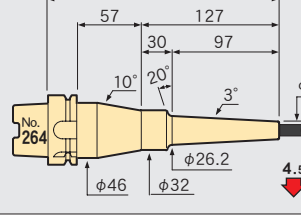
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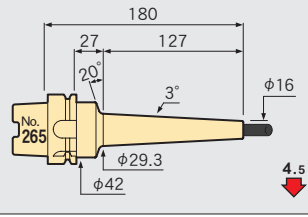
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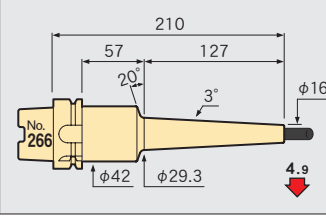
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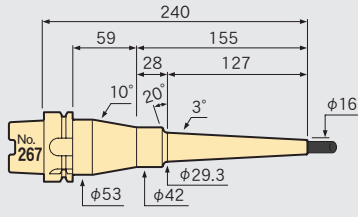
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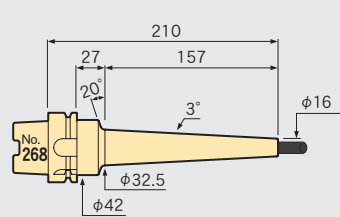
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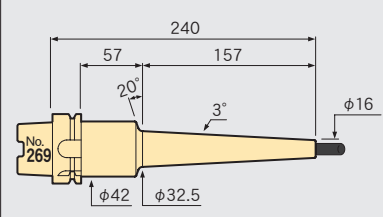
A63-SLSB10-240-M127



A63-SLSB10-210-M157



A63-SLSB10-240-M157



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

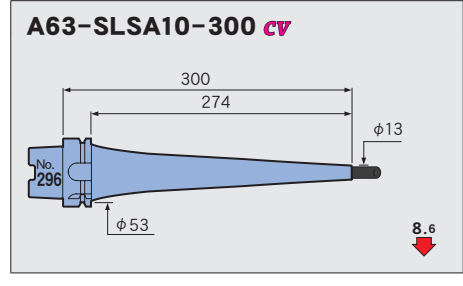
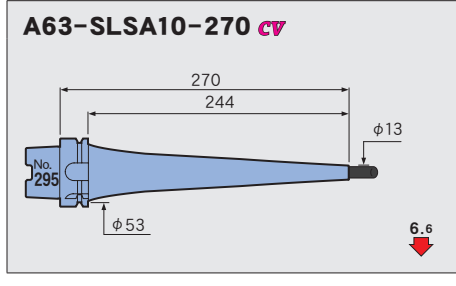
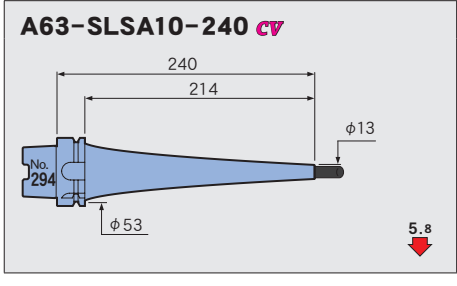
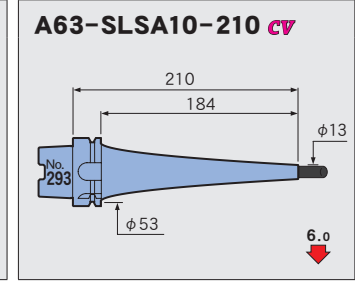
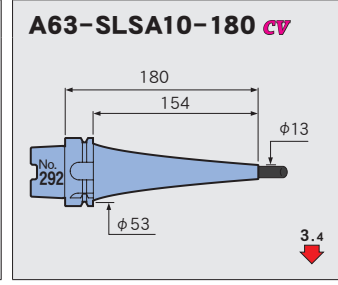
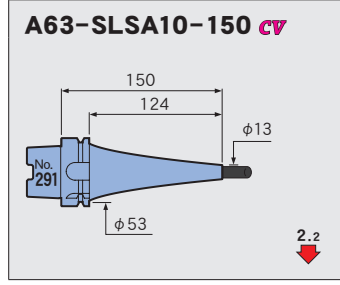
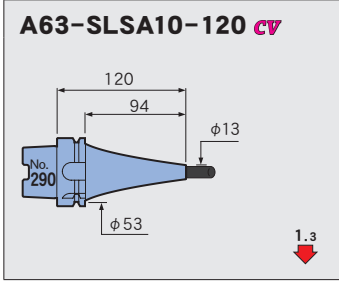
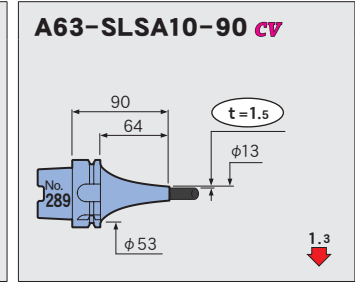
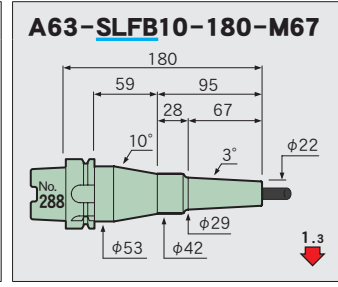
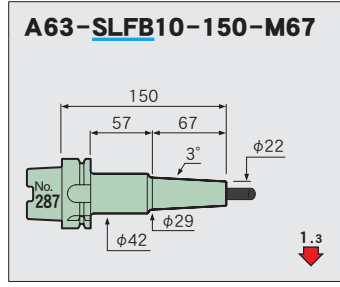
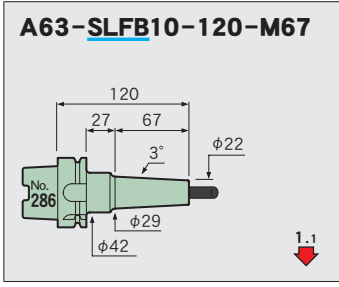
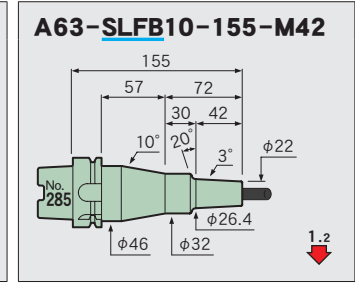
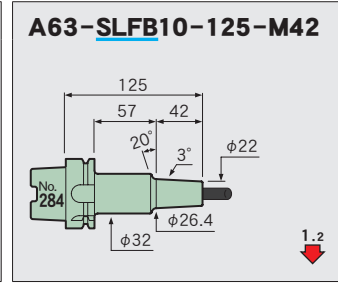
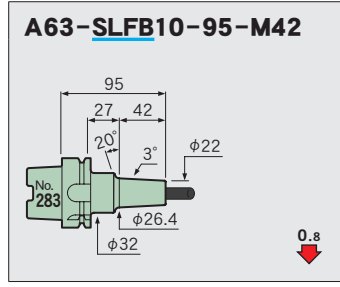
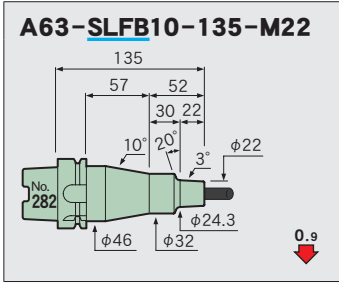
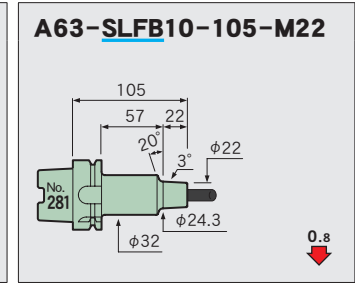
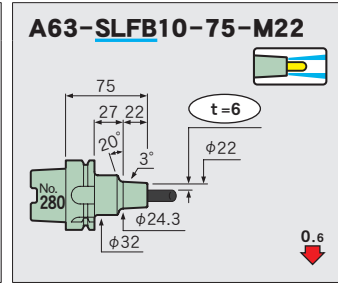
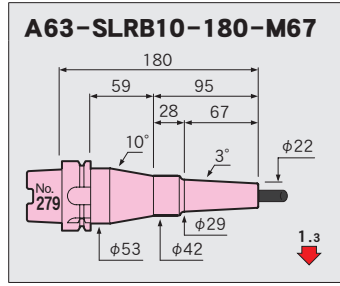
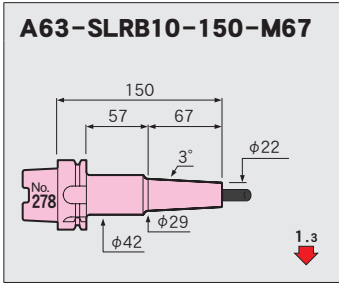
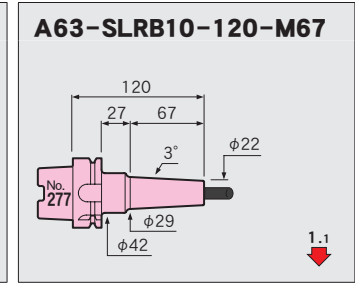
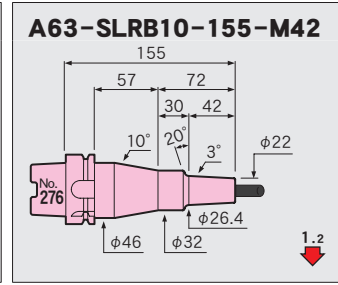
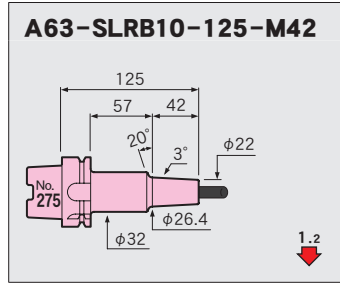
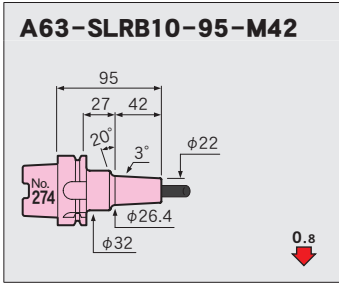
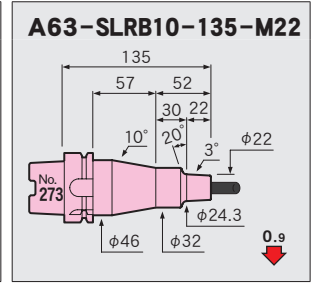
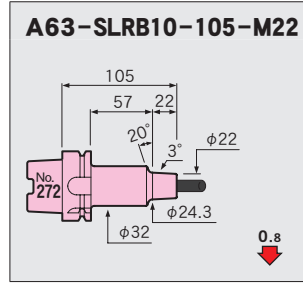
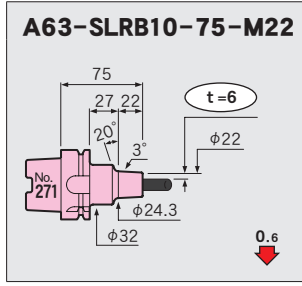
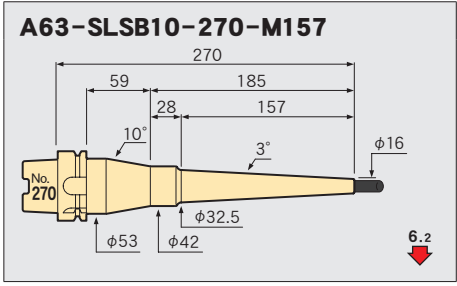
STRAIGHT
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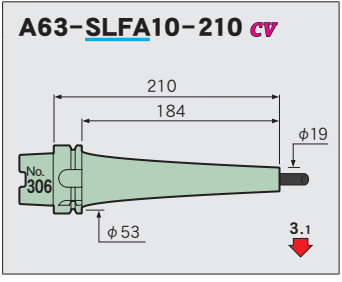
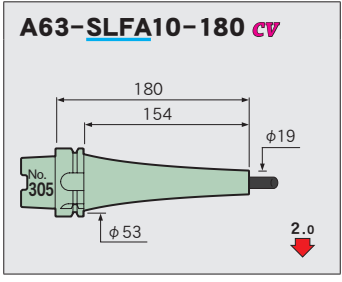
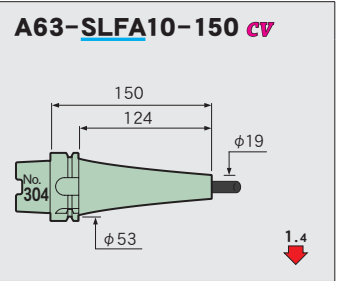
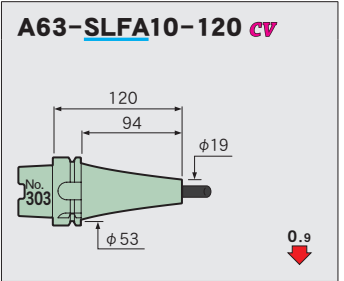
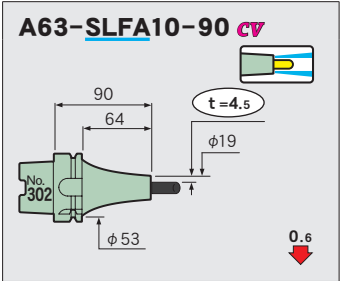
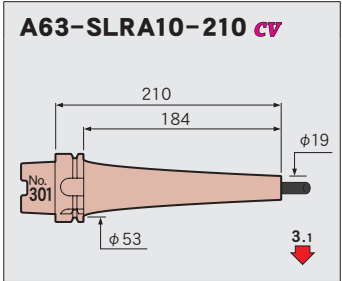
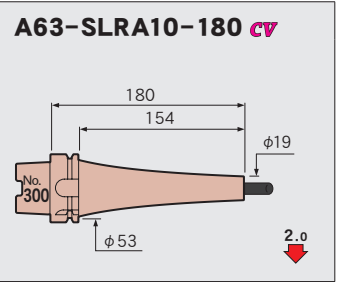
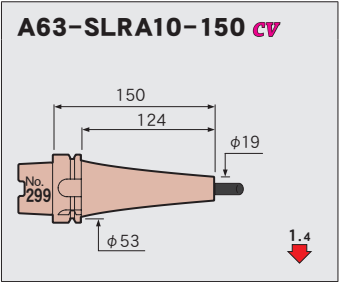
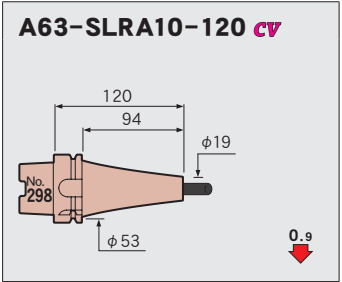
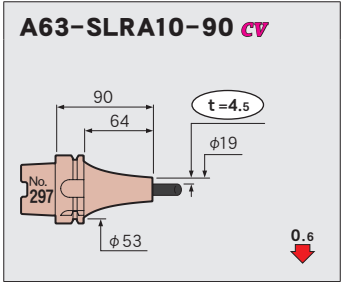
OTHERS

PERIPHERALS

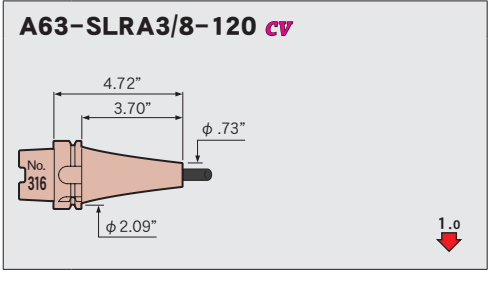
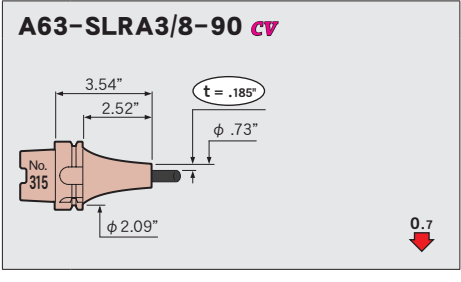
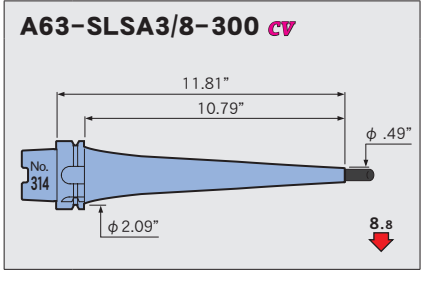
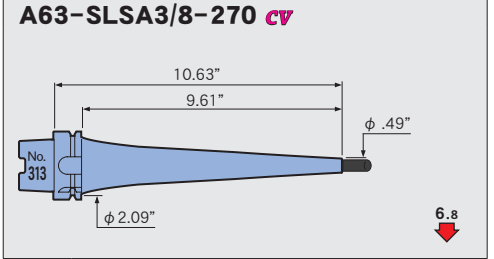
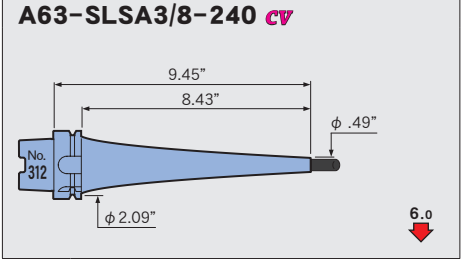
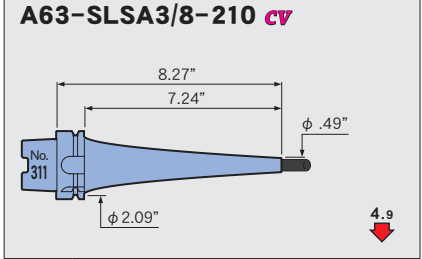
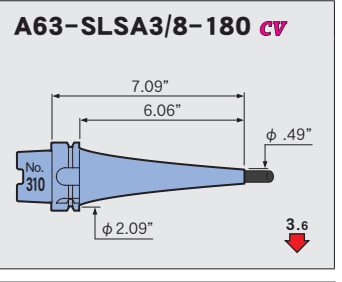
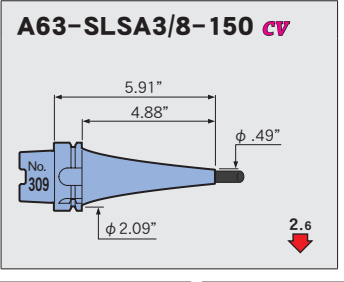
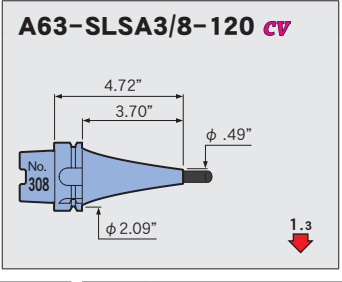
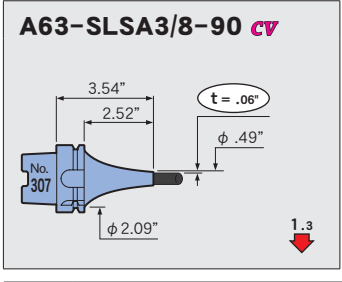
Technical
information

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information





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Feature
Shrink-fit Heater

MONO 3°
MONO CURVE
MONO Series

2PIECE type

UNO

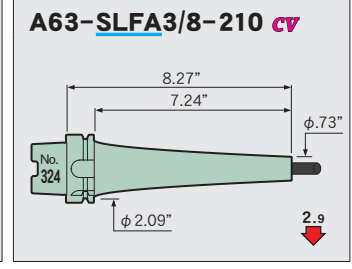
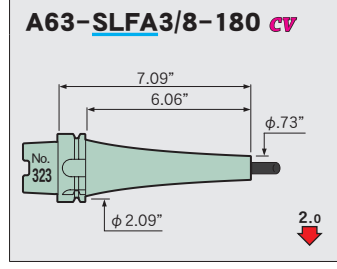
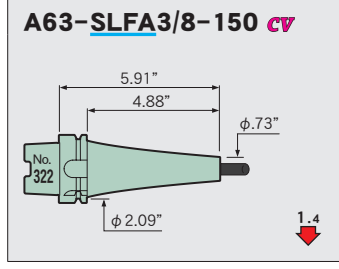
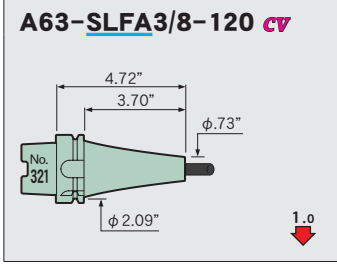
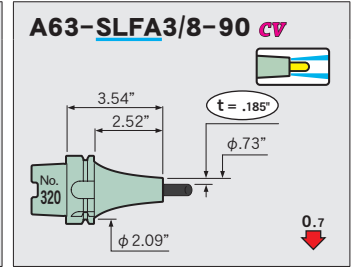
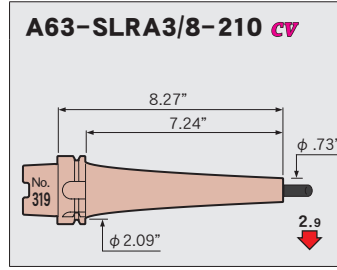
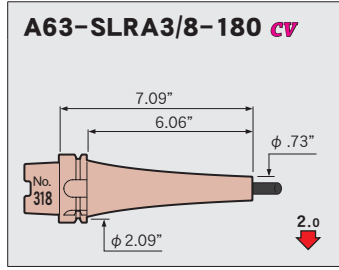
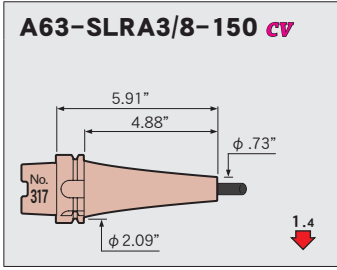
HYPER
version

STRAIGHT
anbor

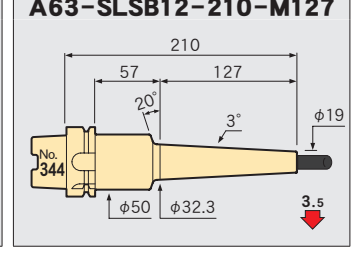
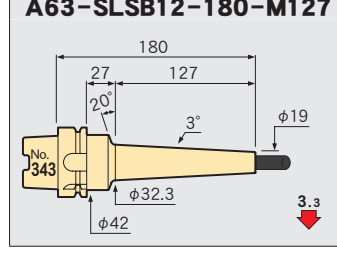
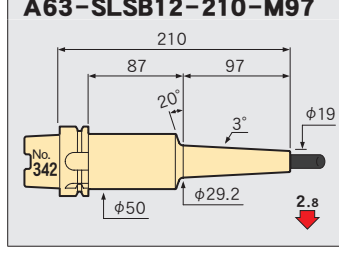
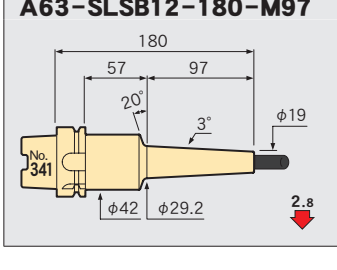
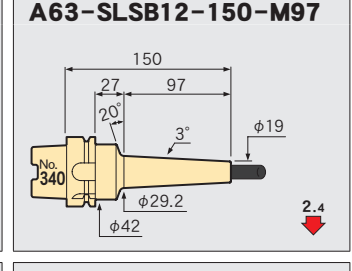
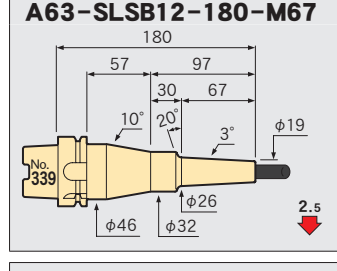
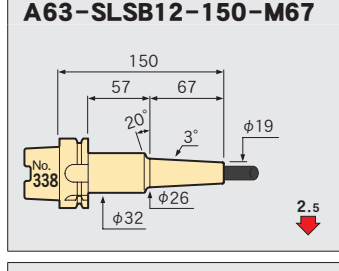
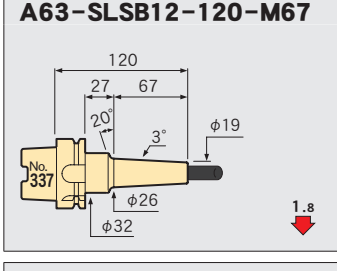
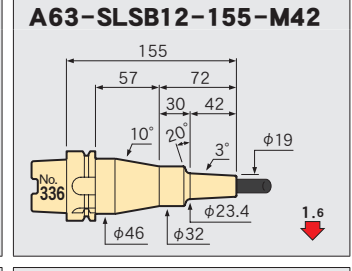
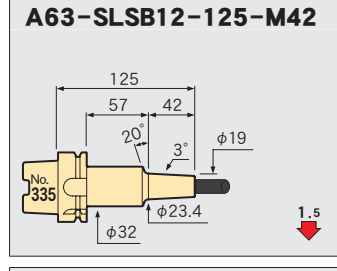
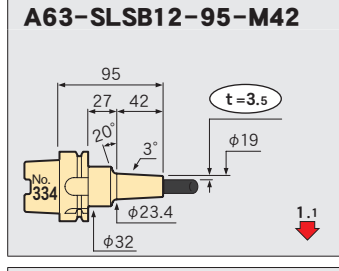
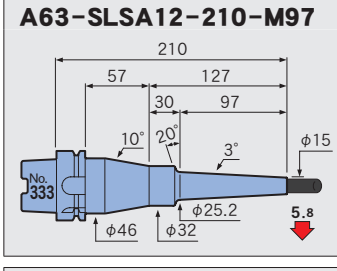
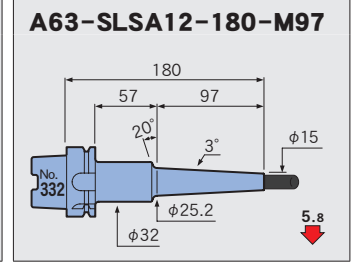
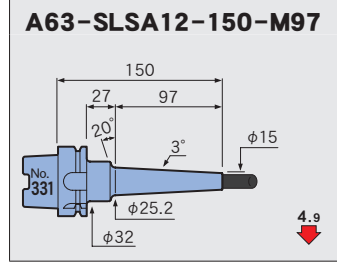
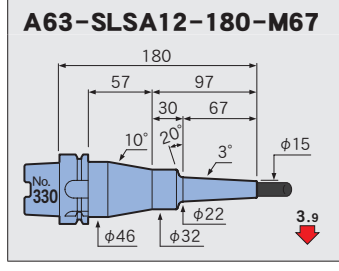
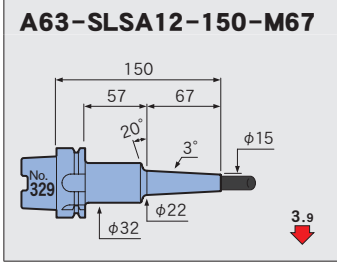
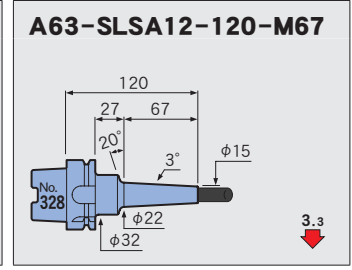
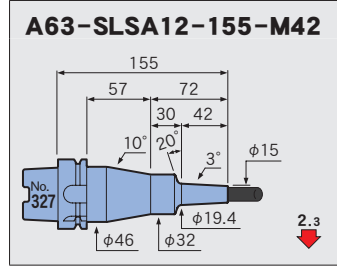
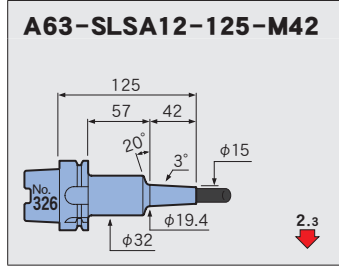
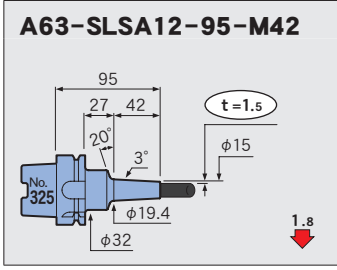
OTHERS

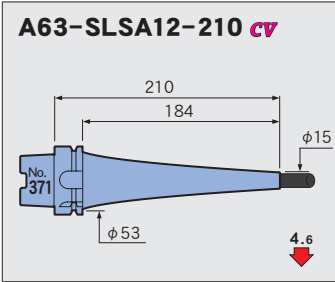
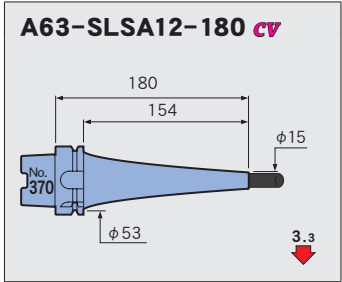
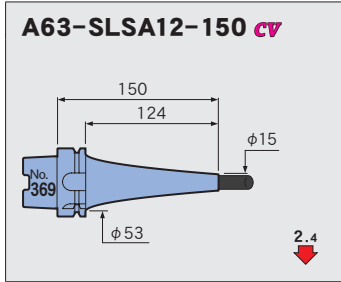
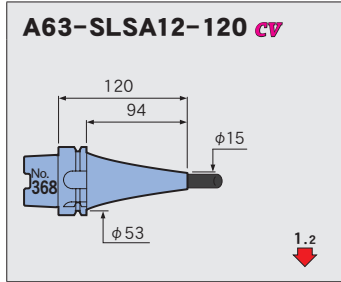
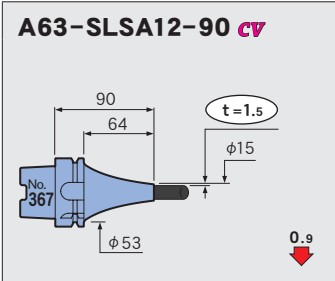
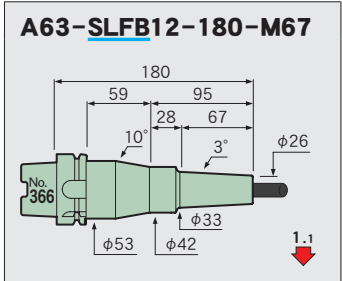
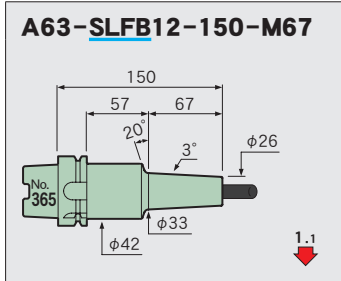
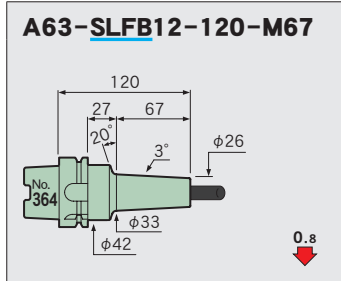
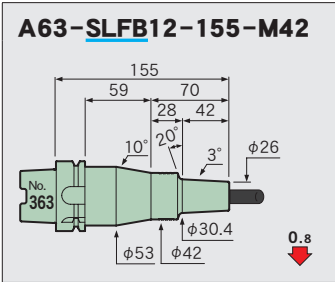
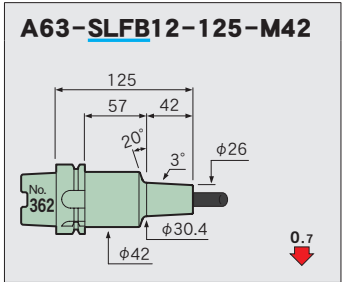
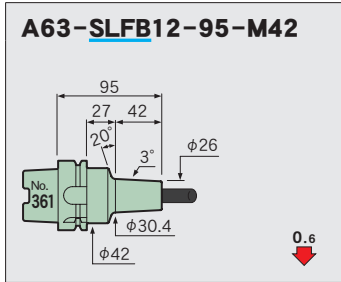
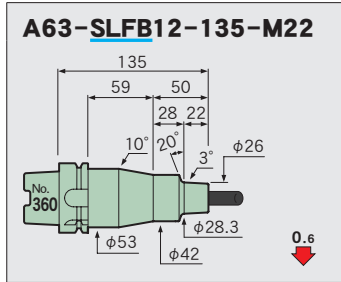
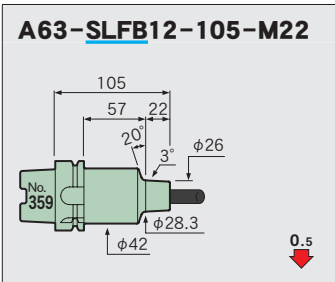
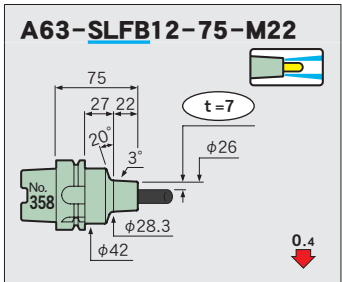
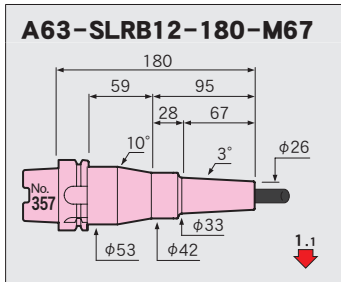
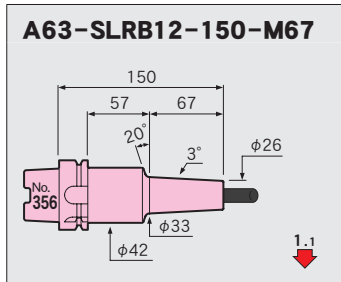
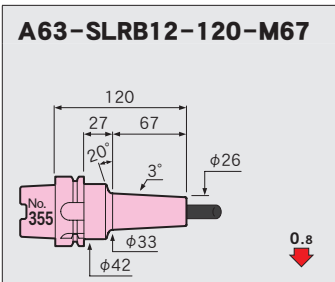
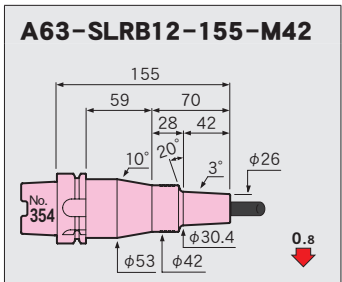
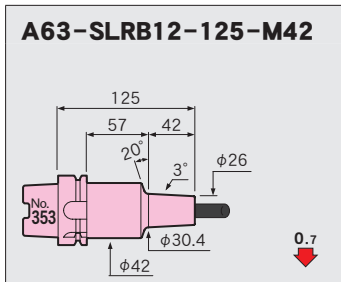
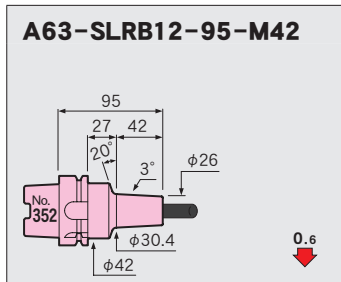
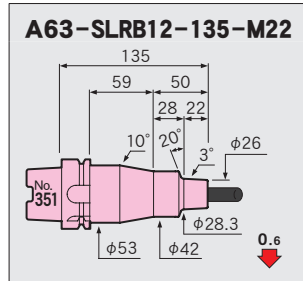
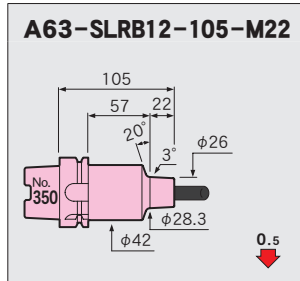
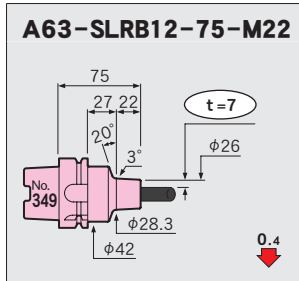
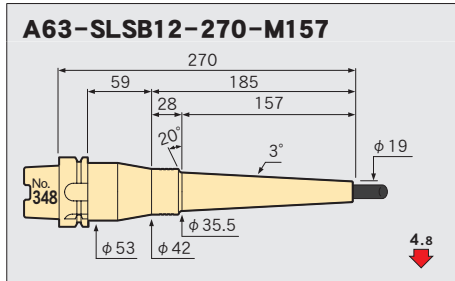
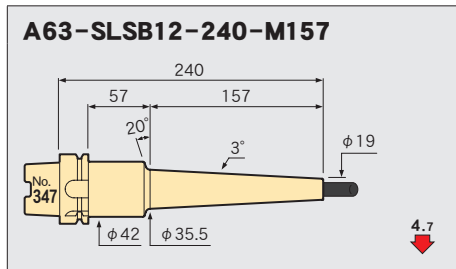
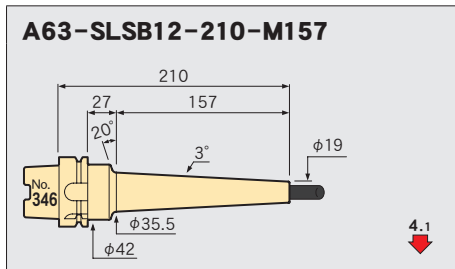
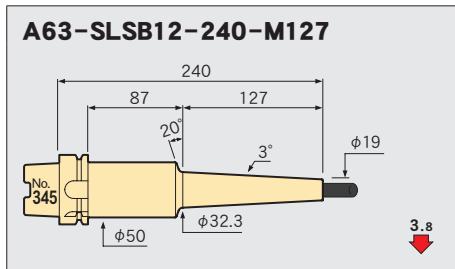
PERIPHERALS

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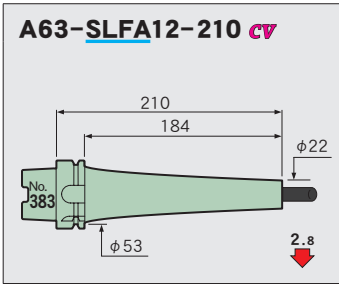
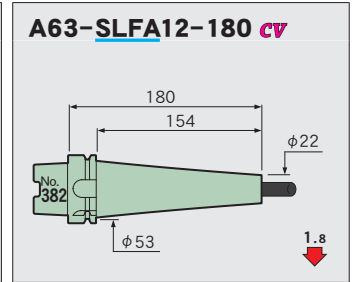
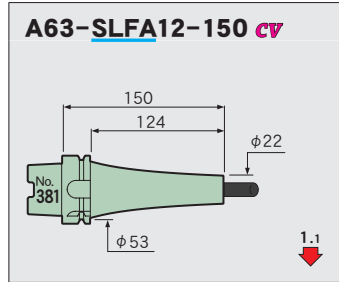
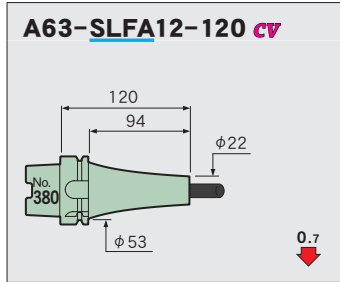
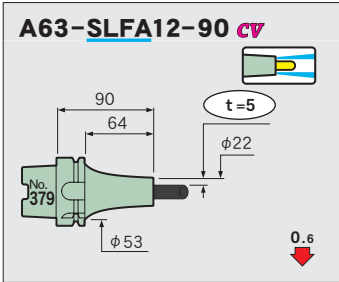
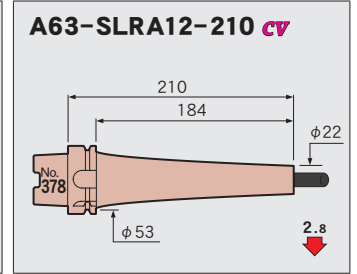
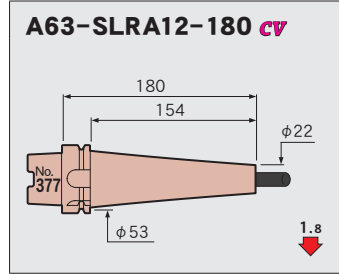
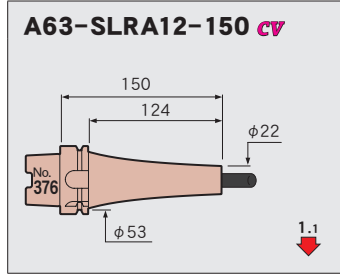
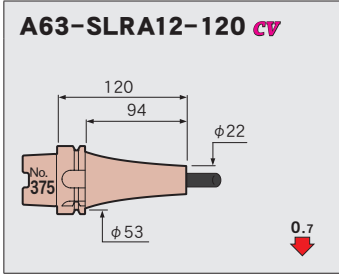
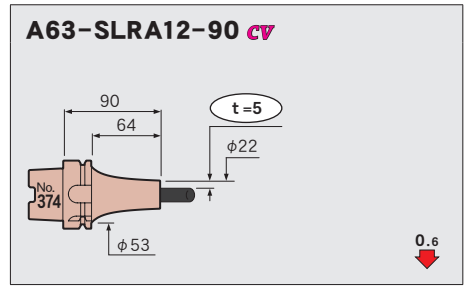
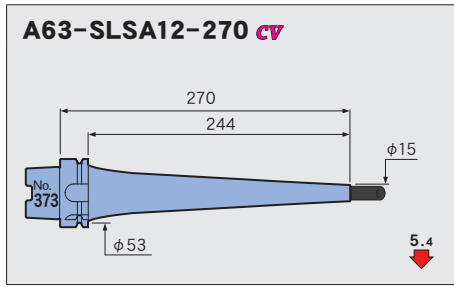
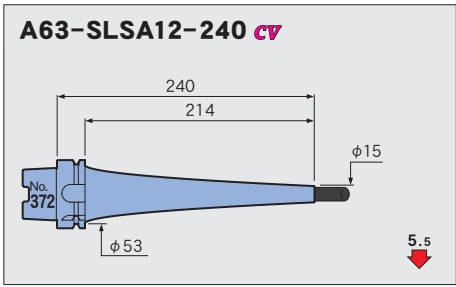
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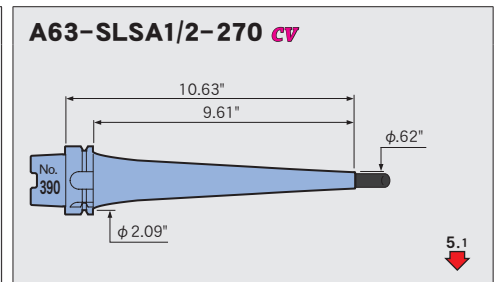
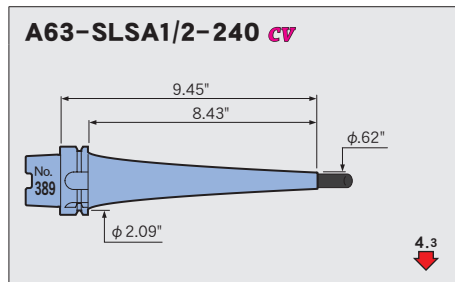
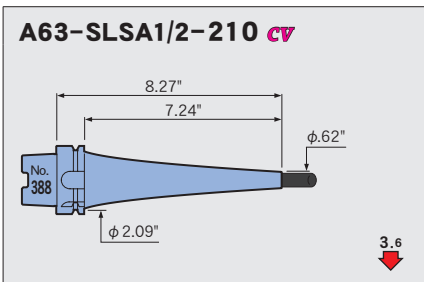
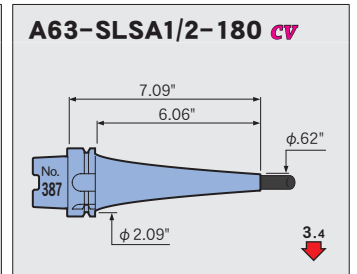
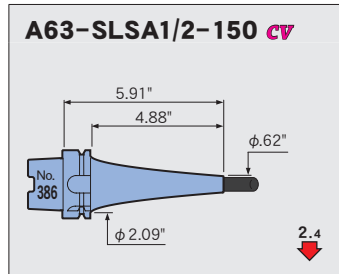
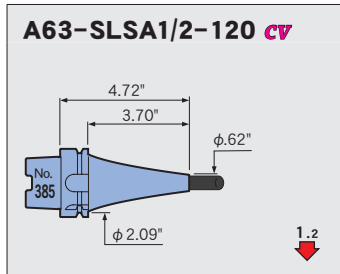
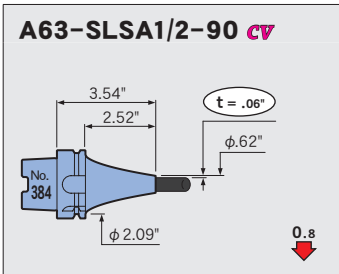


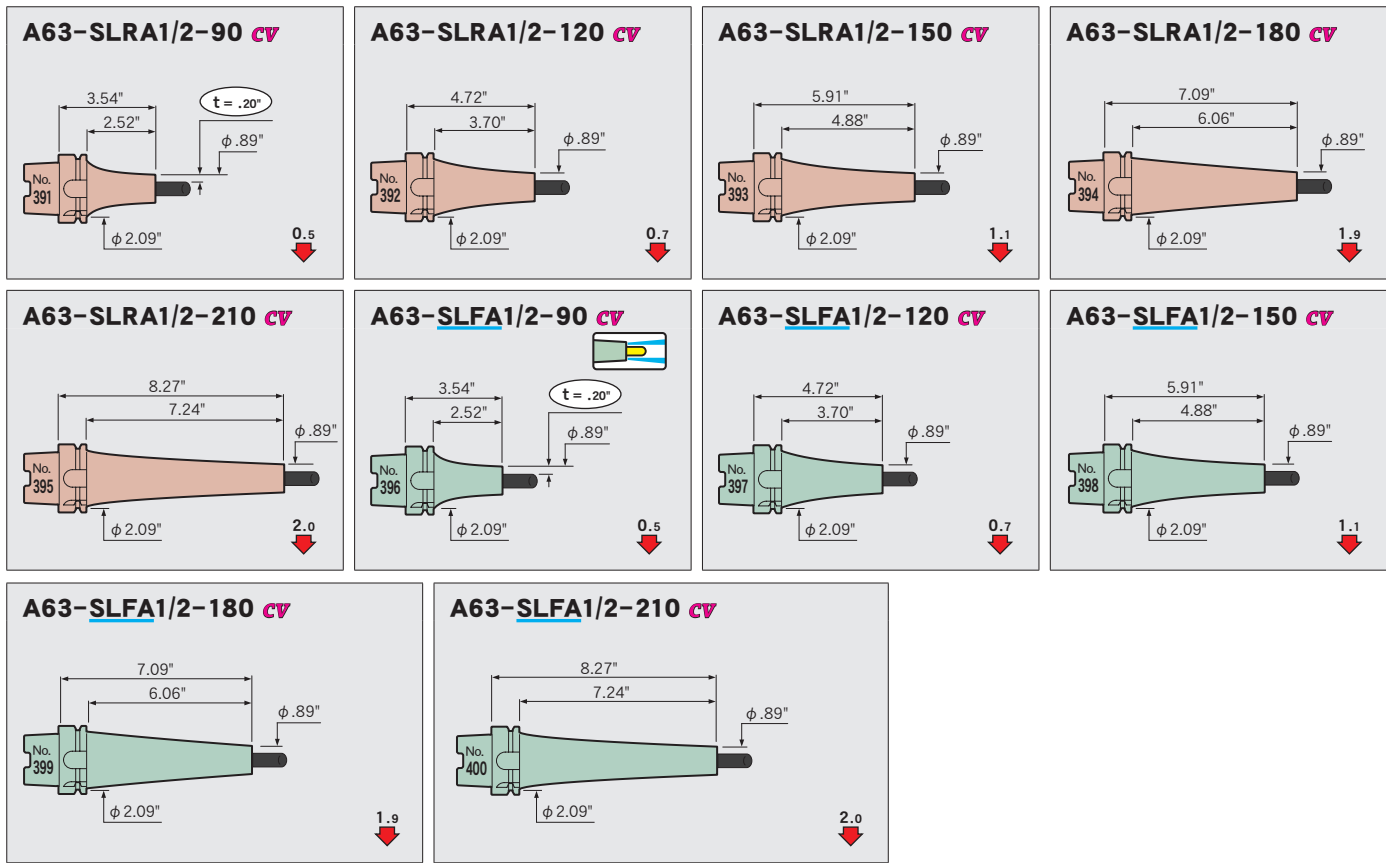
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical information

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
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Technical Information

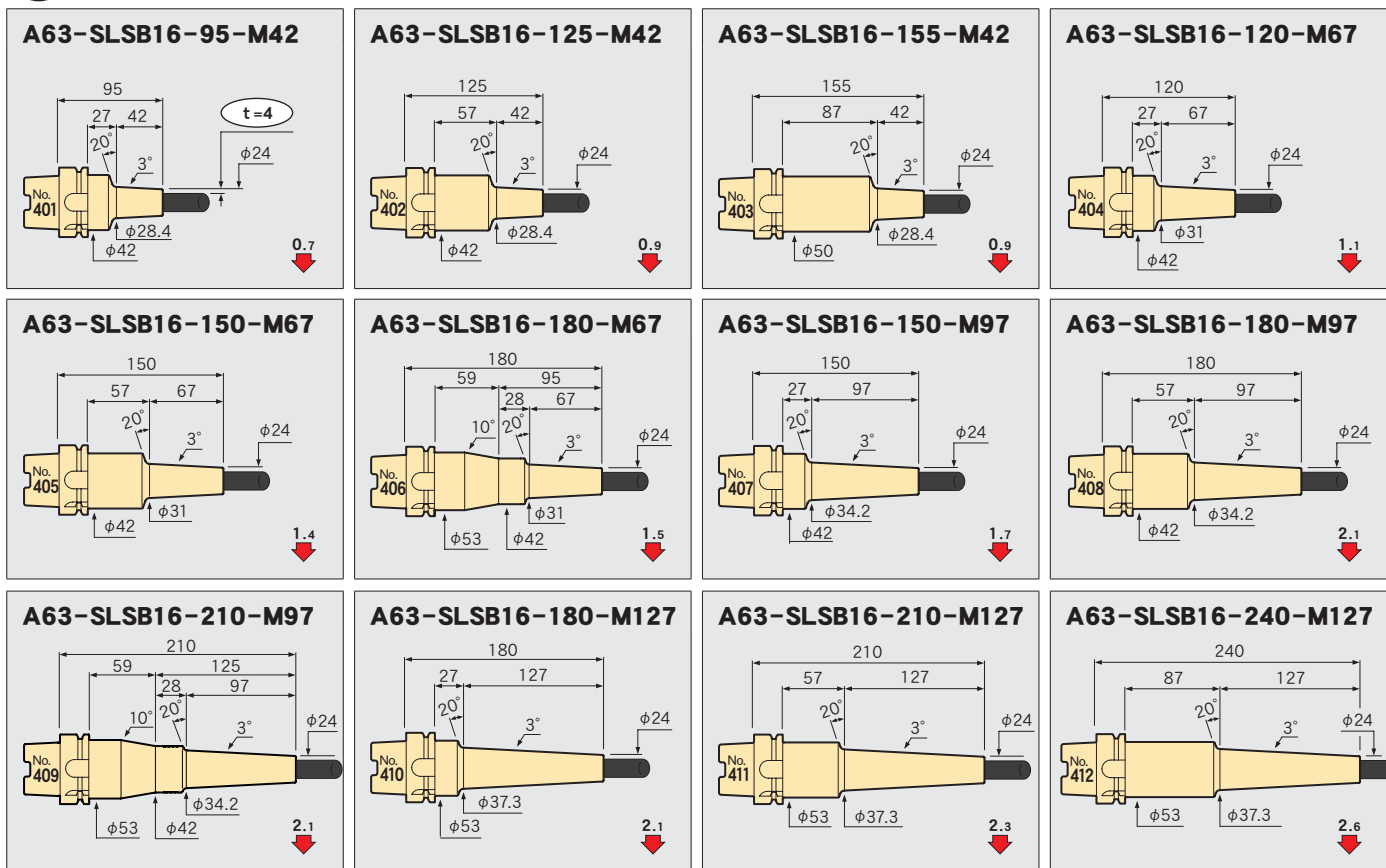


φ1/2

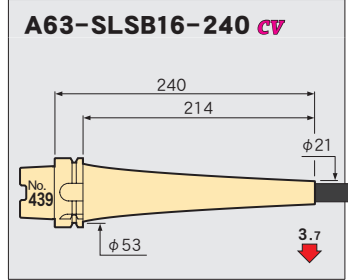
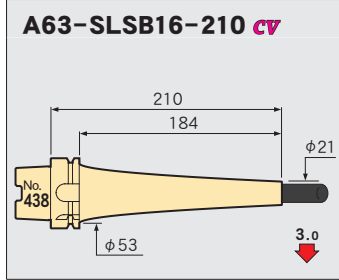
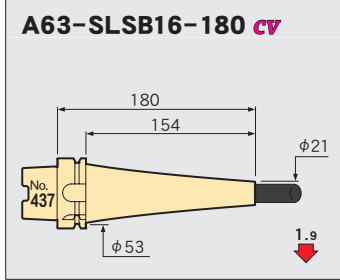
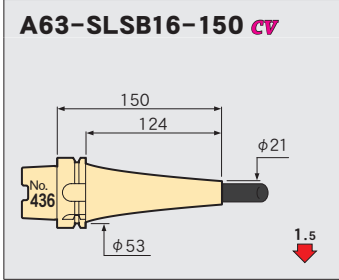
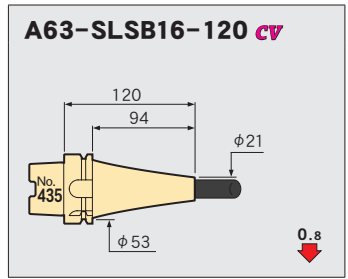
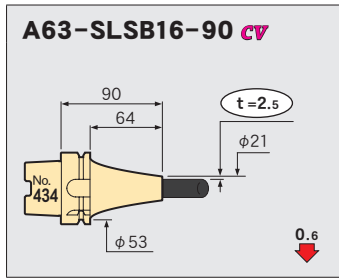
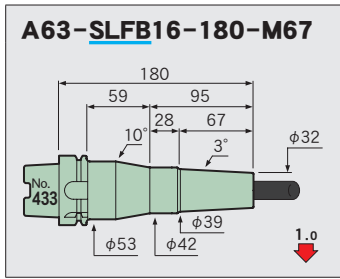
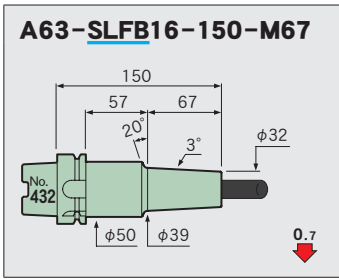
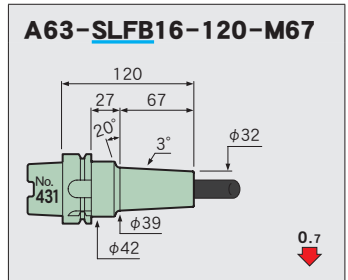
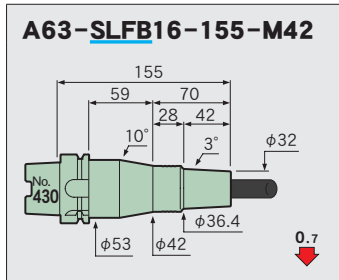
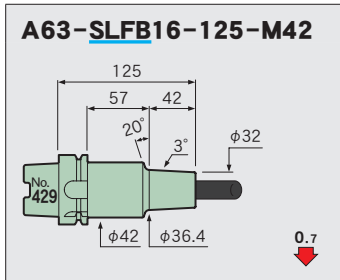
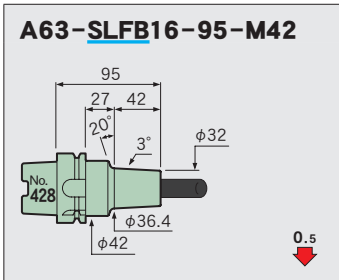
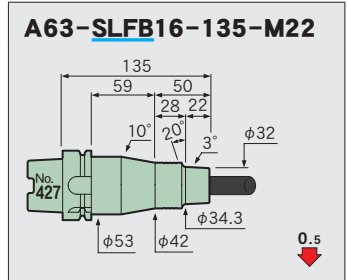
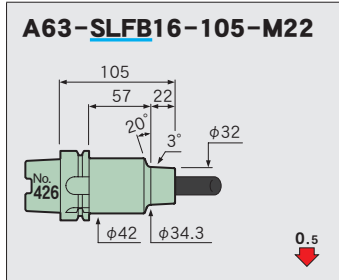
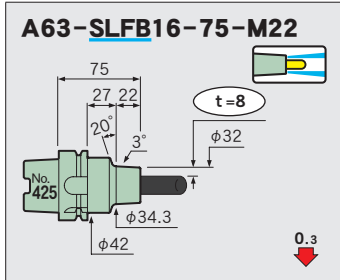
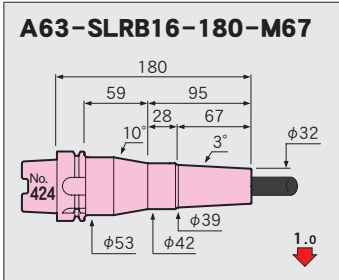
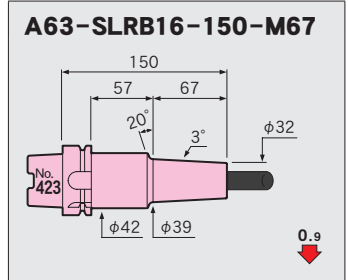
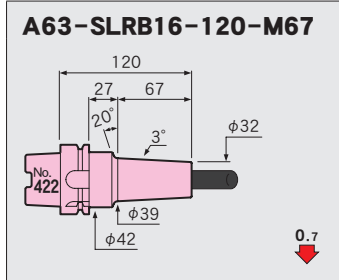
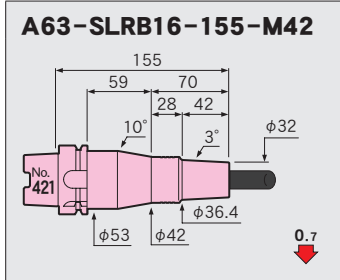
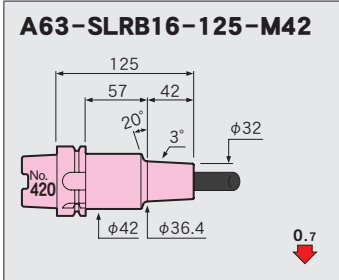
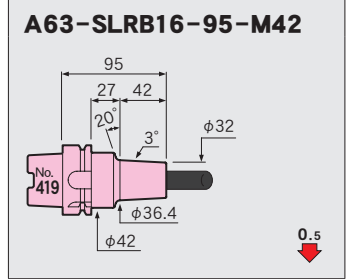
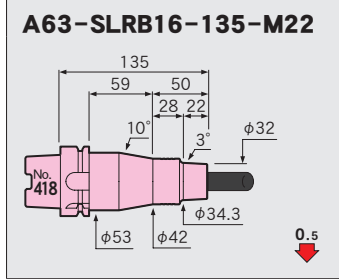
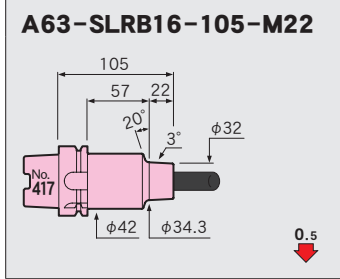
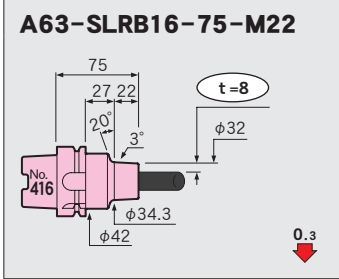
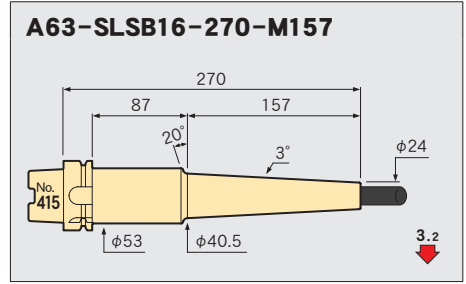
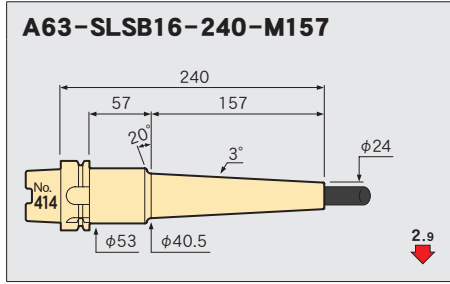
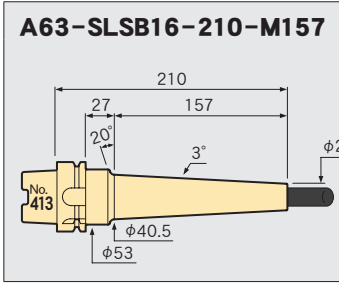




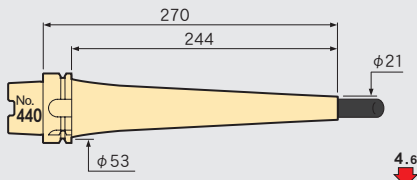
$\phi 16$



Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

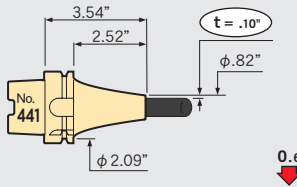


A63-SLSB16-270 CV

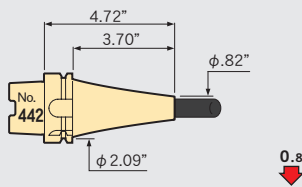


φ5/8

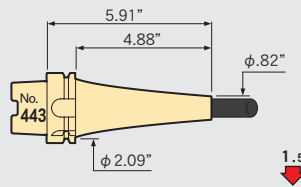
A63-SLSB5/8-90 CV



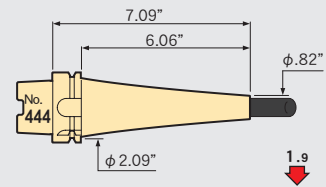
A63-SLSB5/8-120 CV



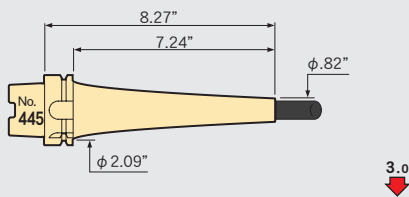
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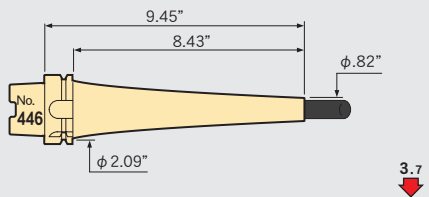
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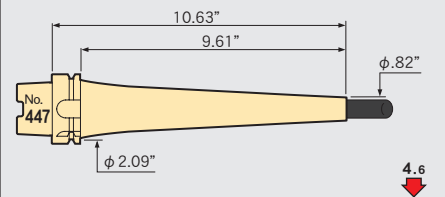
A63-SLSB5/8-210 CV



A63-SLSB5/8-240 CV



A63-SLSB5/8-270 CV



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

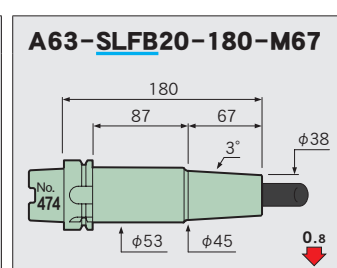
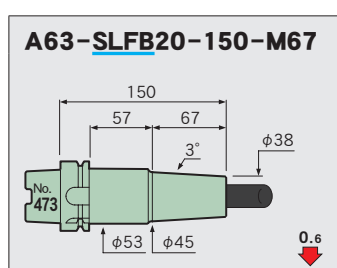
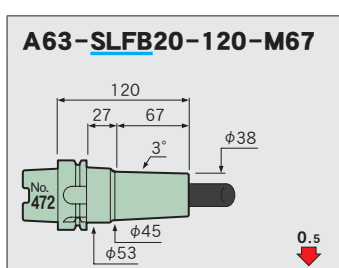
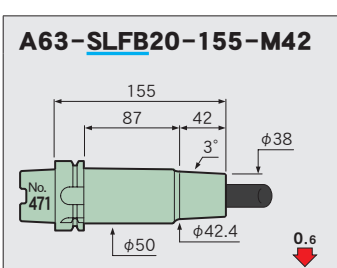
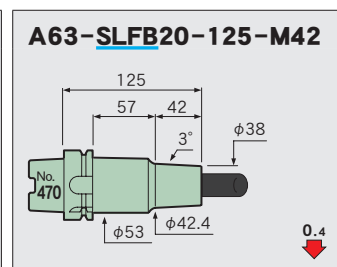
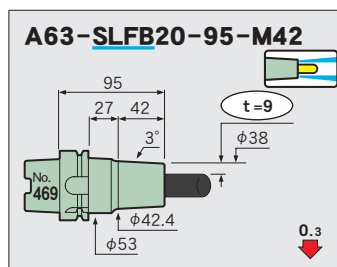
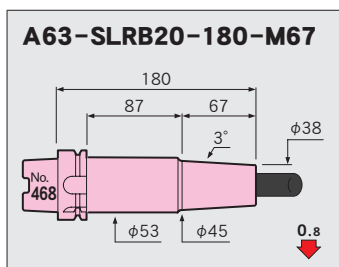
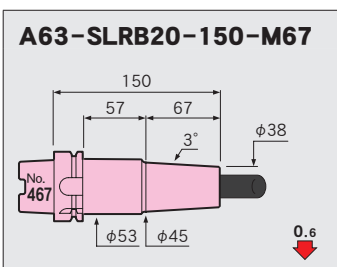
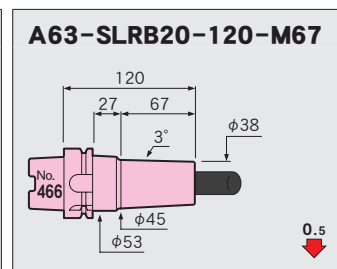
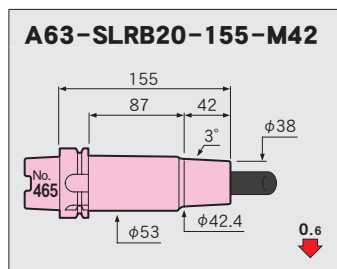
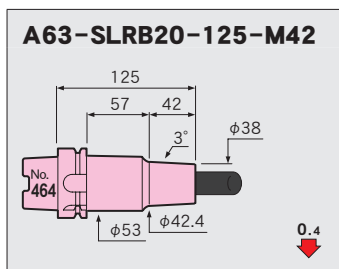
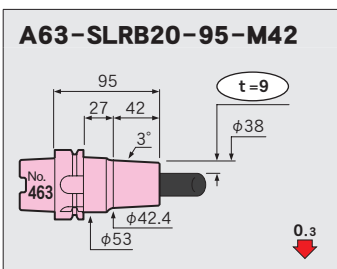
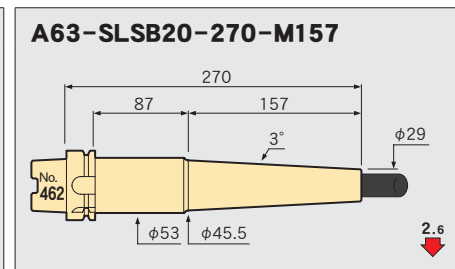
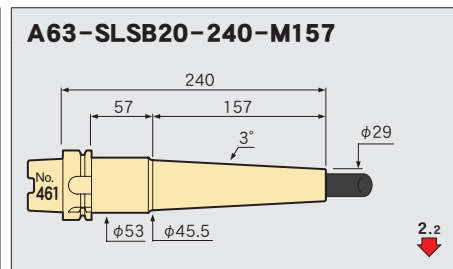
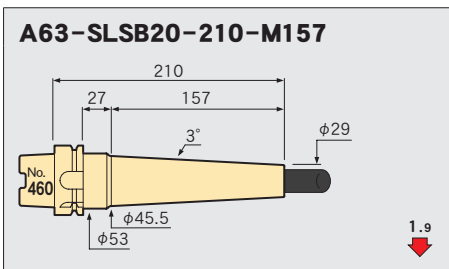
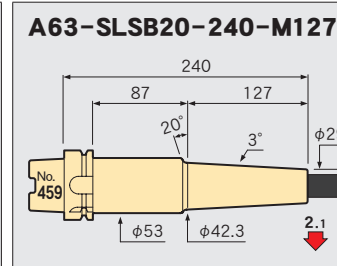
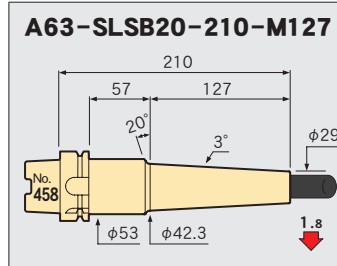
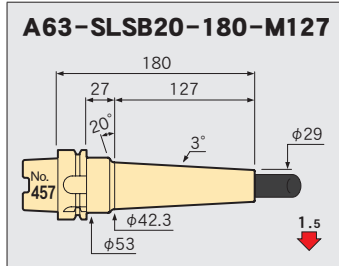
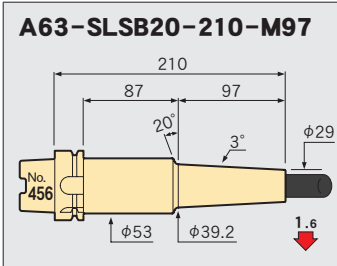
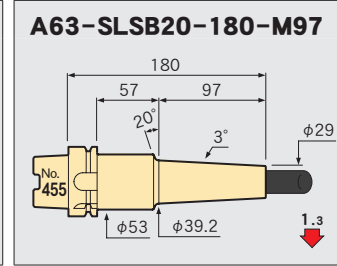
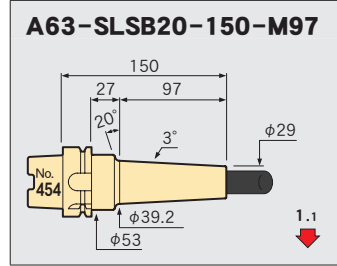
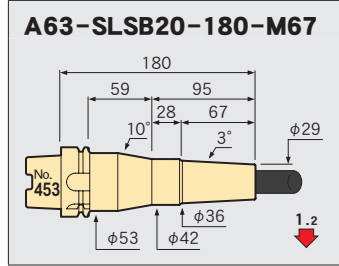
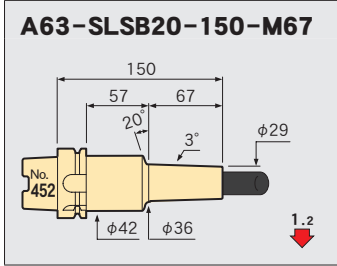
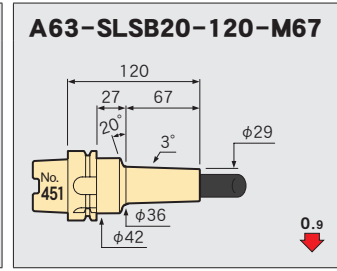
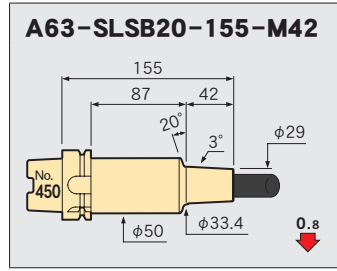
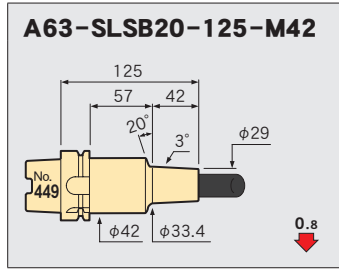
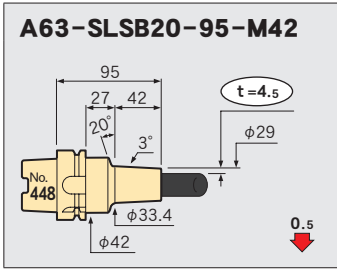
OTHERS

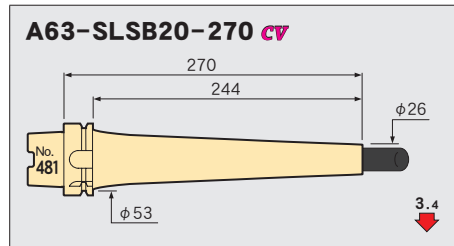
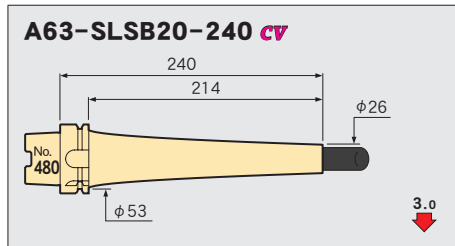
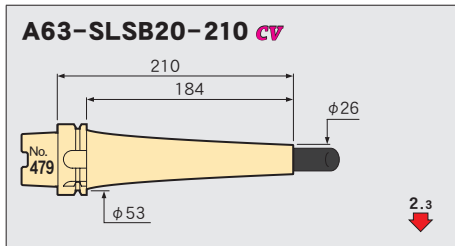
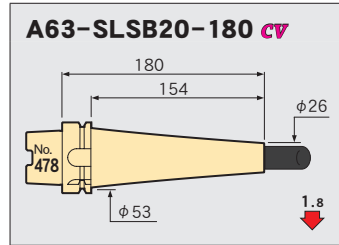
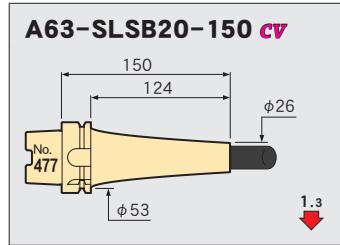
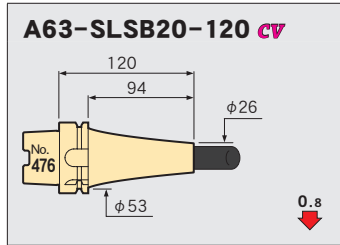
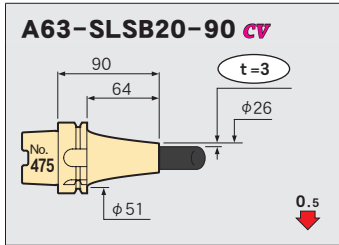
PERIPHERALS

Technical
Information

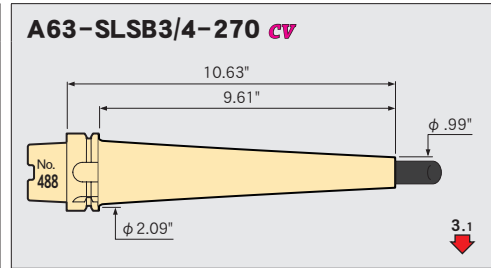
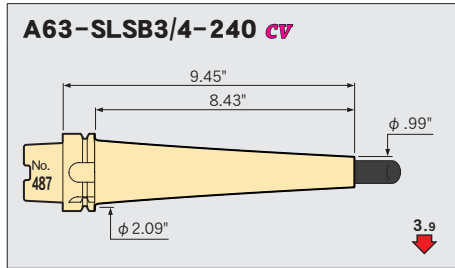
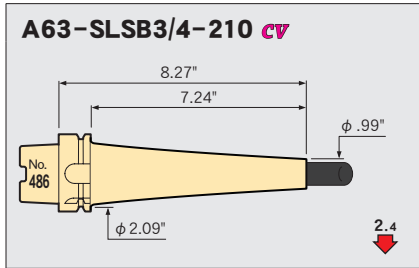
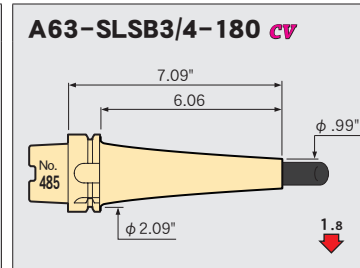
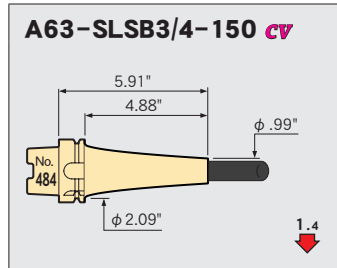
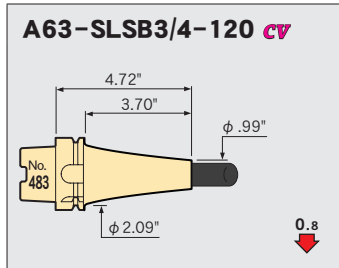
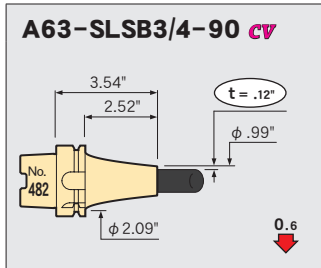
φ20

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

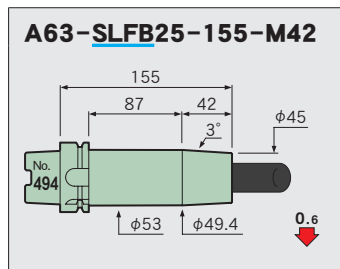
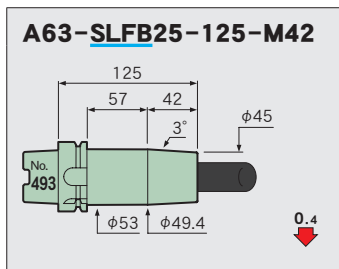
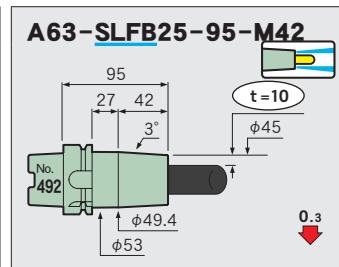
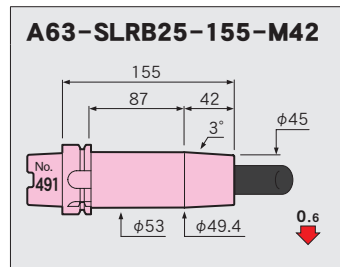
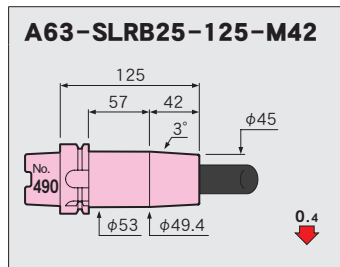
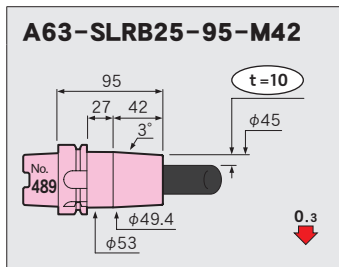




φ 3/4

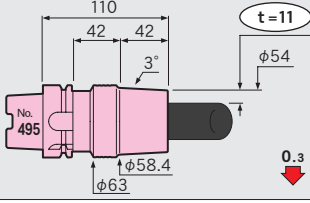


φ25



φ32

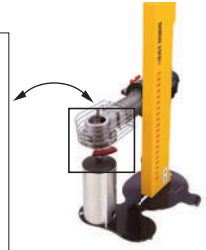
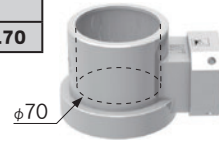
A63-SLRB32-110-M42



■ φ70 Nozzle (HRB-03S)

Required for shrinking the SLRB32.

CODE
HRB-NZL70



HEAT ROBO Baby 3000S

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

A100

MONO 3°

Rigidity value (μm/kgf)
P. 234

A100-SLSB16-285-M157

Imbalance value **N**
P. 237

Fig. 1

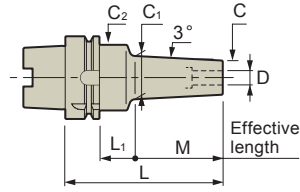
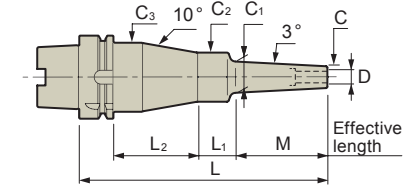


Fig. 2



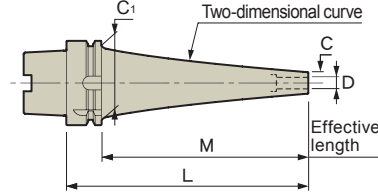
MONO CURVE

Rigidity value (μm/kgf)
P. 234

A100-SLRA12-225 cv

Imbalance value **N**
P. 237

Fig. 3



Std. Access.

- Coolant duct (fixed type) → P.218

Note

- Swing type coolant ducts are available upon request. → P.218

Caution

- Setting cutters... Be sure to insert the tool beyond the safety mark.

Compatibility table for HRD-01S



[○] Available [×] Not available
[▲] Usable by raising the heating unit. → P.233






cv : Curve

Thickness



CODE	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	Scale model
A100-SLSA3-110-M 42	1	3	6	1.5	110	42	39	—	10.4	26	—	9	80	2.2	19.8	9.4	1
-135-M 67					135	67			13				105	2.3	20.9	15.1	4
-140-M 42					140	42	69		10.4				110		19.9	10.1	2
-165-M 67					165	67			13	25			136	2.2	21	16	5
-M 97						97	39		16.2	26			135	2.3	22.2	21	7
-170-M 42	2				170	42	33	66	10.4		40		140	2.6	20.2	10	3
-195-M 67					195	67			13				165		21.3	15.9	6
-M 97	1					97	69	—	16.2	25	—		166	2.3	22.3	22.5	8
-225-M 97	2				225		33	66		26	40		195	2.7	22.6	22.2	9
-SLRA3- 90-M 22	1	3	7.5	2.25	90	22	39	—	9.8	26	—	9	60	2.2	20.2	2.9	10
-110-M 42					110	42			11.9				80		20.6	5.5	13
-120-M 22					120	22	69		9.8	25			91		20.3	3.3	11
-135-M 67					135	67	39		14.5				106		21.4	9	16
-140-M 42					140	42	69		11.9	26			110	2.3	20.7	6.1	14
-150-M 22	2				150	22	33	66	9.8		40		120	2.6	20.6	3.2	12
-165-M 67	1				165	67	69	—	14.5	25	—		136		21.5	10.1	17
-M 97						97	39		17.7					2.2	22.4	13.1	19
-170-M 42	2				170	42	33	66	11.9	26	40		140	2.6	21	6	15
-195-M 67					195	67			14.5				165		21.8	9.9	18
-M 97	1					97	69	—	17.7		—			2.4	22.5	14.7	20
-M127						127	39		20.8	36					24.5	15.8	22
-225-M 97	2				225	97	33	66	17.7	26	40		195	2.7	22.8	14.4	21
-M127	1					127	69	—	20.8	36	—			2.6	24.6	16.4	23
-255-M127	2				255		30	69		32	46		226	3	24.9	16.6	24






CODE	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg lbs	N	S	Scale model
A100-SLFB3- 90-M 22	1	3	9.5	3.25	90	22	39	—	11.8	26	—	9	60	2.2	19.8	1.9	25
 -110-M 42					110	42			13.9				80	2.3	20.3	3.3	28
-120-M 22					120	22	69		11.8				90		19.9	2.3	26
-135-M 67					135	67	39		16.5				105		21.4	5.5	31
-140-M 42					140	42	69		13.9	25			111	2.2	20.4	4.1	29
A100 -150-M 22	2				150	22	33	66	11.8	26	40		120	2.6	20.2	2.3	27
-165-M 67	1				165	67	69	—	16.5	25	—		136	2.3	21.5	6.7	32
-170-M 42	2				170	42	33	66	13.9	26	40		140	2.6	20.7	3.9	30
-195-M 67					195	67			16.5				165		21.8	6.3	33
A100-SLSA4-110-M 42	1	4	7	1.5	110	42	39	—	11.4	25	—	12	81	2.1	21	7.2	34
-135-M 67					135	67			14				106	2.2		11.8	37
-140-M 42					140	42	69		11.4				111		21.1	8	35
-165-M 67					165	67			14				136	2.3		13.1	38
-M 97						97	39		17.2	26			135		22.4	16.9	40
-170-M 42	2				170	42	33	66	11.4		40		140	2.6	21.4	8	36
-195-M 67					195	67			14	25	39		166			12.9	39
-M 97	1					97	69	—	17.2		—			2.3	22.5	18.7	41
-225-M 97	2				225		33	66			39		196	2.6	22.8	18.3	42
-SLRA4- 90-M 22	1	4	10	3	90	22	39	—	12.3	25	—	12	61	2.1	20.3	1.8	43
-110-M 42					110	42			14.4				81	2.2	21	3.2	46
-120-M 22					120	22	69		12.3				91		20.4	2.3	44
-135-M 67					135	67	39		17				106		22	5.3	49
-140-M 42					140	42	69		14.4				111		21.1	4	47
-150-M 22	2				150	22	33	66	12.3	26	40		120	2.6	20.7	2.2	45
-165-M 67	1				165	67	69	—	17		—		135	2.4	22.1	6.3	50
-M 97						97	39		20.2	25			136	2.2	23.5	8	52
-170-M 42	2				170	42	33	66	14.4		39		141	2.6	21.4	3.8	48
-195-M 67					195	67			17				166		22.5	6.3	51
-M 97	1					97	69	—	20.2	26	—		165	2.4	23.5	9.5	53
-M127						127	39		23.3	32			166		26.7	9.6	55
-225-M 97	2				225	97	33	66	20.2	26	40		195	2.7	23.9	9.2	54
-M127	1					127	69	—	23.3	32	—		196	2.6	26.8	10.7	56
-255-M127	2				255		30	69			46		226	3	27.2	10.4	57
-SLFB4- 90-M 22	1	4	12	4	90	22	39	—	14.3	25	—	12	61	2.1	20.1	1.4	58
 -110-M 42					110	42			16.4				81	2.2	20.8	2.3	61
-120-M 22					120	22	69		14.3				91		20.2	1.9	59
-135-M 67					135	67	39		19	26			105	2.3	22	3.7	64
-140-M 42					140	42	69		16.4	25			111		20.8	3.1	62
-150-M 22	2				150	22	33	66	14.3		39		121	2.6	20.5	1.8	60
-165-M 67	1				165	67	69	—	19	26	—		135	2.4	22.1	4.7	65
-170-M 42	2				170	42	33	66	16.4	25	39		141	2.6	21.2	2.9	63
-195-M 67					195	67			19				166		22.4	4.7	66
-SLSA4-165 CV	3	4	7	1.5	165	136	—	—	85	—	—	12	133	3.4	29	2.5	67
-195 CV					195	166							163	3.7	30.6	3.3	68
-225 CV					225	196							196	4.3	33	3.8	69
-255 CV					255	226							226	4.4	34.1	5.6	70
-285 CV					285	256							256	4.6	35.5	7.6	71
-315 CV					315	286							286	4.9	37.1	9.8	72
-345 CV					345	316							316	5.2	38.8	12.4	73
A100-SLSA3/16-165 CV	3	.19	.31	.06	6.50	5.35	—	—	3.35	—	—	.59	5.35	7.0	25.2	2.4	74
-195 CV					7.68	6.54							6.54	7.6	26.9	3.3	75
-225 CV					8.86	7.72							7.72	8.7	29.1	4	76
-255 CV					10.04	8.90							8.90	9.0	30	6	77
-285 CV					11.22	10.08							10.08	9.4	32.2	8.2	78
-315 CV					12.40	11.26							11.26	10.1	33.6	10.4	79
-345 CV					13.58	12.44							12.44	10.7	35.2	13.1	80




CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h					Scale model	Feature
A100-SLSA6-110-M 42	1	6	9	1.5	110	42	39	—	13.4	25	—	18	81	2.1	21.3	4.9	▲	81	Shrink-fit Heater
-135-M 67					135	67			16				106	2.2	22.8	8.2		84	
-140-M 42					140	42	69		13.4				111		21.4	5.8		82	
-165-M 67					165	67			16				136	2.3	22.9	9.5		85	
-M 97						97	39		19.2	32					25.3	11.1		87	
-170-M 42	2				170	42	33	66	13.4	25	39		141	2.6	21.7	5.6		83	
-195-M 67					195	67			16				166		23.2	9.3		86	
-M 97	1					97	69	—	19.2	32	—			2.4	25.4	11.9		88	
-225-M 97	2				225		30	69			46		196	2.9	25.7	11.7		89	
-SLSB6-110-M 42	1	6	10	2	110	42	39	—	14.4	25	—	18	81	2.1	22.2	3.8	○	90	MONO 3° MONO CURVE
-135-M 67					135	67			17				106	2.2	24.3	6.3		93	
-140-M 42					140	42	69		14.4				111	2.2	22.3	4.7		91	
-165-M 67					165	67			17				136	2.3	24.4	7.7		94	
-M 97						97	39		20.2	32					27.3	8.6		96	
A100 -170-M 42	2				170	42	33	66	14.4	26	40		140	2.6	22.6	4.6		92	
-195-M 67					195	67			17	25	39		166		24.7	7.4		95	
-M 97	1					97	69	—	20.2	36	—		165		27.4	9.5		97	
-M127						127	39		23.3	32			166	2.4	29.8	11.3		99	
-225-M 97	2				225	97	30	69	20.2		46		196	2.9	27.8	9.2		98	
-M127	1					127	69	—	23.3		—			2.5	29.9	12.4		100	
-M157						157	39		26.5						32.3	13.6		102	
-255-M127	2				255	127	30	69	23.3		46		226	3	30.3	12.1	▲	101	
-M157	1					157	69	—	26.5		—			2.6	32.4	15.1		103	
-285-M157	2				285		30	69			46		256	3.1	32.8	14.6		104	
-SLRB6- 90-M 22	1	6	14	4	90	22	39	—	16.3	32	—	18	61	2.2	21.1	1	○	105	2PIECE type
-110-M 42					110	42			18.4				81	2.3	22.8	1.6		108	
-120-M 22					120	22	69		16.3				91	2.4	21.3	1.2		106	
-135-M 67					135	67	39		21				106	2.3	24.9	2.7		111	
-140-M 42					140	42	69		18.4				111	2.4	22.9	2		109	
-150-M 22	2				150	22	30	69	16.3		46		121	2.8	21.6	1.2		107	
-165-M 67	1				165	67	69	—	21		—		136	2.5	25	3.2		112	
-170-M 42	2				170	42	30	69	18.4		46		141	2.9	23.3	1.9		110	
-195-M 67					195	67			21				166		25.3	3.1		113	
-SLFB6- 90-M 22	1	6	14	4	90	22	39	—	16.3	32	—	18	61	2.2	21.1	1	○	114	HYPER version
 -110-M 42					110	42			18.4				81	2.3	22.8	1.6		117	
-120-M 22					120	22	69		16.3				91	2.4	21.3	1.2		115	
-135-M 67					135	67	39		21				106	2.3	24.9	2.7		120	
-140-M 42					140	42	69		18.4				111	2.4	22.9	2		118	
-150-M 22	2				150	22	30	69	16.3		46		121	2.8	21.6	1.2		116	
-165-M 67	1				165	67	69	—	21		—		136	2.5	25	3.2		121	
-170-M 42	2				170	42	30	69	18.4		46		141	2.9	23.3	1.9		119	
-195-M 67					195	67			21				166		25.3	3.1		122	
-SLSA6-165 CV	3	6	9	1.5	165	136	—	—	85	—	—	18	136	3.3	28.8	2.1	○	123	OTHERS
-195 CV					195	166							166	4	32	2.3		124	
-225 CV					225	196							196	4.1	32.4	3.6		125	
-255 CV					255	226							226	4.8	35.9	3.9		126	
-285 CV					285	256							256	5	37.4	5.2	▲	127	
-315 CV					315	286							286	5.3	38.9	6.8		128	
-345 CV					345	316							316	5.6	40.3	8.7		129	
A100-SLSA1/4-165 CV	3	1/4	.37	.06	6.50	5.35	—	—	3.35	—	—	.71	5.35	8.0	27.1	1.5	○	130	
-195 CV					7.68	6.54							6.54	8.2	27.8	2.5		131	
-225 CV					8.86	7.72							7.72	8.4	28.5	3.9		132	
-255 CV					10.04	8.90							8.90	9.8	32.7	4.2		133	
-285 CV					11.22	10.08							10.08	10.4	34.3	5.6	▲	134	
-315 CV					12.40	11.26							11.26	11.0	36.1	7.4		135	
-345 CV					13.58	12.44							12.44	11.6	37.5	9.5		136	





Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information



CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg	N	S	Scale model
A100-SLSA8-110-M 42	1	8	11	1.5	110	42	39	—	15.4	36	—	24	80	2.3	23.2	3.2	137
-135-M 67					135	67			18	32			106		25.8	5.5	140
-140-M 42					140	42	69		15.4	36			110	2.5	23.4	3.5	138
-165-M 67					165	67			18	32			136	2.4	26	6.1	141
-M 97						97	39		21.2					2.3	29	8.1	143
-170-M 42	2				170	42	28	71	15.4	36	50		140	3.1	23.7	3.4	139
-195-M 67					195	67	30	69	18	32	46		166	2.9	26.3	5.9	142
-M 97	1					97	69	—	21.2		—			2.5	29.1	8.9	144
-225-M 97	2				225		28	71		36	50		195	3.2	29.5	8.3	145
-SLSB8-110-M 42	1	8	13	2.5	110	42	39	—	17.4	32	—	24	81	2.2	24.3	2.1	146
-135-M 67					135	67			20				106	2.3	27.5	3.6	149
-140-M 42					140	42	69		17.4				111	2.4	24.5	2.6	147
-165-M 67					165	67			20				136		27.7	4.2	150
-M 97						97	39		23.2						31.4	5.4	152
A100 -170-M 42	2				170	42	28	71	17.4	36	50		140	3.1	24.8	2.4	148
-195-M 67					195	67	30	69	20	32	46		166	2.9	28	4	151
-M 97	1					97	69	—	23.2		—			2.5	31.5	6.3	153
-M127						127	39		26.3					2.4	35.3	7.3	155
-225-M 97	2				225	97	30	69	23.2		46		196	3	31.9	6	154
-M127	1					127	69	—	26.3		—			2.6	35.4	8.5	156
-M157						157	39		29.5	42				2.7	39.1	8.1	158
-255-M127	2				255	127	30	69	26.3	32	46		226	3.1	35.7	8.2	157
-M157	1					157	69	—	29.5	42	—			2.9	39.3	8.7	159
-285-M157	2				285		28	71			56		256	3.6	39.6	8.6	160
-SLRB8- 90-M 22	1	8	18	5	90	22	39	—	20.3	32	—	24	61	2.2	21.8	0.7	161
-110-M 42					110	42			22.4				81	2.3	24.4	1.1	164
-120-M 22					120	22	69		20.3				91	2.4	22	1	162
-135-M 67					135	67	39		25				106		27.6	1.8	167
-140-M 42					140	42	69		22.4				111		24.5	1.6	165
-150-M 22	2				150	22	30	69	20.3		46		121	2.9	22.3	1	163
-165-M 67	1				165	67	69	—	25		—		136	2.5	27.8	2.4	168
-170-M 42	2				170	42	28	71	22.4	36	50		140	3.1	24.9	1.3	166
-195-M 67					195	67	30	69	25	32	46		166	3	28.1	2.2	169
-SLFB8- 90-M 22	1	8	18	5	90	22	39	—	20.3	32	—	24	61	2.2	21.8	0.7	170
 -110-M 42					110	42			22.4				81	2.3	24.4	1.1	173
-120-M 22					120	22	69		20.3				91	2.4	22	1	171
-135-M 67					135	67	39		25	36			105		27.6	1.7	176
-140-M 42					140	42	69		22.4	32			111		24.5	1.6	174
-150-M 22	2				150	22	30	69	20.3		46		121	2.9	22.3	1	172
-165-M 67	1				165	67	69	—	25		—		136	2.5	27.8	2.4	177
-170-M 42	2				170	42	30	69	22.4		46		141	2.9	24.9	1.5	175
-195-M 67					195	67			25				166	3	28.1	2.2	178
-SLSA8-165 CV	3	8	11	1.5	165	136	—	—	85	—	—	24	136	3.7	30.7	1.4	179
-195 CV					195	166							166		31	2.3	180
-225 CV					225	196							196	4.6	35.3		181
-255 CV					255	226							226		35.9	3.6	182
-285 CV					285	256							256	4.9	37.4	4.8	183
-315 CV					315	286							286	5.7	41.9	5	184
-345 CV					345	316							311	6.1	45.1	6	185
-SLRA8-195 CV	3	8	16	4	195	166	—	—	85	—	—	24	166	3.7	28.5	1.4	186
-225 CV					225	196							196	4.4	32.3	1.6	187
-255 CV					255	226							226	4.6	33.6	2.2	188
-285 CV					285	256							256	4.8	34.8	3	189
-SLFA8-195 CV	3	8	16	4	195	166	—	—	85	—	—	24	166	3.7	28.5	1.4	190
 -225 CV					225	196							196	4.4	32.3	1.6	191
-255 CV					255	226							226	4.6	33.6	2.2	192
-285 CV					285	256							256	4.8	34.8	3	193

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg lbs	N	S	Scale model	Feature	
A100-SLSA5/16-165 CV	3	5/16	.43	.06	6.50	5.35	—	—	3.35	—	—	.94	5.35	7.8	26.6	1.5	○	194	Shrink-fit Heater
-195 CV					7.68	6.54							6.54	7.9	27.2	2.4	○	195	
-225 CV					8.86	7.72							7.72	9.6	31.2	2.5	○	196	
-255 CV					10.04	8.90							8.90		32.4	3.9	▲	197	
-285 CV					11.22	10.08							10.08	10.2	34.2	5.3	○	198	
-315 CV					12.40	11.26							11.26	11.9	38.4	5.4	○	199	
-345 CV					13.58	12.44							12.44	12.3	43.5	6.6	○	200	
-SLRA5/16-195 CV	3	5/16	.63	.16	7.68	6.54	—	—	3.35	—	—	.94	6.54	8.3	28	1.4	○	201	MONO 3° MONO CURVE
-225 CV					8.86	7.72							7.72	9.7	32.2	1.6	○	202	
-255 CV					10.04	8.90							8.90	10.1	33.5	2.3	▲	203	
-285 CV					11.22	10.08							10.08	10.6	35.1	3.1	○	204	
-SLFA5/16-195 CV	3	5/16	.63	.16	7.68	6.54	—	—	3.35	—	—	.94	6.54	8.3	28	1.4	○	205	MONO Series
-225 CV					8.86	7.72							7.72	9.7	32.2	1.6	○	206	
-255 CV					10.04	8.90							8.90	10.1	33.5	2.3	▲	207	
-285 CV					11.22	10.08							10.08	10.6	35.1	3.1	○	208	
A100-SLSA10-110-M 42	1	10	13	1.5	110	42	39	—	17.4	25	—	30	81	2.2	24.6	2.7	○	209	2PIECE type
-135-M 67					135	67			20	32			106	2.3	28.5	4.1	○	212	
-140-M 42					140	42	69		17.4	25			111	2.2	24.8	3.8	○	210	
-165-M 67					165	67			20	36			135	2.5	28.6	4.4	○	213	
-M 97						97	39		23.2	32			136	2.3	33.2	6.2	○	215	
-170-M 42	2				170	42	28	71	17.4	36	50		140	3.1	25.1	2.5	○	211	
-195-M 67					195	67	30	69	20	32	46		166	2.9	29	4.6	○	214	
-M 97	1					97	69	—	23.2					2.5	33.3	7.1	○	216	
-225-M 97	2				225		30	69			46		196	3	33.7	6.9	▲	217	
-SLSB10-110-M 42	1	10	16	3	110	42	39	—	20.4	32	—	30	81	2.3	25.8	1.2	○	218	
-135-M 67					135	67			23				106		30.4	2.5	○	221	
-140-M 42					140	42	69		20.4				111	2.4	25.9	2	○	219	
-165-M 67					165	67			23				136	2.5	30.5	3.2	○	222	
-M 97						97	39		26.2					2.4	35.9	3.8	○	224	
A100 -170-M 42	2				170	42	30	69	20.4		46		141	2.9	26.3	1.9	○	220	
-195-M 67					195	67			23				166		30.9	3	○	223	
-M 97	1					97	69	—	26.2					2.6	36.1	4.8	○	225	
-M127						127	39		29.3	42					42.1	4.6	○	227	
-225-M 97	2				225	97	30	69	26.2	32	46		196	3	36.4	4.5	▲	226	
-M127	1					127	69	—	29.3	42				2.9	42.5	5	○	228	
-M157						157	39		32.5					2.8	47.7	5.7	○	230	
-255-M127	2				255	127	28	71	29.3		56		226	3.5	42.8	4.9	○	229	
-M157	1					157	69	—	32.5				226	3	48.1	6.2	○	231	
-285-M157	2				285		28	71			56		256	3.7	48.4	6.1	○	232	
-SLRB10- 90-M 22	1	10	22	6	90	22	39	—	24.3	32	—	30	61	2.3	22.2	0.6	×	233	STRAIGHT arbor
-110-M 42					110	42			26.4				81		25.9	0.9	○	236	
-120-M 22					120	22	69		24.3				91	2.4	22.3		×	234	
-135-M 67					135	67	39		29	42			106	2.5	30.5	1.1	○	239	
-140-M 42					140	42	69		26.4	32			111		26	1.4	○	237	
-150-M 22	2				150	22	28	71	24.3	36	50		120	3.1	22.7	0.7	×	235	
-165-M 67	1				165	67	69	—	29	42	—		136	2.8	30.6	1.3	○	240	
-170-M 42	2				170	42	28	71	26.4	36	50		140	3.2	26.3	1	○	238	
-195-M 67					195	67			29	42	56		166	3.5	31	1.3	○	241	
-SLFB10- 90-M 22	1	10	22	6	90	22	39	—	24.3	32	—	30	61	2.3	22.2	0.6	×	242	PERIPHERALS
-110-M 42					110	42			26.4				81		25.9	0.9	○	245	
-120-M 22					120	22	69		24.3	32			91	2.4	22.3		×	243	
-135-M 67					135	67	39		29	36			105	2.5	30.5	1.2	○	248	
-140-M 42					140	42	69		26.4				110	2.6	26	1.1	○	246	
-150-M 22	2				150	22	30	69	24.3	32	46		121	2.9	22.7	0.9	×	244	
-165-M 67	1				165	67	69	—	29	36	—		135	2.7	30.6	1.6	○	249	
-170-M 42	2				170	42	30	69	26.4	32	46		141	2.9	26.3	1.3	○	247	
-195-M 67					195	67	28	71	29	42	56		166	3.5	31		○	250	

Feature	CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg lbs	N	S	Scale model
Shrink-fit Heater	A100-SLSA10-165 CV	3	10	13	1.5	165	136	—	—	85	—	—	30	136	3.5	29.4	1.4	251
	-195 CV					195	166							166	4.3	33.6	1.5	252
	-225 CV					225	196							196	4.2	33.4	2.4	253
	-255 CV					255	226							226	4.5	34.3	3.5	254
	-285 CV					285	256							251	5.1	38.3	3.6	255
	-315 CV					315	286							286		39.9	4.8	256
	-345 CV					345	316							311	5.9	42.7	5.5	257
MONO 3° MONO CURVE	-SLRA10-165 CV	3	10	19	4.5	165	136	—	—	85	—	—	30	136	3.5	27.6	1	258
	-195 CV					195	166							166	4	30.1	1.1	259
	-225 CV					225	196							196	4.1	31.1	1.6	260
	-255 CV					255	226							226	4.9	35.3	1.7	261
	-285 CV					285	256							256	5	36.2	2.4	262
MONO Series	-SLFA10-165 CV	3	10	19	4.5	165	136	—	—	85	—	—	30	136	3.5	27.6	1	263
	 -195 CV					195	166							166	4	30.1	1.1	264
	-225 CV					225	196							196	4.1	31.1	1.6	265
	-255 CV					255	226							226	4.9	35.3	1.7	266
	-285 CV					285	256							256	5	36.2	2.4	267
	A100-SLSA3/8-165 CV	3	3/8	.49	.06	6.50	5.35	—	—	3.35	—	—	1.18	5.35	7.5	26	1.4	268
-195 CV					7.68	6.54							6.54	9.2	30	1.5	269	
-225 CV					8.86	7.72							7.72		30.4	2.5	270	
 -255 CV					10.04	8.90							8.90	9.4	32.2	3.8	271	
-285 CV					11.22	10.08							10.08	10.5	38.4	4	272	
-315 CV					12.40	11.26							11.26	11.6	38.2	5.2	273	
-345 CV					13.58	12.44							12.44	12.2	44	6.2	274	
2PIECE type	-SLRA3/8-165 CV	3	3/8	.73	.18	6.50	5.35	—	—	3.35	—	—	1.18	5.35	8.5	28.9	0.8	275
	-195 CV					7.68	6.54							6.54	8.8	30.1	1.1	276
	-225 CV					8.86	7.72							7.72	9.2	31.3	1.6	277
	-255 CV					10.04	8.90							8.90	10.9	35.5	1.7	278
	-285 CV					11.22	10.08							10.08	11.3	36.6	2.4	279
UNO	-SLFA3/8-165 CV	3	3/8	.73	.18	6.50	5.35	—	—	3.35	—	—	1.18	5.35	8.5	28.9	0.8	280
	 -195 CV					7.68	6.54							6.54	8.8	30.1	1.1	281
	-225 CV					8.86	7.72							7.72	9.2	31.3	1.6	282
	-255 CV					10.04	8.90							8.90	10.9	35.5	1.7	283
	-285 CV					11.22	10.08							10.08	11.3	36.6	2.4	284
HYPER version	A100-SLSA12-110-M 42	1	12	15	1.5	110	42	39	—	19.4	32	—	30	79	2.2	27	1.9	285
	-135-M 67					135	67			22				104	2.3	32.5	3.4	288
	-140-M 42					140	42	69		19.4				109	2.4	27.2	2.4	286
	-165-M 67					165	67			22				134		32.6	4.1	289
	-M 97					97	39			25.2					2.3	39.4	5.1	291
	-170-M 42	2				170	42	28	71	19.4	36	50		135	3.1	27.5	2.1	287
	-195-M 67					195	67	30	69	22	32	46		164	2.9	32.9	3.9	290
-M 97	1					97	69	—	25.2	36	—		160	2.7	39.6	5.5	292	
-225-M 97	2				225		30	69		32	46		194	3	39.9	5.8	293	
OTHERS	-SLSB12-110-M 42	1	12	19	3.5	110	42	39	—	23.4	32	—	30	79	2.3	28.4	1.2	294
	-135-M 67					135	67			26				104		34.7	2	297
	-140-M 42					140	42	69		23.4				109	2.4	28.5	1.7	295
	-165-M 67					165	67			26				134	2.5	34.8	2.7	298
	-M 97					97	39			29.2	42			133	2.6	42.9	2.5	300
	-170-M 42	2				170	42	28	71	23.4	36	50		135	3.1	28.9	1.4	296
	-195-M 67					195	67	30	69	26	32	46		164	3	35.2	2.5	299
	-M 97	1					97	69	—	29.2	50	—		160	3.1	43.2	2.6	301
	-M127					127	39			32.3	42			163	2.7	50.4	3.3	303
	-225-M 97					225	97	99		29.2	50			190	3.4	43.6	2.8	302
-M127					127	69			32.3	42			192	3	50.8	3.8	304	
PERIPHERALS	-M157					157	39			35.5				193	2.9	58	4.2	306
	-255-M127	2				255	127	28	71	32.3		56		222	3.6	51.1	3.7	305
	-M157	1				157	69	—	35.5						3.1	58.3	4.8	307
	-285-M157	2				285		28	71			56		252	3.8	58.7	4.7	308
Technical Information																		

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg lbs	N	S	Scale model	Feature	
A100-SLRB12- 90-M 22	1	12	26	7	90	22	39	—	28.3	42	—	30	58	2.4	26.5	0.4	×	309	Shrink-fit Heater
-110-M 42					110	42			30.4				78	2.5	29.2	0.6		312	
-120-M 22					120	22	69		28.3				87	2.6	26.8	0.5		310	
-135-M 67					135	67	39		33				103		35.5	0.9		315	
-140-M 42					140	42	69		30.4				107	2.7	29.6	0.8		313	
-150-M 22					150	22	99		28.3	50			117	3.3	27.2	0.5		311	
-165-M 67					165	67	69		33	42			132	2.9	35.8	1.1		316	
-170-M 42					170	42	99		30.4	50			135	3.3	29.9	0.8		314	
-195-M 67	2				195	67	28	71	33	42	56		162	3.5	36.2	1.1		317	
-SLFB12- 90-M 22	1	12	26	7	90	22	39	—	28.3	42	—	30	58	2.4	26.5	0.4	×	318	
 -110-M 42					110	42			30.4				78	2.5	29.2	0.6		321	
-120-M 22					120	22	69		28.3				87	2.6	26.8	0.5		319	
-135-M 67					135	67	39		33				103		35.5	0.9		324	
-140-M 42					140	42	69		30.4	50			105	3	29.6	0.6		322	
A100 -150-M 22	2				150	22	28	71	28.3	42	56		117	3.3	27.2	0.5		320	
-165-M 67	1				165	67	69	—	33		—		132	2.9	35.8	1.1		325	
-170-M 42					170	42	99		30.4	50			135	3.3	29.9	0.8		323	
-195-M 67	2				195	67	28	71	33	42	56		162	3.5	36.2	1.1		326	
-SLSA12-165 CV	3	12	15	1.5	165	136	—	—	85	—	—	30	133	4.2	34.1	1.2	○	327	2PIECE type
-195 CV					195	166							163	4.1	33.6			328	
-225 CV					225	196							175	4.8	38.3	1.8		329	
-255 CV					255	226							190		37.8	2.6	▲	330	
-285 CV					285	256							251	5.5	42.5	3.5		331	
-315 CV					315	286							281	5.9	44.6	4.3		332	
-345 CV					345	316							311	6.2	46.7	5.3		333	
-SLRA12-165 CV	3	12	22	5	165	136	—	—	85	—	—	30	133	3.6	27.9	0.8	×	334	
-195 CV					195	166							163	4.4	32.2			335	
-225 CV					225	196							159		32.7	1.3	○	336	
-255 CV					255	226							221	4.6	36.1	1.6	▲	337	
-285 CV					285	256							251	5	38.5	2.1		338	
-SLFA12-165 CV	3	12	22	5	165	136	—	—	85	—	—	30	133	3.6	27.9	0.8	×	339	HYPER version
 -195 CV					195	166							163	4.4	32.2			340	
-225 CV					225	196							159		32.7	1.3	○	341	
-255 CV					255	226							221	4.6	36.1	1.6	▲	342	
-285 CV					285	256							251	5	38.5	2.1		343	
A100-SLSA1/2-165 CV	3	1/2	.62	.06	6.50	5.35	—	—	3.35	—	—	1.18	5.28	7.5	26.8	1.2	○	344	
-195 CV					7.68	6.54							6.46	9.2	31.2	1.3		345	
-225 CV					8.86	7.72							6.89	9.6	32.7	1.9		346	
-255 CV					10.04	8.90							7.48	10.1	34.2	2.8	▲	347	
-285 CV					11.22	10.08							9.92	10.2	39.6	3.8		348	
-315 CV					12.40	11.26							11.10	11.0	42.4	4.7		349	
-345 CV					13.58	12.44							12.28	11.8	45.9	5.9		350	
-SLRA1/2-165 CV	3	1/2	.89	.20	6.50	5.35	—	—	3.35	—	—	1.18	5.20	8.8	31.7	0.6	×	351	PERIPHERALS
-195 CV					7.68	6.54							5.71	9.4	31.5	0.9		352	
-225 CV					8.86	7.72								11.2	35.8	1.0	○	353	
-255 CV					10.04	8.90							8.74	12.1	42.1	1.1	▲	354	
-285 CV					11.22	10.08							9.92	10.8	41.0	2.2		355	
-SLFA1/2-165 CV	3	1/2	.89	.20	6.50	5.35	—	—	3.35	—	—	1.18	5.20	8.8	31.7	0.6	×	356	Technical Information
 -195 CV					7.68	6.54							5.71	9.4	31.5	0.9		357	
-225 CV					8.86	7.72								11.2	35.8	1.0	○	358	
-255 CV					10.04	8.90							8.74	12.1	42.1	1.1	▲	359	
-285 CV					11.22	10.08							9.92	10.8	41.0	2.2		360	

CODE	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h				Scale model
A100-SLSB16-110-M 42	1	16	24	4	110	42	39	—	28.4	42	—	32	78	2.4	34.7	0.7	361
-135-M 67					135	67			31				103	2.5	45	1.2	364
-140-M 42					140	42	69		28.4				107	2.7	35	0.9	362
-165-M 67					165	67			31				132	2.8	45.4	1.4	365
A100 -M 97						97	39		34.2				133	2.7	57.4	1.7	367
-170-M 42					170	42	99		28.4	50			135	3.2	35.4	0.9	363
-195-M 67					195	67			31				160	3.3	45.7	1.4	366
-M 97						97	69		34.2	42			162	2.9	57.8	2.1	368
-M127						127	39		37.3	50			160	3	69.8	2.2	370
-225-M 97	2				225	97	28	71	34.2	42	56		192	3.6	58.1	2.1	369
-M127	1					127	69	—	37.3	53	—		190	3.4	70.2	2.3	371
-M157						157	39		40.5				193	3.3	82.3	2.6	373
-255-M127	2				255	127	28	71	37.3		67		220	4.3	70.6	2.3	372
-M157	1					157	69	—	40.5		—			3.7	82.6	2.9	374
-285-M157	2				285		28	71			67		250	4.6	83		375
-SLRB16- 90-M 22	1	16	32	8	90	22	39	—	34.3	42	—	32	58	2.4	26.5	0.4	376
-110-M 42					110	42			36.4				78	2.5	34.8	0.5	379
-120-M 22					120	22	69		34.3				87	2.7	26.9		377
-135-M 67					135	67	39		39				103		45.2	0.7	382
-140-M 42					140	42	69		36.4				107	2.8	35.2		380
-150-M 22	2				150	22	28	71	34.3		56		117	3.4	27.2	0.5	378
-165-M 67	1				165	67	69	—	39		—		132	3	45.5	1	383
-170-M 42	2				170	42	28	71	36.4		56		137	3.5	35.5	0.7	381
-195-M 67					195	67			39				162	3.6	45.9	0.9	384
-SLFB16- 90-M 22	1	16	32	8	90	22	39	—	34.3	42	—	32	58	2.4	26.5	0.4	385
 -110-M 42					110	42			36.4				78	2.5	34.8	0.5	388
-120-M 22					120	22	69		34.3				87	2.7	26.9		386
-135-M 67					135	67	39		39				103		45.2	0.7	388
-140-M 42					140	42	69		36.4				107	2.8	35.2		391
-150-M 22	2				150	22	28	71	34.3		56		117	3.4	27.2	0.5	387
-165-M 67	1				165	67	69	—	39		—		132	3	45.5	1	392
-170-M 42	2				170	42	28	71	36.4		56		137	3.5	35.5	0.7	390
-195-M 67					195	67			39				162	3.6	45.9	0.9	393
-SLSB16-165 CV	3	16	21	2.5	165	136	—	—	85	—	—	32	131	4.2	34.2	0.6	394
-195 CV					195	166							161	4	33.7	1.1	395
-225 CV					225	196							191	4.8	38.4	1.2	396
-255 CV					255	226							221	4.7	38	2	397
-285 CV					285	256							251	5.5	42.6		398
-315 CV					315	286							281	5.9	44.8	2.6	399
-345 CV					345	316							311	6.2	46.9	3.3	400
A100-SLSB5/8-165 CV	3	5/8	.82	.10	6.50	5.35	—	—	3.35	—	—	1.26	5.20	8.8	31.9	0.6	401
-195 CV					7.68	6.54							6.38	8.6	32.6	1.2	402
-225 CV					8.86	7.72							7.56	10.4	37.6		403
-255 CV					10.04	8.90							8.74	10.1	38.3	2.0	404
-285 CV					11.22	10.08							9.92	11.9	43.4	2.2	405
-315 CV					12.40	11.26							11.10	12.7	46.3	2.8	406
-345 CV					13.58	12.44							12.28	13.5	49.1	3.5	407
A100-SLSB20-110-M 42	1	20	29	4.5	110	42	39	—	33.4	42	—	40	78	2.5	37.4	0.6	408
-135-M 67					135	67			36				103	2.6	52.8	0.9	411
-140-M 42					140	42	69		33.4				107	2.7	37.8	0.8	409
-165-M 67					165	67			36				132	2.8	53.2	1.2	412
-M 97						97	39		39.2	53			133	2.9	71.3	1.1	414

CODE	Fig.	φD	φC	t	L	M	L ₁	L ₂	φC ₁	φC ₂	φC ₃	H	h	Kg lbs	N	S	Scale model
A100-SLSB20-170-M 42	2				170	42	28	71	33.4	42	56	40	137	3.4	38.1	0.8	410
-195-M 67					195	67			36				162	3.5	53.5	1.2	413
-M 97	1				97	69	—		39.2	53	—			3.3	71.7	1.3	415
-M127					127	39			42.3				163	3.2	91	1.5	417
-225-M 97	2				225	97	28	71	39.2		67		190	4.3	72	1.3	416
-M127	1				127	69	—		42.3		—			3.6	91.4	1.8	418
-M157					157	39			45.5				193	3.5	109.6	1.9	420
-255-M127	2				255	127	28	71	42.3		67		220	4.5	91.8	1.8	419
-M157	1				157	69	—		45.5		—			3.9	109.9	2.2	421
-285-M157	2				285		28	71			67		250	4.8	110.3		422
-SLRB20-110-M42	1	20	38	9	110	42	39	—	42.4	53	—	40	78	2.8	37.5	0.3	423
-135-M67					135	67			45				103	3.1	53	0.5	426
A100 -140-M42					140	42	69		42.4				105	3.2	37.9	0.4	424
-165-M67					165	67			45				130	3.5	53.3	0.6	427
-170-M42	2				170	42	28	71	42.4	53	67		135	4.1	38.2	0.4	425
-195-M67					195	67			45				160	4.4	53.7	0.6	428
-SLFB20-110-M42	1	20	38	9	110	42	39	—	42.4	53	—	40	78	2.8	37.5	0.3	429
 -135-M67					135	67			45				103	3.1	53	0.5	432
-140-M42					140	42	69		42.4				105	3.2	37.9	0.4	430
-165-M67					165	67			45				130	3.5	53.3	0.6	433
-170-M42	2				170	42	28	71	42.4		67		135	4.1	38.2	0.4	431
-195-M67					195	67			45				160	4.4	53.7	0.6	434
-SLSB20-165 CV	3	20	26	3	165	136	—	—	85	—	—	40	132	4	33.6	0.6	435
-195 CV					195	166							161	4.9	38.1	0.7	436
-225 CV					225	196							191	4.6	37.4	1.2	437
-255 CV					255	226							221	5.5	42.1	1.3	438
-285 CV					285	256							251	5.2	41.2	2.1	439
-315 CV					315	286							281	6.1	46	2.3	440
-345 CV					345	316							311	6.4	47.9	2.9	441
A100-SLSB3/4-165 CV	3	3/4	.99	.12	6.50	5.35	—	—	3.35	—	—	1.50	5.20	8.6	31.5	0.6	442
-195 CV					7.68	6.54							6.38	10.4	36.6	0.7	443
-225 CV					8.86	7.72							7.56	10.0	37.5	1.2	444
-255 CV					10.04	8.90							8.74	11.7	42.6	1.3	445
-285 CV					11.22	10.08							9.92	11.4	43.5	2.2	446
-315 CV					12.40	11.26							11.10	13.1	48.6	2.3	447
-345 CV					13.58	12.44							12.28	13.8	51.6	3.0	448
A100-SLRB25-110-M42	1	25	45	10	110	42	39	—	49.4	53	—	45	78	2.9	40.7	0.3	449
-140-M42					140		69						105	3.3	41	0.4	450
-170-M42	2				170		28	71			67		135	4.2	41.4		451
-SLFB25-110-M42	1	25	45	10	110	42	39	—	49.4	53	—	45	78	2.9	40.7	0.3	452
 -140-M42					140		69						105	3.3	41	0.4	453
-170-M42	2				170		28	71			67		135	4.2	41.4		454
A100-SLRB32-110-M42	1	32	54	11	110	42	39	—	58.4	63	—	50	77	3.2	26.9	0.2	455
-140-M42					140		69						107	3.7	33.4	0.3	456
-170-M42	2				170		28	71			77		132	4.9	42.8		457

■ Cleaning tool for a spindle taper hole, STAR DUST

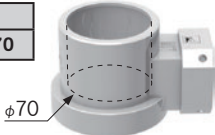
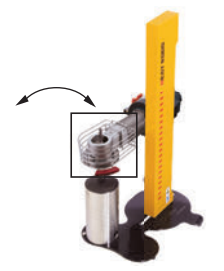
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Ⓢ P.226

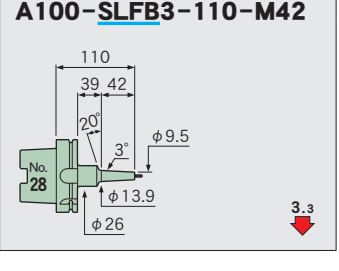
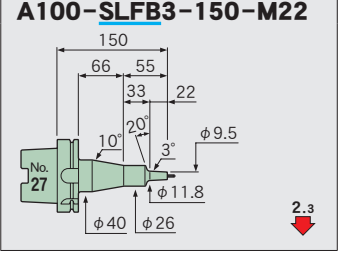
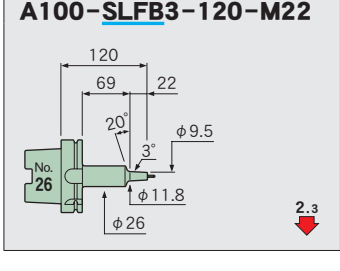
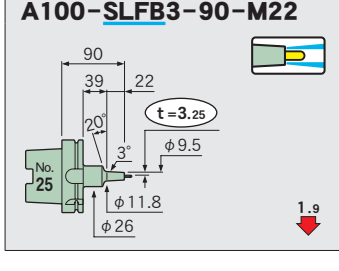
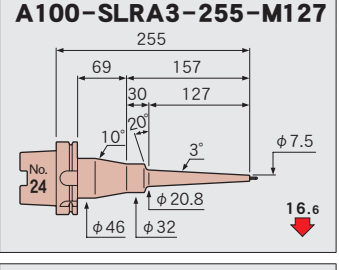
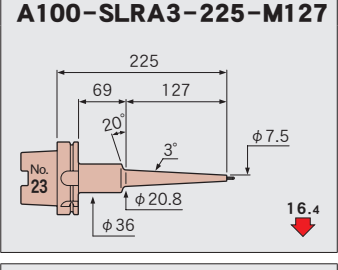
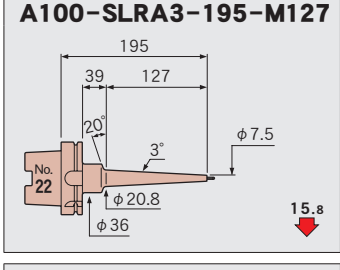
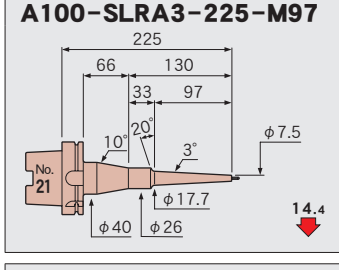
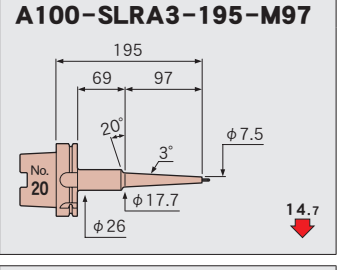
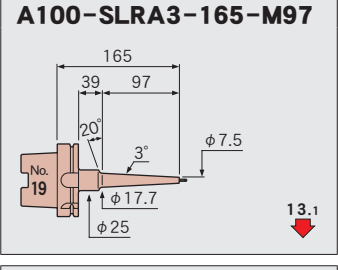
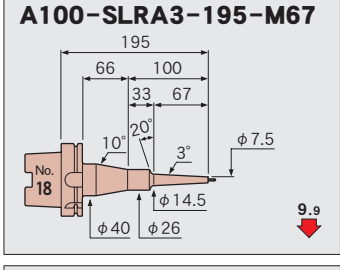
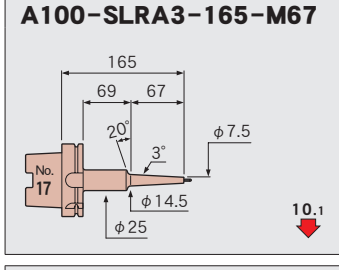
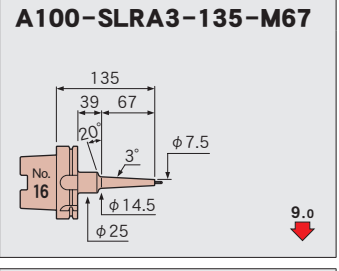
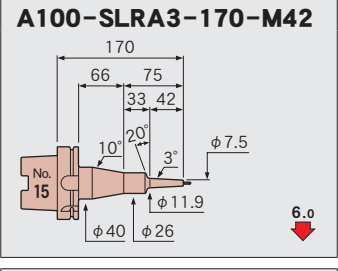
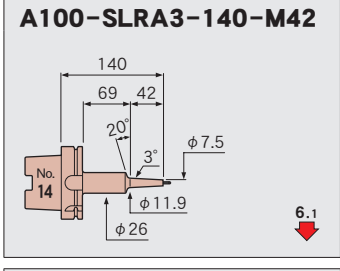
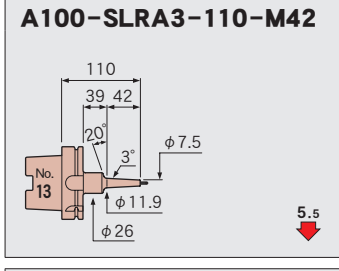
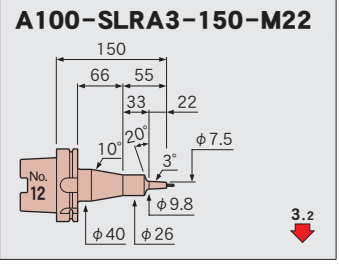
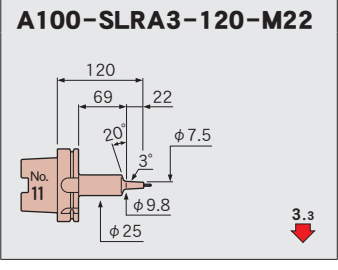
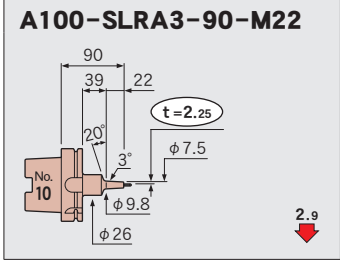
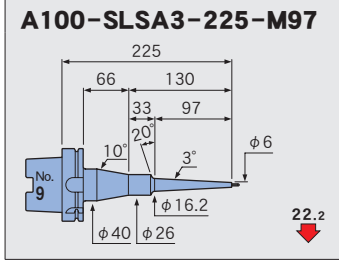
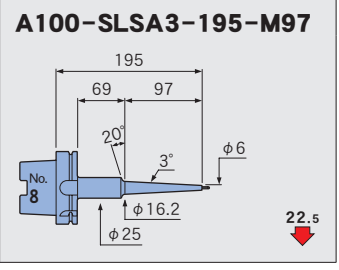
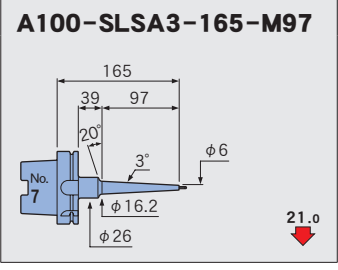
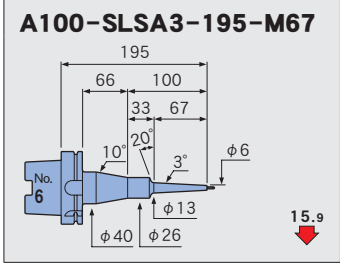
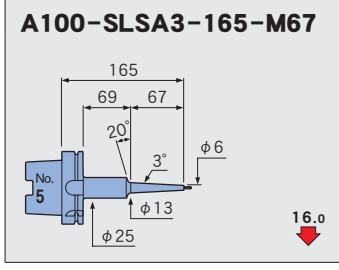
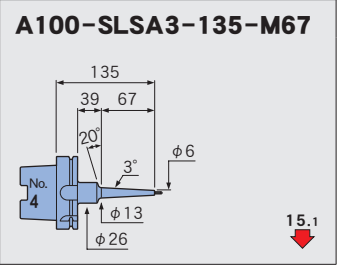
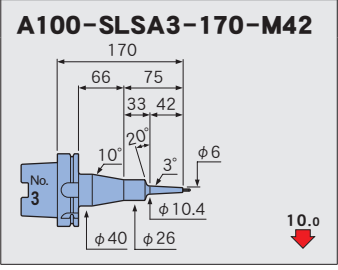
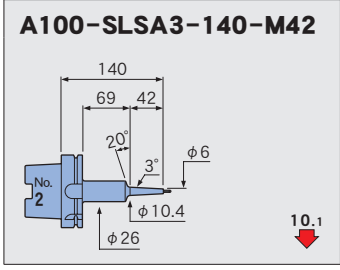
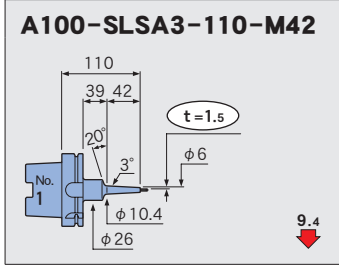


■ φ70 Nozzle(HRB-03S)
Required for shrinking the SLRB32.

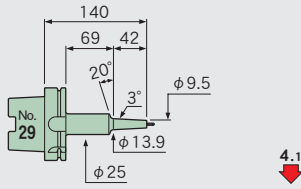
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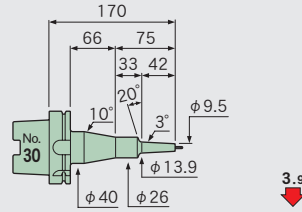
HEAT ROBO Baby 3000S



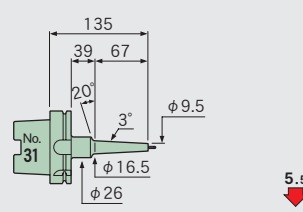
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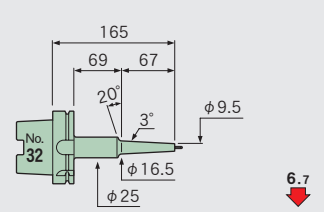
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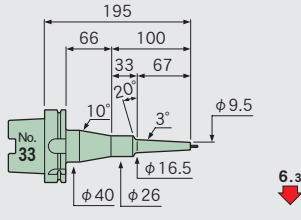
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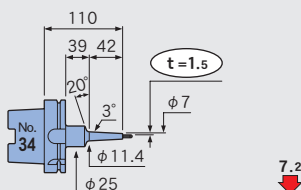


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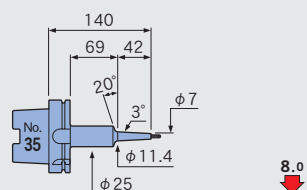


φ 4

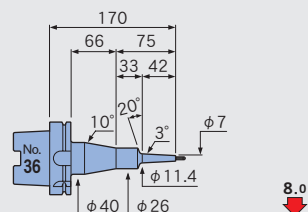
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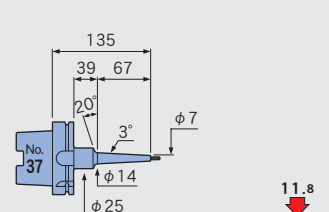
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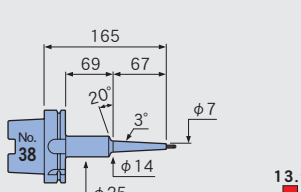
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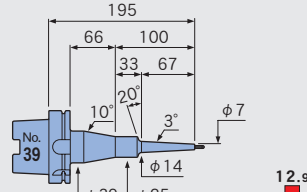
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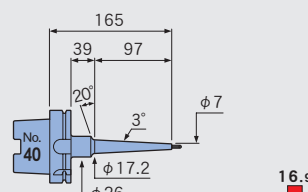
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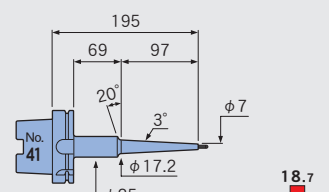
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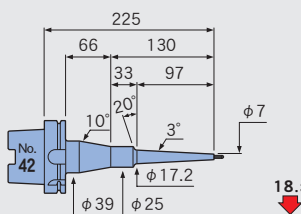
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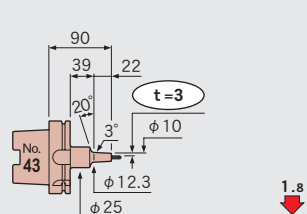
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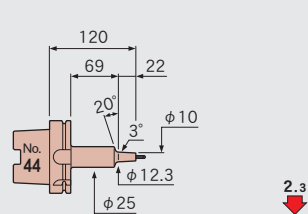
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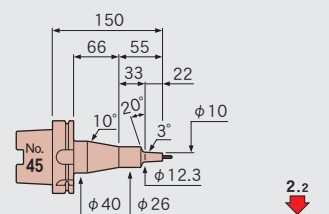
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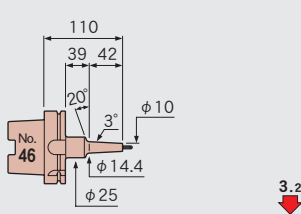
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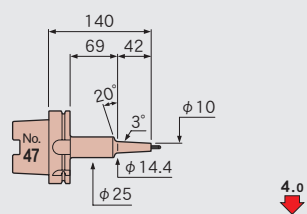
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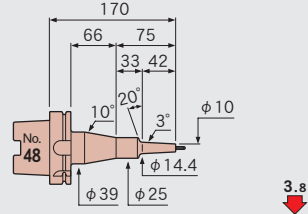
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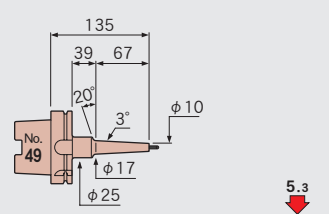
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A100-SLRA4-170-M42



A100-SLRA4-135-M67



Feature
Shrink-fit Heater

MONO Series
MONO 3°
MONO CURVE

2PIECE type

UNO

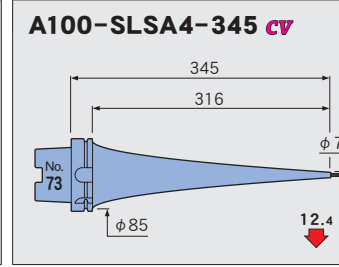
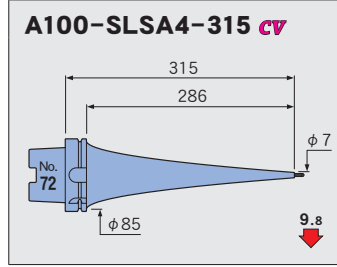
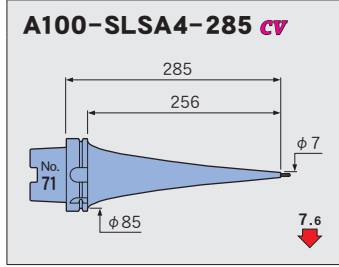
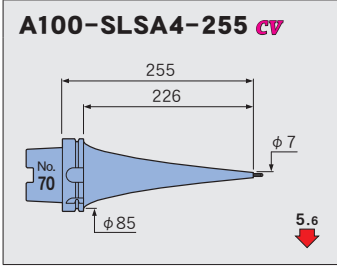
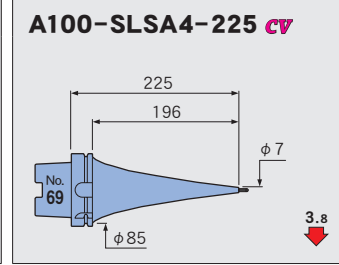
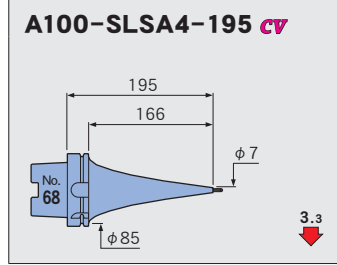
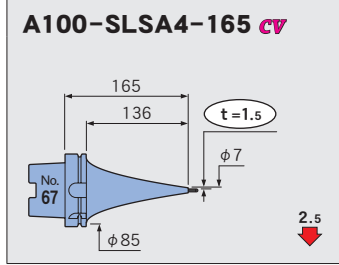
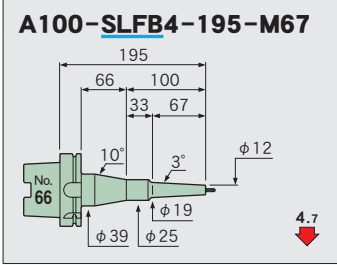
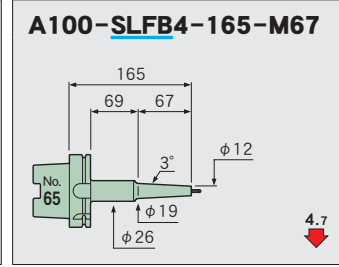
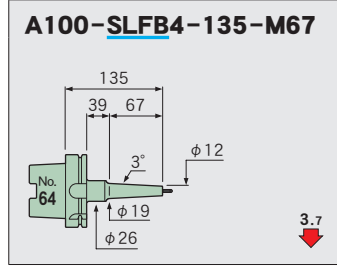
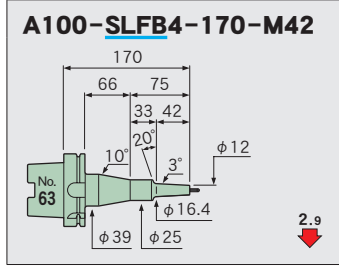
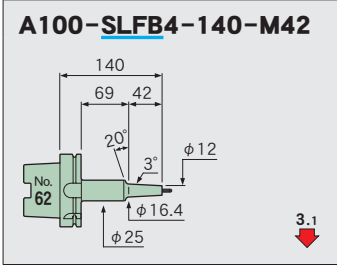
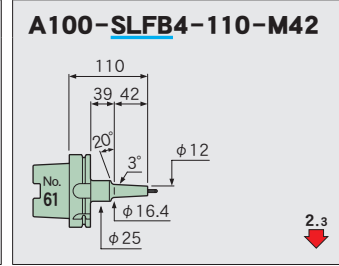
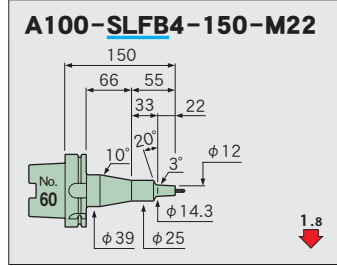
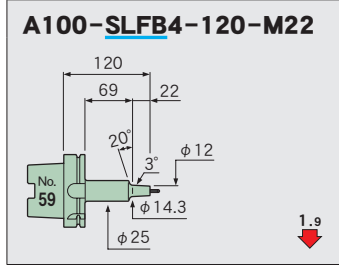
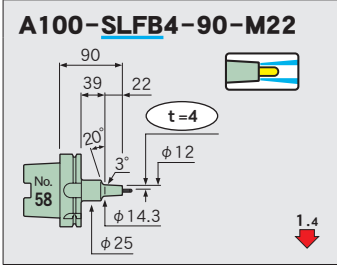
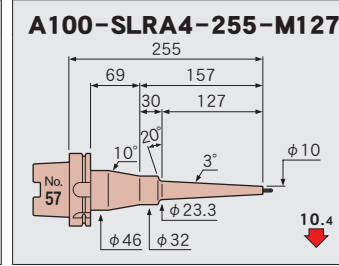
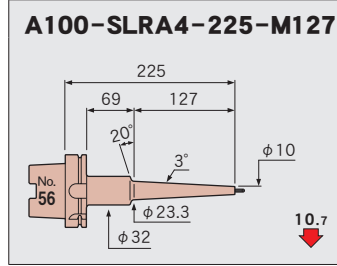
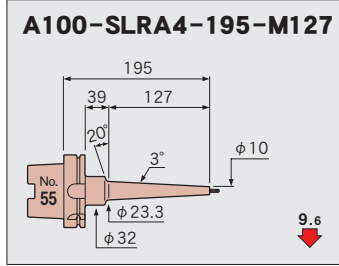
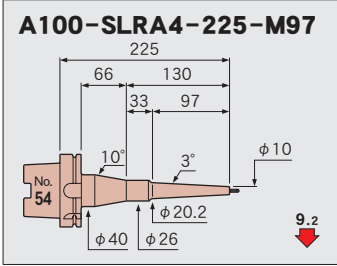
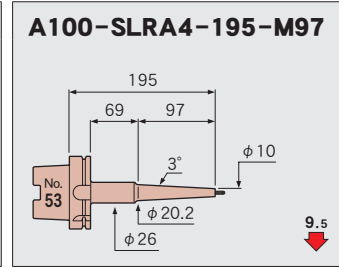
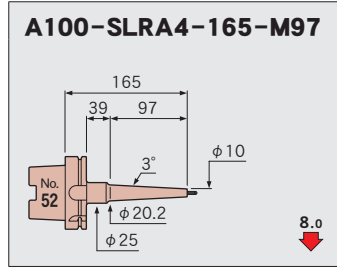
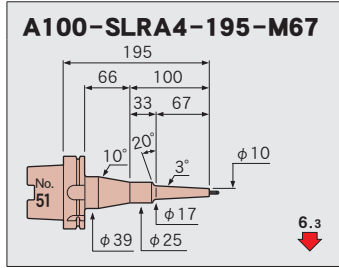
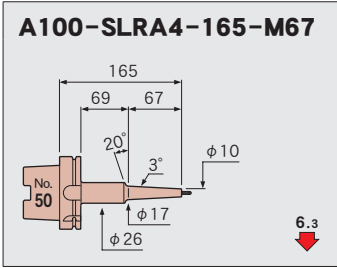
HYPER
version

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arbor

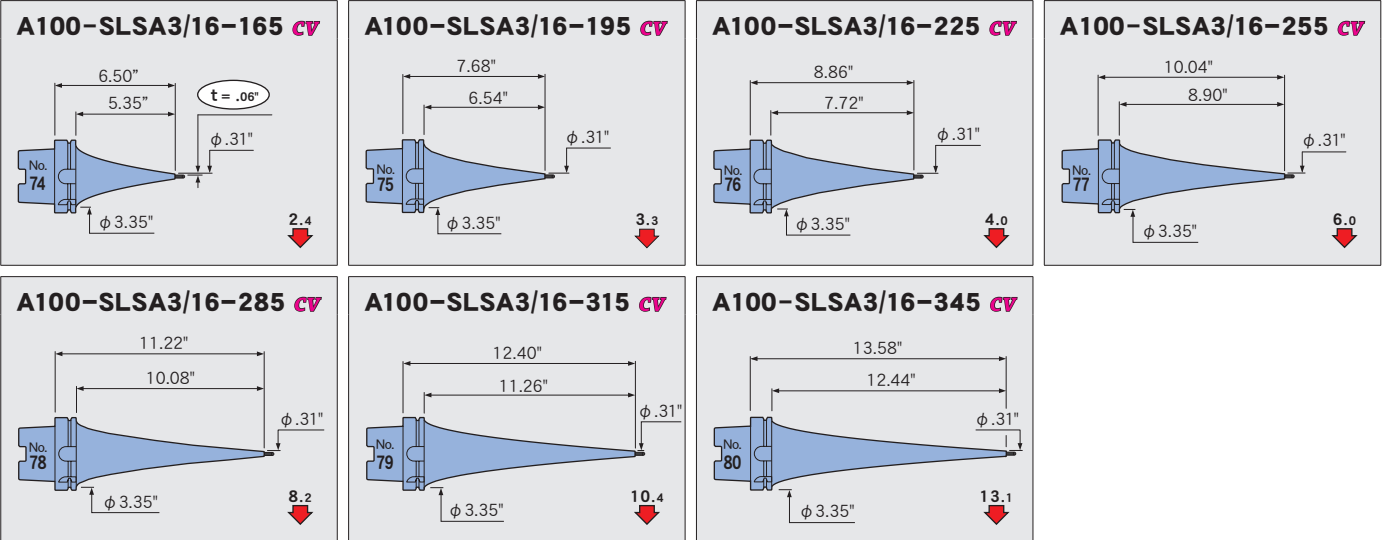
OTHERS

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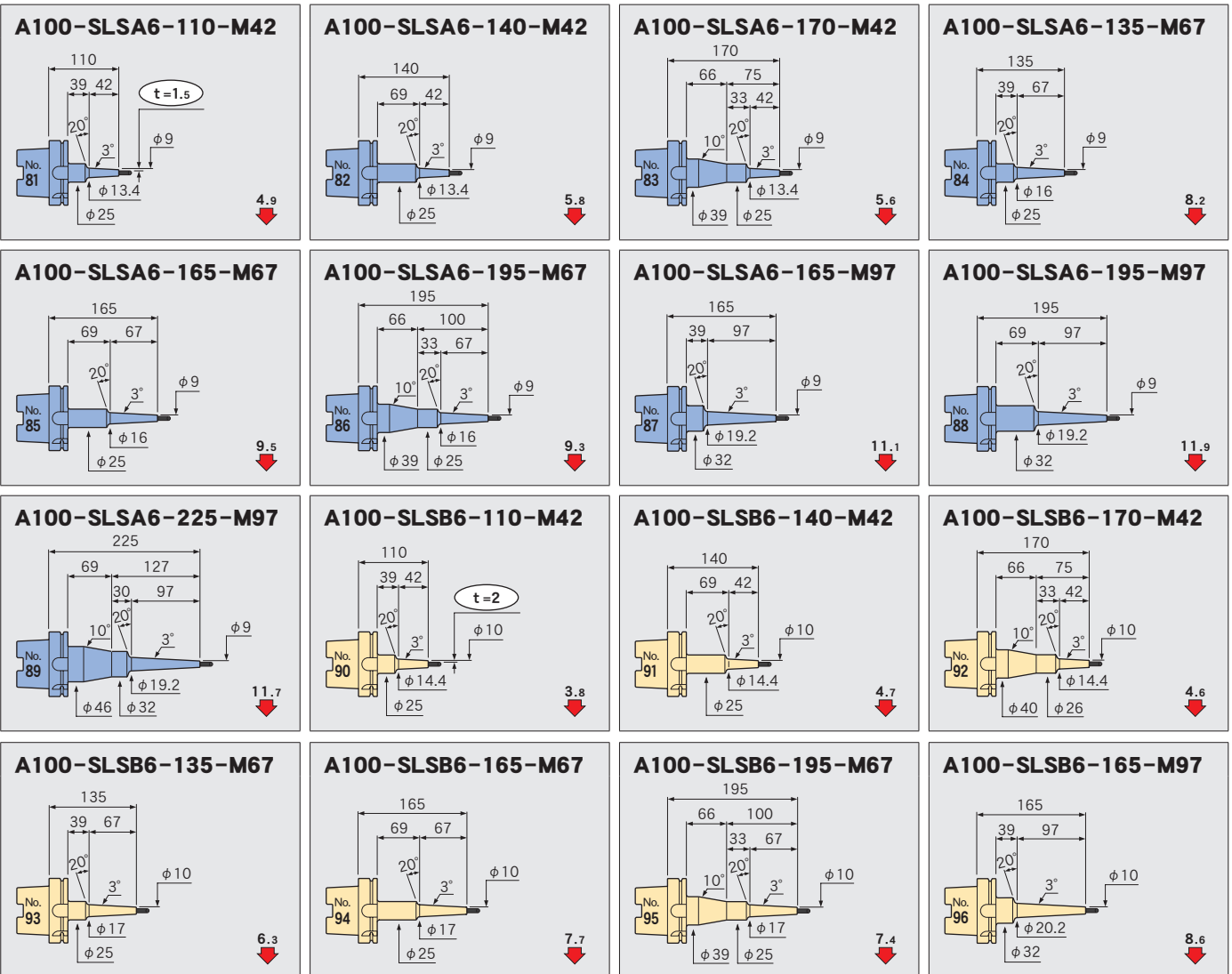
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UNO

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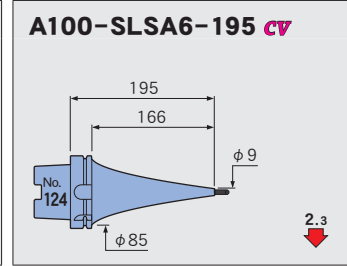
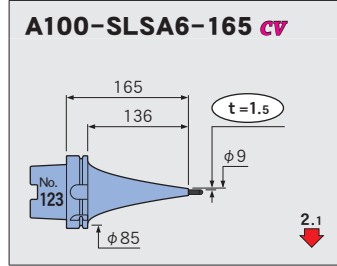
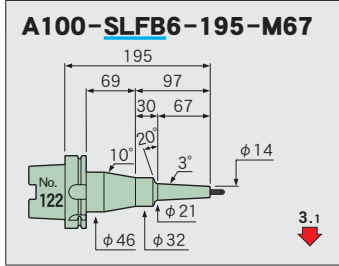
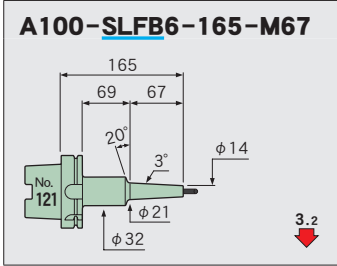
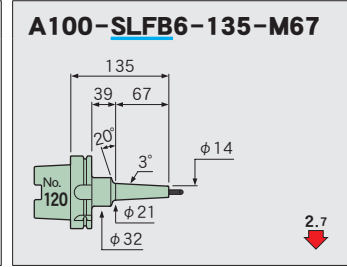
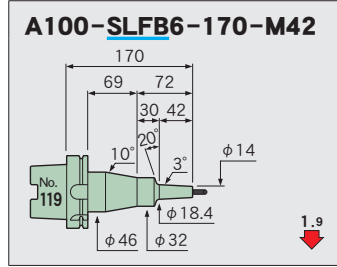
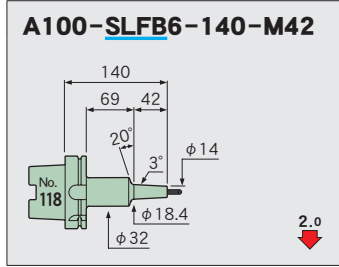
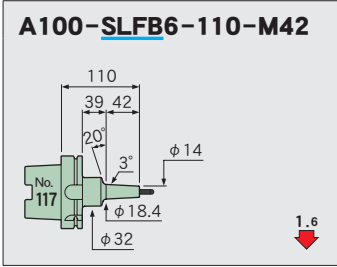
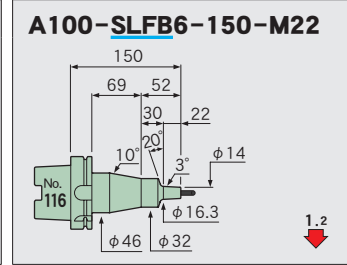
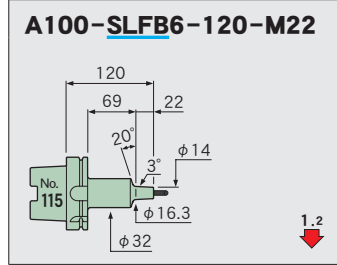
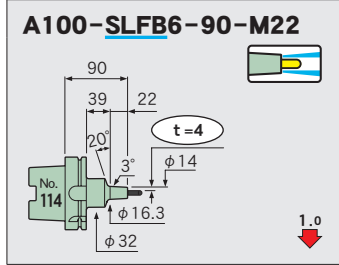
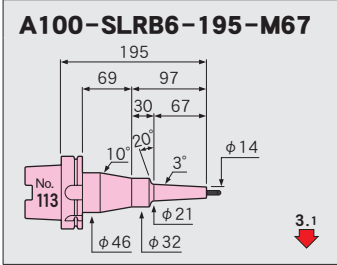
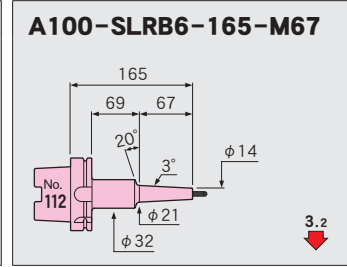
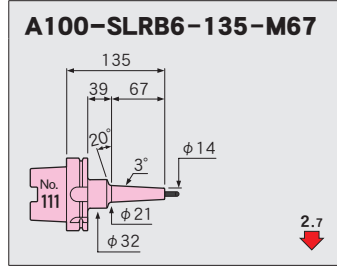
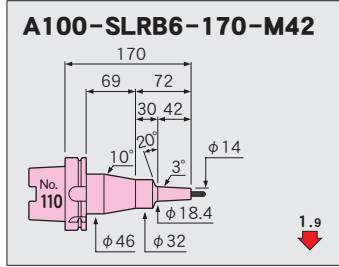
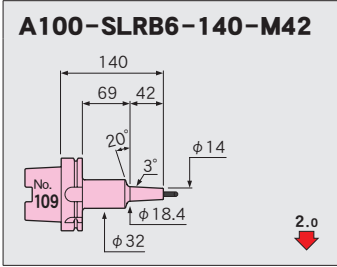
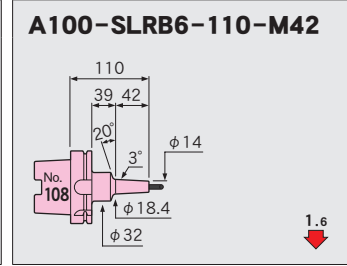
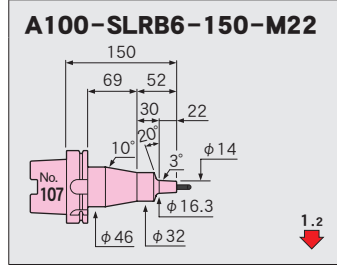
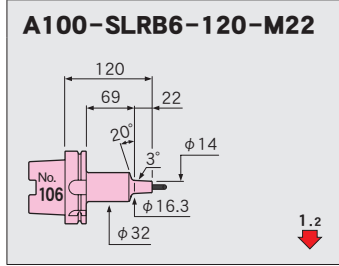
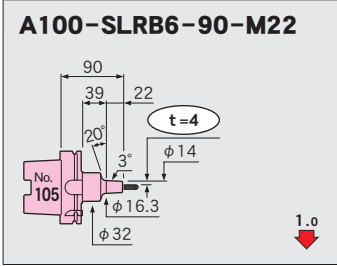
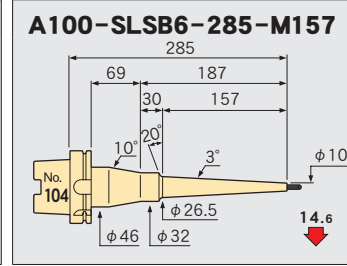
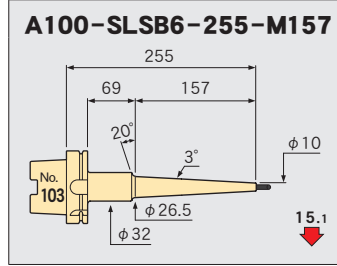
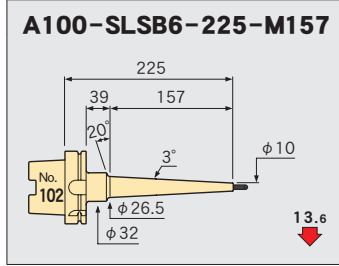
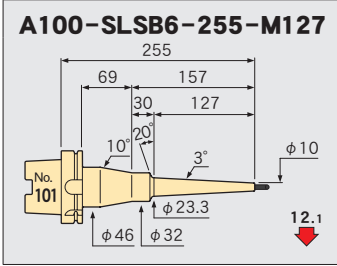
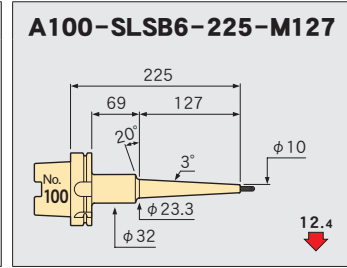
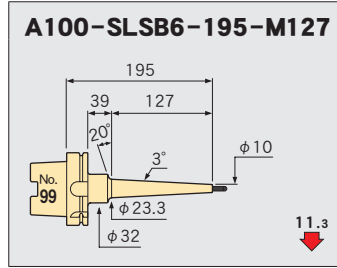
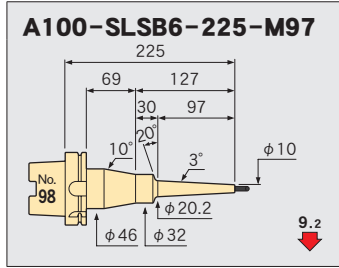
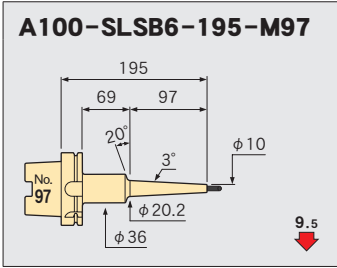
STRAIGHT
arbor

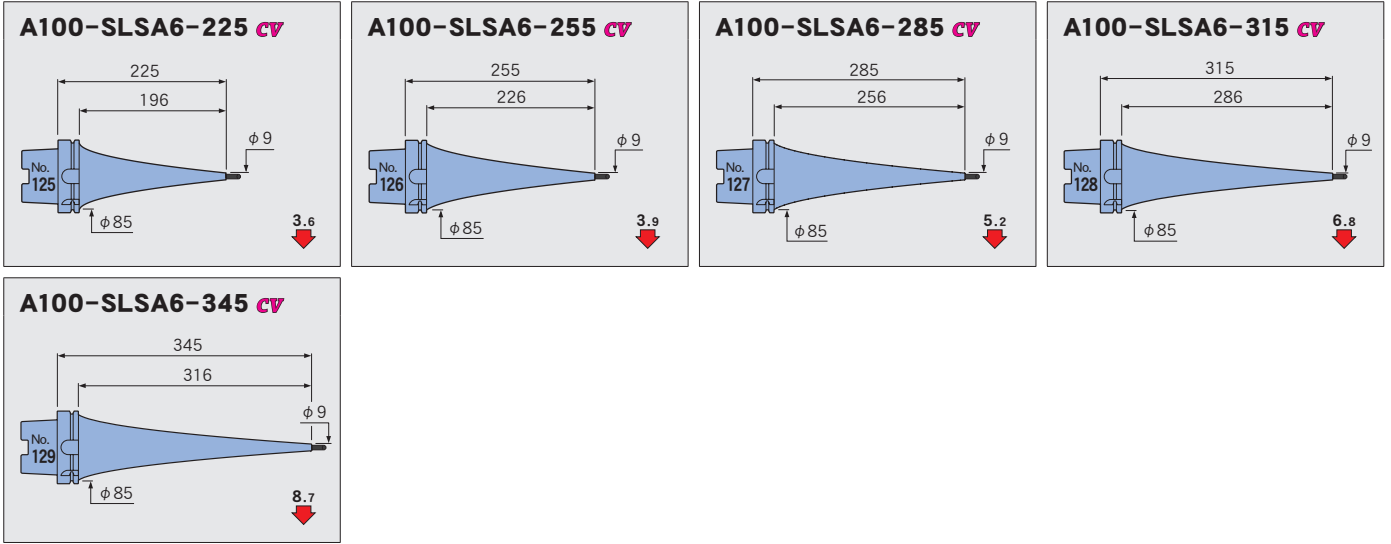
OTHERS

PERIPHERALS

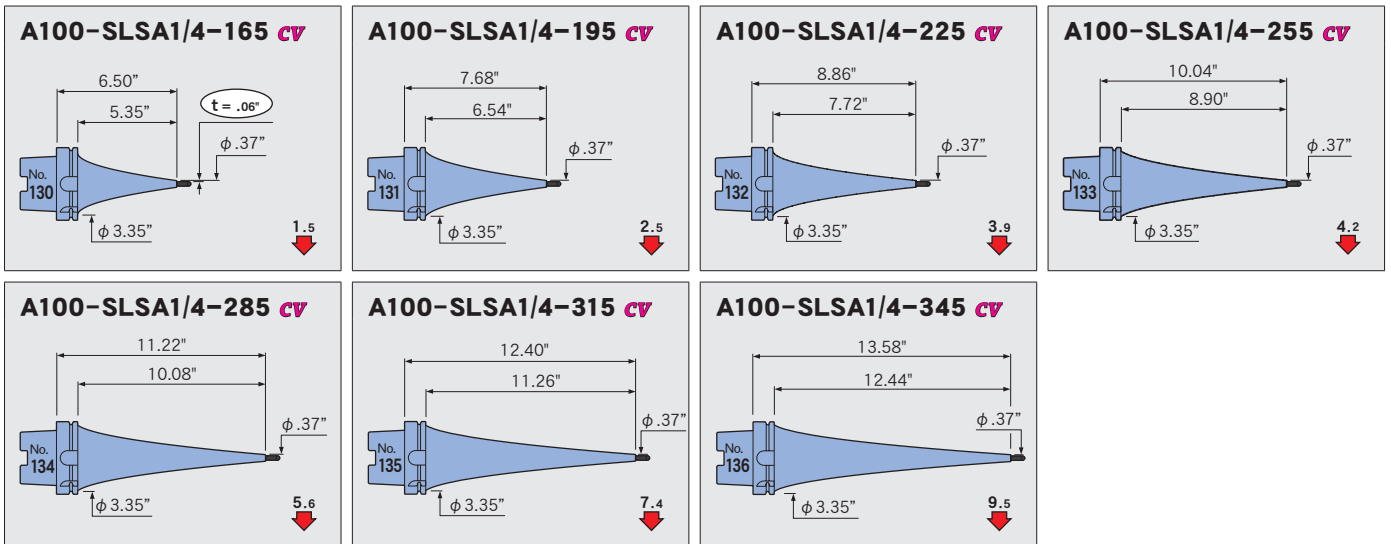
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MONO 3° MONO CURVE
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HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
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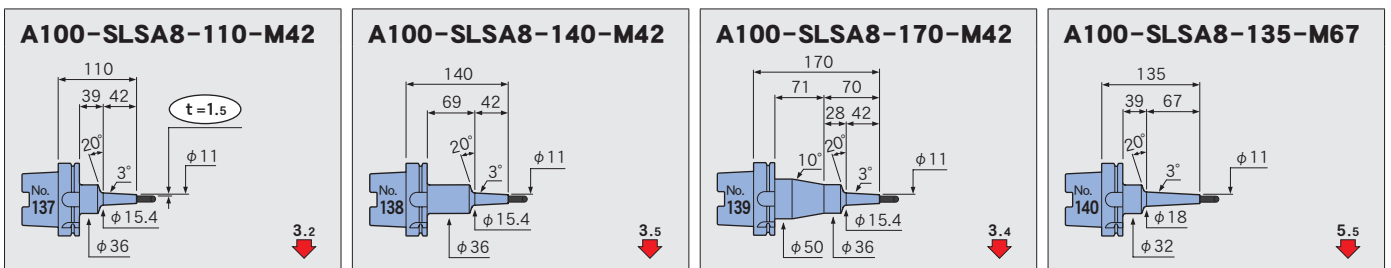




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MONO CURVE

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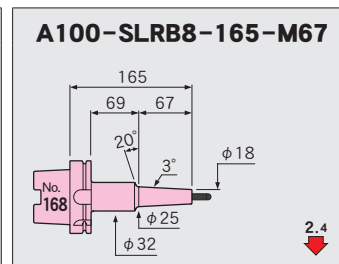
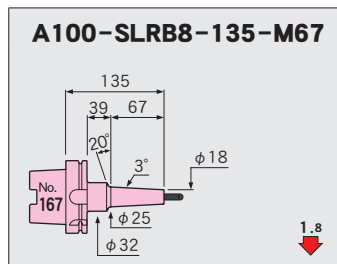
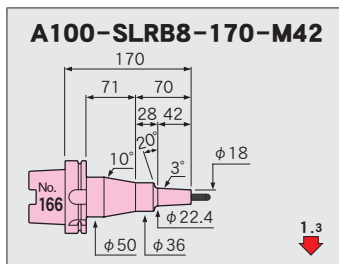
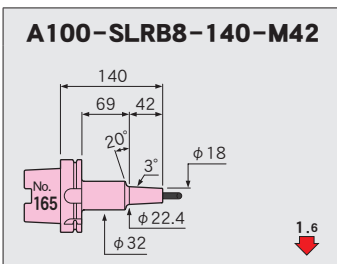
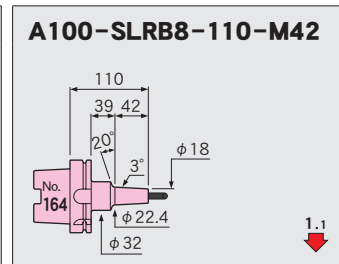
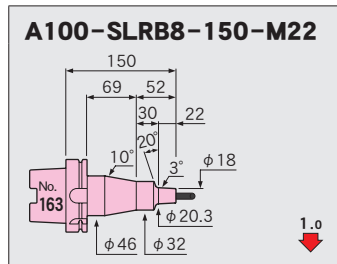
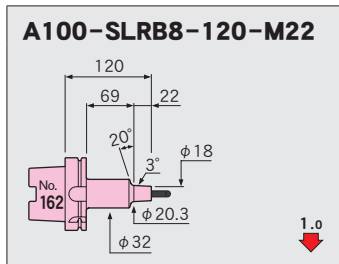
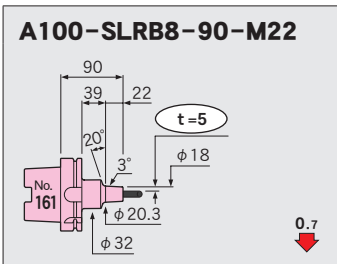
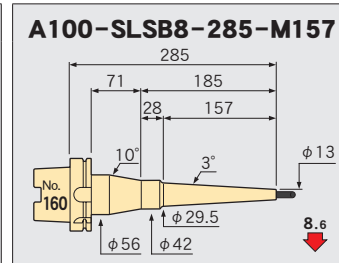
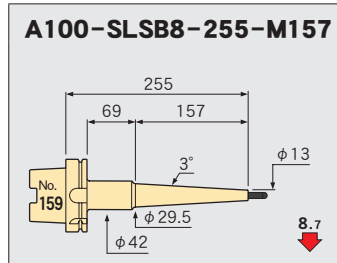
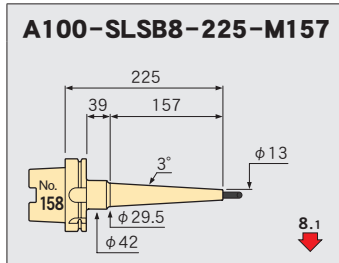
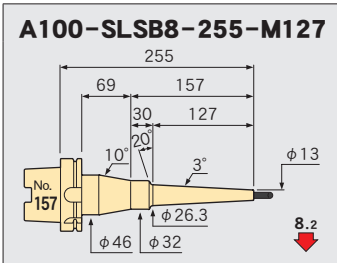
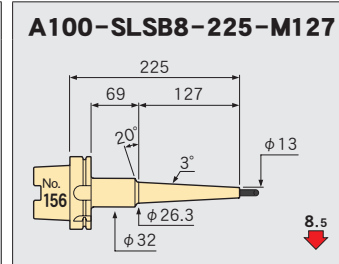
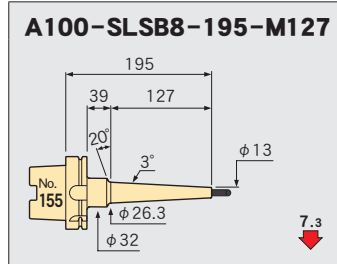
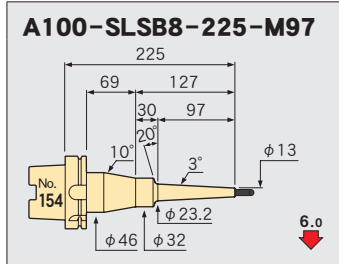
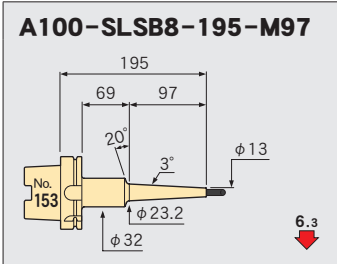
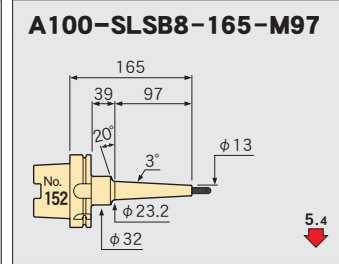
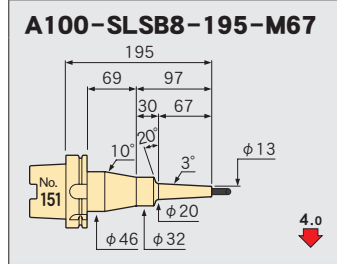
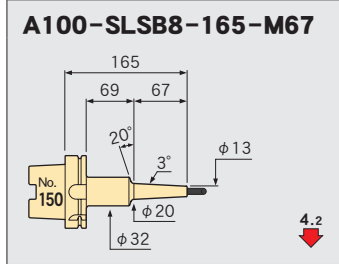
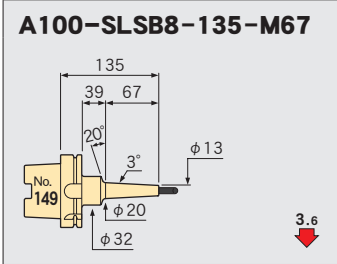
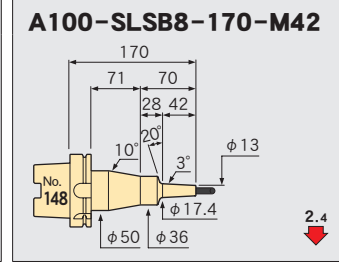
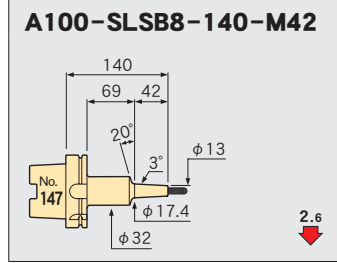
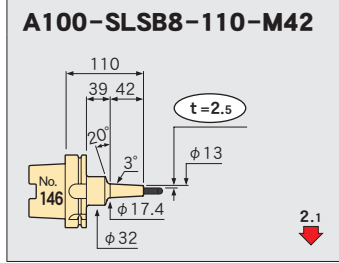
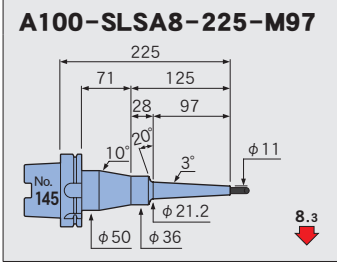
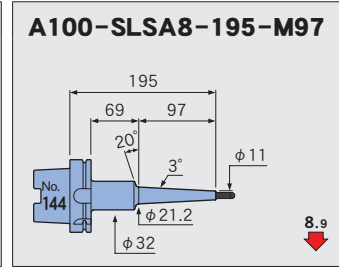
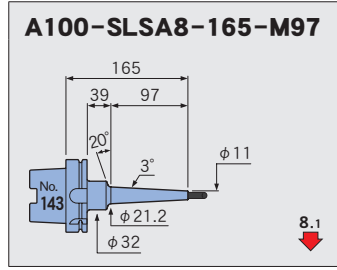
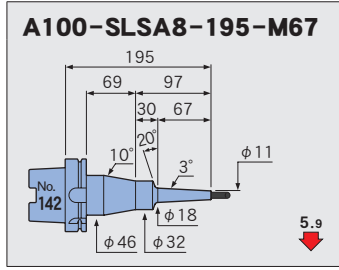
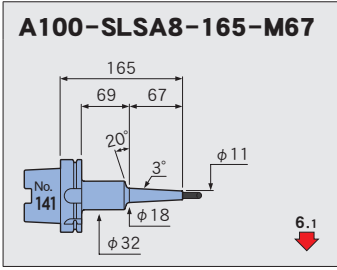
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<p>A100-SLRB8-195-M67</p>	<p>A100-SLFB8-90-M22</p>	<p>A100-SLFB8-120-M22</p>	<p>A100-SLFB8-150-M22</p>
<p>A100-SLFB8-110-M42</p>	<p>A100-SLFB8-140-M42</p>	<p>A100-SLFB8-170-M42</p>	<p>A100-SLFB8-135-M67</p>
<p>A100-SLFB8-165-M67</p>	<p>A100-SLFB8-195-M67</p>	<p>A100-SLSA8-165 cv</p>	<p>A100-SLSA8-195 cv</p>
<p>A100-SLSA8-225 cv</p>	<p>A100-SLSA8-255 cv</p>	<p>A100-SLSA8-285 cv</p>	<p>A100-SLSA8-315 cv</p>
<p>A100-SLSA8-345 cv</p>	<p>A100-SLRA8-195 cv</p>	<p>A100-SLRA8-225 cv</p>	<p>A100-SLRA8-255 cv</p>
<p>A100-SLRA8-285 cv</p>	<p>A100-SLFA8-195 cv</p>	<p>A100-SLFA8-225 cv</p>	<p>A100-SLFA8-255 cv</p>
<p>A100-SLFA8-285 cv</p>			

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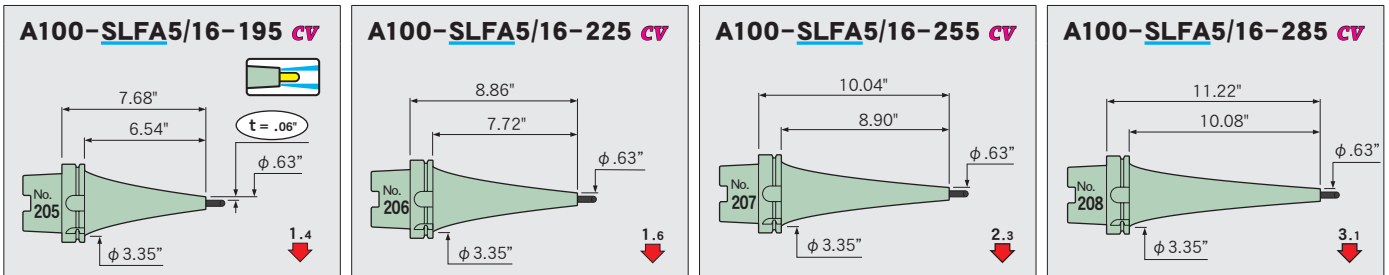
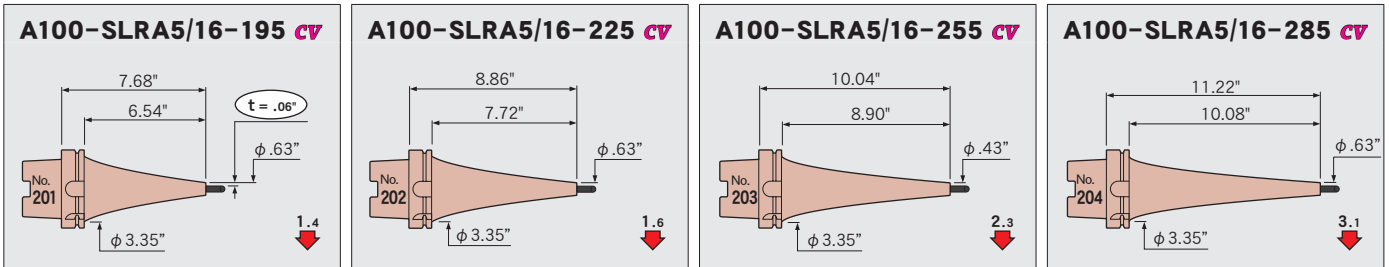
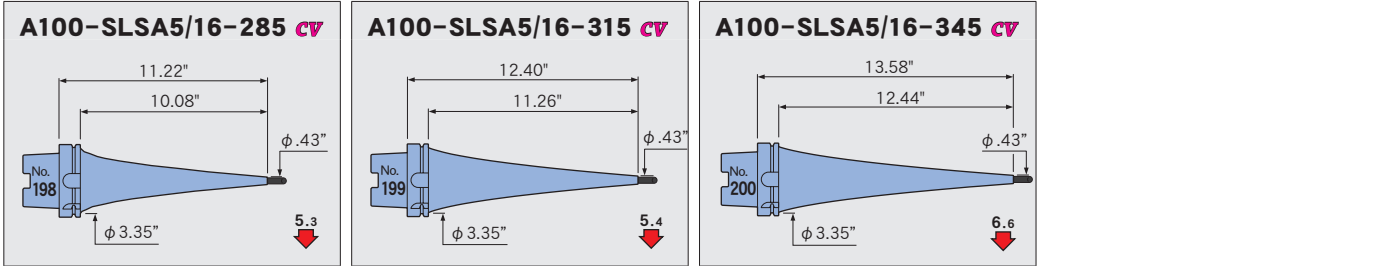
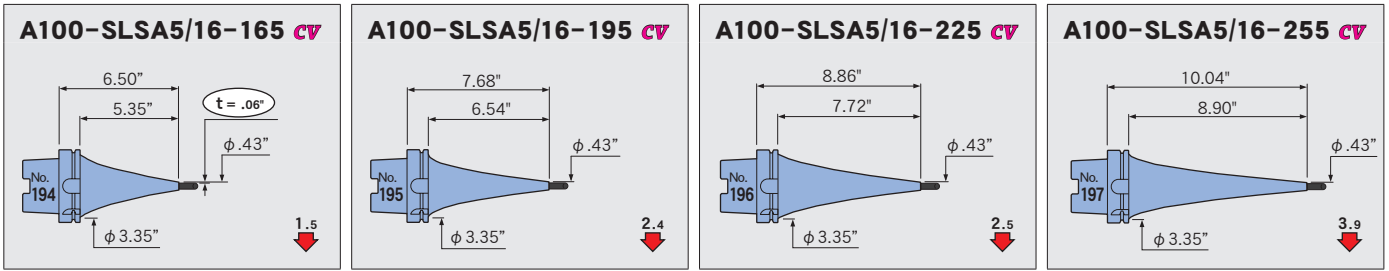
OTHERS

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MONO 3°
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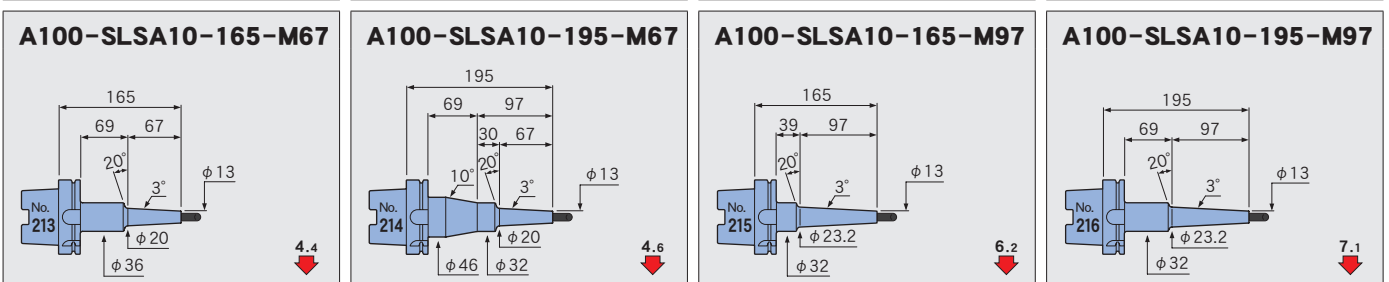
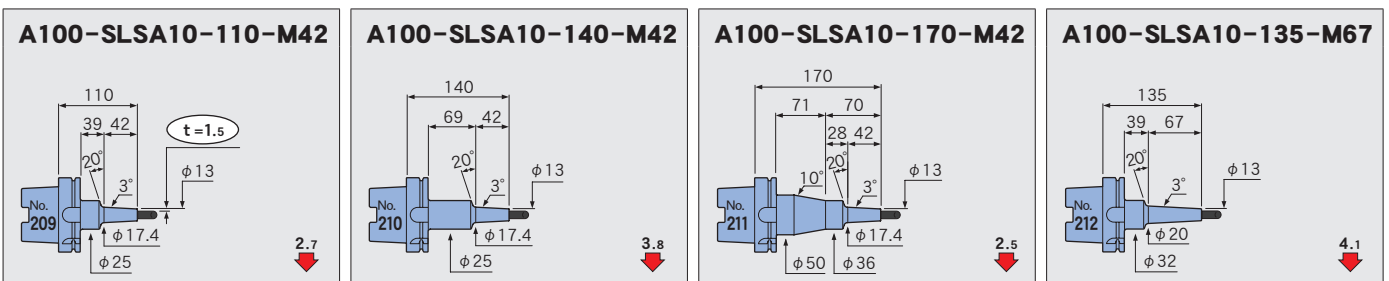
MONO Series

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<p>A100-SLSA10-225-M97</p>	<p>A100-SLSB10-110-M42</p>	<p>A100-SLSB10-140-M42</p>	<p>A100-SLSB10-170-M42</p>
<p>A100-SLSB10-135-M67</p>	<p>A100-SLSB10-165-M67</p>	<p>A100-SLSB10-195-M67</p>	<p>A100-SLSB10-165-M97</p>
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<p>A100-SLRB10-90-M22</p>	<p>A100-SLRB10-120-M22</p>	<p>A100-SLRB10-150-M22</p>	<p>A100-SLRB10-110-M42</p>
<p>A100-SLRB10-140-M42</p>	<p>A100-SLRB10-170-M42</p>	<p>A100-SLRB10-135-M67</p>	<p>A100-SLRB10-165-M67</p>
<p>A100-SLRB10-195-M67</p>	<p>A100-SLFB10-90-M22</p>	<p>A100-SLFB10-120-M22</p>	<p>A100-SLFB10-150-M22</p>

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

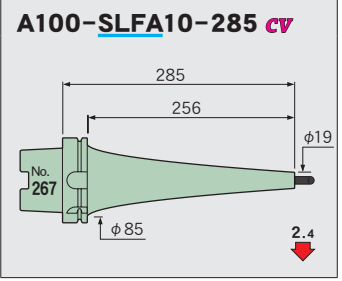
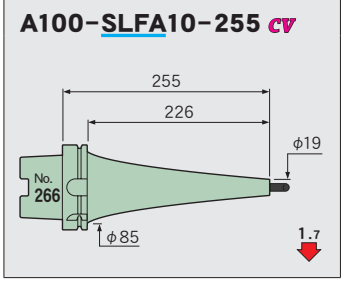
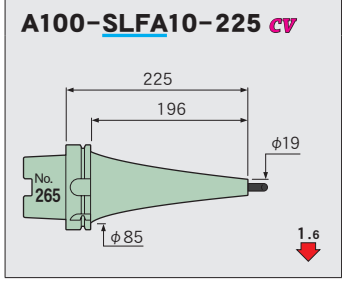
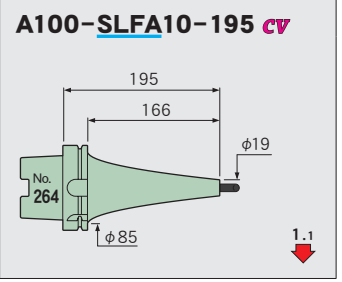
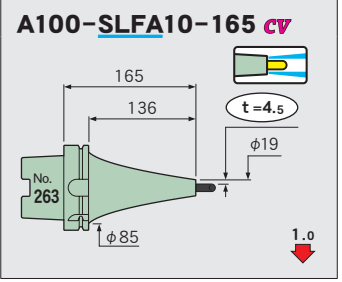
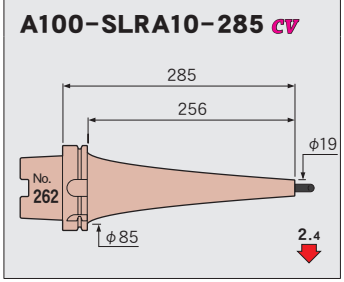
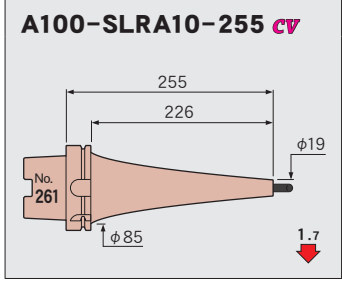
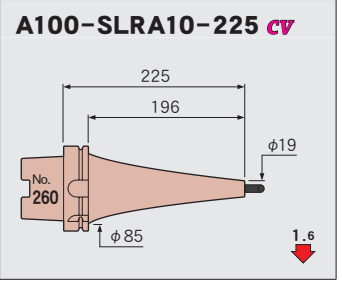
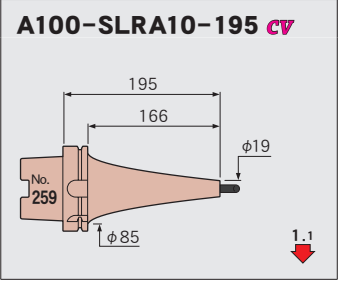
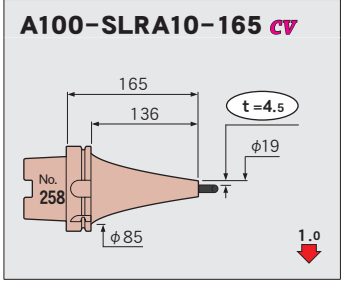
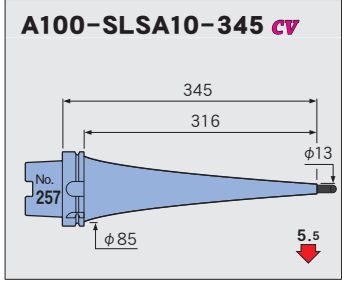
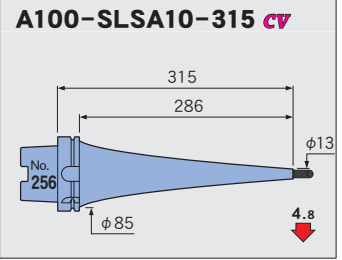
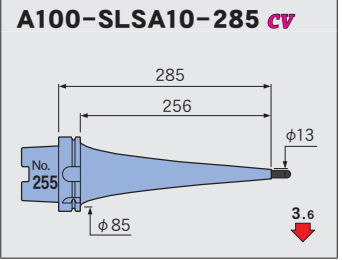
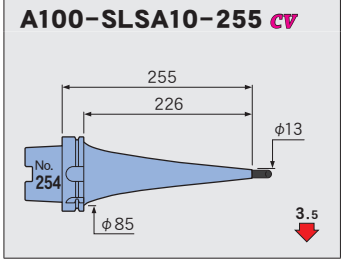
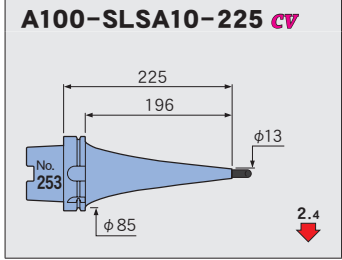
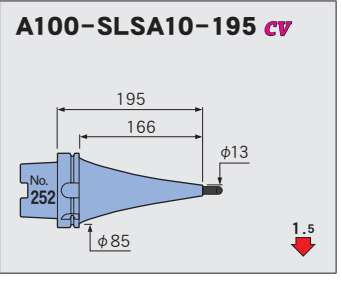
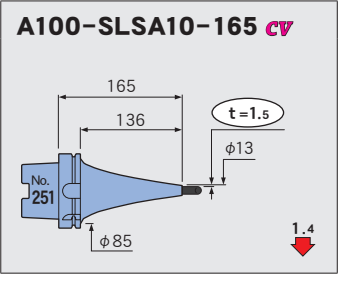
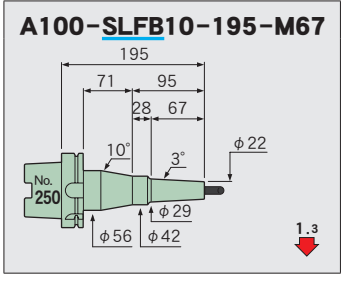
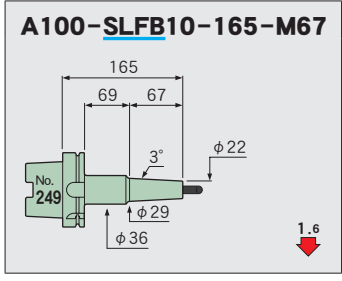
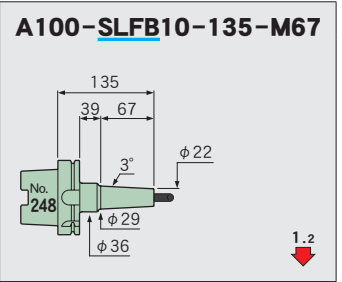
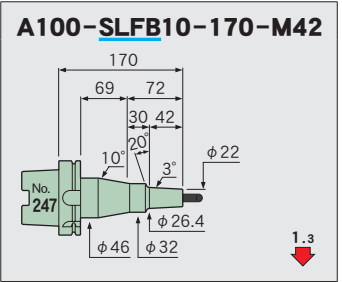
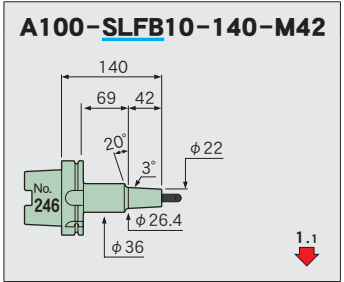
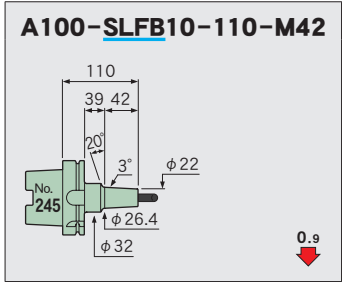
HYPER
version

STRAIGHT
anbor

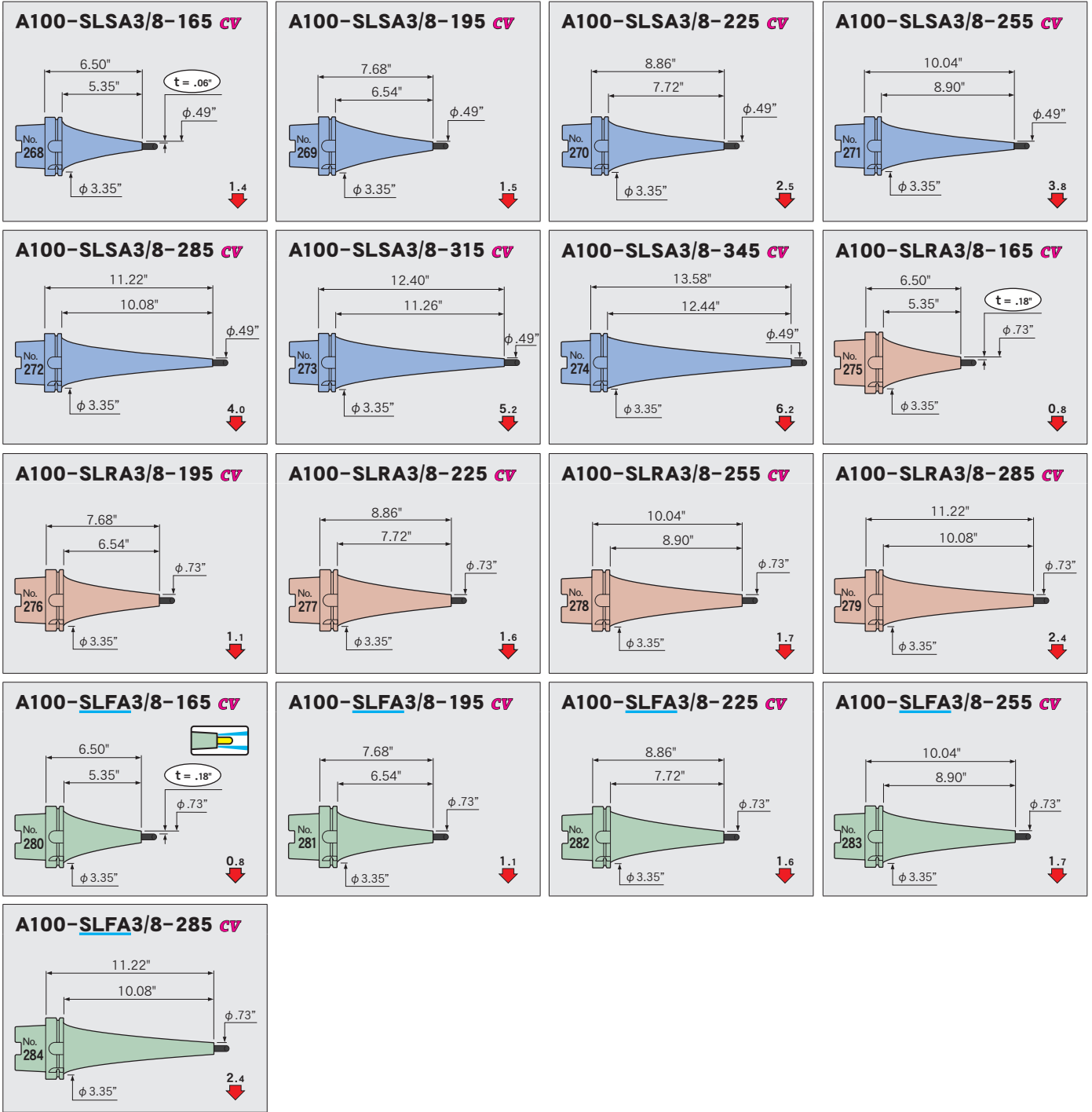
OTHERS

PERIPHERALS

Technical
Information



ϕ 3/8



Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

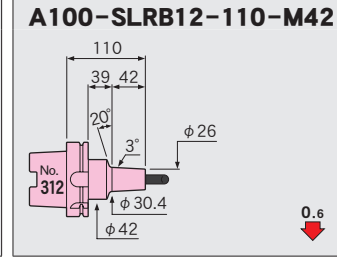
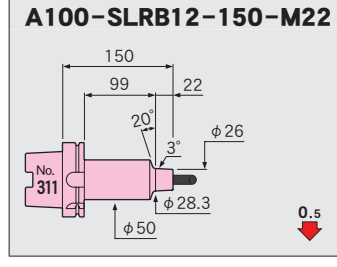
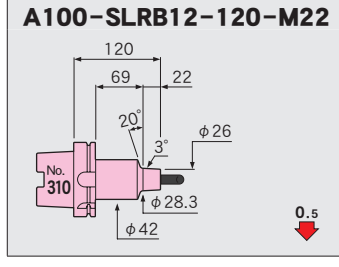
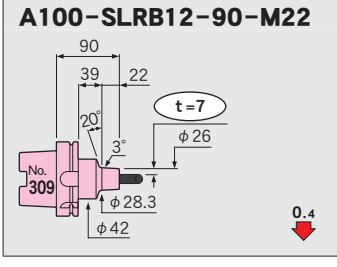
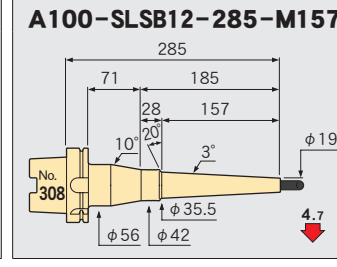
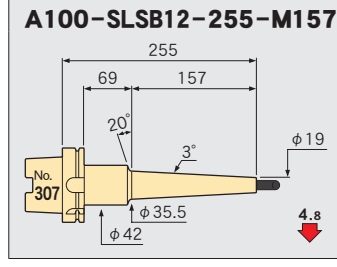
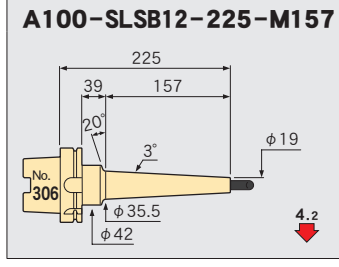
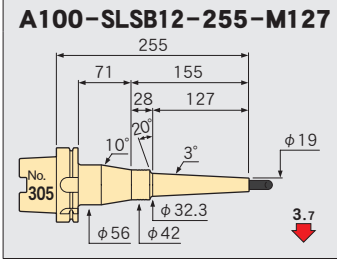
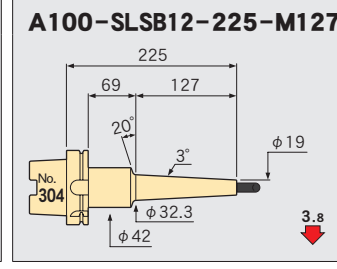
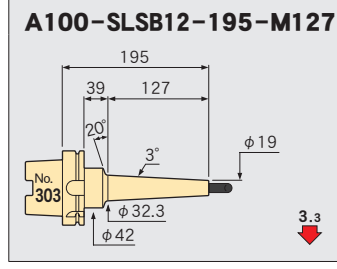
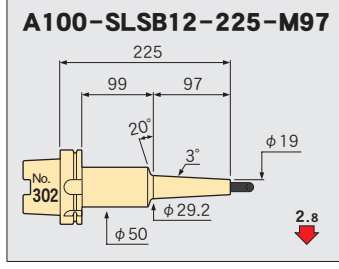
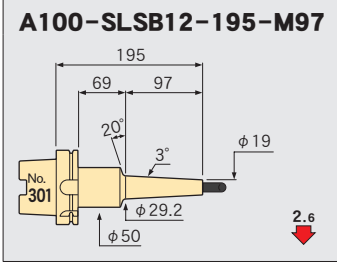
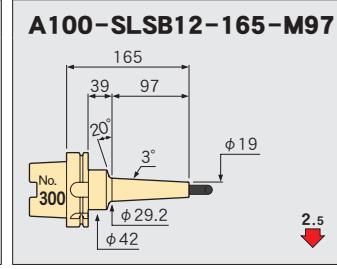
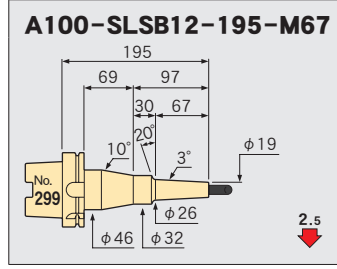
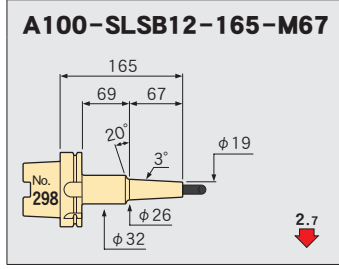
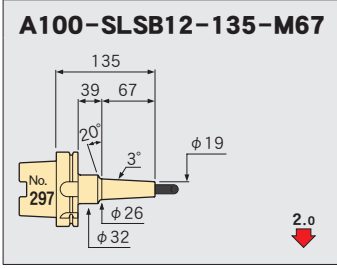
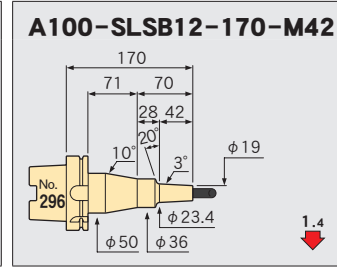
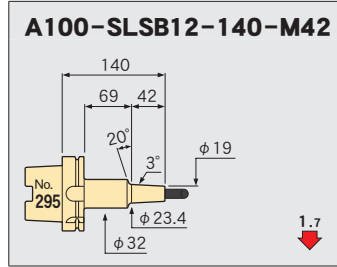
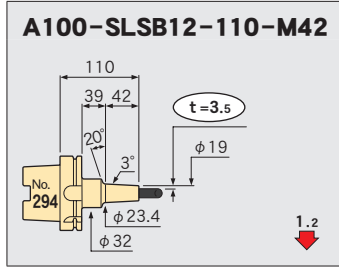
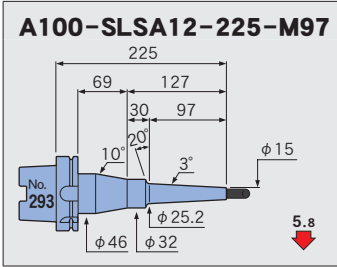
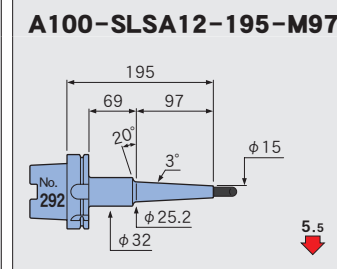
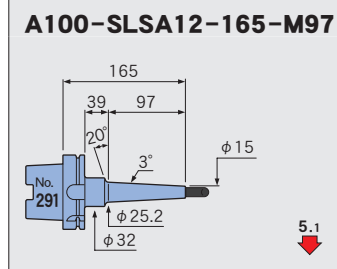
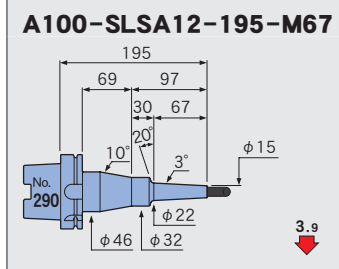
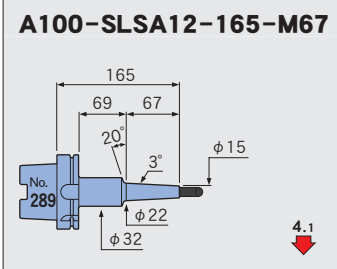
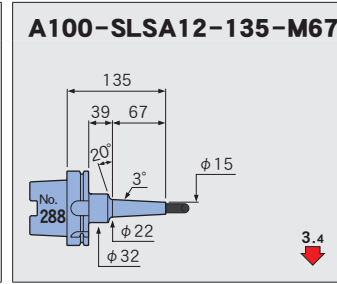
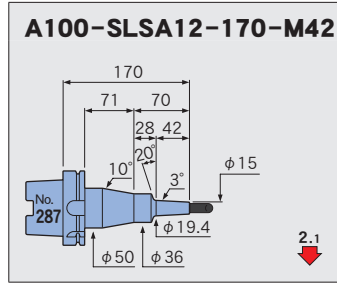
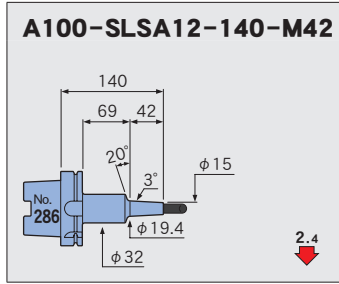
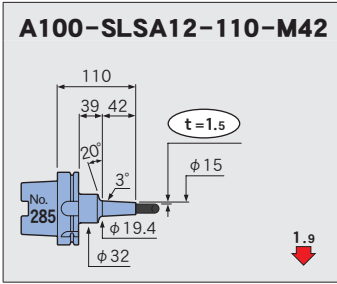
HYPER
version

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information



<p>A100-SLRB12-140-M42</p>	<p>A100-SLRB12-170-M42</p>	<p>A100-SLRB12-135-M67</p>	<p>A100-SLRB12-165-M67</p>
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<p>A100-SLFB12-165-M67</p>	<p>A100-SLFB12-195-M67</p>	<p>A100-SLSA12-165 CV</p>	<p>A100-SLSA12-195 CV</p>
<p>A100-SLSA12-225 CV</p>	<p>A100-SLSA12-255 CV</p>	<p>A100-SLSA12-285 CV</p>	<p>A100-SLSA12-315 CV</p>
<p>A100-SLSA12-345 CV</p>	<p>A100-SLRA12-165 CV</p>	<p>A100-SLRA12-195 CV</p>	<p>A100-SLRA12-225 CV</p>
<p>A100-SLRA12-255 CV</p>	<p>A100-SLRA12-285 CV</p>	<p>A100-SLFA12-165 CV</p>	<p>A100-SLFA12-195 CV</p>

Feature
Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

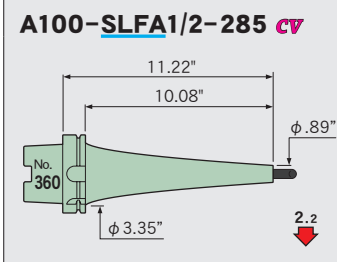
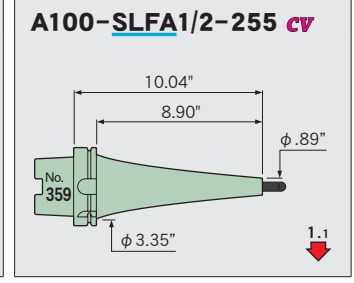
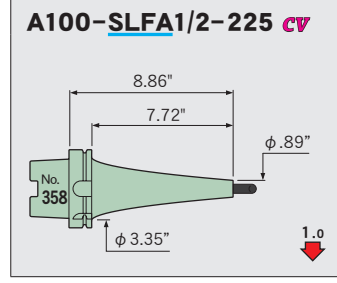
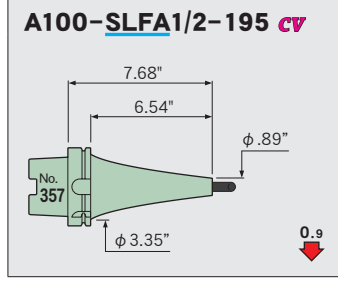
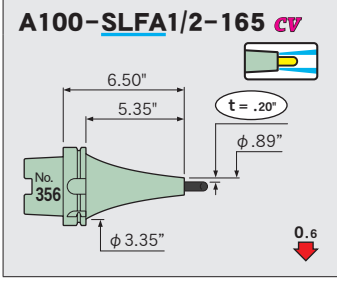
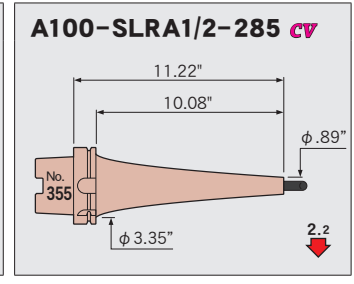
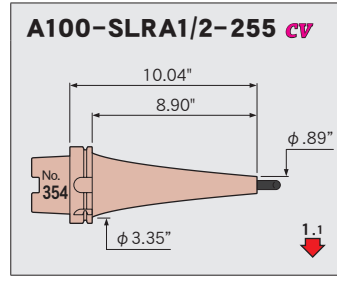
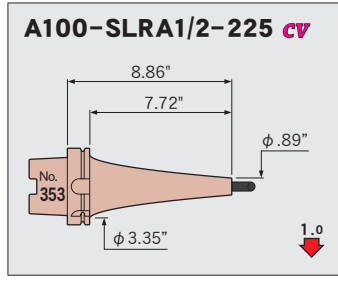
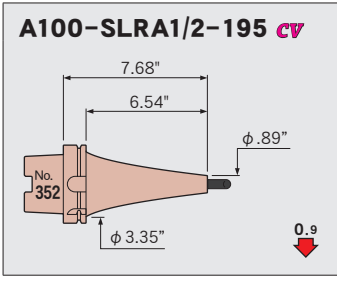
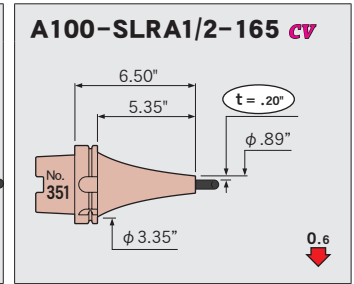
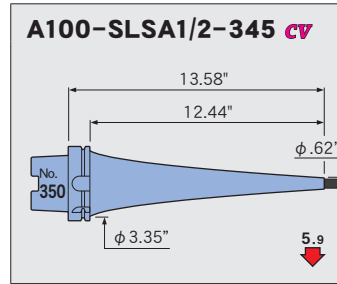
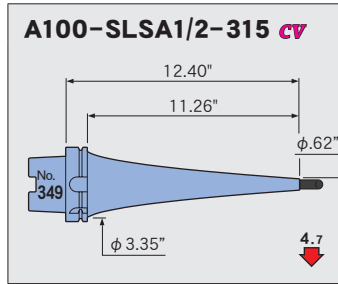
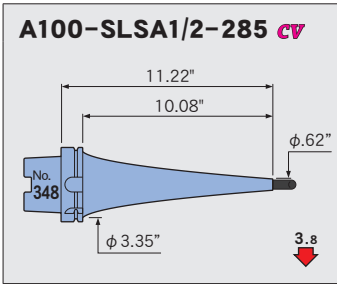
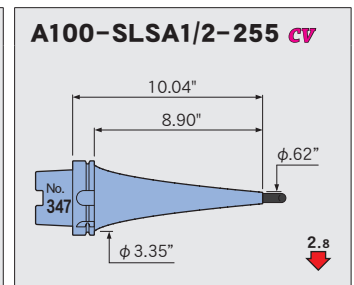
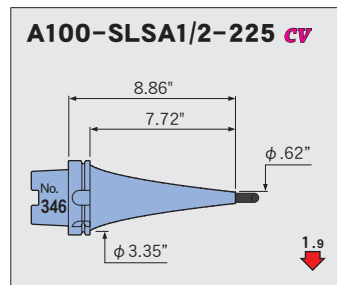
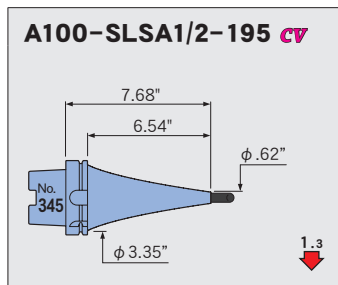
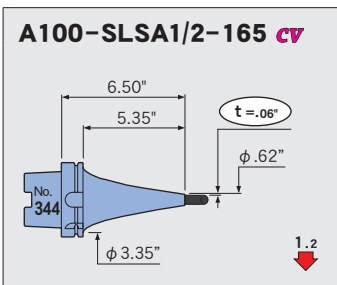
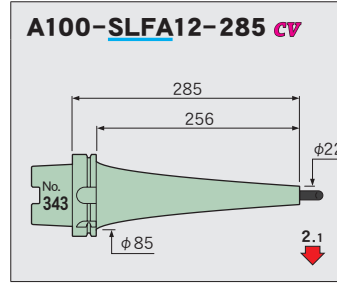
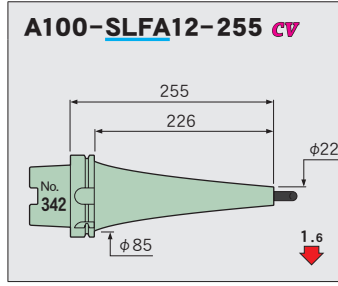
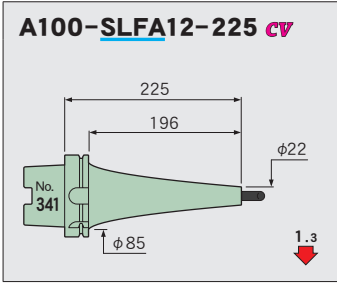
HYPER
version

STRAIGHT
arbor

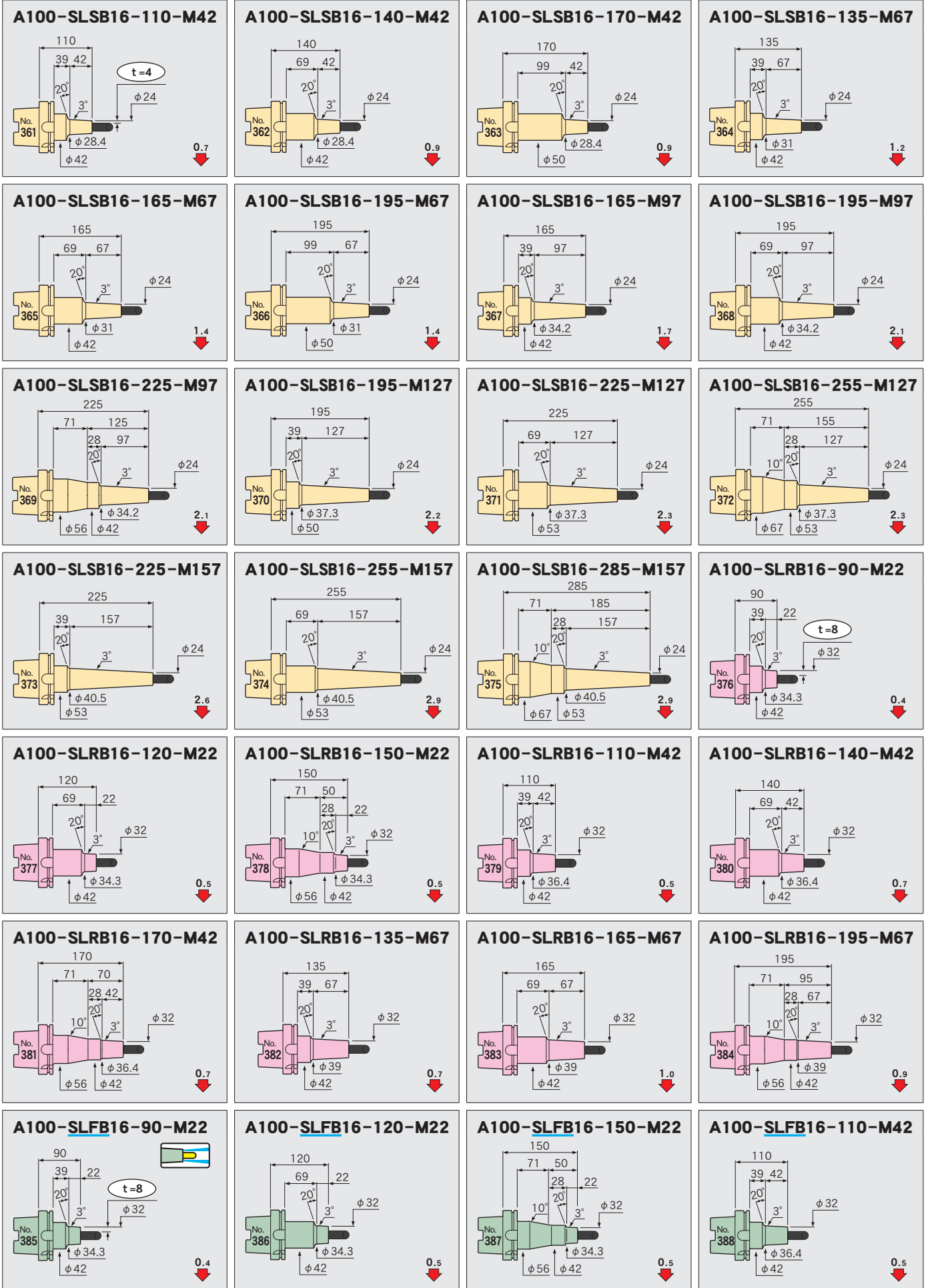
OTHERS

PERIPHERALS

Technical
Information



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Feature
Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

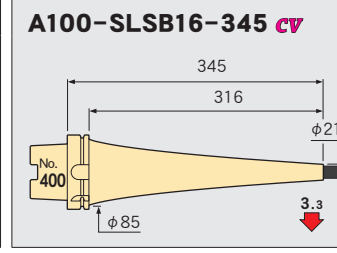
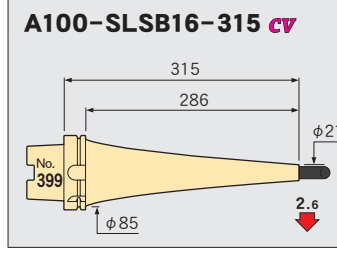
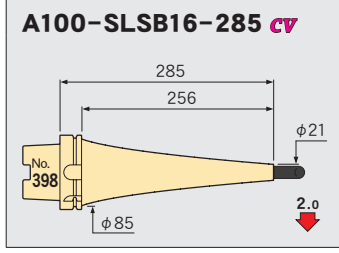
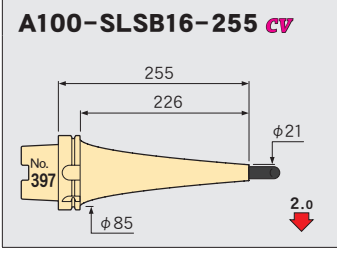
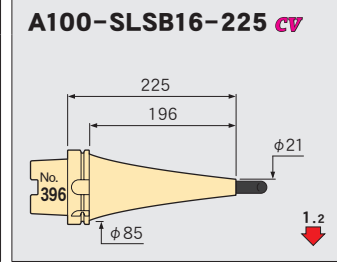
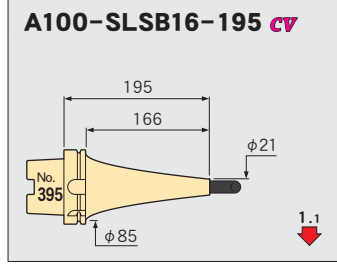
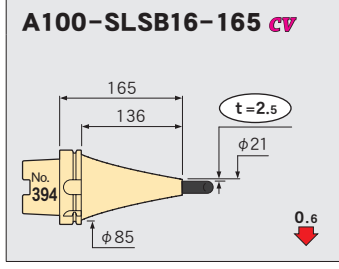
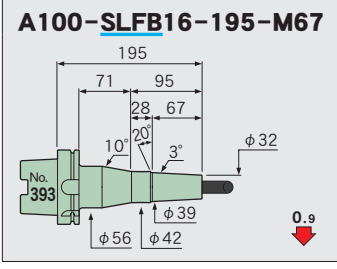
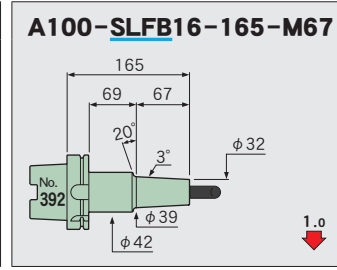
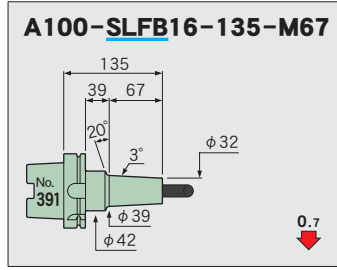
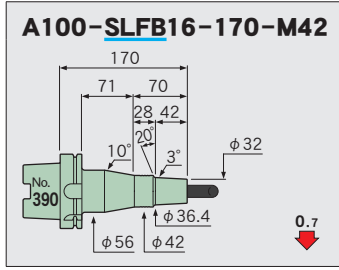
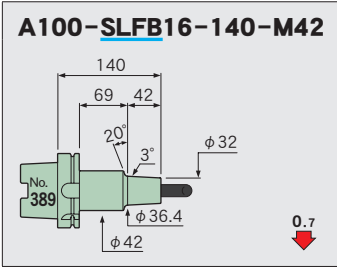
OTHERS

PERIPHERALS

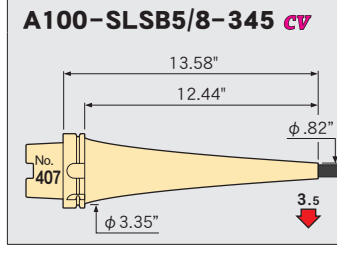
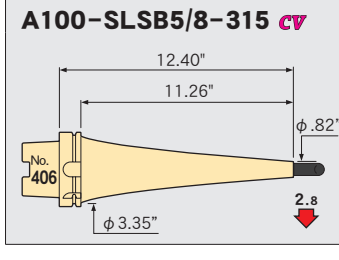
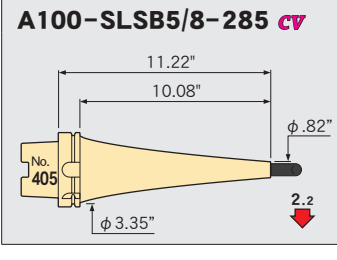
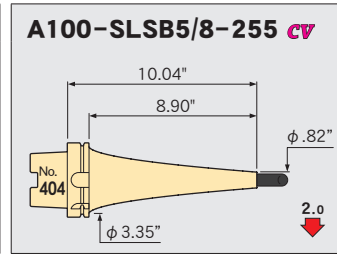
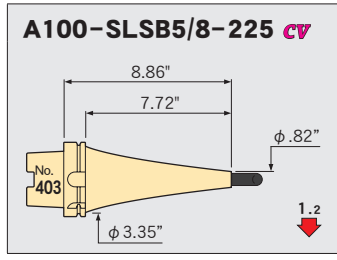
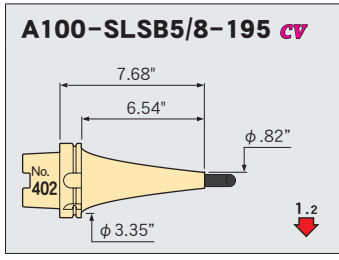
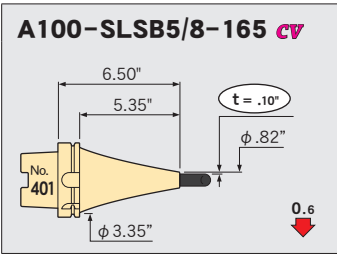
Technical
Information

A100 S=1:10

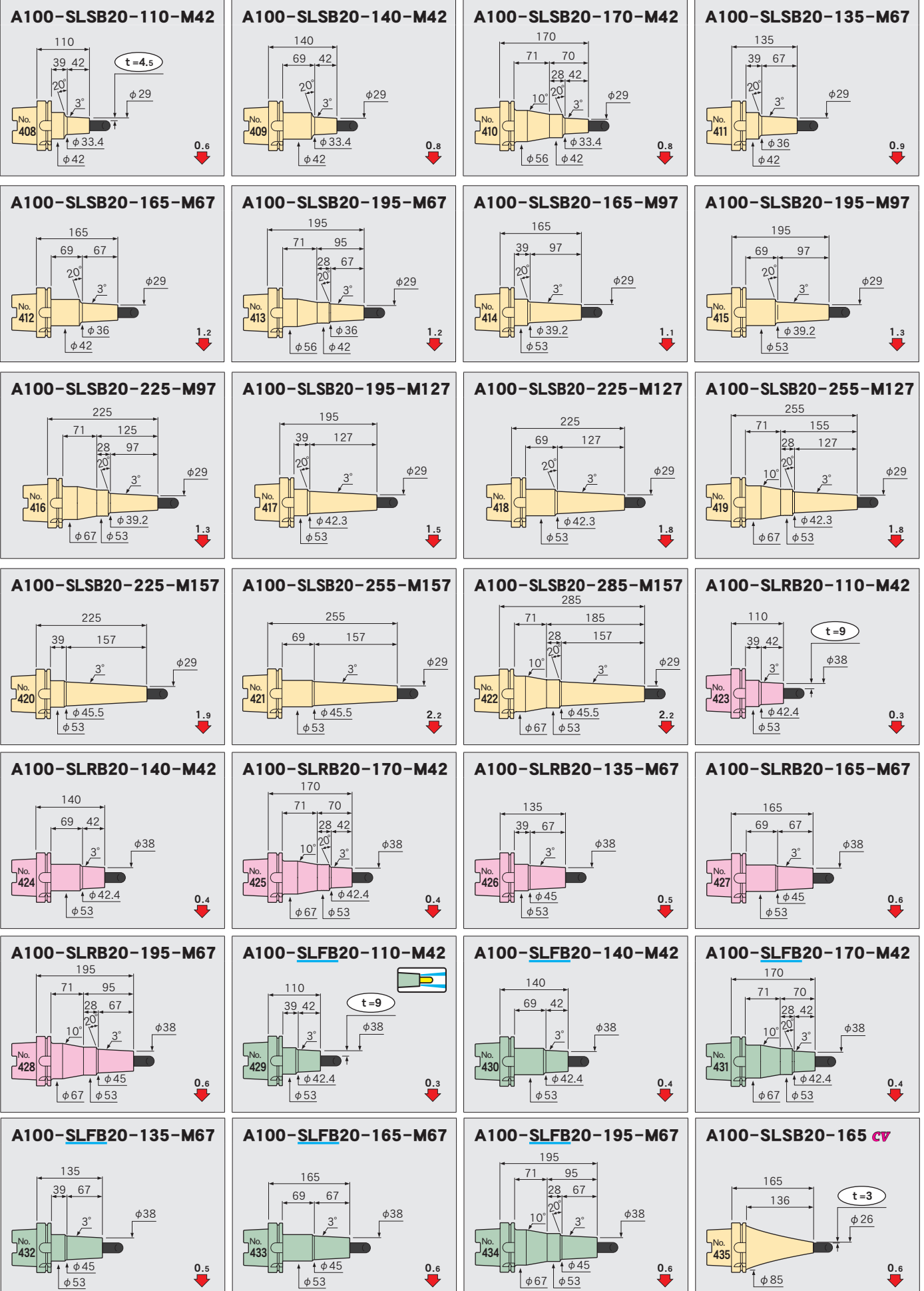
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information



φ 5/8



φ20



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

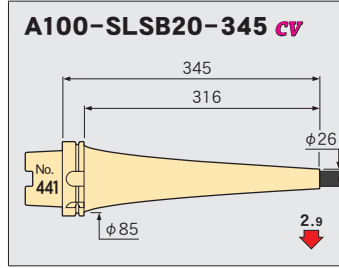
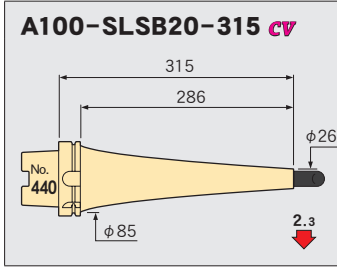
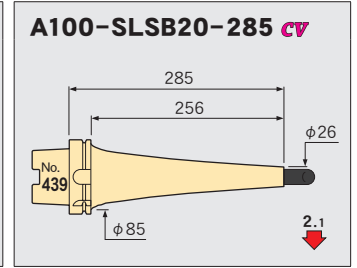
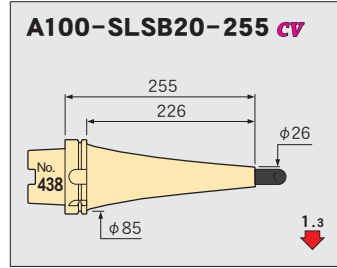
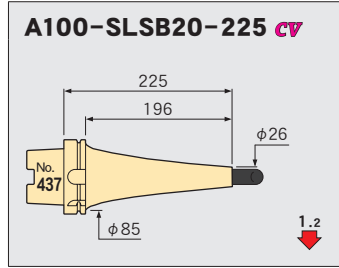
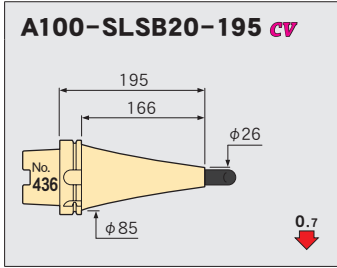
OTHERS

PERIPHERALS

Technical
Information

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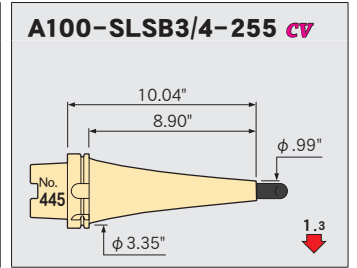
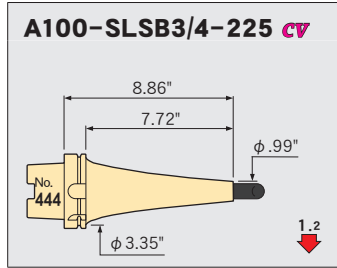
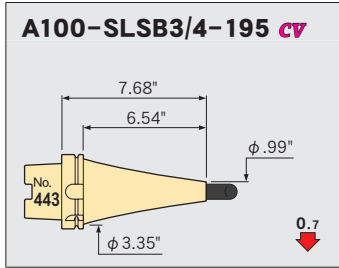
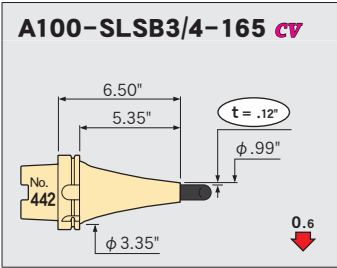
Feature
Shrink-fit Heater



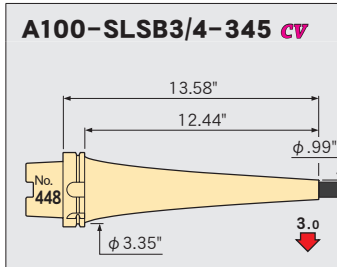
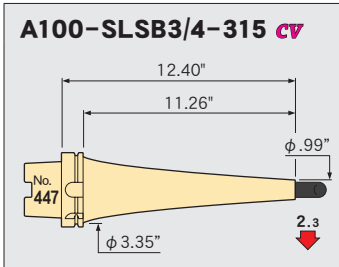
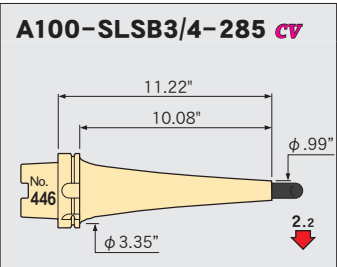
MONO 3°
MONO CURVE

φ 3/4

2PIECE type



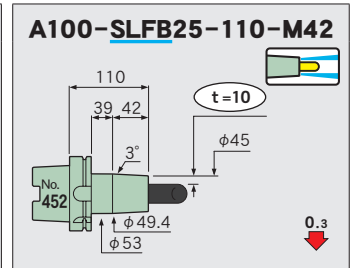
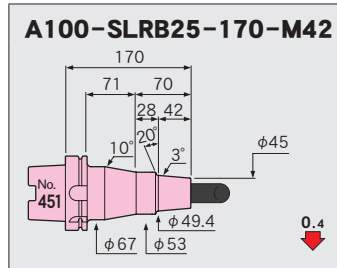
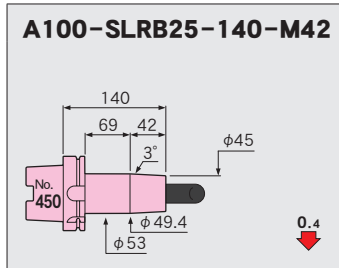
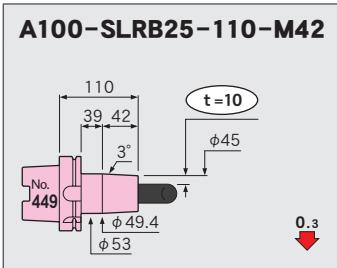
UNO



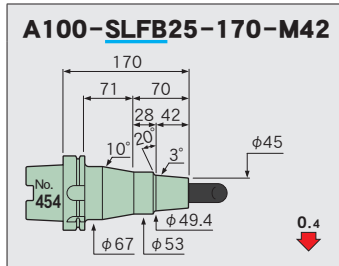
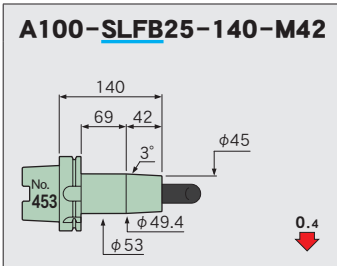
HYPER version

φ 25

STRAIGHT anbor



OTHERS

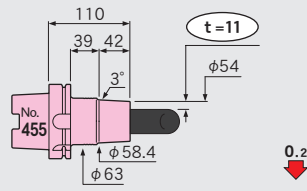


PERIPHERALS

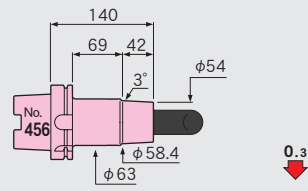
Technical Information

φ32

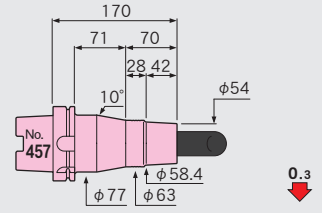
A100-SLRB32-110-M42



A100-SLRB32-140-M42

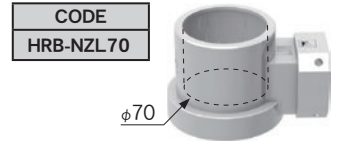


A100-SLRB32-170-M42



■ φ70 Nozzle (HRB-03S)

Required for shrinking the SLRB32.



HEAT ROBO Baby 3000S

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

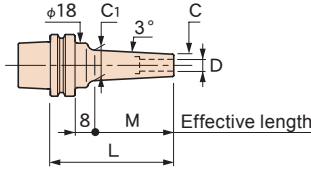
OTHERS

PERIPHERALS

Technical
Information

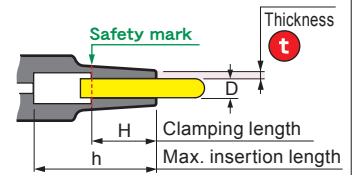
E25

MONO 3°



Caution

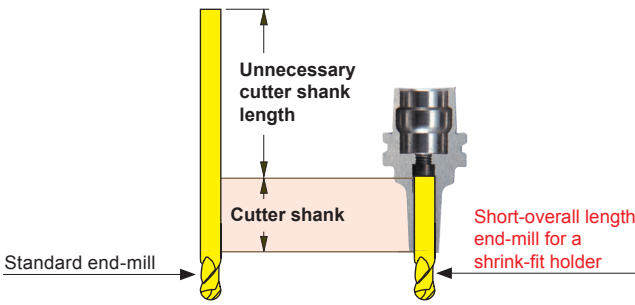
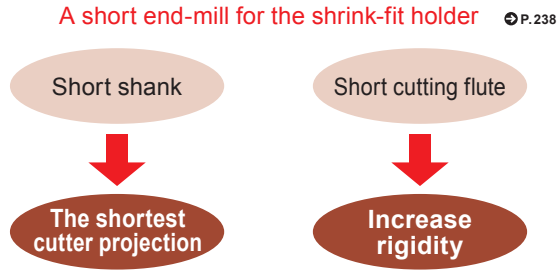
- The coolant duct is not installed in a holder. Consult us if you need it.
- Setting cutters - Be sure to insert the tool beyond the safety mark.



CODE	φD	φC	t	L	M	L ₁	φC ₁	H	h	Kg	N	S	Scale model
E25-SLSA3-35	3	6	1.5	35	17	8	7.8	9	29	0.06	0.37	3.6	1
-50				50	32		9.4		44		0.39	7	2
-SLRA3-35				7.5	2.25		35		17		9.3	29	0.37
E25-SLSA3.175-35	3.175	6.175	1.5	35	17	8	8	9	29	0.06	0.37	3.5	4
-50				50	32		9.6		44		0.39	6.6	5
E25-SLSA4-35	4	7	1.5	35	17	8	8.8	12	29	0.06	0.38	2.8	6
-50				50	32		10.4		44		0.4	5.3	7
-SLRA4-35				10	3		35		17		11.8	29	0.38
E25-SLSA5-35	5	8	1.5	35	17	8	9.8	15	26	0.06	0.38	2.2	9
E25-SLSA6-35	6	9	1.5	35	17	8	10.8	18	26	0.05	0.38	1.8	10
-50				50	32		12.4		39		0.07	0.43	3.6
-SLRA6-35				12	3		35		17	13.8	26	0.39	1.1

A short carbide end-mill for the shrink-fit holder

The shrink-fit holder doesn't need standard length cutting tools, because it has shorter insertion length.



Centering bar
To identify workpiece datum position

CODE
ST6-CEB102

Measuring instrument tool holder
Use when centering a workpiece. The spring collet (C10-6-P) and the centering bar (ST6-CEB102) are required and sold separately. Fasten nuts by hand.

CODE
E25-CEH10-37

Caution
• Not usable for machining.

Be aware of max. insertion length (h)!
If you insert cutter beyond the max. insertion length (h), the machine spindle might not be able to clamp the holder properly and thus damage the spindle. Please use our exclusive adapter to recognize the max. insertion length when you shrink-fit.

Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-E25-G1

P. 226

Holder Stand
P. 16

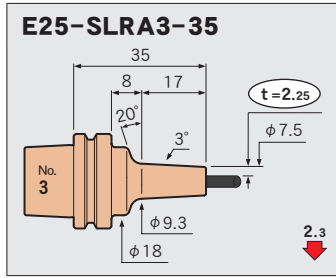
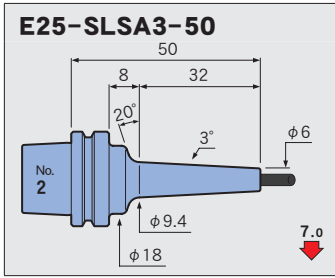
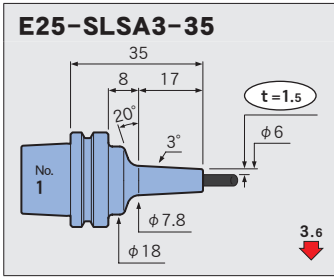
Sodick UH430L / UH650L
TT1-400A / OPM series

MITSUI SEIKI VL30 / VL50

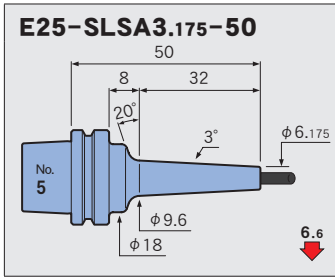
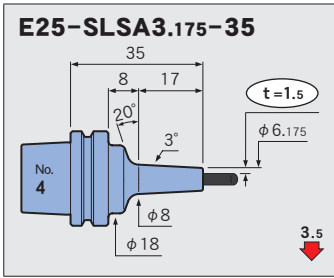
ROKU-ROKU P12-C genesis / Amdroid II
MEGA series / HC-435

YASDA YMC series

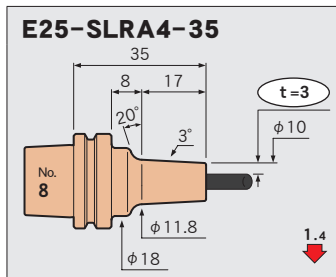
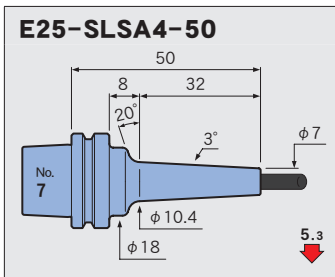
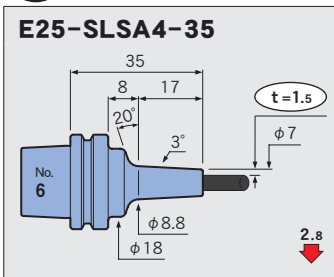
φ3



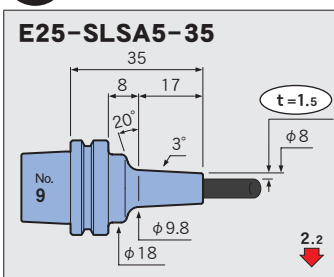
φ3.175



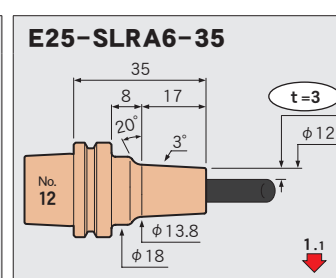
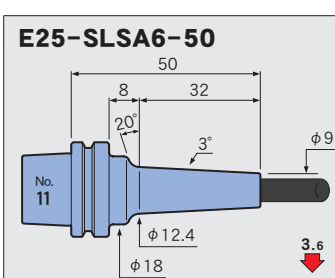
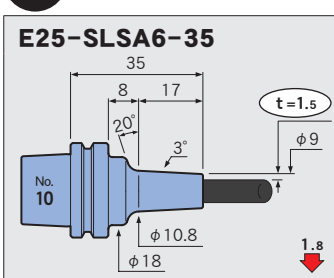
φ4



φ5



φ6



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

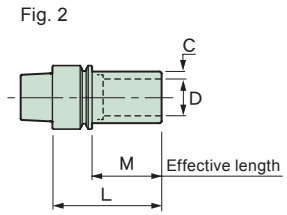
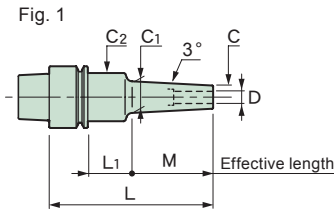
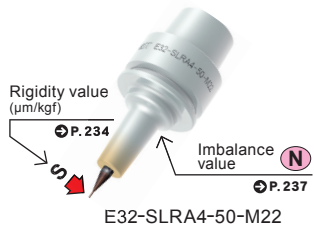
OTHERS

PERIPHERALS

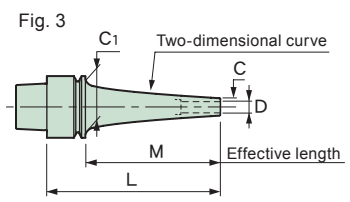
Technical
information



MONO 3°



MONO CURVE CV



Caution

- The coolant duct is not installed in a holder. Consult us if you need it.
- Setting cutters... Be sure to insert the tool beyond the safety mark.

Safety mark, Thickness t, Clamping length H, Max. insertion length h

CV : Curve Thickness

CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg lbs	(N)	S	Scale model
E32-SLSA3-50-M22	1	3	6	1.5	50	22	8	8.3	20	9	42	0.1	0.4	4.7	1
70					42	10.4		62			0.2				9.5
-85-M42					85	23	25	77	0.8		9.4	3			
-SLRA3-50-M22	1	3	7.5	2.25	50	22	8	9.8	20	9	42	0.1	0.4	2.8	4
70					42	11.9		62			0.2				5.3
-85-M42					85	23	25	77	0.8		5.5	6			
E32-SLSA3.175-50-M22	1	3.175	6.175	1.5	50	22	8	8.5	20	9	42	0.1	0.4	4.4	7
E32-SLSA4-50-M22	1	4	7	1.5	50	22	8	9.3	20	12	42	0.1	0.4	3.6	8
70					42	11.4		62			0.2				7.3
-85-M42					85	23	25	77	0.8		7.4	10			
-SLRA4-50-M22	1	4	10	3	50	22	8	12.3	20	12	42	0.2	0.4	1.7	11
70					42	14.4		62			0.5				3.1
-85-M42					85	23	25	77	0.9		3.2	13			
-SLSA4-60 CV	3	4	7	1.5	60	40	—	26	—	12	43	0.2	0.6	2.4	14
-90 CV					90	70					73				0.8
E32-SLSA3/16-60 CV	3	3/16	.31	.06	2.37	1.58	—	1.02	—	.59	1.69	0.4	0.6	2.4	16
-90 CV					3.55	2.76					2.87				0.5
E32-SLSA6-70-M42	1	6	9	1.5	70	42	8	13.4	20	18	62	0.2	0.5	4.8	18
-SLRA6-50-M22	1	6	12	3	50	22	8	14.3	26	18	39	0.2	0.5	1.2	19
70					42	16.4		62			2.4				20
-85-M42					85	23	25	77	0.9		2.5	21			
-SLSA6-60 CV	3	6	9	1.5	60	40	—	26	—	18	43	0.2	0.7	1.9	22
-90 CV					90	70					73				0.9
E32-SLSA1/4-60 CV	3	1/4	.37	.06	2.37	1.58	—	1.02	—	.71	1.69	0.4	0.7	1.9	24
-90 CV					3.55	2.76					2.87				0.5
E32-SLRA8-50-M22	1	8	14	3	50	22	8	16.3	26	24	39	0.2	0.5	1	26
-85-M42					85	42		23			18.4				25
-SLSA8-60 CV	3	8	11	1.5	60	40	—	26	—	24	38	0.2	0.7	1.6	28
-90 CV					90	70					—				—
E32-SLSA5/16-60 CV	3	5/16	.43	.06	2.37	1.58	—	1.02	—	.94	1.89	0.4	0.7	1.6	30
-90 CV					3.55	2.76					2.36				0.5
E32-SLRA10-55-M22	1	10	16	3	55	22	13	18.3	26	25	44	0.2	0.6	0.9	32
-SLSA10-60 CV	3	10	13	1.5	60	40	—	26	—	30	48	0.2	0.8	1.4	33
-90 CV					90	70					60				1.1

CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg lbs	N	S	Scale model
E32-SLSA3/8-60 CV	3	3/8	.49	.06	2.37	1.58	—	1.02	—	1.18	1.89	0.4	0.8	1.4	35
-90 CV					3.55	2.76					2.36	0.5	1.1	3.5	36
E32-SLRA12-55-M22	1	12	20	4	55	22	13	22.3	26	30	44	0.2	0.7	0.7	37
E32-SLRA16-55-M35	2	16	26	5	55	35	—	—	—	32	44	0.2	0.6	0.7	38

■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-E32-G4

➔ P.226



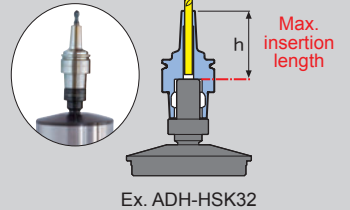
■ Holder stand

➔ P.16



⚠ Be aware of max. insertion length (h)!

If you insert cutter beyond the max. insertion length (h), the machine spindle might not be able to clamp the holder properly and thus damage the spindle. Please use our exclusive adapter to recognize the max. insertion length when you shrink-fit.



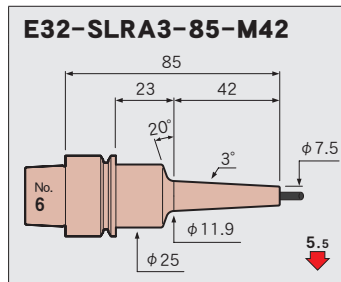
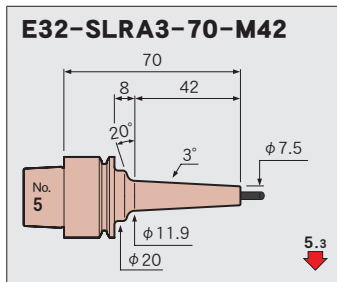
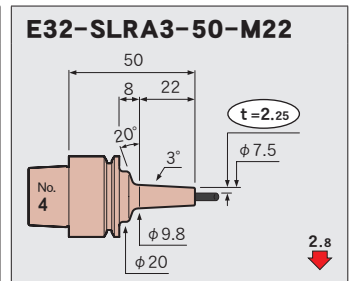
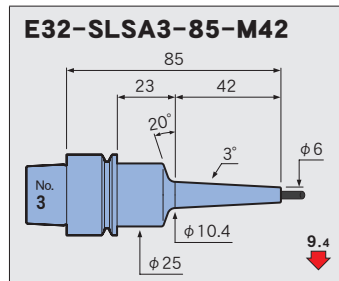
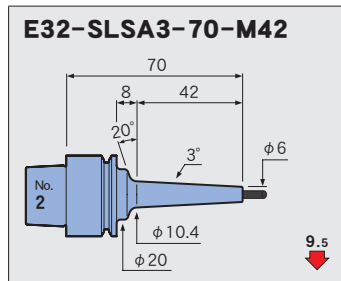
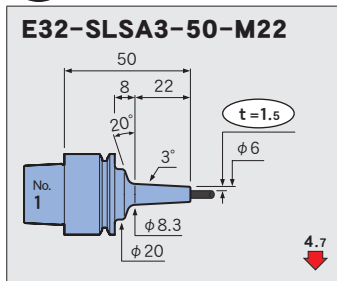
Ex. ADH-HSK32

- DMG MORI** HSC 20 linear
- HORKOS** NJ35-5AX
- MAKINO** V22 / V33 / IQ300 / IQ500
- MITSUI SEIKI** VL30 / VL50
- Nidec** μV1
- Sodick** UH430L / UH650L
- SUGINO** Xion α-5AX
- YASDA** YMC650 / YMC430 ver III

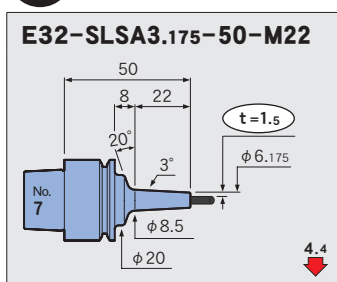


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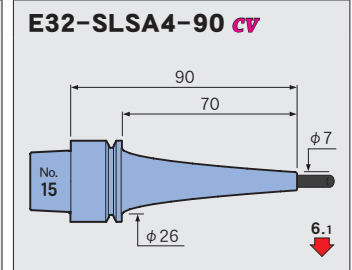
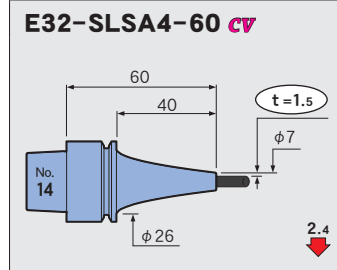
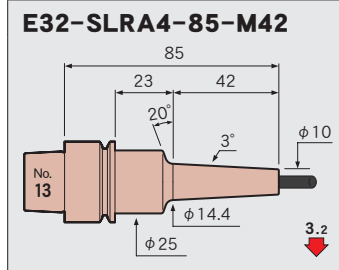
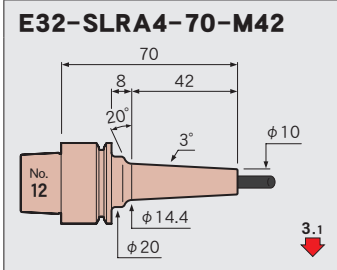
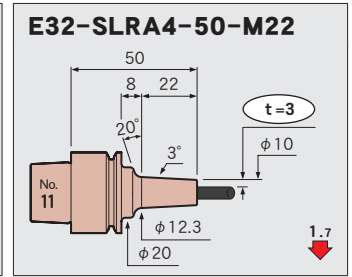
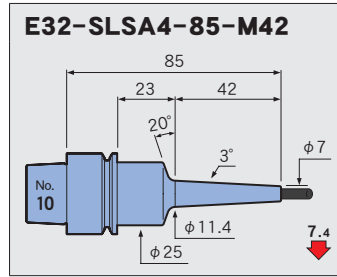
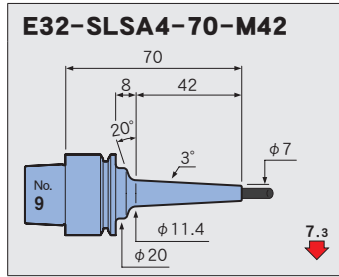
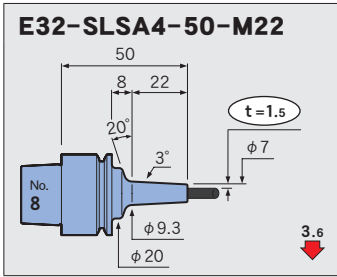
φ3



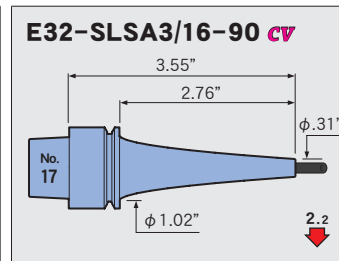
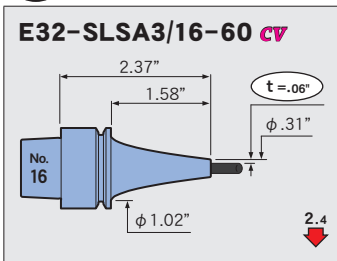
φ3.175



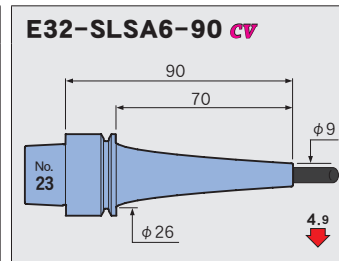
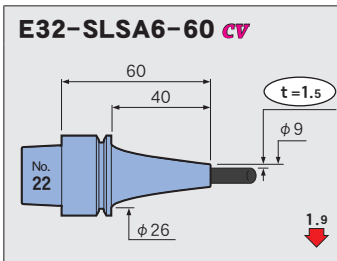
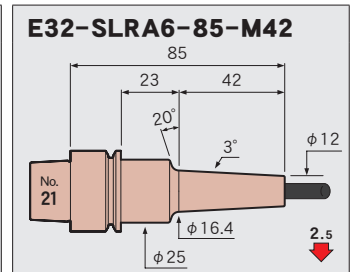
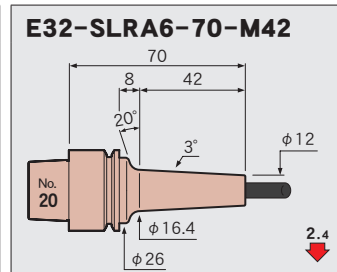
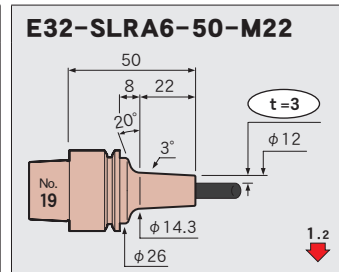
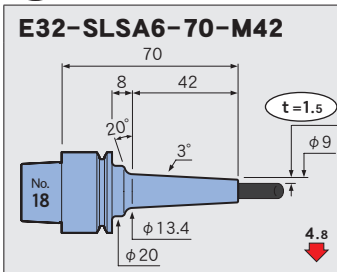
φ 4



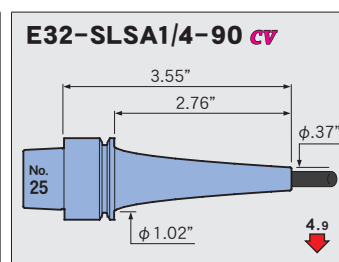
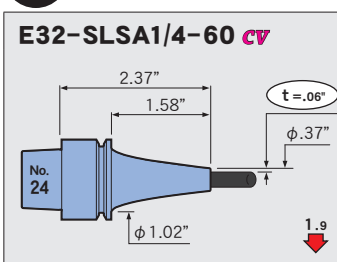
φ 3/16



φ 6

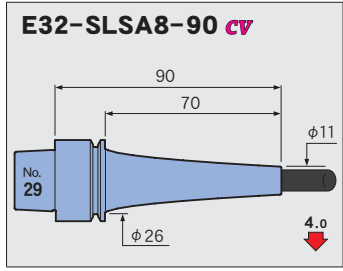
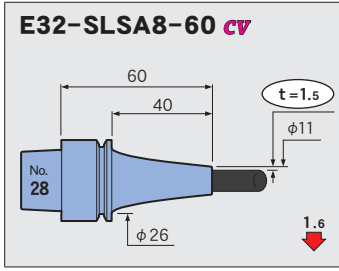
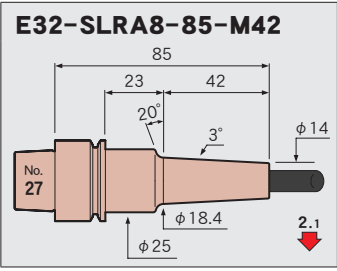
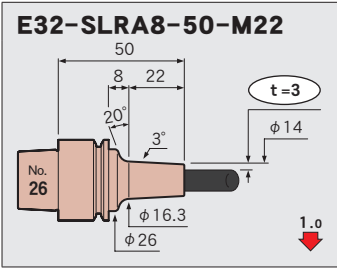


φ 1/4

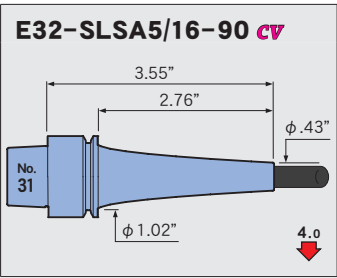
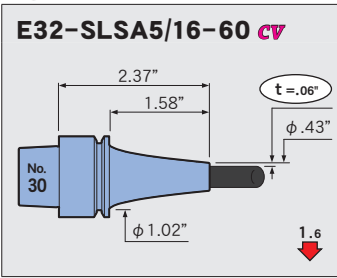


Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information

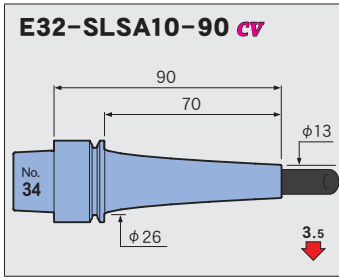
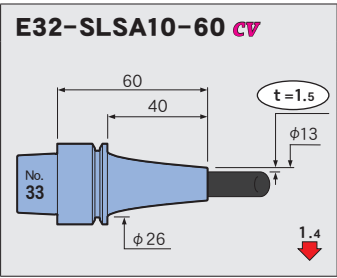
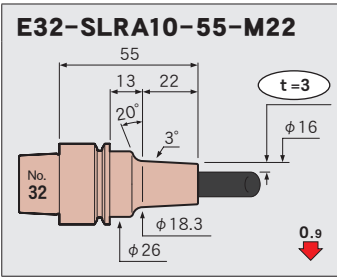
$\phi 8$



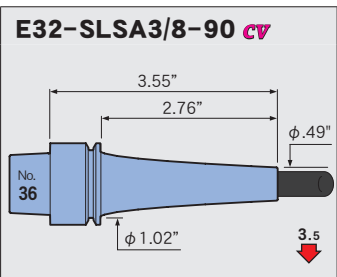
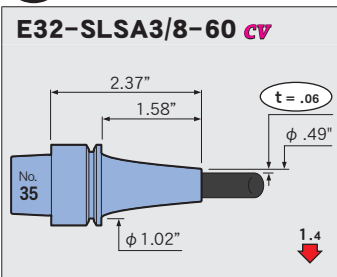
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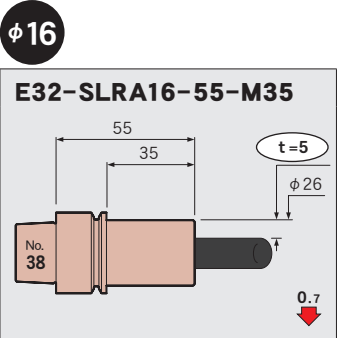
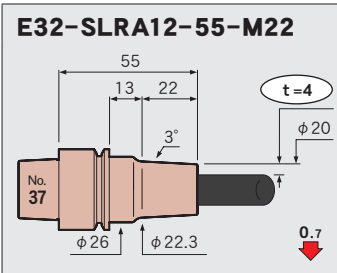
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$\phi 3/8$



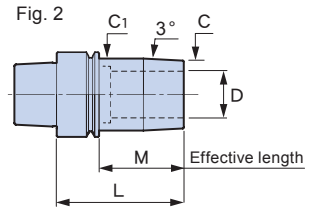
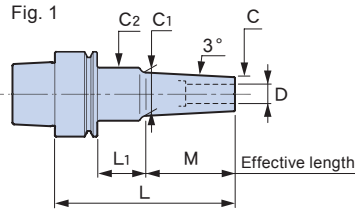
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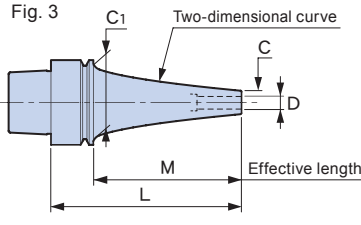
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

E40

MONO 3°



MONO CURVE



Caution

- The coolant duct is not installed in a holder. Consult us if you need it.
- Setting cutters... Be sure to insert the tool beyond the safety mark.

cv : Curve

Thickness

CODE	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg lbs	N	S	Scale model		
E40-SLSA3- 50-M22	1	3	6	1.5	50	22	8	8.3	20	9	42	0.2	0.7	4.6	1		
- 70-M42					70	42		10.4			62			9.4	2		
- 85-M42					85	23	25	69	0.3		1.1	9.3	3				
-110-M67					110			67	13		94	2.2	15	4			
-SLRA3- 50-M22	1	3	7.5	2.25	50	22	8	9.8	20	9	42	0.2	0.7	2.8	5		
- 70-M42					70	42		11.9			62			5.3	6		
- 85-M42					85	23	25	69	0.3		1.1	5.4	7				
-110-M67					110			67	14.5		94	9	8				
E40-SLSA3.175-50-M22	1	3.175	6.175	1.5	50	22	8	8.5	20	9	42	0.2	0.7	4.4	9		
E40-SLSA4- 50-M22	1	4	7	1.5	50	22	8	9.3	20	12	42	0.2	0.7	3.6	10		
- 70-M42					70	42		11.4			62			7.2	11		
- 85-M42					85	23	25	74	0.3		1.1	7.3	12				
-110-M67					110			67	14		99	1.2	11.9	13			
-SLRA4- 50-M22	1	4	10	3	50	22	8	12.3	20	12	42	0.2	0.7	1.6	14		
- 70-M42					70	42		14.4			62			0.3	3	15	
- 85-M42					85	23	25	69	1.1		3.1	16					
-110-M67					110			67				17	94	1.2	5.2	17	
-SLSA4- 90 cv	3	4	7	1.5	90	70	—	34	—	12	74	0.3	1.5	2.9	18		
-120 cv					120	100					104			0.4	1.8	6.5	19
-150 cv					150	130					134			0.5	2.4	8.6	20
-SLRA4- 90 cv	3	4	10	3	90	70	—	34	—	12	74	0.4	1.6	2	21		
-120 cv					120	100					104			1.9	4.2	22	
E40-SLSA3/16- 90 cv	3	3/16	.31	.06	3.55	2.76	—	1.34	—	0.59	2.91	0.8	1.7	2.9	23		
-120 cv					4.73	3.94					4.09			1.9	6.5	24	
-150 cv					5.91	5.12					5.28			1.1	2.6	8.6	25
-SLRA3/16- 90 cv	3	3/16	.42	.12	3.55	2.76	—	1.34	—	0.59	2.91	0.8	1.7	2	26		
-120 cv					4.73	3.94					4.09			0.9	2	4.2	27
E40-SLSA6- 50-M22	1	6	9	1.5	50	22	8	11.3	20	18	39	0.2	0.7	2.2	28		
- 70-M42					70	42		13.4			54			4.7	29		
- 85-M42					85	23	25	69	0.3		1.1	4.9	30				
-110-M67					110			67	16		94	1.2	8	31			
-SLRA6- 50-M22	1	6	12	3	50	22	8	14.3	26	18	39	0.2	0.7	1.2	32		
- 70-M42					70	42		16.4			54			0.3	0.8	2.3	33
- 85-M42					85	23	25	69	1.2		2.5	34					
-110-M67					110			67				19	94	0.4	4.1	35	

CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h				Scale model			
E40-SLSA6- 90 CV	3	6	9	1.5	90	70	—	34	—	18	74	0.3	1.6	2.5	36			
-120 CV					120	100					104	0.4	1.9	5.6	37			
-150 CV					150	130					134	0.5	2.5	7.7	38			
-SLRA6- 90 CV	3	6	13	3.5	90	70	—	34	—	18	74	0.4	1.7	1.7	39			
-120 CV					120	100					104	0.5	2.4	2.6	40			
E40-SLSA1/4- 90 CV	3	1/4	.37	.06	3.55	2.76	—	1.34	—	0.71	2.91	0.8	1.7	2.5	41			
-120 CV					4.73	3.94					4.09	0.9	2	5.6	42			
-150 CV					5.91	5.12					5.28	1.1	2.6	7.7	43			
-SLRA1/4- 90 CV	3	1/4	.53	.14	3.55	2.76	—	1.34	—	0.71	2.91	0.8	1.8	1.7	44			
-120 CV					4.73	3.94					4.09	1.0	2.5	2.6	45			
E40-SLSA 8- 60-M22	1	8	11	1.5	60	22	18	13.3	26	24	49	0.3	1	1.5	46			
- 80-M42					80	42		15.4			64			3.3	47			
-100-M42					100	38		25			84			1.5	3.8	48		
-SLRA 8- 50-M22	1	8	14	3	50	22	8	16.3	26	20	39	0.2	0.7	0.9	49			
- 85-M42					85	42	23	18.4			25		24	69	0.3	1.2	2.1	50
-100-M42					100	38	84	0.4			1.5		2.4	51				
-SLSA 8- 90 CV	3	8	11	1.5	90	70	—	34	—	24	74	0.3	1.7	2.2	52			
-120 CV					120	100					104		0.4	2	3.4	53		
-150 CV					150	130					134		0.5	3	5.1	54		
-SLRA 8- 90 CV	3	8	16	4	90	70	—	34	—	24	74	0.4	1.8	1.6	55			
-120 CV					120	100					104		0.5	2.5	2.4	56		
E40-SLSA5/16- 90 CV	3	5/16	.43	.06	3.55	2.76	—	1.34	—	0.94	2.91	0.8	1.7	2.2	57			
-120 CV					4.73	3.94					4.09		0.9	2.1	3.4	58		
-150 CV					5.91	5.12					5.28		1.1	2.8	5.1	59		
-SLRA5/16- 90 CV	3	5/16	.63	.16	3.55	2.76	—	1.34	—	0.94	2.91	0.9	2.2	1.6	60			
-120 CV					4.73	3.94					4.09		1.1	2.6	2.4	61		
E40-SLSA10- 60-M22	1	10	13	1.5	60	22	18	15.3	26	30	49	0.3	1	1.2	62			
- 80-M42					80	42		17.4			64		1.1	2.4	63			
-100-M42					100	38		25			89		1.5	3.1	64			
-SLRA10- 55-M22	1	10	16	3	55	22	13	18.3	26	25	44	0.3	0.9	0.8	65			
- 85-M42					85	42	23	20.4			25		30	64	1.2	1.7	66	
-100-M42					100	38	84	0.4			1.6		2.2	67				
-SLSA10- 90 CV	3	10	13	1.5	90	70	—	34	—	30	74	0.3	1.7	2	68			
-120 CV					120	100					104		0.4	2.4	3.2	69		
-150 CV					150	130					134		0.5	3.1	5	70		
-SLRA10- 90 CV	3	10	19	4.5	90	70	—	34	—	30	74	0.4	2.1	1.1	71			
-120 CV					120	100					104		0.5	2.9	2	72		
E40-SLSA3/8- 90 CV	3	3/8	.49	.06	3.55	2.76	—	1.34	—	1.18	2.91	0.8	1.8	2	73			
-120 CV					4.73	3.94					4.09		1.0	2.5	3.2	74		
-150 CV					5.91	5.12					5.28		1.2	3.2	5	75		
-SLRA3/8- 90 CV	3	3/8	.73	.185	3.55	2.76	—	1.34	—	1.18	2.91	0.9	2.3	1.1	76			
-120 CV					4.73	3.94					4.09		1.2	3	2	77		
E40-SLRA12- 55-M22	1	12	20	4	55	22	13	22.3	26	25	44	0.3	1	0.6	78			
- 85-M42					85	42	23	24.4			32		30	74	0.4	1.6	1.1	79
E40-SLRA16- 55-M22	1	16	26	5	55	22	13	28.3	34	32	44	0.3	1.2	0.4	80			
E40-SLRA20- 60-M40	2	20	32	6	60	40	—	34	—	38	49	0.4	1.6	0.4	81			


■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-E40-G2

Ⓜ P. 226

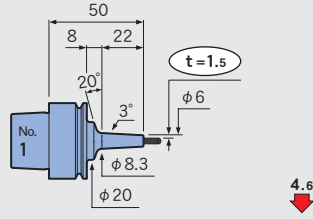


DMG MORI	HSC 30 linear
MITSUI SEIKI	VL30 / VL50
MATSUURA	LS-160 / LX-160 / LF-160 / LV-500
ROKU-ROKU	VISION/CEGA HC series
YASDA	YMC650
YAMAZAKI MAZAK	UD-400 5X

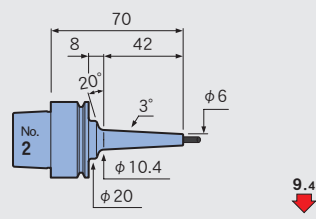


ϕ3

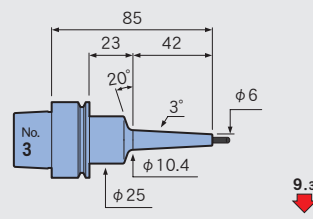
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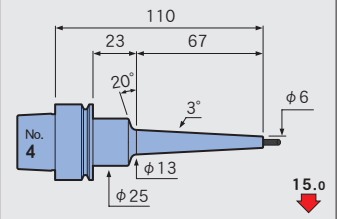
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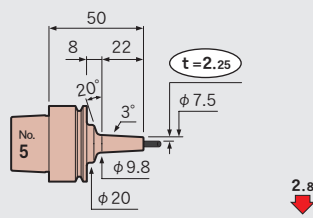
E40-SLSA3-85-M42



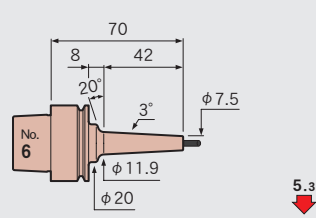
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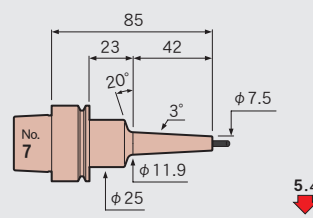
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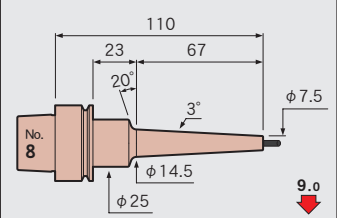
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E40-SLRA3-85-M42

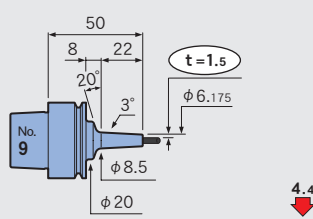


E40-SLRA3-110-M67



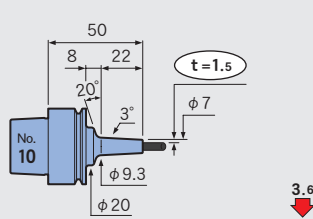
ϕ3.175

E40-SLSA3.175-50-M22

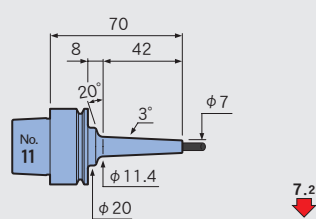


ϕ4

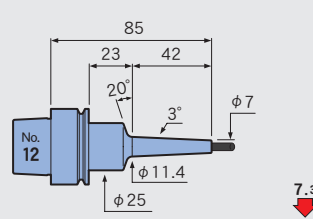
E40-SLSA4-50-M22



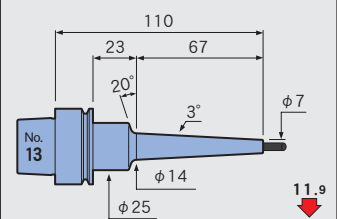
E40-SLSA4-70-M42



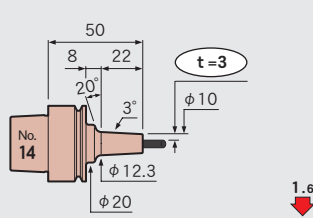
E40-SLSA4-85-M42



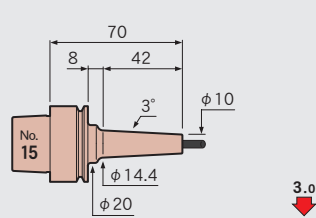
E40-SLSA4-110-M67



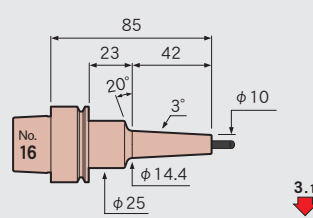
E40-SLRA4-50-M22



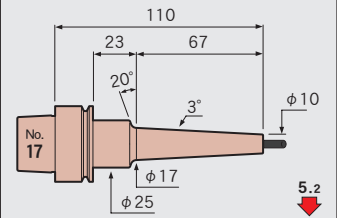
E40-SLRA4-70-M42



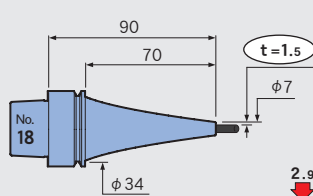
E40-SLRA4-85-M42



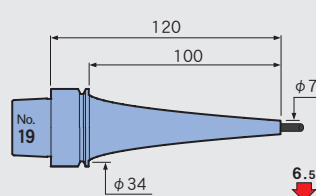
E40-SLRA4-110-M67



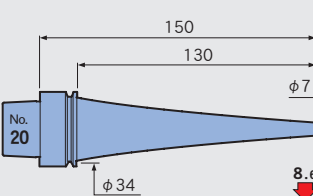
E40-SLSA4-90 CV



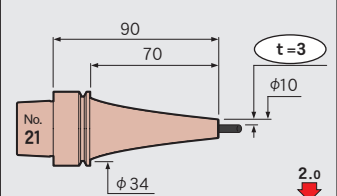
E40-SLSA4-120 CV



E40-SLSA4-150 CV



E40-SLRA4-90 CV



Feature

Shrink-fit Heater

MONO 3° MONO CURVE

MONO Series

2PIECE type

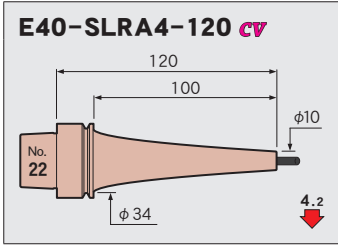
UNO

HYPER version

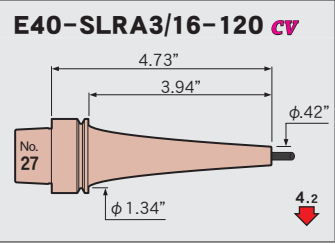
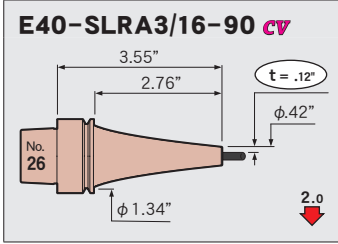
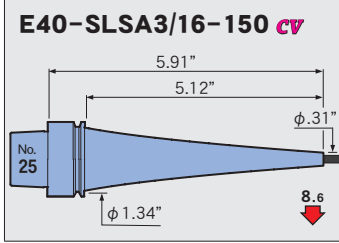
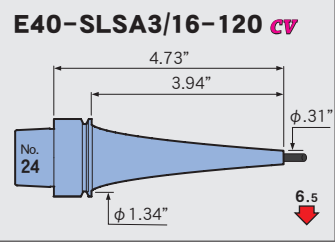
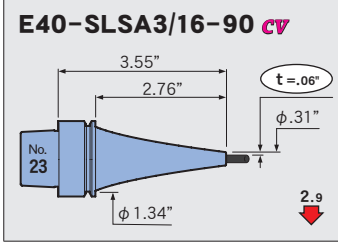
STRAIGHT anbor

OTHERS

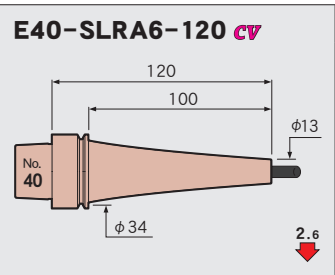
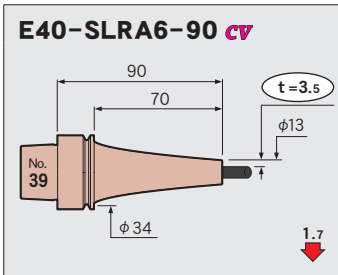
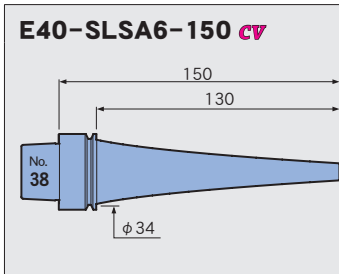
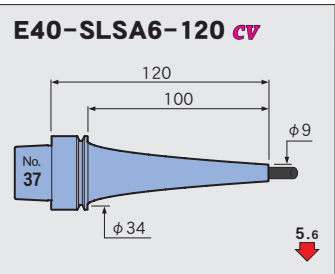
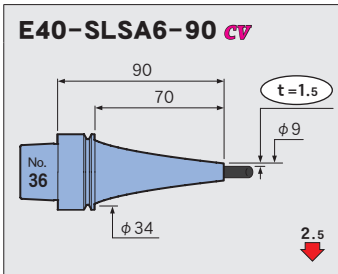
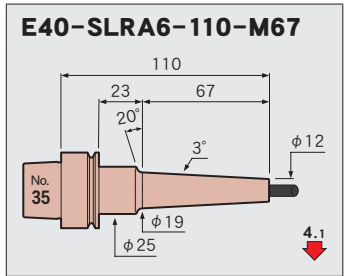
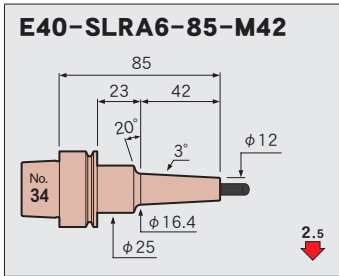
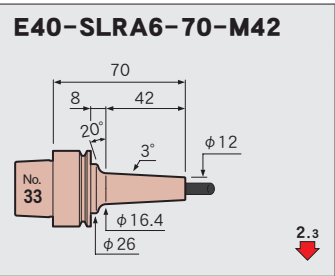
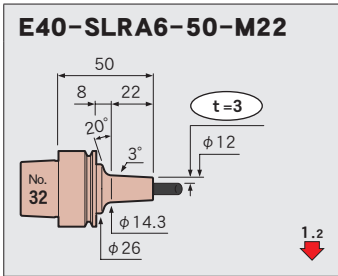
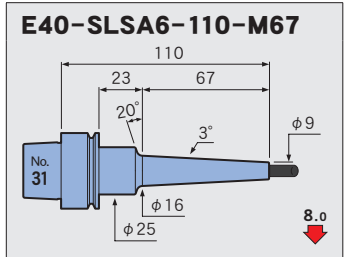
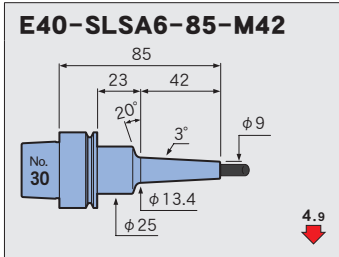
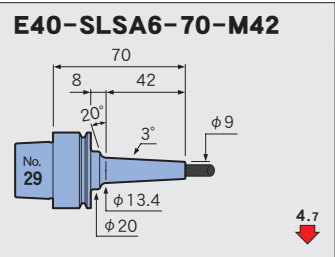
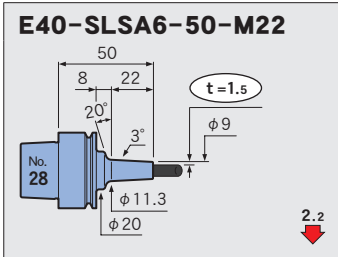
PERIPHERALS



$\phi 3/16$



$\phi 6$



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

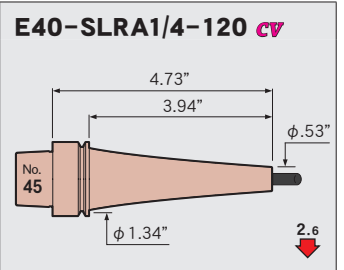
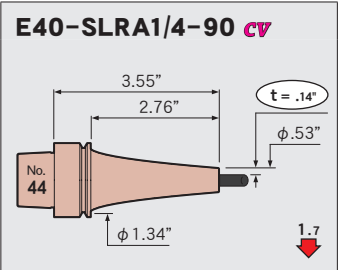
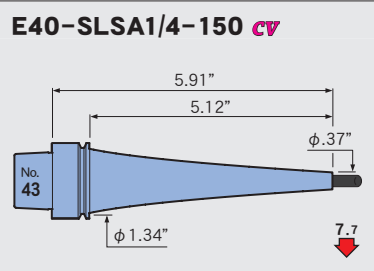
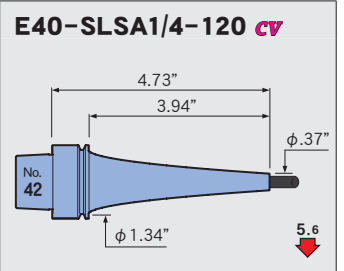
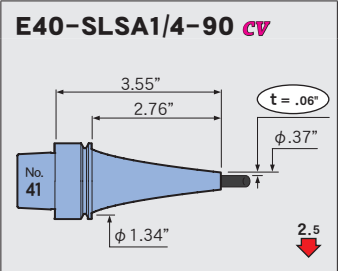
$\phi 1/4$

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series



$\phi 8$

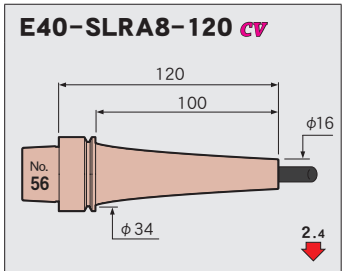
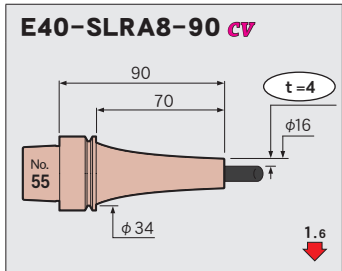
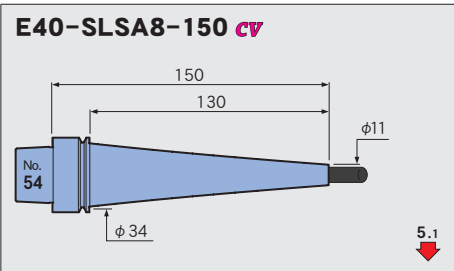
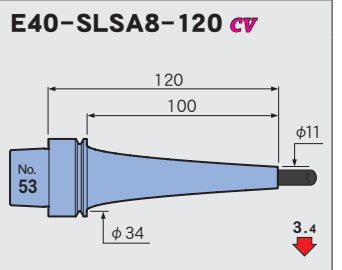
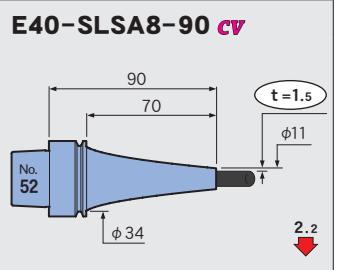
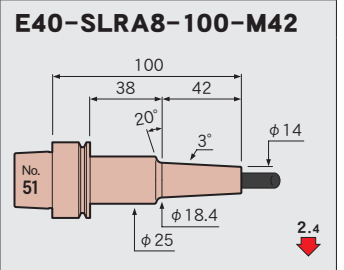
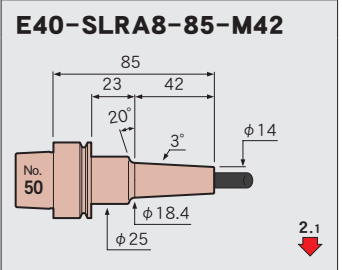
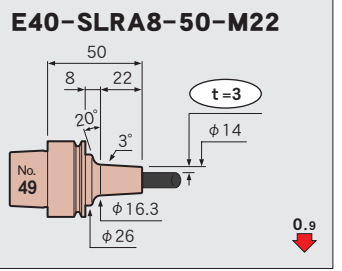
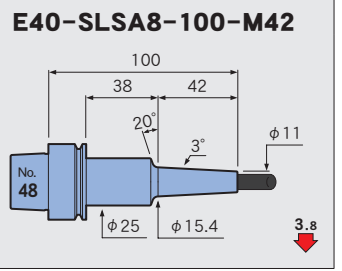
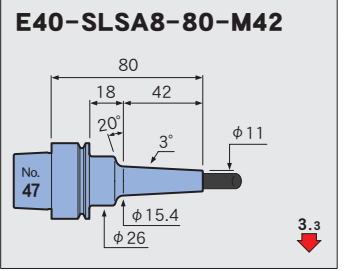
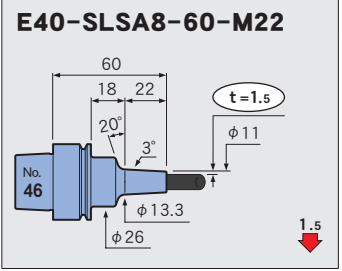
2PIECE type

UNO

HYPER version

STRAIGHT anbor

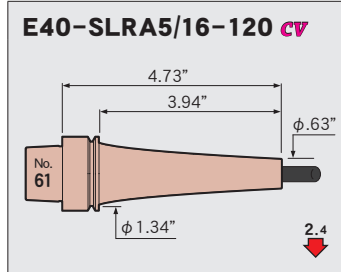
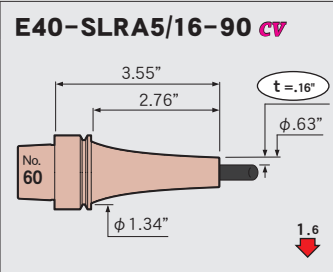
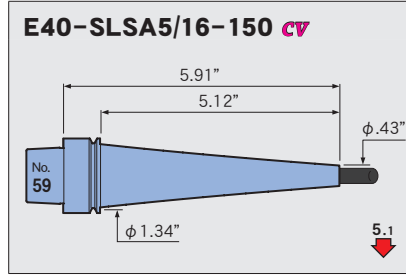
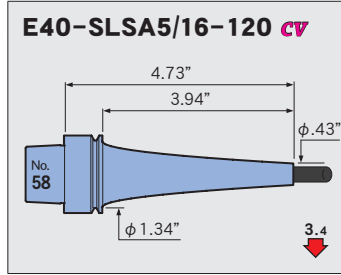
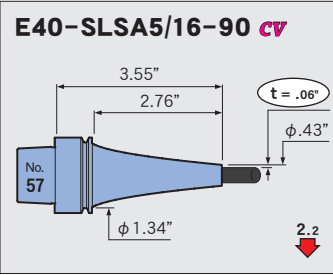
OTHERS



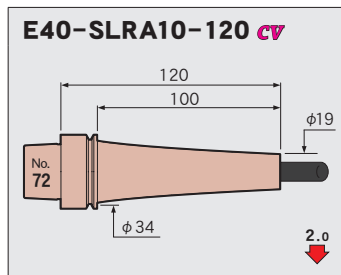
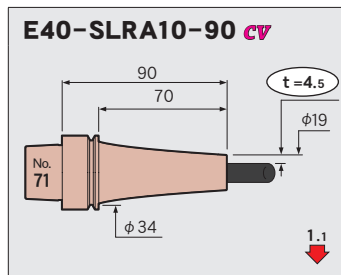
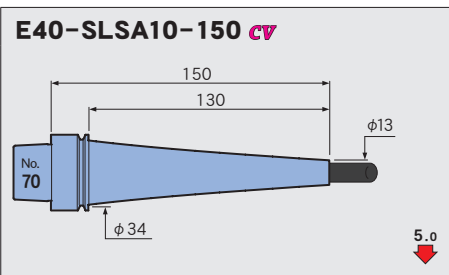
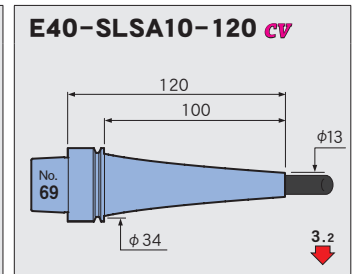
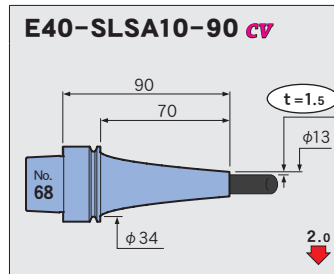
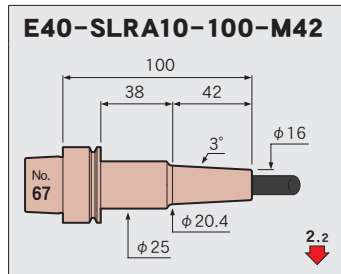
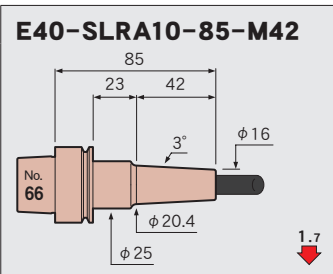
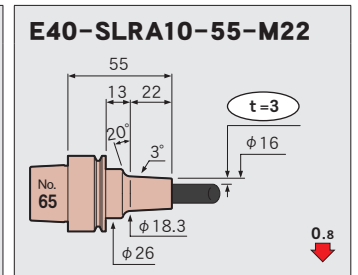
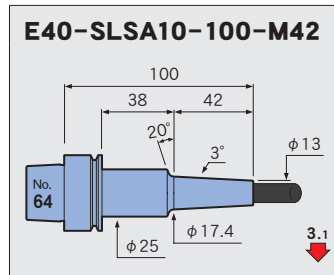
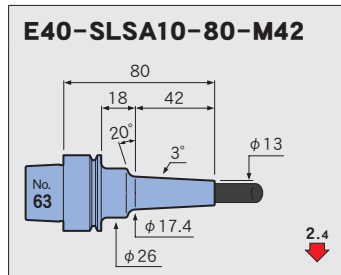
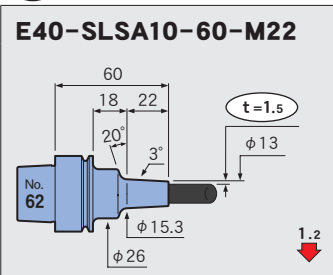
PERIPHERALS

Technical Information

$\phi 5/16$



$\phi 10$



Shrink-fit Heater

MONO Series
MONO 3°
MONO CURVE

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

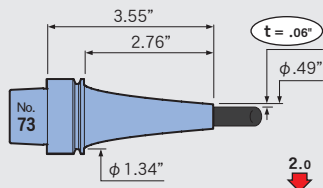
OTHERS

PERIPHERALS

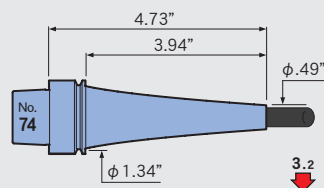
Technical
Information

$\phi 3/8$

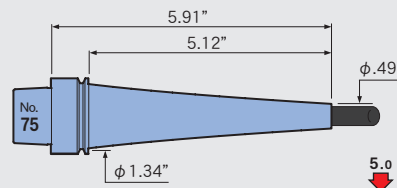
E40-SLSA3/8-90 CV



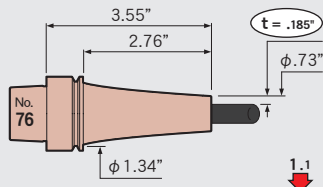
E40-SLSA3/8-120 CV



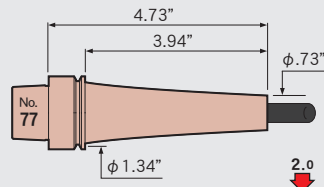
E40-SLSA3/8-150 CV



E40-SLRA3/8-90 CV

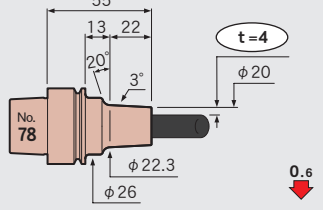


E40-SLRA3/8-120 CV

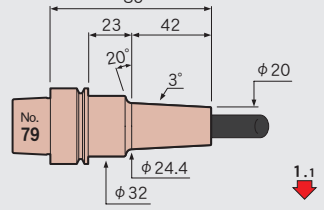


$\phi 12$

E40-SLRA12-55-M22

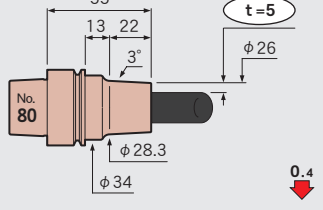


E40-SLRA12-85-M42



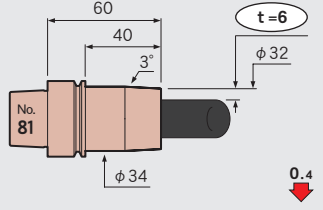
$\phi 16$

E40-SLRA16-55-M22



$\phi 20$

E40-SLRA20-60-M40



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER version

STRAIGHT arbor

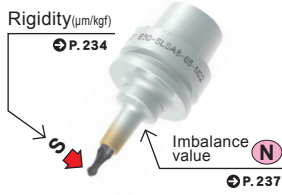
OTHERS

PERIPHERALS

Technical Information

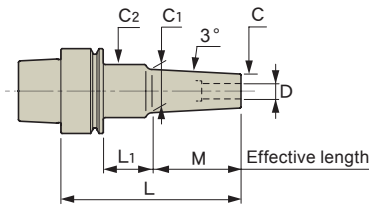
E50

MONO 3°



E50-SLSA8-65-M22

Fig. 1

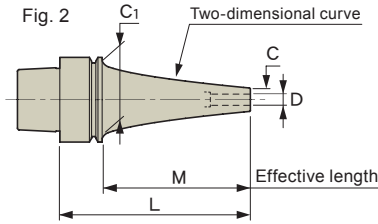


MONO CURVE CV



E50-SLSA6-150 cv

Fig. 2



Caution

- The coolant duct is not installed in a holder. Consult us if you need it.
- Setting cutters... Be sure to insert the tool beyond the safety mark.

Compatibility table for HRD-01S

[O] Available [X] Not available

CV : Curve

Thickness

CODE	Fig.	ϕD	ϕC	t	L	M	L ₁	ϕC_1	ϕC_2	H	h	Kg	N	S	Scale model	
E50-SLSA3- 60-M22	1	3	6	1.5	60	22	12	8.3	20	9	50	0.4	1.3	4.7	○	1
- 75-M22					75		27				25					61
- 80-M42					80	42	12	10.4	20		70	9.3	3			
- 95-M42					95	27	25	81	1.7		9.1	4				
-SLRA3- 75-M22	1	3	7.5	2.25	75	22	27	9.8	25	9	61	0.5	1.7	2.8	○	5
- 95-M42					95						42					11.9
-120-M67					120	67	14.5	106	1.8		8.9	7				
-150-M97					150	97	17.7	136	0.6		12.9	8				
-SLFB3- 75-M22	1	3	9.5	3.25	75	22	27	11.8	25	9	61	0.5	1.8	1.9	○	9
E50-SLSA4- 75-M22	1	4	7	1.5	75	22	27	9.3	25	12	61	0.5	1.3	3.6	○	10
- 95-M42					95						42					11.4
-SLRA4- 75-M22	1	4	10	3	75	22	27	12.3	25	12	61	0.5	1.7	1.7	○	13
- 95-M42					95						42					14.4
-120-M67					120	67	17	106	0.6		5.2	15				
-150-M97					150	97	20.2	135	0.7		7.8	16				
-SLFB4- 75-M22	1	4	12	4	75	22	27	14.3	25	12	61	0.5	1.9	1.4	○	12
-SLSA4- 90 CV	2	4	7	1.5	90	64	—	42	—	12	74	0.6	2.2	1.8	○	17
-120 CV					120						94					104
-150 CV					150	124	134	0.7	3.3		6	19				
-180 CV					180	154	164	0.8	3.5		12	20				
-SLRA4-120 CV	2	4	10	3	120	94	—	42	—	12	104	0.7	2.8	2.7	○	21
-150 CV					150						124					134



CODE	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg lbs	N	S	Scale model
E50-SLSA3/16- 90 CV	2	3/16	.31	.06	3.55	2.52	—	1.65	—	0.59	2.83	1.4	2.6	1.7	23
-120 CV					4.73	3.71					4.02	1.4	2.8	4.2	24
-150 CV					5.91	4.89					5.20	1.7	3.5	6	25
-180 CV					7.09	6.07					6.38	1.7	3.7	12	26
-SLRA3/16-120 CV	2	3/16	.42	.12	4.73	3.71	—	1.65	—	0.59	4.02	1.6	3.4	2.7	27
-150 CV					5.91	4.89					5.20	1.7	3.6	4.1	28
E50-SLSA6- 75-M22	1	6	9	1.5	75	22	27	11.3	25	18	61	0.5	1.3	2.3	29
- 95-M42					95	42		13.4			81		1.6	4.8	30
-120-M67					120	67		16			106		1.8	8.1	31
-150-M97					150	97		19.2	32		135	0.6	2.3	11	32
-SLSB6- 95-M42	1	6	10	2	95	42	27	14.4	25	18	81	0.5	1.8	3.7	33
-120-M67					120	67		17			106	0.6		6.2	34
-150-M97					150	97		20.2	32		135	0.7	2.3	8.5	35
-SLRA6- 75-M22	1	6	12	3	75	22	27	14.3	25	18	61	0.5	1.5	1.3	36
- 95-M42					95	42		16.4			81		1.8	2.5	37
E50 -120-M67					120	67		19			106	0.6	1.9	4.1	38
-SLRB6- 95-M42	1	6	14	4	95	42	27	18.4	32	18	80	0.6	2.2	1.6	39
-SLFB6- 75-M22	1	6	14	4	75	22	27	16.3	32	18	60	0.6	2.1	1	40
-SLSA6- 90 CV	2	6	9	1.5	90	64	—	42	—	18	74	0.6	2.3	1.6	41
-120 CV					120	94					104		2.7	3.5	42
-150 CV					150	124					134	0.7	3.4	5.4	43
-180 CV					180	154					164	0.9	4.2	7.6	44
-SLRA6-120 CV	2	6	13	3.5	120	94	—	42	—	18	104	0.8	3.3	1.8	45
-150 CV					150	124					132	0.9	4	2.7	46
E50-SLSA1/4- 90 CV	2	1/4	.37	.06	3.55	2.52	—	1.65	—	0.71	2.83	1.4	2.6	1.6	47
-120 CV					4.73	3.71					4.02	1.4	2.9	3.5	48
-150 CV					5.91	4.89					5.20	1.7	3.6	5.4	49
-180 CV					7.09	6.07					6.38	1.9	4.3	7.6	50
-SLRA1/4-120 CV	2	1/4	.53	.14	4.73	3.71	—	1.65	—	0.71	4.02	1.6	3.4	1.8	51
-150 CV					5.91	4.89					5.20	2	4.2	2.7	52
E50-SLSA8- 65-M22	1	8	11	1.5	65	22	17	13.3	26	24	49	0.5	1.5	1.5	53
- 75-M22					75		27	15.4	25		61		1.6	1.6	54
- 85-M42					85	42	17		26		67			3.2	55
- 95-M42					95		27		25		81		2.2	3.5	56
-120-M67					120	67		18	32		105	0.6	2.3	5.4	57
-150-M97					150	97		21.2			132	0.7	2.4	8.1	58
-SLSB8- 95-M42	1	8	13	2.5	95	42	27	17.4	32	24	80	0.6	2.2	2.1	59
-120-M67					120	67		20			105		2.3	3.5	60
-150-M97					150	97		23.2			135	0.7	2.4	5.3	61



CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h		N	S		Scale model	
E50-SLRA8- 75-M22	1	8	14	3	75	22	27	16.3	25	24	61	0.5	1.5	1.1		63	
- 95-M42					95	42		18.4			81		1.8	2		64	
-SLRB8- 95-M42	1	8	18	5	95	42	27	22.4	32	24	80	0.6	2.2	1.1		65	
-120-M67					120	67		25			105		0.7	2.3		1.7	66
-SLFB8- 75-M22	1	8	18	5	75	22	27	20.3	32	24	60	0.6	2.2	0.7		67	
-SLSA8- 90 CV	2	8	11	1.5	90	64	—	42	—	24	74	0.6	2.5	1.4		68	
-120 CV					120	94					104		0.7	3.2		2.2	69
E50 -150 CV					150	124					134			3.5		4.9	70
-180 CV					180	154					164		0.8	4.2		7.1	71
-SLRA8-120 CV	2	8	16	4	120	94	—	42	—	24	102	0.8	3.8	1.3		72	
-150 CV					150	124					132		0.9	4		2.7	73
E50-SLSA5/16- 90 CV	2	5/16	.43	.06	3.55	2.52	—	1.65	—	0.94	2.83	1.4	2.6	1.4		74	
-120 CV					4.73	3.71					4.02		1.6	3.4		2.2	75
-150 CV					5.91	4.89					5.20		1.7	3.6		4.9	76
-180 CV					7.09	6.07					6.38		1.9	4.4		7.1	77
-SLRA5/16-120 CV	2	5/16	.63	.16	4.73	3.71	—	1.65	—	0.94	4.02	1.8	4	1.3		78	
-150 CV					5.91	4.89					5.20		1.9	4.2		2.7	79
E50-SLSA10- 65-M22	1	10	13	1.5	65	22	17	15.3	26	30	49	0.5	1.5	1.1		80	
- 75-M22					75		27		25		61		1.6	1.3		81	
- 85-M42					85	42	17	17.4	26		64			2.4		82	
- 95-M42					95		27		25		81		2.2	2.6		83	
-120-M67					120	67		20	32		105		0.6	2.3		4.1	84
-150-M97					150	97		23.2			64		0.7	2.5		6.2	85
-SLSB10- 95-M42	1	10	16	3	95	42	27	20.4	32	30	80	0.6	2.2	1.5		86	
-120-M67					120	67		23			105		0.7	2.4		2.4	87
-150-M97					150	97		26.2			135			2.5		3.7	88
-SLRA10- 75-M22	1	10	16	3	75	22	27	18.3	25	30	60	0.6	1.5	1		89	
-SLRB10- 95-M42	1	10	22	6	95	42	27	26.4	32	30	80	0.7	2.3	0.9		90	
-120-M67					120	67		29			42		107	0.8		3.2	1.1
-SLFB10- 75-M22	1	10	22	6	75	22	27	24.3	32	30	60	0.6	2.2	0.6		92	
-SLSA10- 90 CV	2	10	13	1.5	90	64	—	42	—	30	74	0.6	2.5	1.3		93	
-120 CV					120	94					104		0.7	3.3		2.1	94
-150 CV					150	124					134		0.8	4.1		3.4	95
-180 CV					180	154					162			4.3		6.9	96
-SLRA10-150 CV	2	10	19	4.5	150	124	—	42	—	30	132	0.9	4.4	2.2		97	
E50-SLSA3/8- 90 CV	2	3/8	.49	.06	3.55	2.52	—	1.65	—	1.18	2.83	1.4	2.6	1.3		98	
-120 CV					4.73	3.71					4.02		1.6	3.4		2.1	99
-150 CV					5.91	4.89					5.20		1.9	4.2		3.4	100
-180 CV					7.09	6.07					6.38		1.9	4.5		6.9	101
-SLRA3/8-150 CV	2	3/8	.73	.185	5.91	4.89	—	1.65	—	1.18	5.20	2.0	4.7	2.2		102	



Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical information

CODE	Fig.	ϕD	ϕC	t	L	M	L ₁	ϕC_1	ϕC_2	H	h	Kg	N	S	Scale model
E50-SLSA12- 65-M22	1	12	15	1.5	65	22	17	17.3	26	25	49	0.5	1.6	0.9	103
- 75-M22					75		27		25	30	60		1.7	1.1	104
E50 - 95-M42					95	42		19.4	32		80		2.2	1.9	105
-120-M67					120	67		22			105	0.6	2.4	3.3	106
-SLSB12- 95-M42	1	12	19	3.5	95	42	27	23.4	32	30	80	0.6	2.3	1.2	107
-120-M67					120	67		26			105	0.7	2.5	1.9	108
-150-M97					150	97		29.2			135	0.9	3.5	2.5	109
-SLRA12- 75-M22	1	12	20	4	75	22	27	22.3	25	30	62	0.6	1.6	0.9	110
-SLRB12- 95-M42	1	12	26	7	95	42	27	30.4	42	30	82	0.8	3.1	0.6	111
-120-M67					120	67		33			107	0.9	3.3	0.9	112
-SLFB12- 75-M22	1	12	26	7	75	22	27	28.3	42	30	62	0.7	3	0.4	113
E50-SLSB16- 95-M42	1	16	24	4	95	42	27	28.4	42	32	82	0.7	3.2	0.7	114
-120-M67					120	67		31			107	0.8	3.5	1.2	115
-SLRA16- 60-M22	1	16	26	5	60	22	12	28.3	34	32	44	0.6	1.7	0.4	116
-SLRB16- 75-M22	1	16	32	8	75	22	27	34.3	42	32	62	0.7	3	0.4	117
-SLFB16- 75-M22	1	16	32	8	75	22	27	34.3	42	32	62	0.7	3	0.4	118
E50-SLSB20- 95-M42	1	20	29	4.5	95	42	27	33.4	42	40	82	0.7	3.3	0.6	119
-SLRA20- 65-M22	1	20	32	6	65	22	17	34.3	40	38	49	0.6	2.2	0.3	120

SLFB 

■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-E50-G2

● P.226



DMG MORI
MAKINO
NIDEC
ROKU-ROKU

HSC 70 linear
V33i / D200Z
 $\mu V5$
ZEUS-86



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

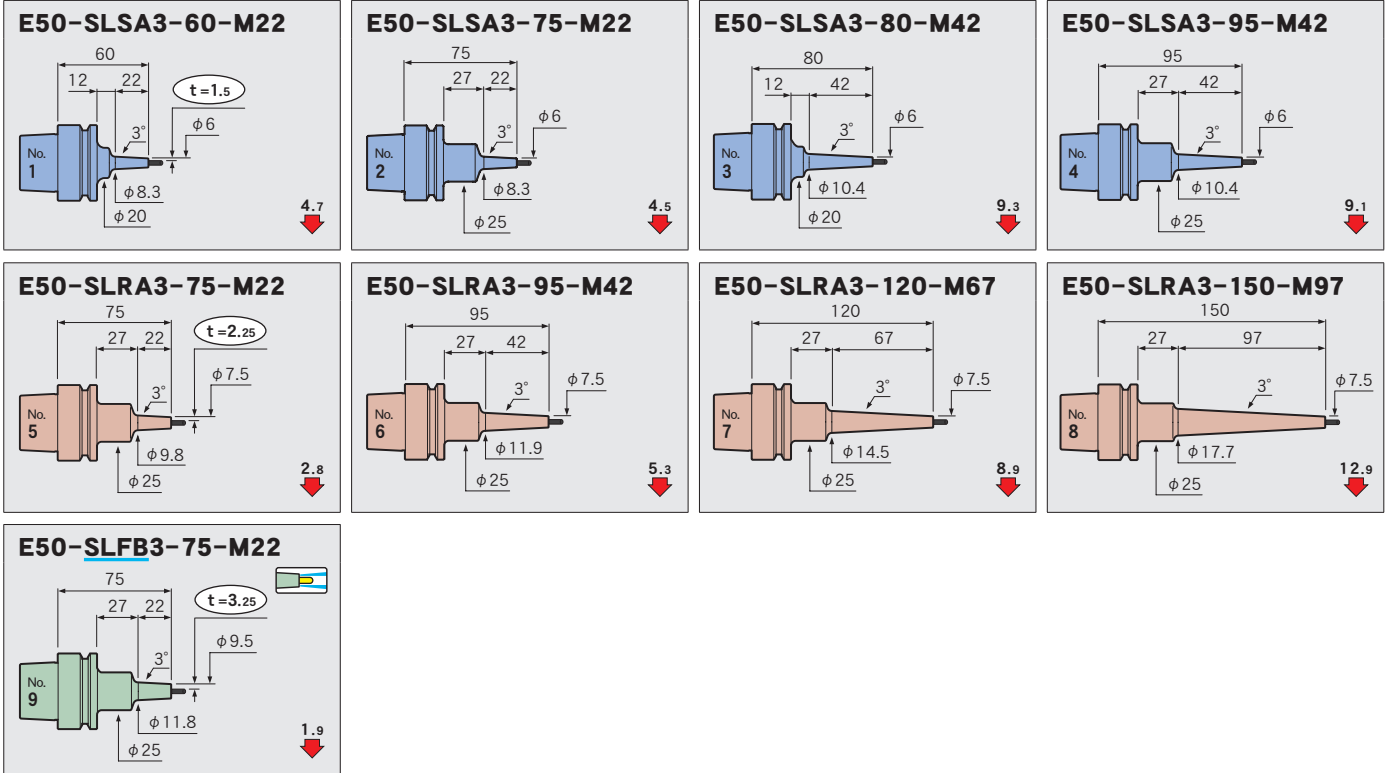
HYPER
versionSTRAIGHT
arbor

OTHERS

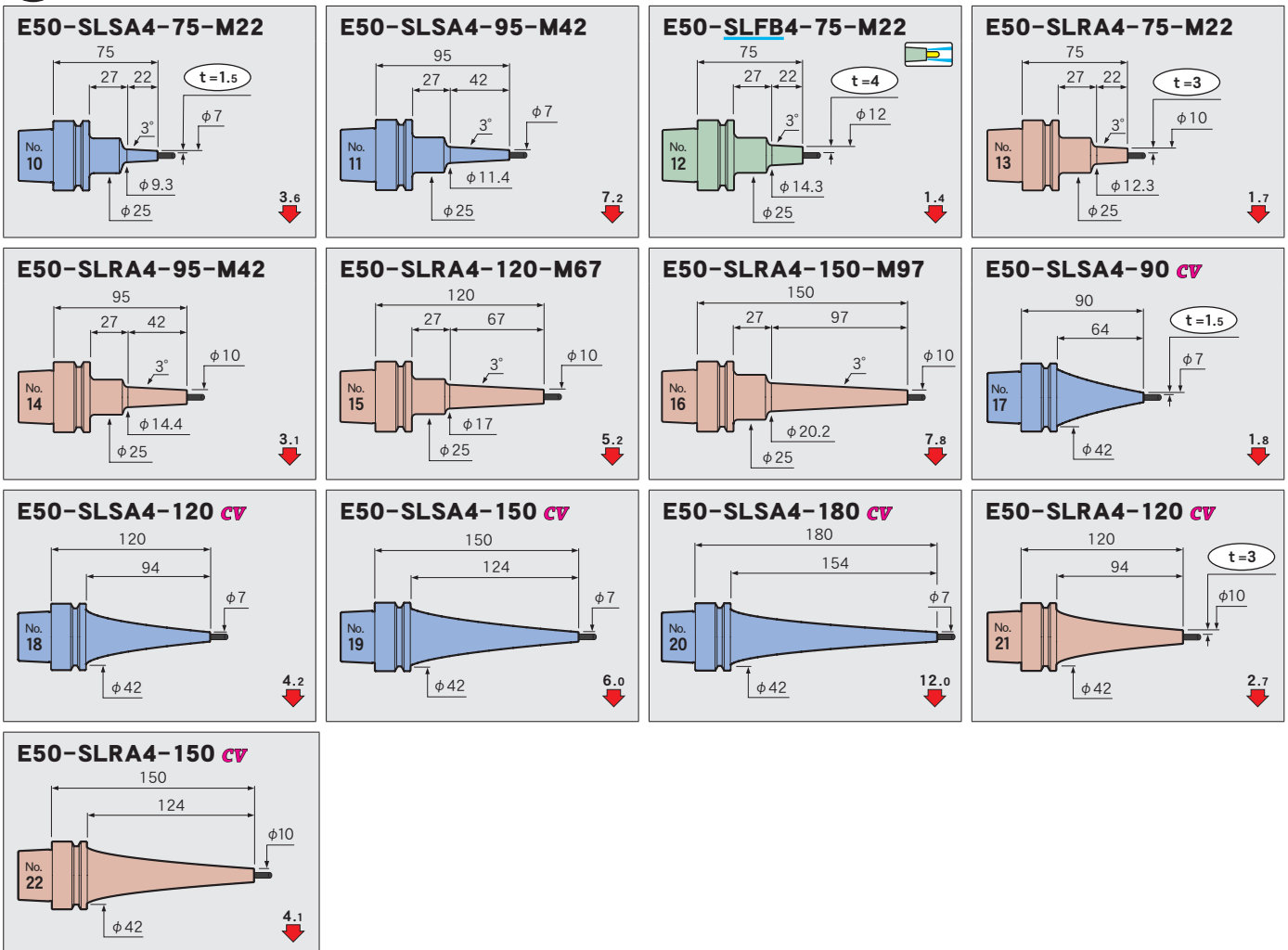
PERIPHERALS

Technical
Information

φ 3



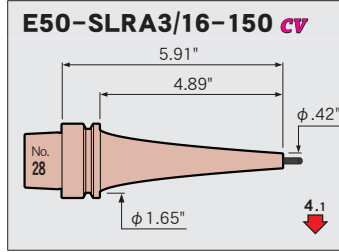
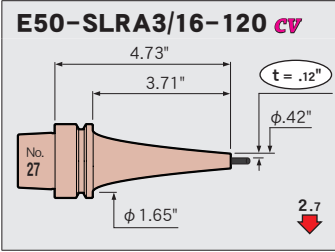
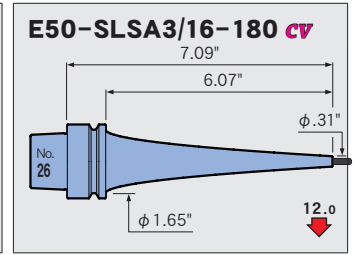
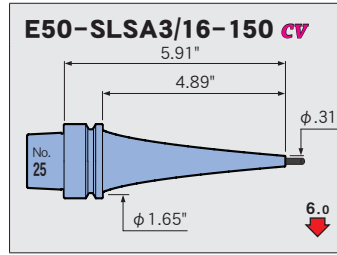
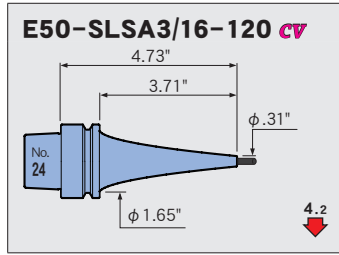
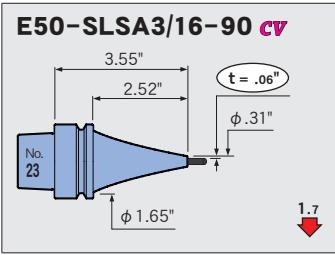
φ 4



Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

$\phi 3/16$

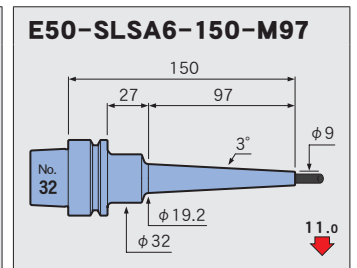
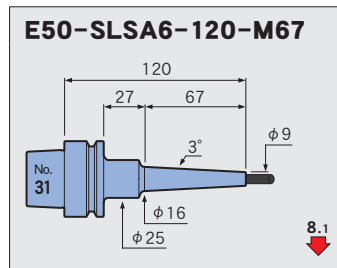
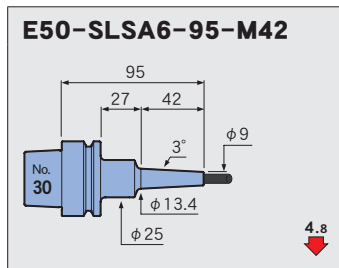
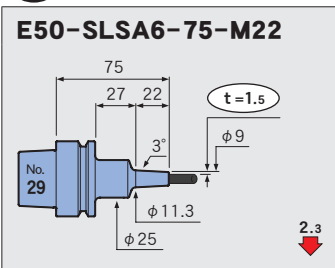
Feature
Shrink-fit Heater



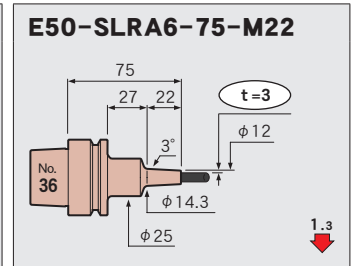
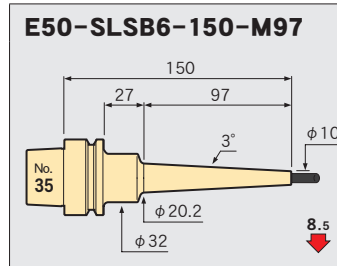
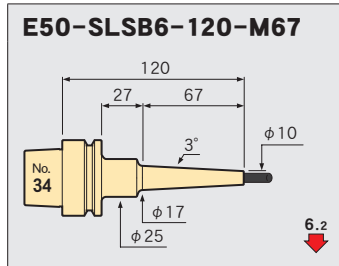
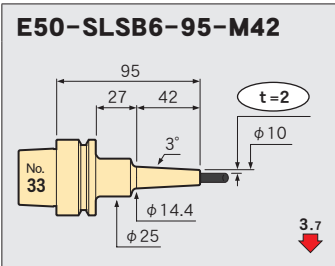
MONO 3°
MONO CURVE
MONO Series

2PIECE type

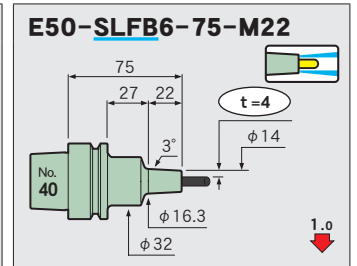
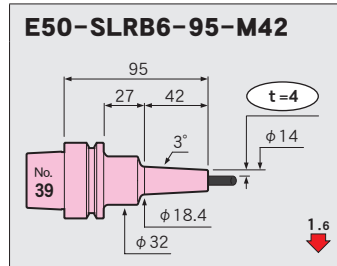
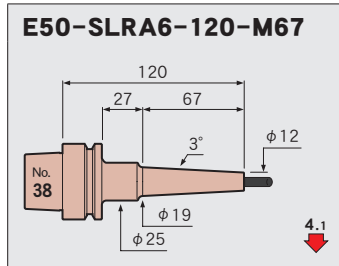
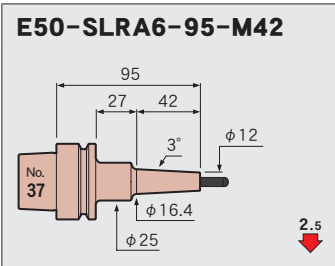
$\phi 6$



UNO

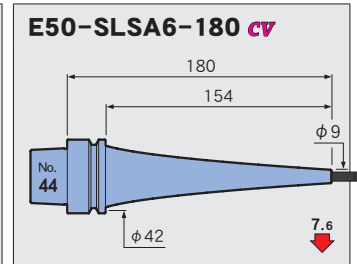
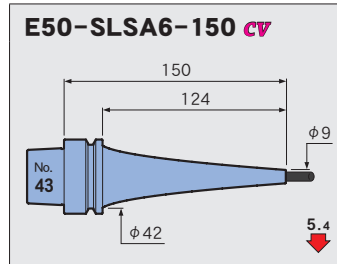
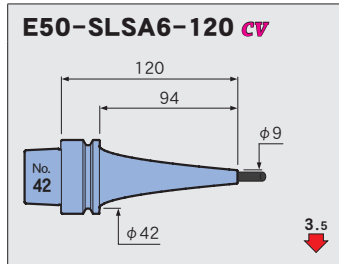
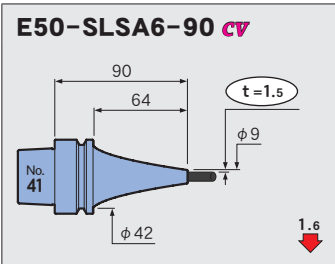


HYPER version



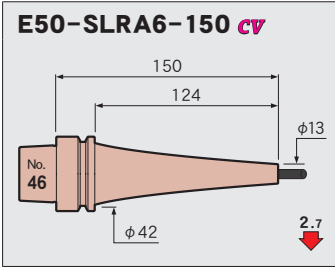
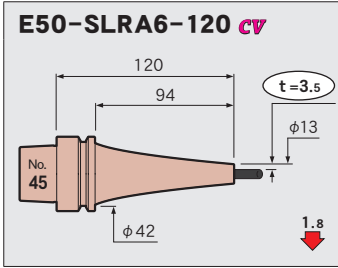
STRAIGHT anbor

OTHERS

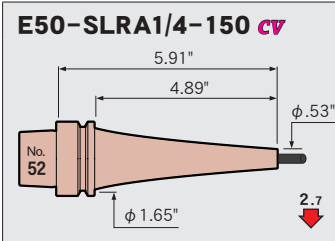
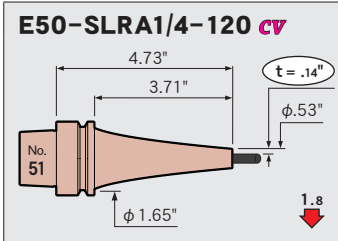
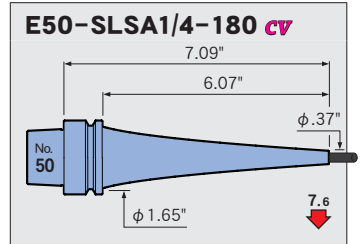
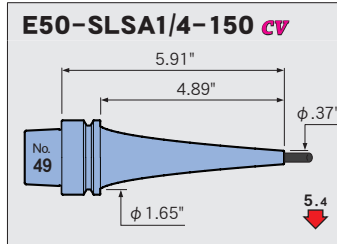
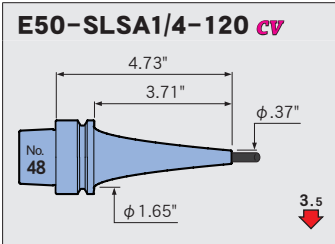
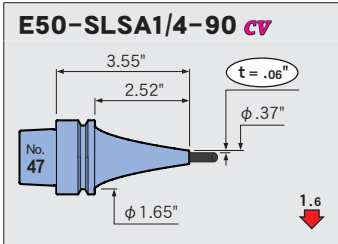


PERIPHERALS

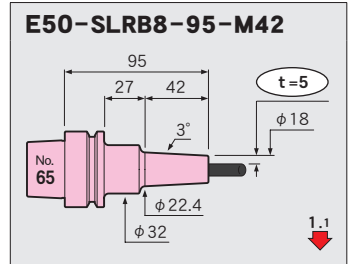
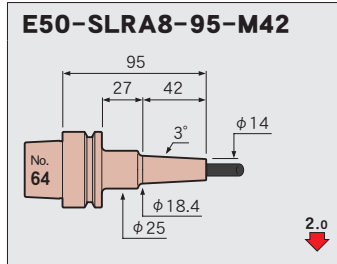
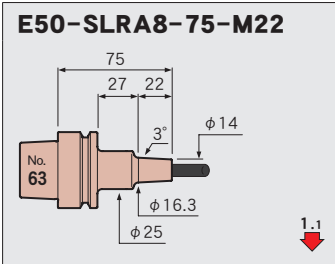
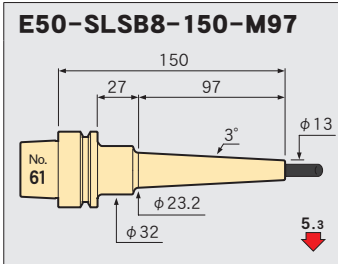
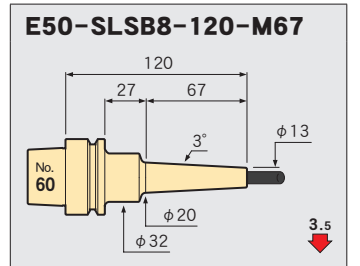
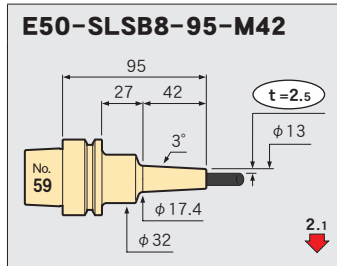
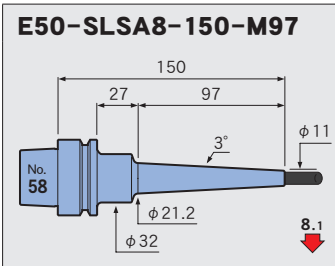
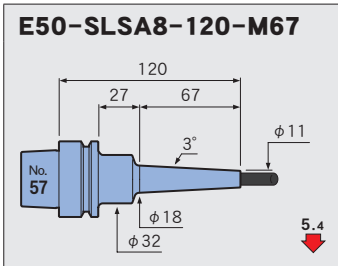
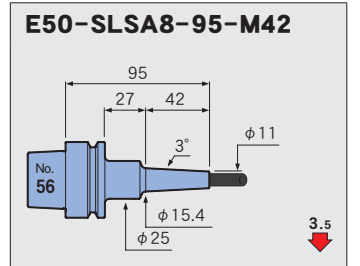
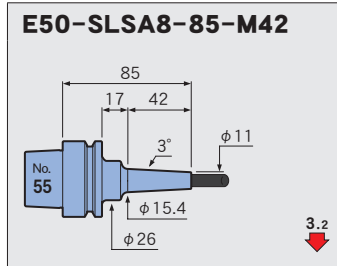
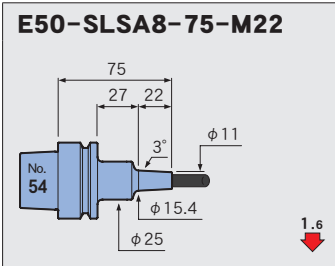
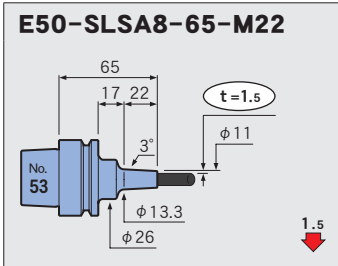
Technical Information

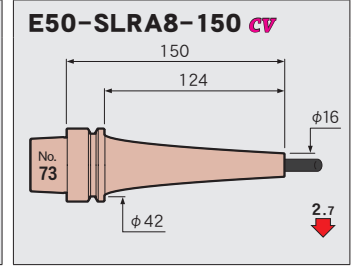
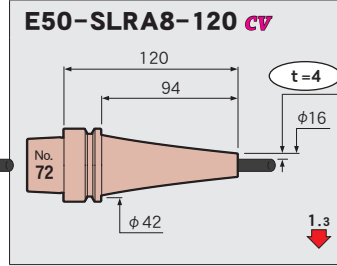
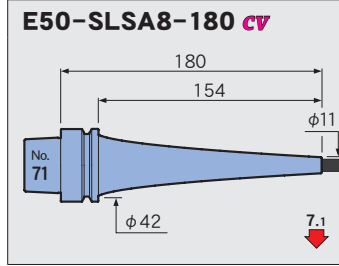
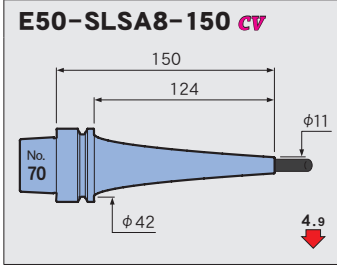
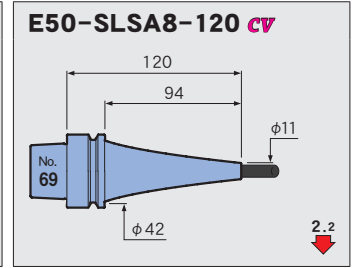
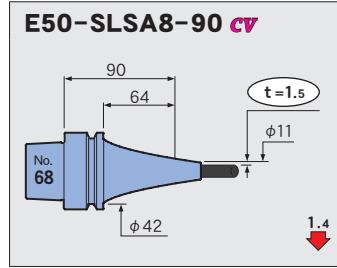
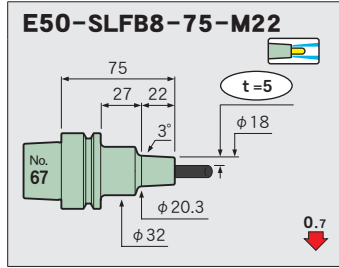
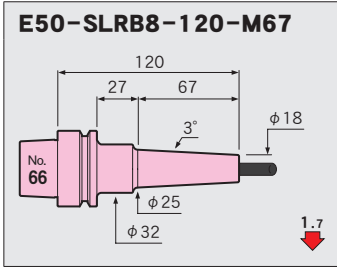


φ 1/4

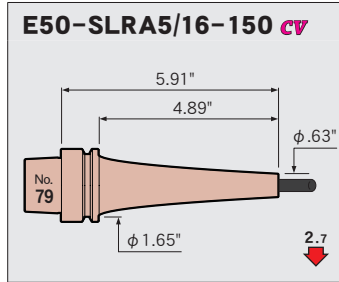
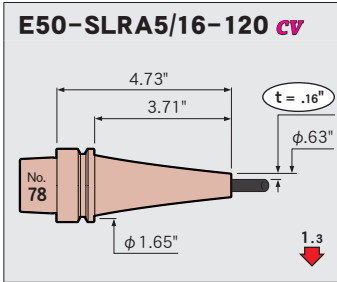
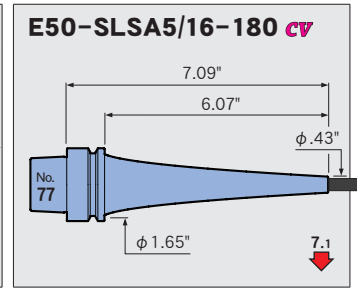
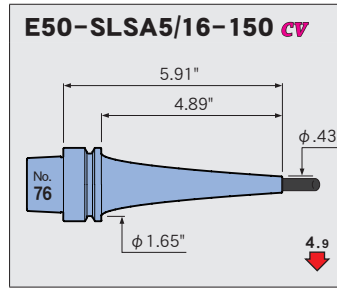
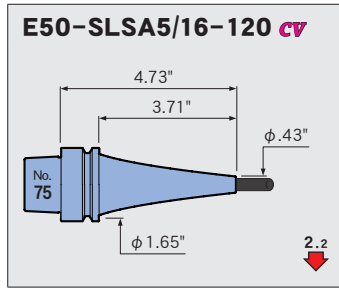
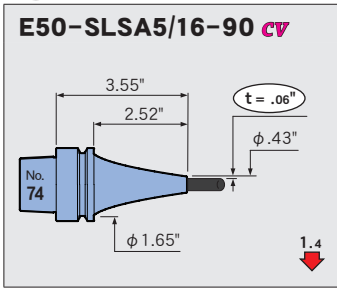


φ 8

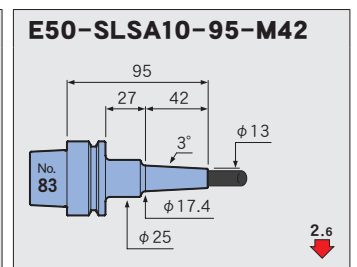
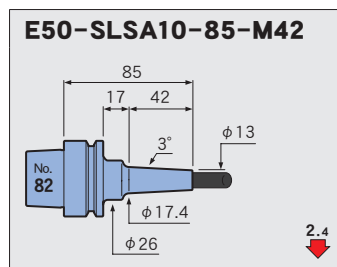
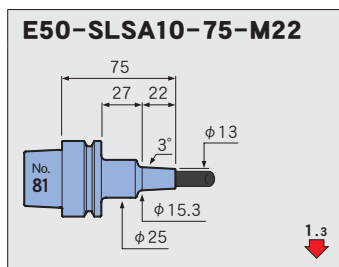
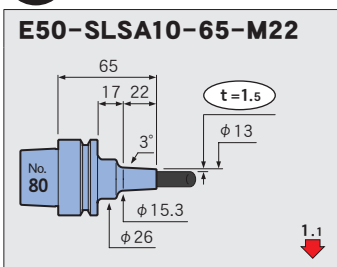


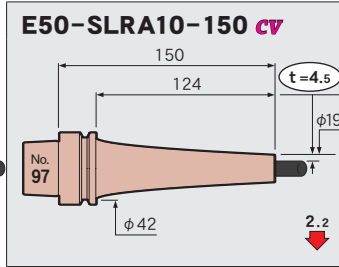
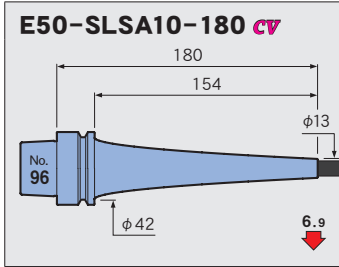
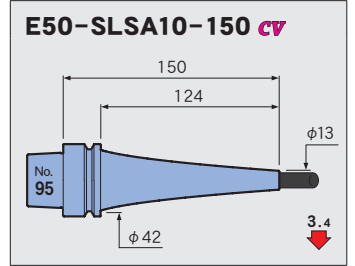
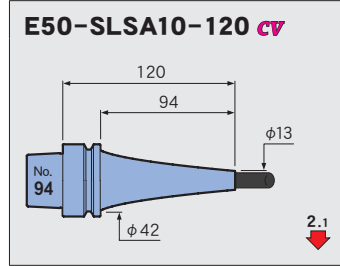
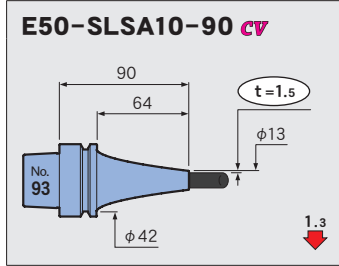
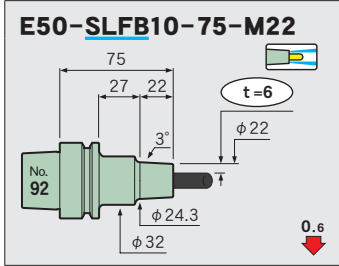
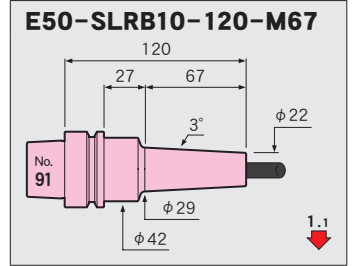
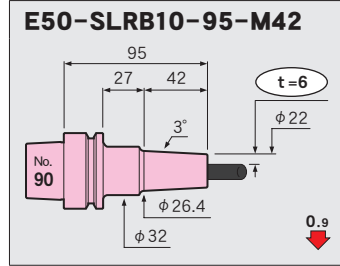
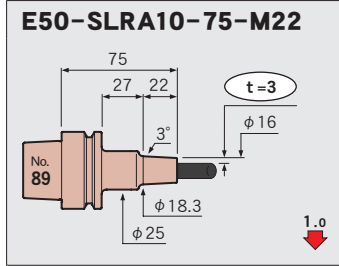
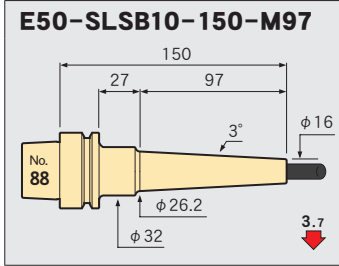
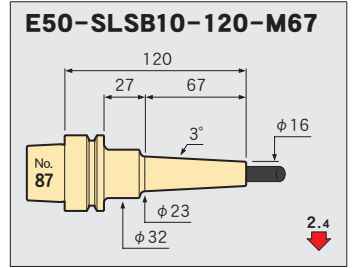
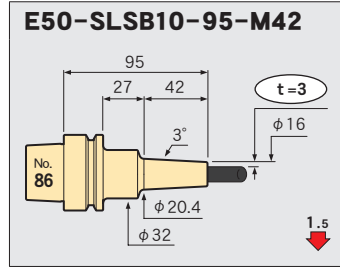
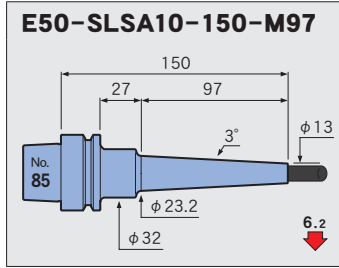
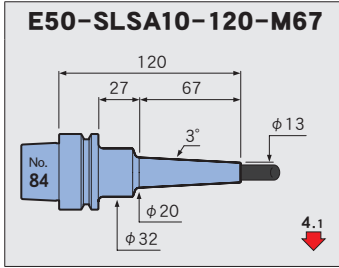


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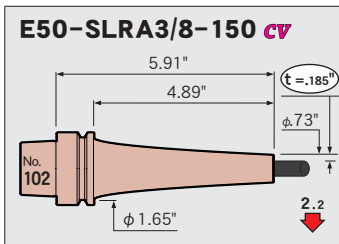
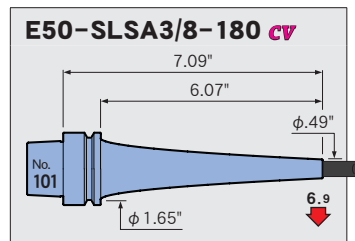
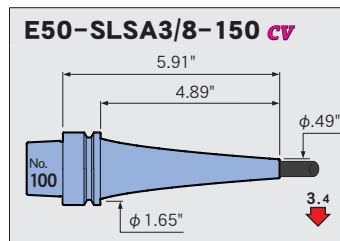
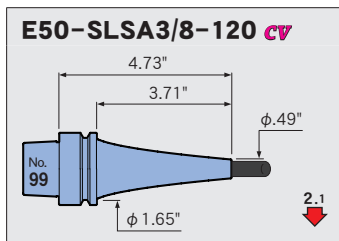
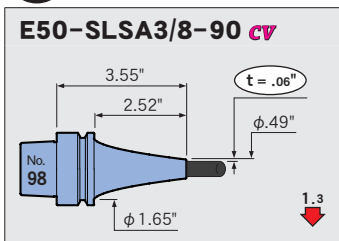


φ 10





φ 3/8



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

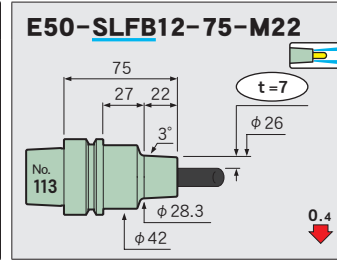
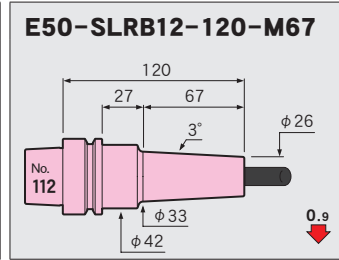
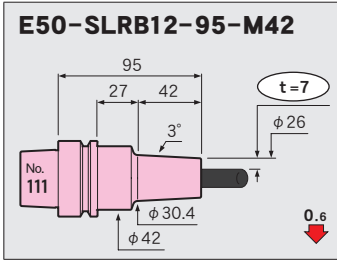
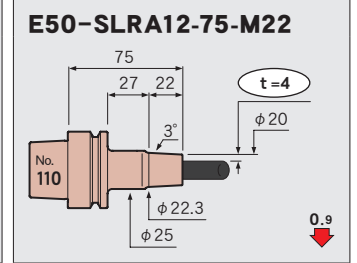
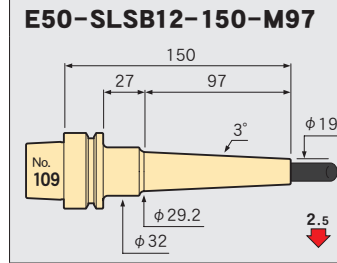
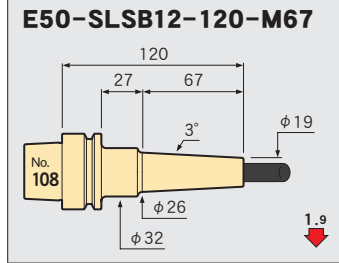
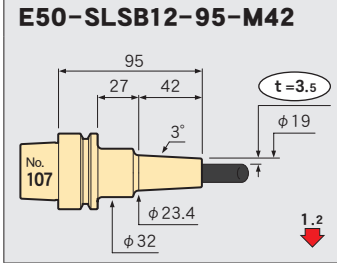
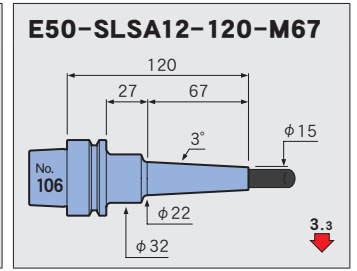
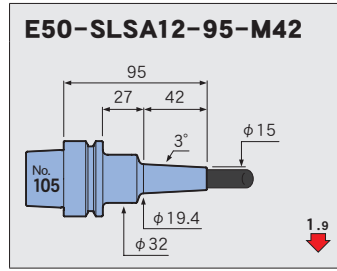
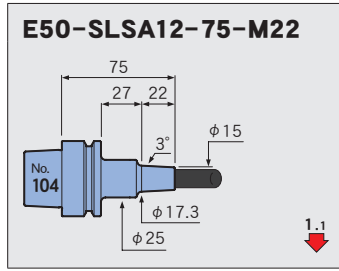
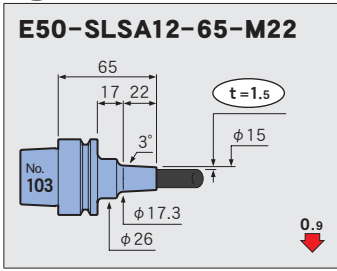
OTHERS

PERIPHERALS

Technical
Information

φ12

Feature
Shrink-fit Heater

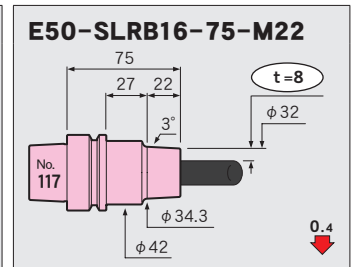
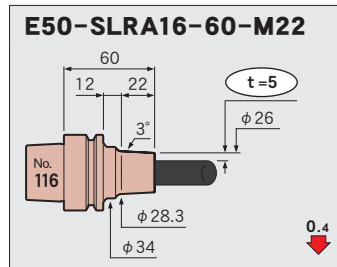
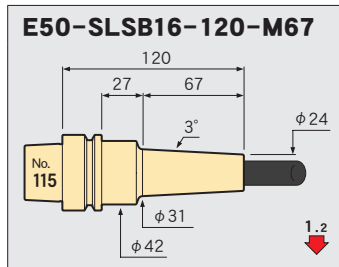
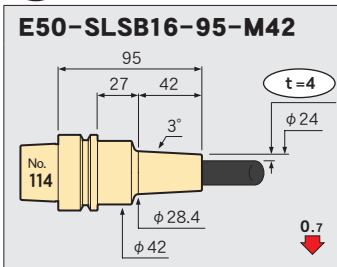


MONO 3° MONO CURVE
MONO Series

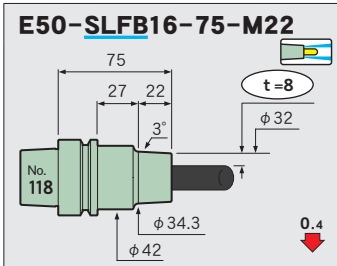
2PIECE type

φ16

UNO



HYPER version

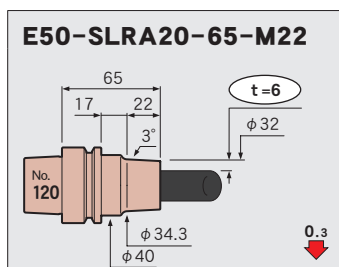
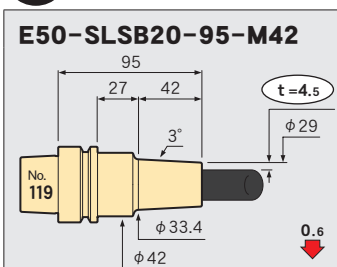


STRAIGHT arbor

OTHERS

φ20

PERIPHERALS



Technical Information

F63

MONO 3°

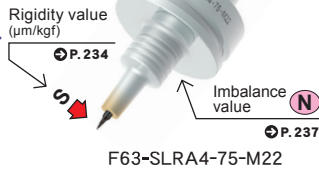
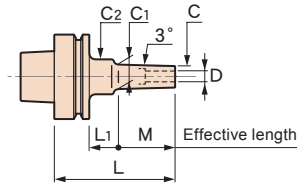
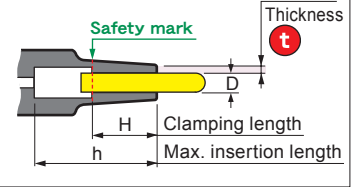


Fig. 1



Caution

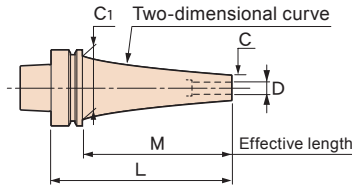
- The coolant duct is not installed in a holder. Consult us if you need it.
- Setting cutters: Be sure to insert the tool beyond the safety mark.



MONO CURVE CV



Fig. 2



Compatibility table for HRD-01S

- [O] Available [x] Not available
- [▲] Usable by raising the heating unit. →P.233
- [★] Use heating coil No. 2.

CV : Curve

Thickness

CODE	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg lbs	(N)	S	Scale model	
F63-SLSA3- 95-M42	1	3	6	1.5	95	42	27	10.4	25	9	78	0.7	1.8	9.1	○	2
-SLRA3- 75-M22	1	3	7.5	2.25	75	22	27		25	9	54	0.7	1.8	2.8	○	4
- 95-M42					95	42		11.9			78		1.9	5.3		5
-SLFB3- 75-M22	1	3	9.5	3.25	75	22	27	11.8	25	9	58	0.7	1.9	1.9	○	6
- 95-M42					95	42		13.9			78	0.8	2	3.2		7
-120-M67					120	67		16.5			103			5.4		8
F63-SLSA4- 95-M42	1	4	7	1.5	95	42	27	11.4	25	12	78	0.7	1.9	7.2	○	9
-SLRA4- 75-M22	1	4	10	3	75	22	27	12.3	25	12	58	0.7	1.8	1.7	○	10
- 95-M42					95	42		14.4			78	0.8	1.9	3.1		11
-SLFB4- 75-M22	1	4	12	4	75	22	27	14.3	25	12	58	0.7	2	1.3	○	12
- 95-M42					95	42		16.4			78	0.8		2.2		13
-120-M67					120	67		19			103		2.1	3.6		14
-SLSA4- 90 CV	2	4	7	1.5	90	64	—	53	—	12	65	0.9	2.7	1.8	○	15
-120 CV					120	94					95	1	3.6	2.7		16
-150 CV					150	124					125	1.2	4.4	4		17
-180 CV					180	154					154	1.3	5	6.6		18
-210 CV					210	184					185		5.3	11.6		19
-240 CV					240	214					214	1.6	6.5	14		20
-270 CV					270	244					245	1.9	8.8	11.9		21
-300 CV					300	274					275	2	9.7	15.9		22
-SLRA4-120 CV	2	4	10	3	120	94	—	53	—	12	95	1	3.6	1.9	○	23
-150 CV					150	124					125	1.1	4.4	2.9		24
-180 CV					180	154					155	1.4	6	3.3		25
-210 CV					210	184					185	1.5	6.2	5.6		26
F63-SLSA3/16- 90 CV	2	3/16	.31	.06	3.54	2.52	—	2.09	—	.59	2.56	2	2.8	2.0	○	27
-120 CV					4.72	3.70					3.74	2.3	3.6	2.6		28
-150 CV					5.91	4.88					4.92	2.6	4.5	4.0		29
-180 CV					7.09	6.06					6.06	2.7	5.2	6.5		30
-210 CV					8.27	7.24					7.24	3.2	6.4	8.4		31
-240 CV					9.45	8.43					8.43	3.6	7.6	10.6		32
-270 CV					10.63	9.61					9.61	4	8.9	13.2		33
-300 CV					11.81	10.79					10.83	4.5	10	16.1		34



CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg lbs	N	S	Scale model
F63-SLRA3/16-120 CV	2	3/16	.42	.12	4.72	3.70	—	2.09	—	.59	3.70	2.3	3.8	1.8	35
-150 CV					5.91	4.88					4.88	2.7	5	2.4	36
-180 CV					7.09	6.06					6.10	2.8	5.3	4.3	37
-210 CV					8.27	7.24					7.24	2.8	5.8	5.7	38
F63-SLSA6- 95-M42	1	6	9	1.5	95	42	27	13.4	25	18	78	0.7	1.9	4.8	40
-SLSB6- 95-M42	1	6	10	2	95	42	27	14.4	25	18	78	0.7	1.9	3.7	41
-SLRA6- 75-M22	1	6	12	3	75	22	27	14.3	25	18	58	0.7	1.8	1.3	42
- 95-M42					95	42		16.4			78	0.8	1.9	2.4	43
-SLFB6- 75-M22	1	6	14	4	75	22	27	16.3	32	18	58	0.8	2.2	1	44
-SLSA6 - 90 CV	2	6	9	1.5	90	64	—	53	—	18	65	0.9	2.8	1.6	45
-120 CV					120	94					95	1	3.6	2.3	46
-150 CV					150	124					125	1.2	4.4	3.6	47
-180 CV					180	154					154	1.3	5.2	5.7	48
-210 CV					210	184					184	1.5	6.4	7.3	49
-240 CV					240	214					214	1.6	6.7	12	50
-270 CV					270	244					245	2	9.7	8.5	51
-300 CV					300	274					275	2.2	10.6	11.7	52
-SLRA 6- 90 CV	2	6	13	3.5	90	64	—	53	—	18	65	1	3.4	0.8	53
-120 CV					120	94					95	1.2	4.3	1.2	54
-150 CV					150	124					125	1.3	5.2	1.9	55
-180 CV					180	154					155	1.4	6.1	2.8	56
-210 CV					210	184					185	1.5	6.6	4.8	57
-SLFA 6- 90 CV	2	6	13	3.5	90	64	—	53	—	18	65	1	3.4	0.8	58
-120 CV					120	94					95	1.2	4.3	1.2	59
-150 CV					150	124					125	1.3	5.2	1.9	60
-180 CV					180	154					155	1.4	6.1	2.8	61
-210 CV					210	184					185	1.5	6.6	4.8	62
F63-SLSA1/4- 90 CV	2	1/4	.37	.06	3.54	2.52	—	2.09	—	.71	2.56	2	2.9	1.6	63
-120 CV					4.72	3.70					3.74	2.2	3.6	2.4	64
-150 CV					5.91	4.88					4.92	2.5	4.5	3.7	65
-180 CV					7.09	6.06					6.10	2.8	5.4	5.5	66
-210 CV					8.27	7.24					7.24	3.4	7.2	7.5	67
-240 CV					9.45	8.43					8.43	3.6	7.8	9.6	68
-270 CV					10.63	9.61					9.65	4.2	9.1	11.3	69
-300 CV					11.81	10.79					10.79	4.7	11.2	11.8	70
-SLRA1/4- 90 CV	2	1/4	.53	.14	3.54	2.52	—	2.09	—	.71	2.52	2.2	3.5	0.8	71
-120 CV					4.72	3.70					3.74	2.6	4.4	1.2	72
-150 CV					5.91	4.88					4.92	2.8	5.3	1.9	73
-180 CV					7.09	6.06					6.06	3.1	6.4	2.9	74
-210 CV					8.27	7.24					7.24	3.2	6.8	4.9	75
-SLFA1/4- 90 CV	2	1/4	.53	.14	3.54	2.52	—	2.09	—	.71	2.52	2.2	3.5	0.8	76
-120 CV					4.72	3.70					3.74	2.6	4.4	1.2	77
-150 CV					5.91	4.88					4.92	2.8	5.3	1.9	78
-180 CV					7.09	6.06					6.06	3.1	6.4	2.9	79
-210 CV					8.27	7.24					7.24	3.2	6.8	4.9	80
F63-SLSA 8- 95-M42	1	8	11	1.5	95	42	27	15.4	25	24	78	0.7	1.9	3.4	81
-SLSB 8- 95-M42	1	8	13	2.5	95	42	27	17.4	32	24	78	0.8	2.3	2.1	82
-SLRA 8- 75-M22	1	8	14	3	75	22	27	16.3	25	24	58	0.7	1.9	1.1	83
- 95-M42					95	42		18.4			78	0.8		2	84
-SLFB 8- 75-M22	1	8	18	5	75	22	27	20.3	32	24	58	0.8	2.2	0.7	85



CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h		N	S		Scale model	
F63-SLSA 8- 90 CV	2	8	11	1.5	90	64	—	53	—	24	65	0.9	2.9	1.4	○	86	
-120 CV					120	94					94	1.1	3.8	2		87	
F63 -150 CV					150	124					124	1.3	5	2.7		88	
-180 CV					180	154					155	5.2	5	89			
-210 CV					210	184					184	1.5	6.6	6.6		▲	90
-240 CV					240	214					214	1.8	7.8	8.3		91	
-270 CV					270	244					244	2.1	10.7	6.9		92	
-300 CV					300	274					274	2.3	11.9	8.9		93	
-SLRA 8- 90 CV					2	8					16	4	90	64		—	53
-120 CV	120	94	95	1.2			4.6	1	95								
-150 CV	150	124	125	1.4			5.9	1.4	96								
-180 CV	180	154	155	1.6			7	2	97								
-210 CV	210	184	185	7.6			3.5	98									
-SLFA 8- 90 CV	2	8	16	4	90	64	—	53	—	24	65	1	3.4	0.7	○	99	
-120 CV					120	94					95	1.2	4.6	1		100	
-150 CV					150	124					125	1.4	5.9	1.4		101	
-180 CV					180	154					155	1.6	7	2		102	
-210 CV					210	184					185	7.6	3.5	103			
F63-SLSA5/16- 90 CV	2	5/16	.43	.06	3.54	2.52	—	2.09	—	.94	2.56	2	2.9	1.5	○	104	
-120 CV					4.72	3.70					3.70	2.2	3.8	2.0		105	
-150 CV					5.91	4.88					4.88	2.7	5.1	2.8		106	
-180 CV					7.09	6.06					6.10	2.8	5.4	5.2		107	
-210 CV					8.27	7.24					7.17	3.2	7.4	6.0		▲	108
-240 CV					9.45	8.43					8.43	3.9	8.9	6.8		109	
-270 CV					10.63	9.61					9.65	4.5	10	8.5		110	
-300 CV					11.81	10.79					10.79	5	12.3	9.0		111	
-SLRA5/16- 90 CV					2	5/16					.63	.16	3.54	2.52		—	2.09
-120 CV	4.72	3.70	3.70	2.6			4.8	1.0	113								
-150 CV	5.91	4.88	4.88	3			6.1	1.5	114								
-180 CV	7.09	6.06	6.06	3.5			7.3	2.1	115								
-210 CV	8.27	7.24	7.24	3.5			7.8	3.6	116								
-SLFA5/16- 90 CV	2	5/16	.63	.16	3.54	2.52	—	2.09	—	.94	2.52	2.2	3.5	0.7	○	117	
-120 CV					4.72	3.70					3.70	2.6	4.8	1.0		118	
-150 CV					5.91	4.88					4.88	3	6.1	1.5		119	
-180 CV					7.09	6.06					6.06	3.5	7.3	2.1		120	
-210 CV					8.27	7.24					7.24	3.5	7.8	3.6		121	
F63-SLSA10- 95-M42	1	10	13	1.5	95	42	27	17.4	25	30	74	0.8	2	2.6	○	122	
-SLSB10- 95-M42	1	10	16	3	95	42	27	20.4	32	30	74	0.8	2.3	1.4	○	123	
-SLRA10- 75-M22	1	10	16	3	75	22	27	18.3	25	30	54	0.8	1.9	1	○	124	
-SLFB10- 75-M22	1	10	22	6	75	22	27	24.3	32	30	54	0.8	2.3	0.6	×	125	
-SLSA10- 90 CV	2	10	13	1.5	90	64	—	53	—	30	65	0.9	2.9	1.3	○	126	
-120 CV					120	94					95	1.2	4.4	127			
-150 CV					150	124					125	1.3	5.2	2.2		128	
-180 CV					180	154					154	1.5	6.3	3.4		129	
-210 CV					210	184					184	1.6	6.8	6		130	
-240 CV					240	214					212	2	9.4	5.8		▲	131
-270 CV					270	244					244	2.1	10.9	6.6		132	
-300 CV					300	274					274	2.3	12.2	8.5		133	



Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical data

CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg lbs	N	S	Scale model
F63-SLRA10- 90 CV	2	10	19	4.5	90	64	—	53	—	30	65	1	3.5	0.6	134
-120 CV					120	94					95	1.2	4.6	0.9	135
-150 CV					150	124					125	1.4	5.8	1.4	136
-180 CV					180	154					155	1.6	7.2	2	137
-210 CV					210	184					185		8	3.1	138
-SLFA10- 90 CV	2	10	19	4.5	90	64	—	53	—	30	65	1	3.5	0.6	139
-120 CV					120	94					95	1.2	4.6	0.9	140
-150 CV					150	124					125	1.4	5.8	1.4	141
-180 CV					180	154					155	1.6	7.2	2	142
-210 CV					210	184					185		8	3.1	143
F63-SLSA3/8- 90 CV	3	3/8	.49	.06	3.54	2.52	—	2.09	—	1.18	2.56	2	2.9	1.3	144
-120 CV					4.72	3.70					3.74	2.3	3.8	2.2	145
F63 -150 CV					5.91	4.88					4.88	2.6	5.2	2.6	146
-180 CV					7.09	6.06					6.06	3.1	6.4	3.6	147
-210 CV					8.27	7.24					7.24	3.5	7.8	4.9	148
-240 CV					9.45	8.43					8.46	4.1	9	6.0	149
-270 CV					10.63	9.61					9.61	4.6	11.2	6.8	150
-300 CV					11.81	10.79					10.79	5	12.5	8.8	151
-SLRA3/8- 90 CV					3	3/8					.73	.185	3.54	2.52	—
-120 CV	4.72	3.70	3.70	2.6			4.8	1.0	153						
-150 CV	5.91	4.88	4.88	3			6.1	1.4	154						
-180 CV	7.09	6.06	6.06	3.4			7.4	2.0	155						
-210 CV	8.27	7.24	7.28	3.9			8.3	2.9	156						
-SLFA3/8- 90 CV	3	3/8	.73	.185	3.54	2.52	—	2.09	—	1.18	2.52	2.2	3.5	0.7	157
-120 CV					4.72	3.70					3.70	2.6	4.8	1.0	158
-150 CV					5.91	4.88					4.88	3	6.1	1.4	159
-180 CV					7.09	6.06					6.06	3.4	7.4	2.0	160
-210 CV					8.27	7.24					7.28	3.9	8.3	2.9	161
F63-SLSA12- 95-M42	1	12	15	1.5	95	42	27	19.4	32	30	74	0.8	2.3	1.8	162
-SLSB12- 95-M42	1	12	19	3.5	95	42	27	23.4	32	30	74	0.8	2.4	1.1	163
-SLRA12- 75-M22	1	12	20	4	75	22	27	22.3	25	30	54	0.9	2.1	0.8	164
-SLFB12- 75-M22	1	12	26	7	75	22	27	28.3	42	30	54	0.9	3	0.4	165
-SLSA12- 90 CV	2	12	15	1.5	90	64	—	53	—	30	64	1	3.4	0.9	166
-120 CV					120	94					94	1.2	4.7	1.2	167
-150 CV					150	124					124	1.3	5.2	2.4	168
-180 CV					180	154					154	1.5	6.5	3.3	169
-210 CV					210	184					184	1.7	7.7	4.6	170
-240 CV					240	214					212	2	9.6	5.5	171
-270 CV					270	244					244	2.2	11.8	5.4	172
-SLRA12- 90 CV	2	12	22	5	90	64	—	53	—	30	64	1	3.6	0.6	173
-120 CV					120	94					94	1.3	5.5	0.7	174
-150 CV					150	124					124	1.5	6.7	1.1	175
-180 CV					180	154					154	1.6	7.5	1.8	176
-210 CV					210	184					184	1.7	8.5	2.8	177
-SLFA12- 90 CV	2	12	22	5	90	64	—	53	—	30	64	1	3.6	0.6	178
-120 CV					120	94					94	1.3	5.5	0.7	179
-150 CV					150	124					124	1.5	6.7	1.1	180
-180 CV					180	154					154	1.6	7.5	1.8	181
-210 CV					210	184					184	1.7	8.5	2.8	182



CODE	Fig.	φD	φC	t	L	M	L ₁	φC ₁	φC ₂	H	h	Kg lbs	N	S	Scale model
F63-SLSA1/2- 90 CV	3	1/2	.62	.06	3.54	2.52	—	2.09	—	1.18	2.52	2.1	3.6	0.8	183
-120 CV					4.72	3.70					3.70	2.5	4.9	1.2	184
F63 -150 CV					5.91	4.88					4.88	2.6	5.3	2.4	185
-180 CV					7.09	6.06					6.06	3	6.7	3.4	186
-210 CV					8.27	7.24					7.17	3.6	9.3	3.6	187
-240 CV					9.45	8.43					8.35	4.1	11.5	4.3	188
-270 CV					10.63	9.61					9.53	4.7	13.3	5.1	189
-SLRA1/2- 90 CV					3	1/2					.89	.20	3.54	2.52	—
-120 CV	4.72	3.70	3.70	2.9			5.7	0.7	191						
-150 CV	5.91	4.88	4.88	3.3			7	1.1	192						
-180 CV	7.09	6.06	5.98	3.3			8.3	1.9	193						
-210 CV	8.27	7.24	7.24	4.4			10.4	2.0	194						
-SLFA1/2- 90 CV	3	1/2	.89	.20			3.54	2.52	—	2.09			—	1.18	
-120 CV					4.72	3.70	3.70	2.9			5.7	0.7			196
-150 CV					5.91	4.88	4.88	3.3			7	1.1			197
-180 CV					7.09	6.06	5.98	3.3			8.3	1.9			198
-210 CV					8.27	7.24	7.24	4.4			10.4	2.0			199
F63-SLFB16- 75-M22					1	16	32	8			75	22			27
-SLSB16- 90 CV	2	16	21	2.5	90	64	—	53	—	32	62	1.1	3.9	0.6	201
-120 CV					120	94					92	1.4	5.8	0.8	202
-150 CV					150	124					122	1.5	6.9	1.5	203
-180 CV					180	154					152	1.9	8.8	1.9	204
-210 CV					210	184					182	2	9.9	3	205
-240 CV					240	214					212	2.3	11.8	3.7	206
-270 CV					270	244					242	2.7	13.7	4.6	207
F63-SLSB5/8- 90 CV					3	5/8					.82	.10	3.54	2.52	—
-120 CV	4.72	3.70	3.62	2.7			5.9	0.8	209						
-150 CV	5.91	4.88	4.80	2.9			7	1.5	210						
-180 CV	7.09	6.06	5.98	3.5			9	1.9	211						
-210 CV	8.27	7.24	7.17	3.7			10.1	3.0	212						
-240 CV	9.45	8.43	8.35	4.3			12.1	3.7	213						
-270 CV	10.63	9.61	9.53	4.8			14.1	4.6	214						
F63-SLFB20- 75-M22*	1	20	38	9			75	22	27	40.3			50	40	
-SLSB20- 90 CV	2	20	26	3	90	64	—	51	—	40	62	1.1	4.2	0.5	216
-120 CV					120	94		53			92	1.4	6.2	0.8	217
-150 CV					150	124		122			1.6	7.6	1.3	218	
-180 CV					180	154		152			2	9.6	1.8	219	
-210 CV					210	184		182			2.3	11.6	2.3	220	
-240 CV					240	214		212			2.6	13.7	3	221	
-270 CV					270	244		242			3.1	16.3	3.4	222	
F63-SLSB3/4- 90 CV					3	3/4		.99			.12	3.54	2.52	—	2.09
-120 CV	4.72	3.70	3.62	2.7			6.3		0.8	224					
-150 CV	5.91	4.88	4.80	2.9			7.6		1.4	225					
-180 CV	7.09	6.06	5.98	3.5			9.7		1.8	226					
-210 CV	8.27	7.24	7.17	4			11.8		2.4	227					
-240 CV	9.45	8.43	8.35	4.5			14		3.1	228					
-270 CV	10.63	9.61	9.53	5.1			16.1		3.9	229					
F63-SLFB25- 75-M22	1	25	45	10			75		22	27		47.3	50		



※ When shrinking the SLFB20 with HEAT ROBO DENJI 5000(HRD-02S), the standard heating coil cannot be used. Please use the heating coil No.4.

■ Cleaning tool for a spindle taper hole, STAR DUST

CODE
CLT-F63-G2

● P.226



DMG MORI NVD4000 DCG
NV4000 DCG
MAKINO V33i / V56i



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

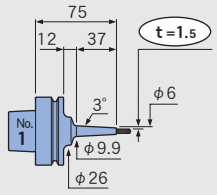
OTHERS

PERIPHERALS

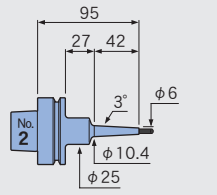
Technical
data

φ3

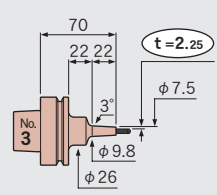
F63-SLSA3-75-M37



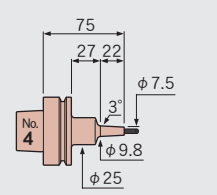
F63-SLSA3-95-M42



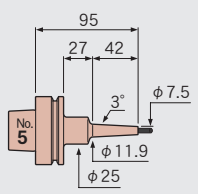
F63-SLRA3-70-M22



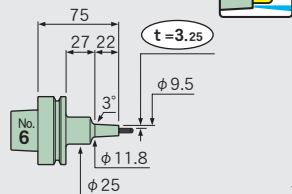
F63-SLRA3-75-M22



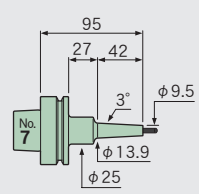
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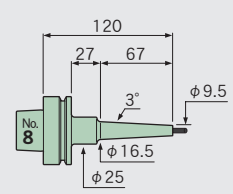
F63-SLFB3-75-M22



F63-SLFB3-95-M42

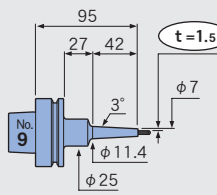


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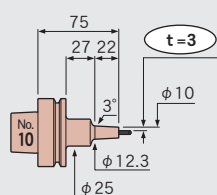


φ4

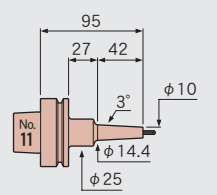
F63-SLSA4-95-M42



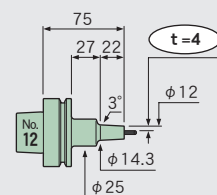
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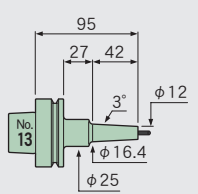
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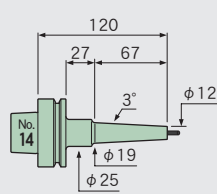
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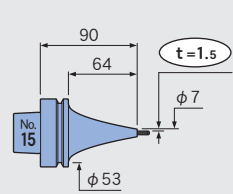
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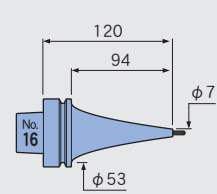
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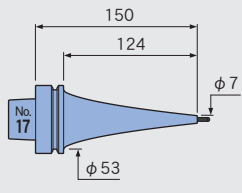
F63-SLSA4-90 CV



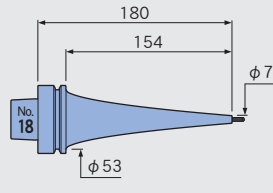
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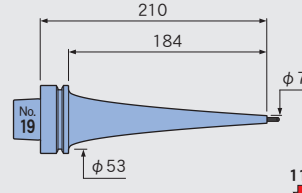
F63-SLSA4-150 CV



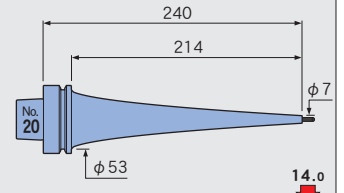
F63-SLSA4-180 CV



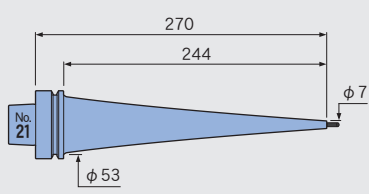
F63-SLSA4-210 CV



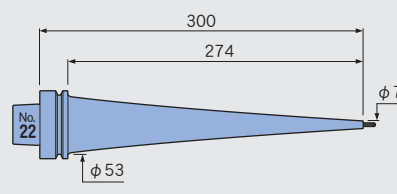
F63-SLSA4-240 CV



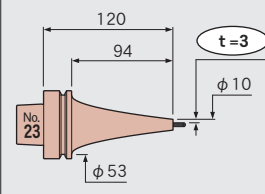
F63-SLSA4-270 CV



F63-SLSA4-300 CV

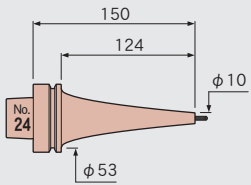


F63-SLRA4-120 CV



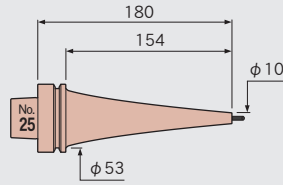
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical data

F63-SLRA4-150 CV



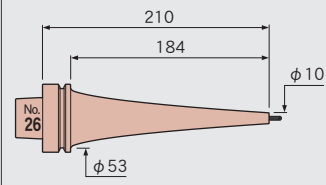
2.9

F63-SLRA4-180 CV



3.3

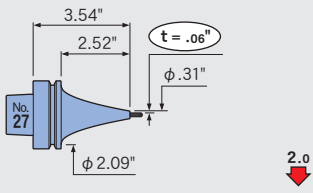
F63-SLRA4-210 CV



5.6

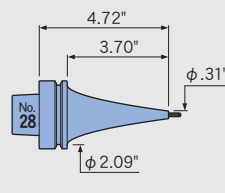
φ 3/16

F63-SLSA3/16-90 CV



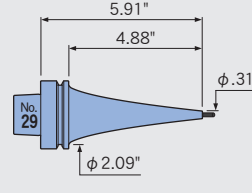
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F63-SLSA3/16-120 CV



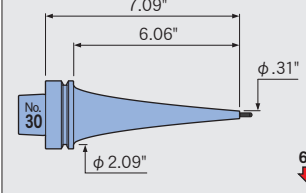
2.6

F63-SLSA3/16-150 CV



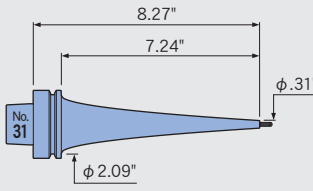
4.0

F63-SLSA3/16-180 CV



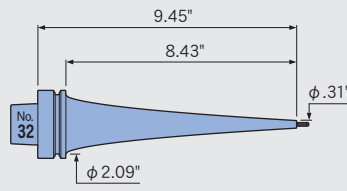
6.5

F63-SLSA3/16-210 CV



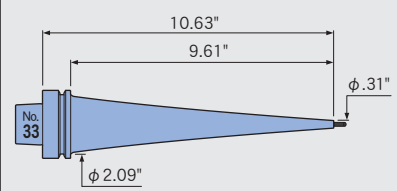
8.4

F63-SLSA3/16-240 CV



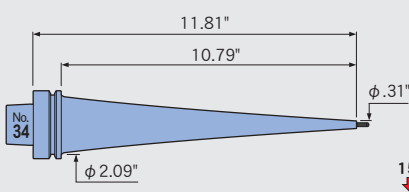
10.6

F63-SLSA3/16-270 CV



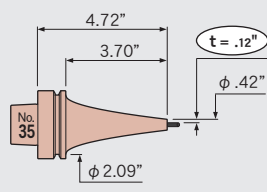
13.2

F63-SLSA3/16-300 CV



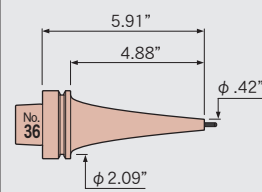
15.9

F63-SLRA3/16-120 CV



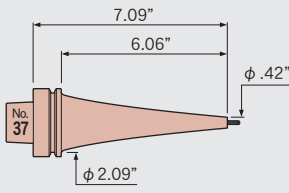
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F63-SLRA3/16-150 CV



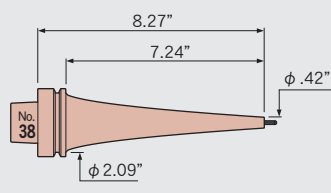
2.4

F63-SLRA3/16-180 CV



4.3

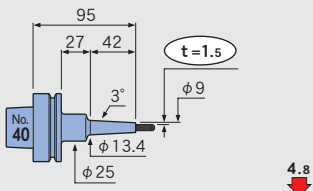
F63-SLRA3/16-210 CV



5.7

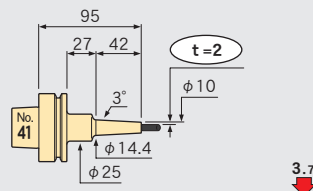
φ 6

F63-SLSA6-95-M42



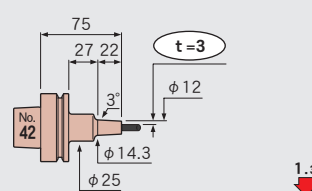
4.8

F63-SLSB6-95-M42



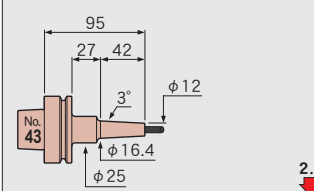
3.7

F63-SLRA6-75-M22



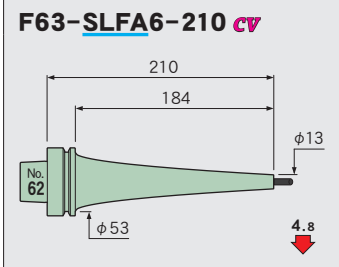
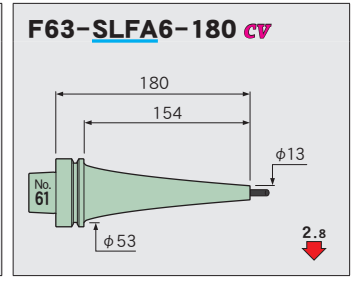
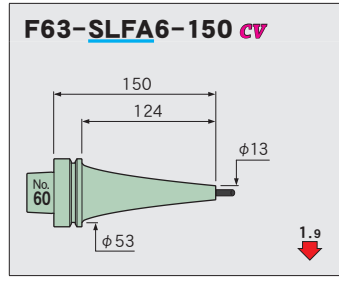
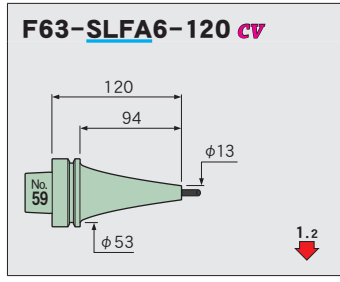
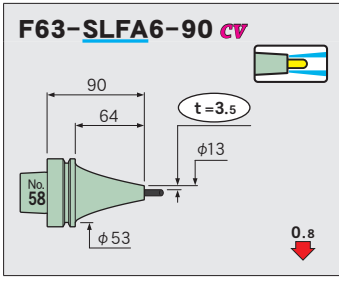
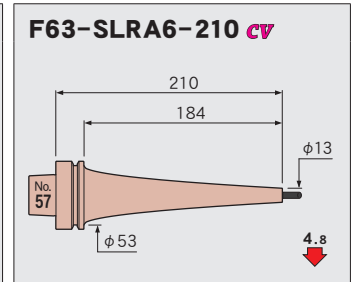
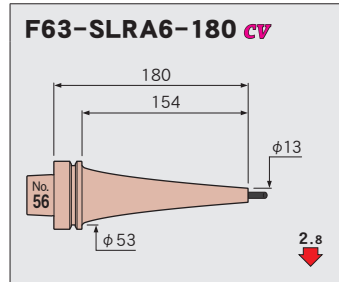
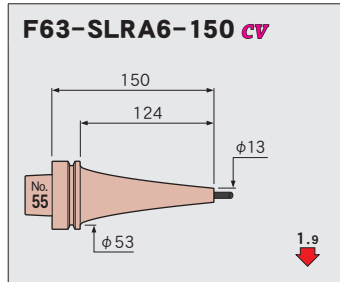
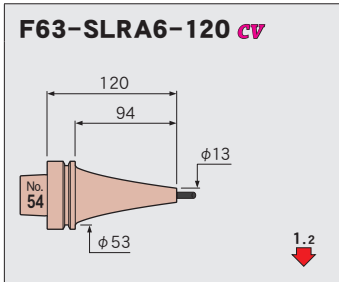
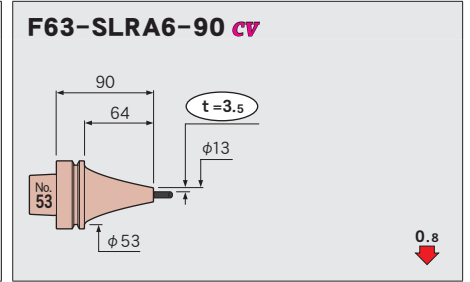
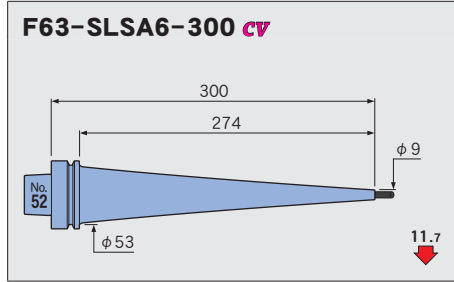
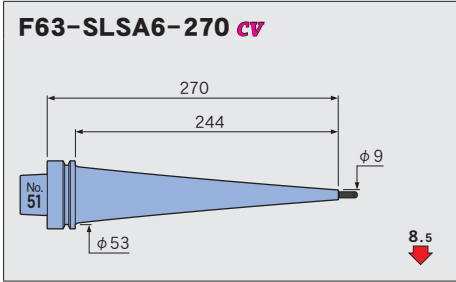
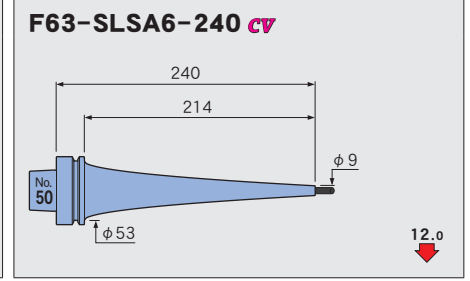
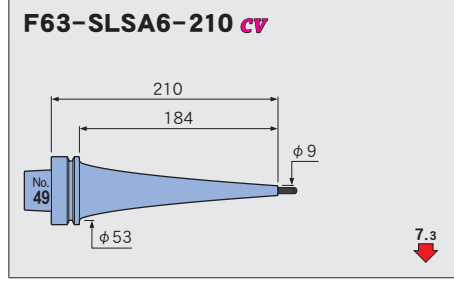
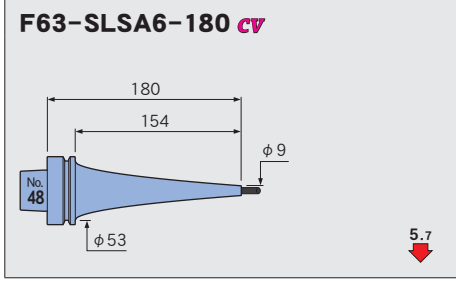
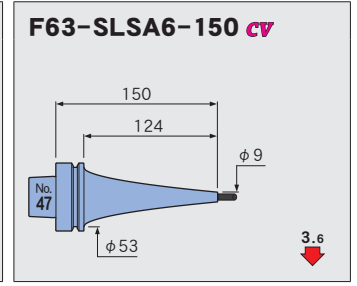
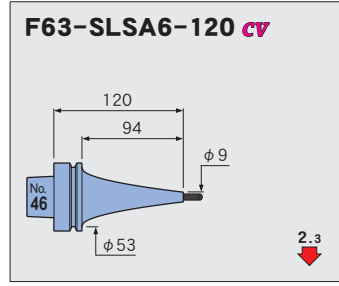
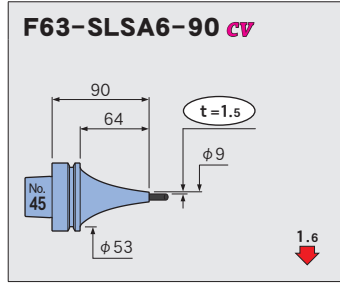
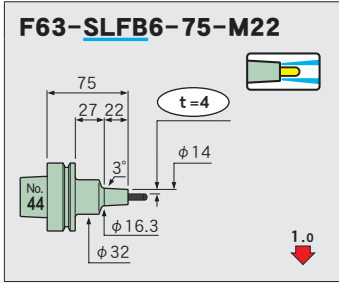
1.3

F63-SLRA6-95-M42



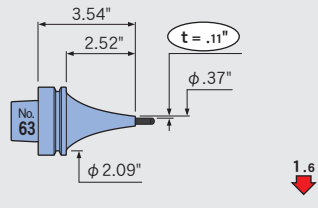
2.4

Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical data

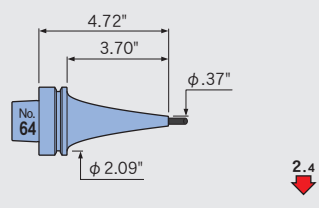


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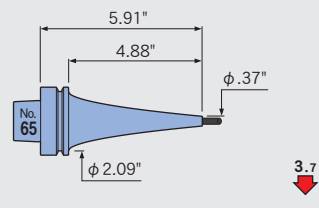
F63-SLSA1/4-90 CV



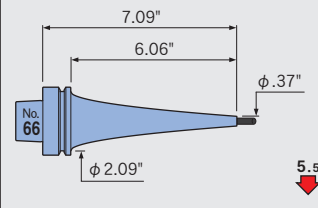
F63-SLSA1/4-120 CV



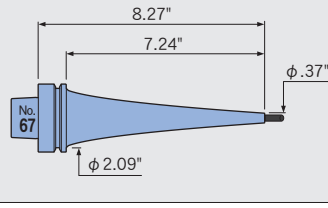
F63-SLSA1/4-150 CV



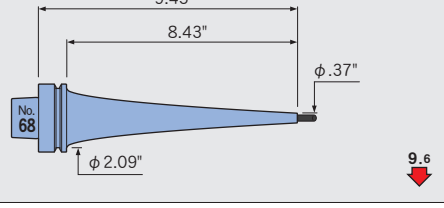
F63-SLSA1/4-180 CV



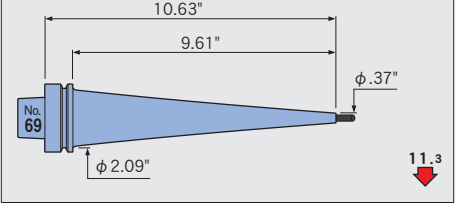
F63-SLSA1/4-210 CV



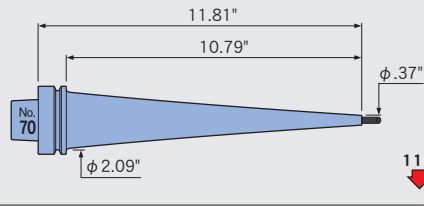
F63-SLSA1/4-240 CV



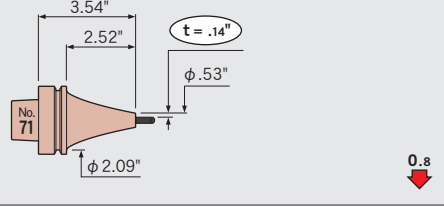
F63-SLSA1/4-270 CV



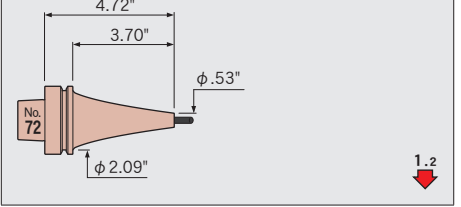
F63-SLSA1/4-300 CV



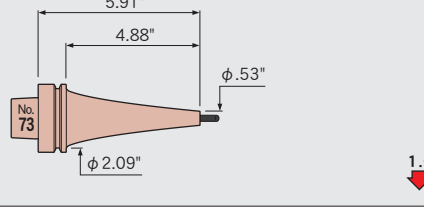
F63-SLRA1/4-90 CV



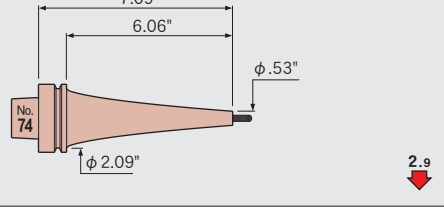
F63-SLRA1/4-120 CV



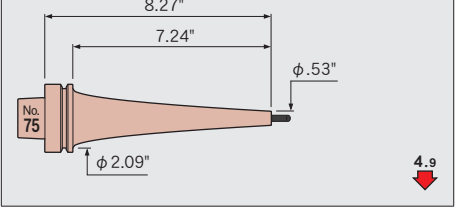
F63-SLRA1/4-150 CV



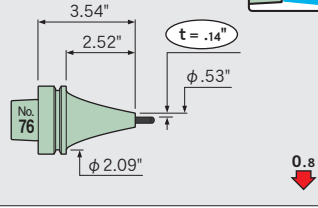
F63-SLRA1/4-180 CV



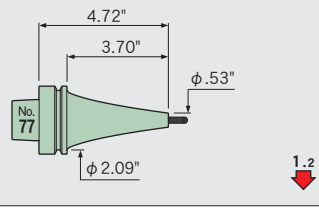
F63-SLRA1/4-210 CV



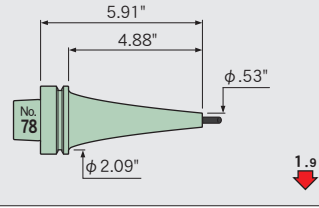
F63-SLFA1/4-90 CV



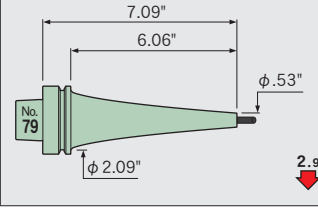
F63-SLFA1/4-120 CV



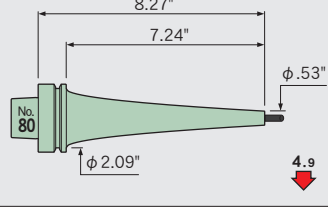
F63-SLFA1/4-150 CV



F63-SLFA1/4-180 CV



F63-SLFA1/4-210 CV



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

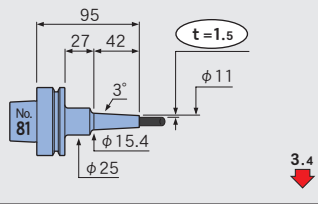
STRAIGHT
arbor

OTHERS

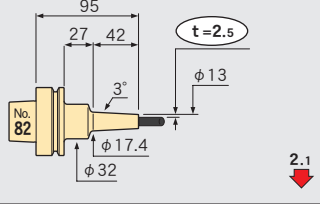
PERIPHERALS

Technical
data

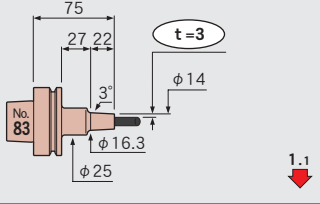
F63-SLSA8-95-M42



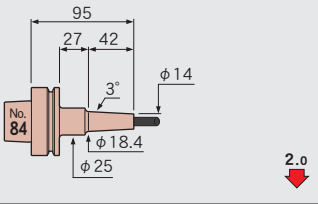
F63-SLSB8-95-M42



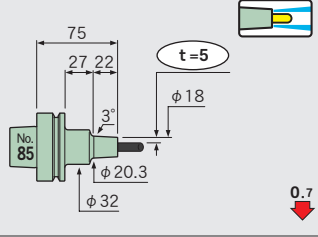
F63-SLRA8-75-M22



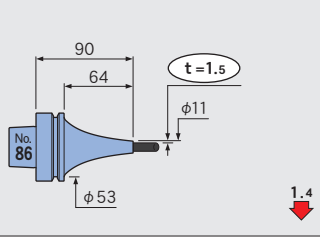
F63-SLRA8-95-M42



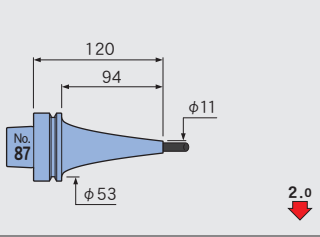
F63-SLFB8-75-M22



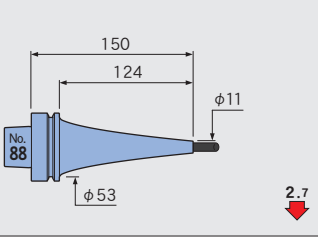
F63-SLSA8-90 CV



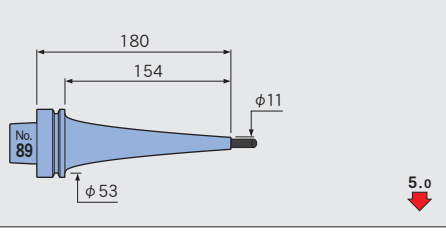
F63-SLSA8-120 CV



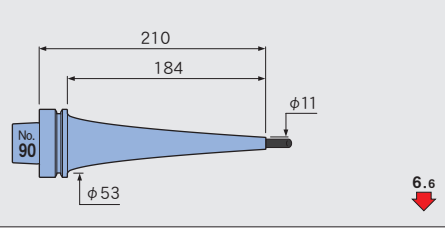
F63-SLSA8-150 CV



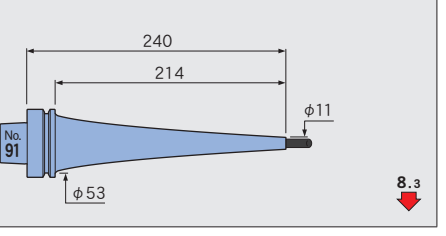
F63-SLSA8-180 CV



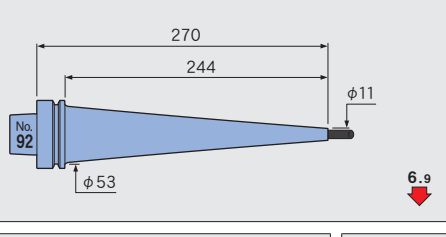
F63-SLSA8-210 CV



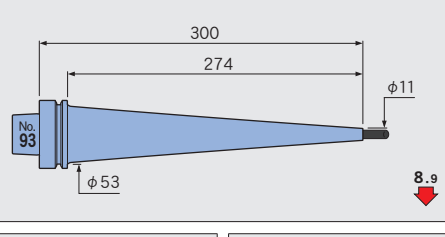
F63-SLSA8-240 CV



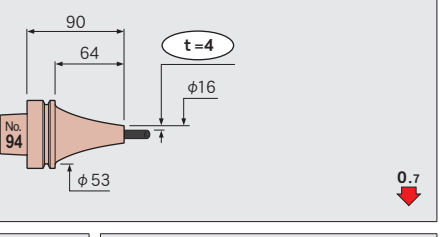
F63-SLSA8-270 CV



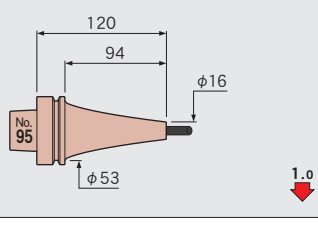
F63-SLSA8-300 CV



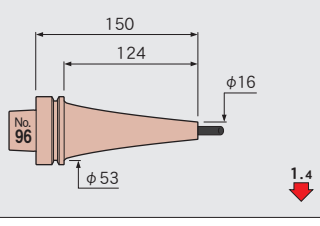
F63-SLRA8-90 CV



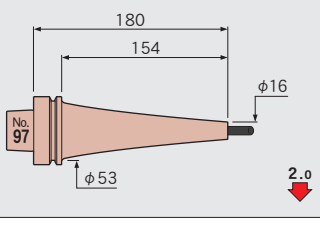
F63-SLRA8-120 CV



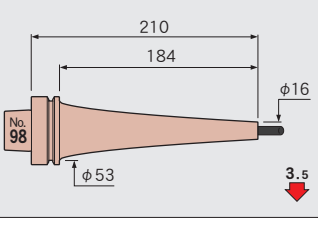
F63-SLRA8-150 CV



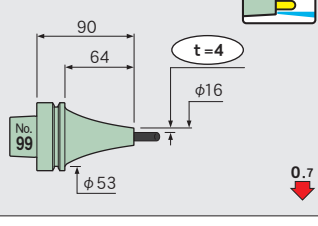
F63-SLRA8-180 CV



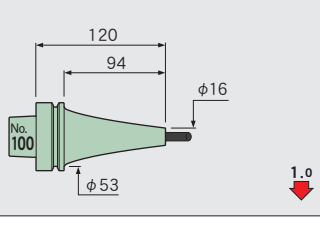
F63-SLRA8-210 CV



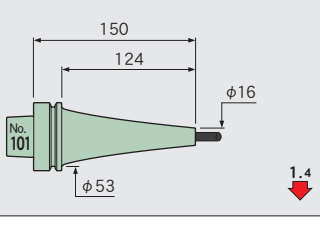
F63-SLFA8-90 CV



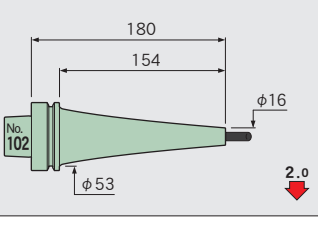
F63-SLFA8-120 CV



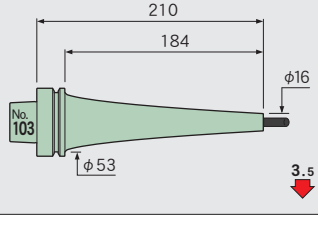
F63-SLFA8-150 CV



F63-SLFA8-180 CV

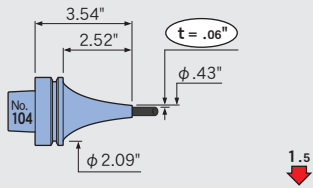


F63-SLFA8-210 CV

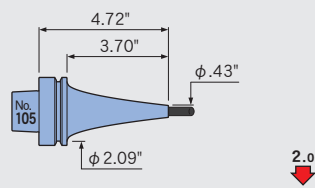


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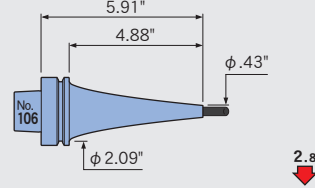
F63-SLSA5/16-90 CV



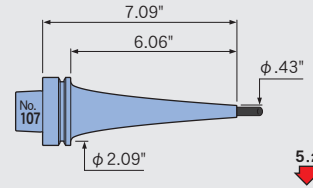
F63-SLSA5/16-120 CV



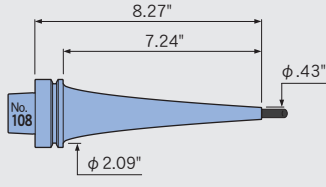
F63-SLSA5/16-150 CV



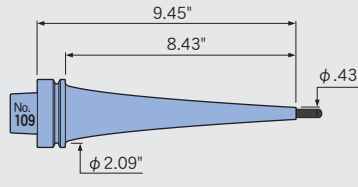
F63-SLSA5/16-180 CV



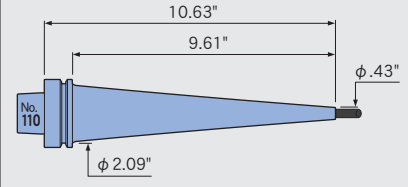
F63-SLSA5/16-210 CV



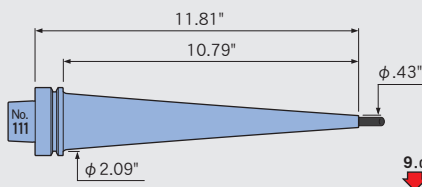
F63-SLSA5/16-240 CV



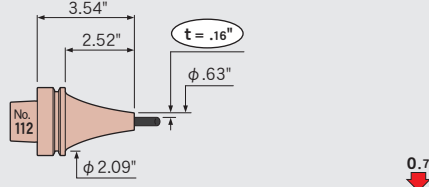
F63-SLSA5/16-270 CV



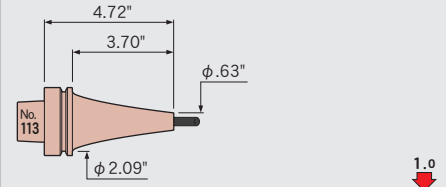
F63-SLSA5/16-300 CV



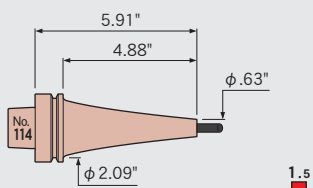
F63-SLRA5/16-90 CV



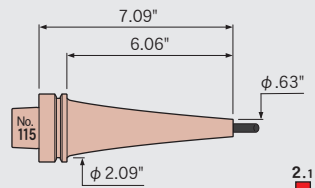
F63-SLRA5/16-120 CV



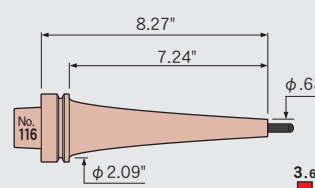
F63-SLRA5/16-150 CV



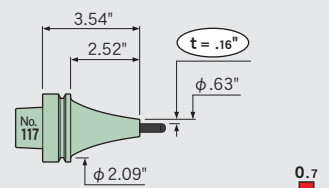
F63-SLRA5/16-180 CV



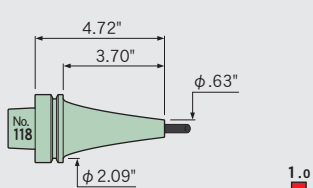
F63-SLRA5/16-210 CV



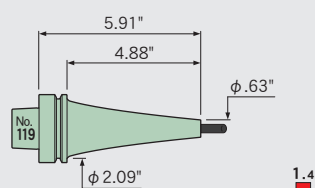
F63-SLFA5/16-90 CV



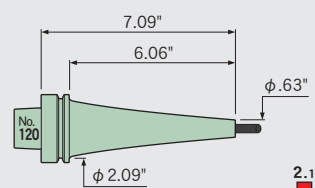
F63-SLFA5/16-120 CV



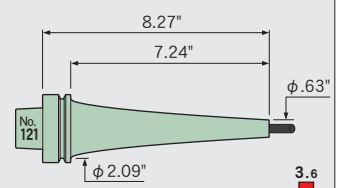
F63-SLFA5/16-150 CV



F63-SLFA5/16-180 CV



F63-SLFA5/16-210 CV



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

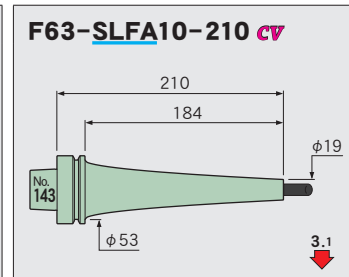
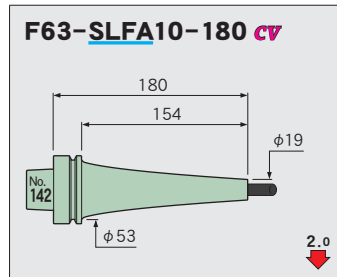
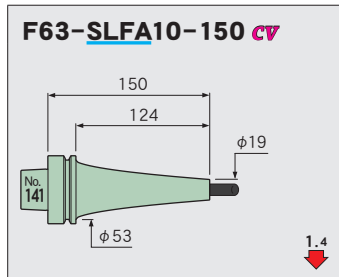
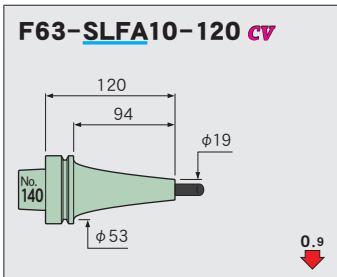
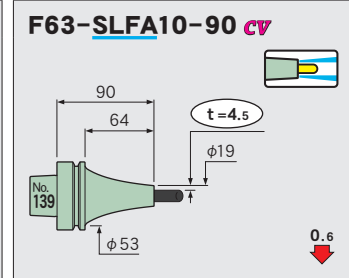
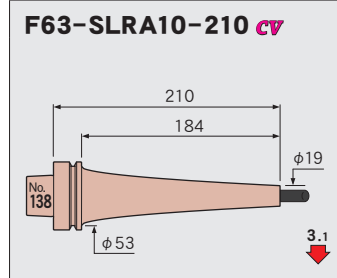
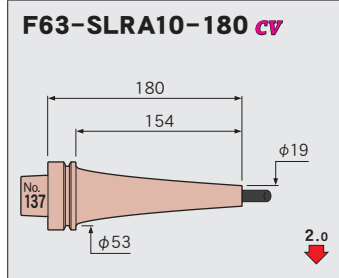
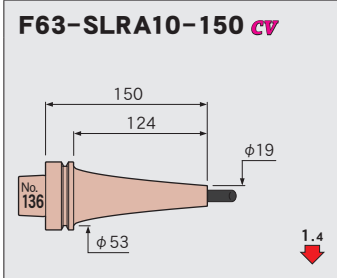
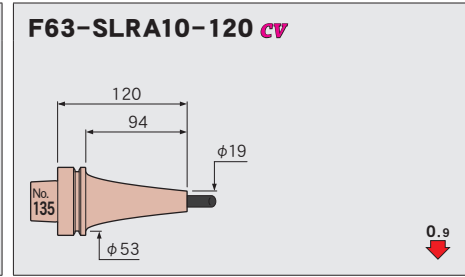
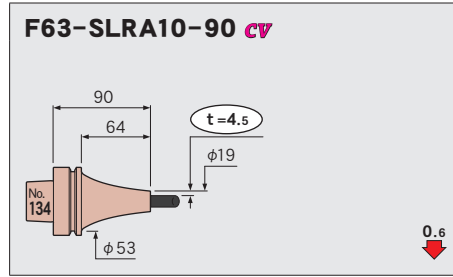
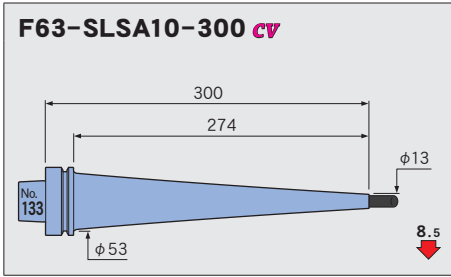
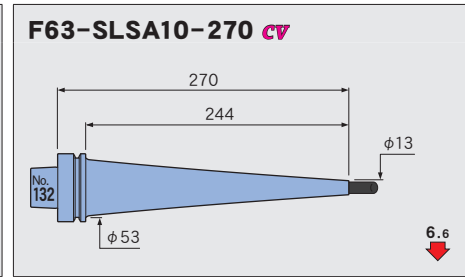
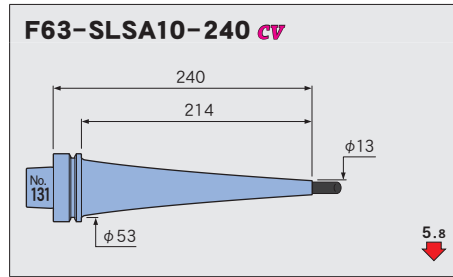
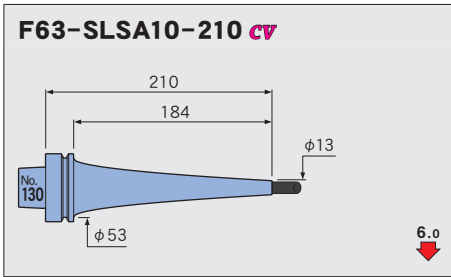
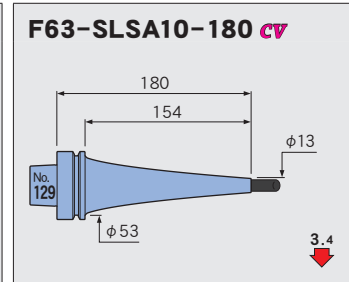
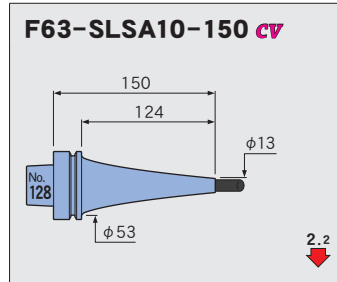
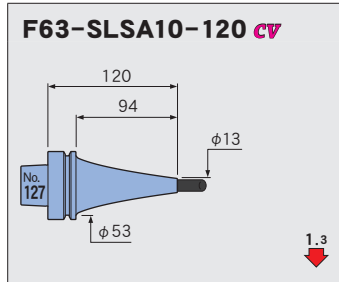
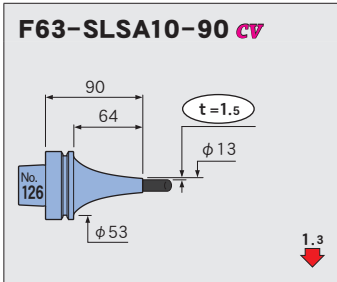
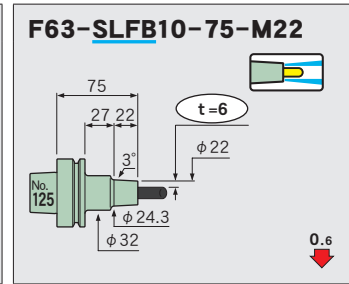
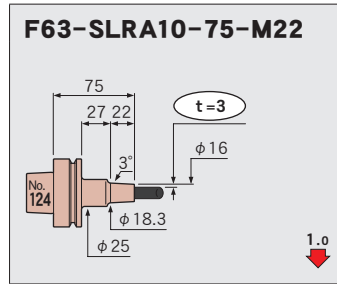
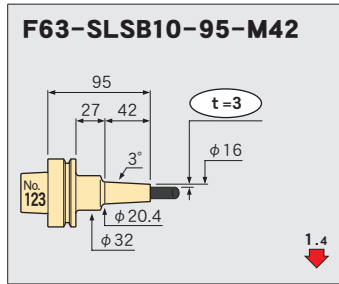
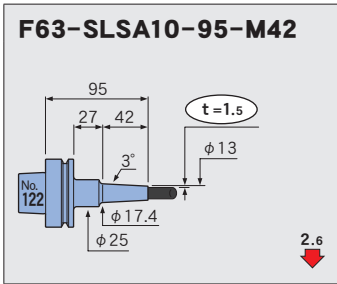
HYPER
version

STRAIGHT
arbor

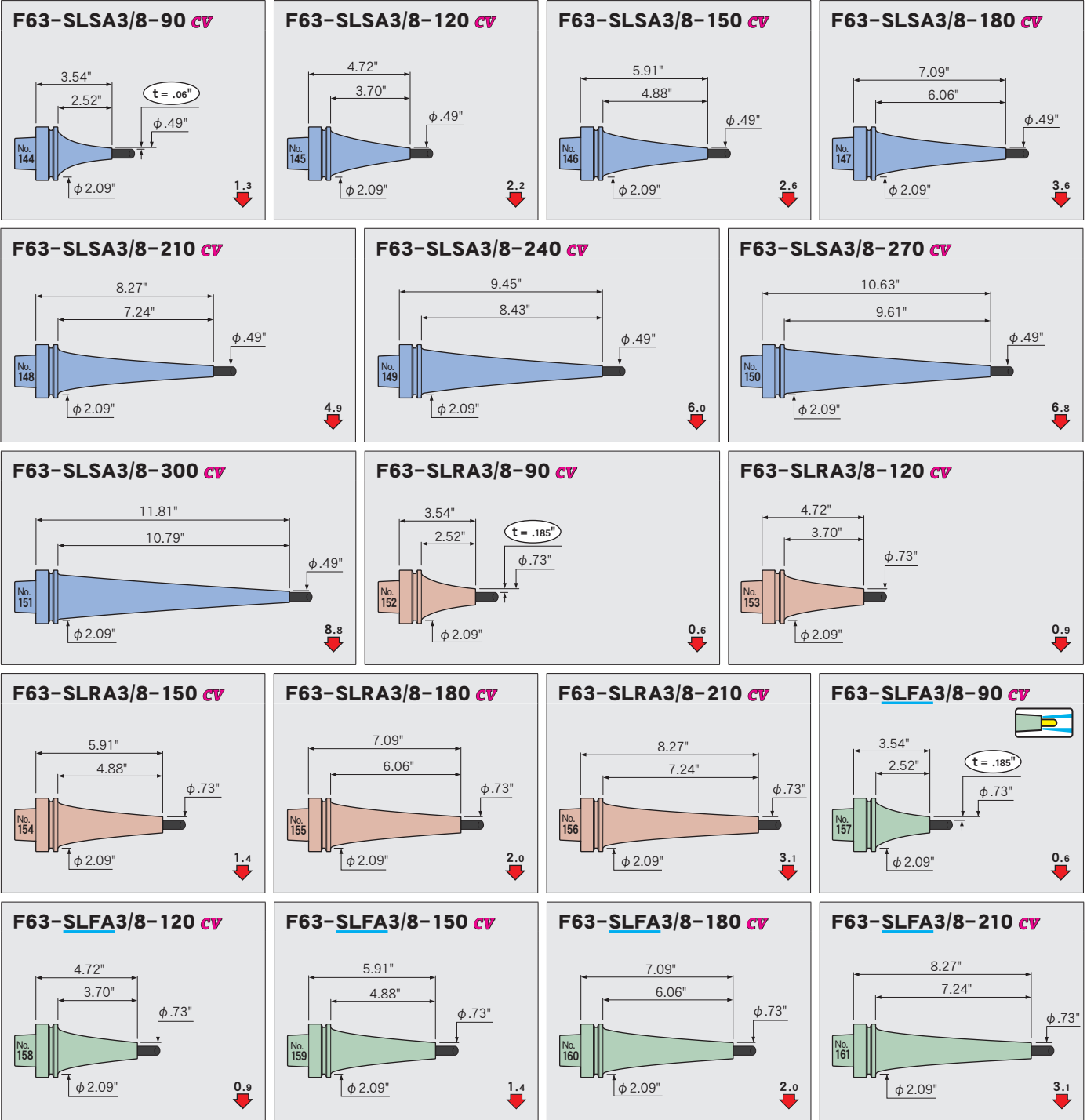
OTHERS

PERIPHERALS

Technical
data



$\phi 3/8$



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

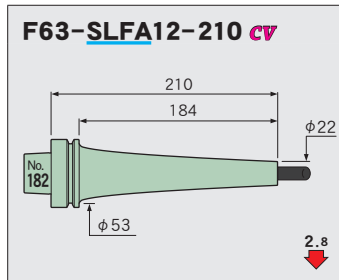
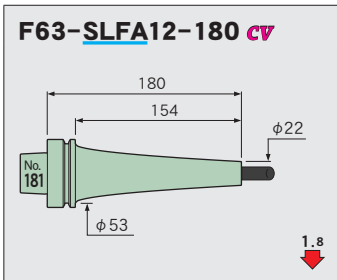
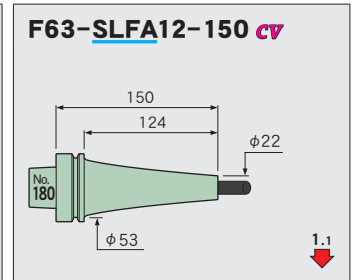
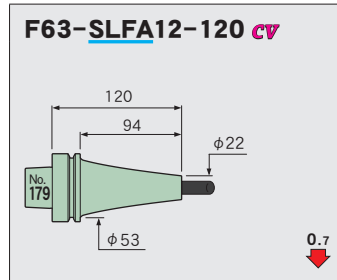
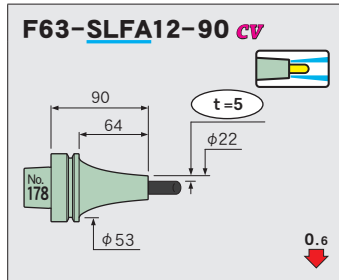
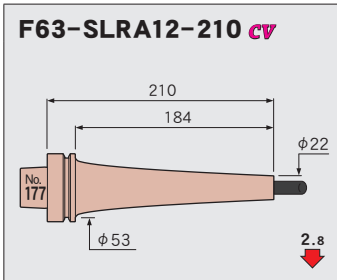
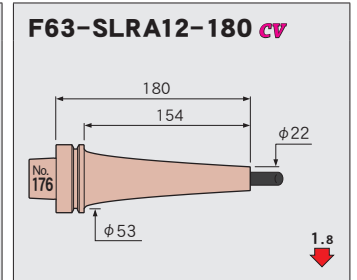
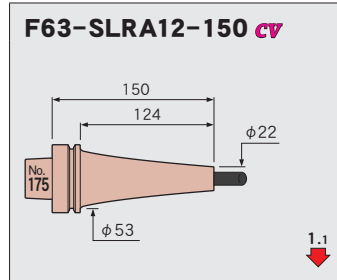
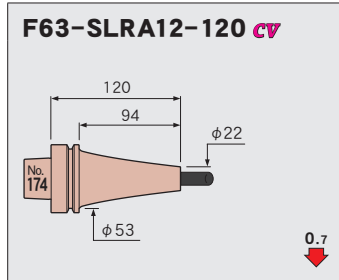
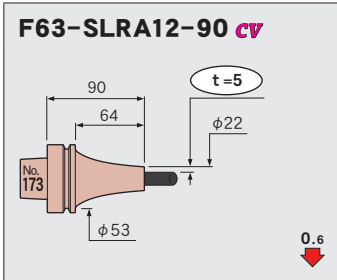
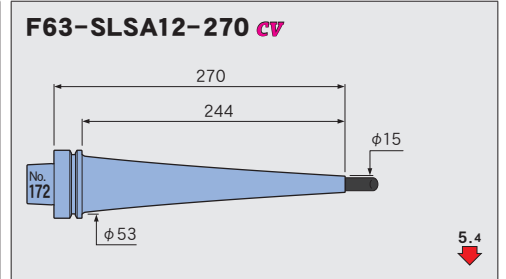
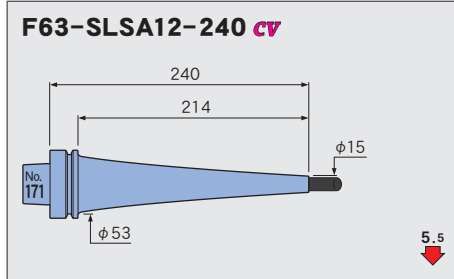
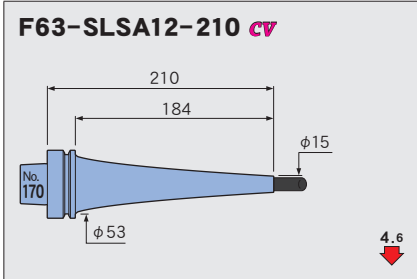
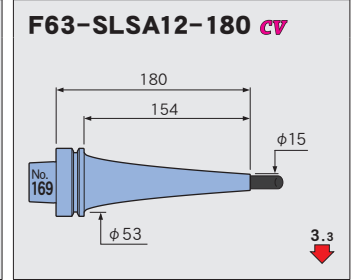
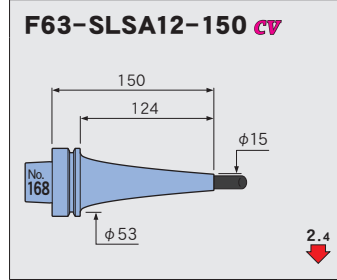
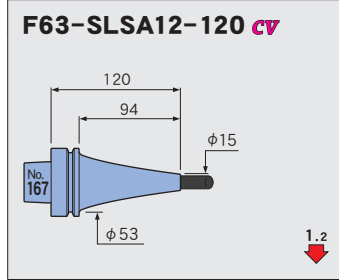
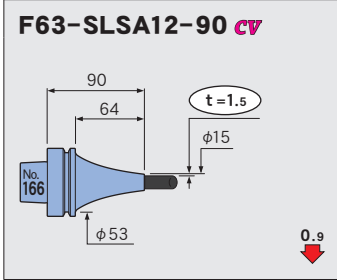
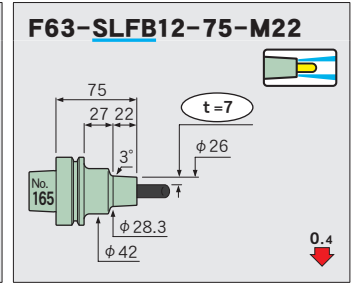
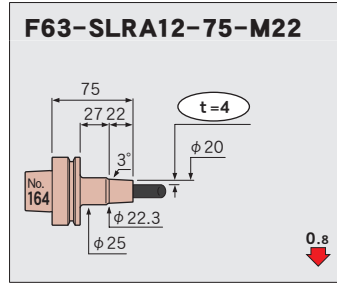
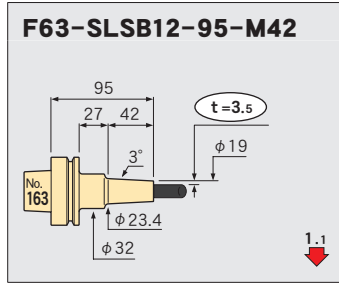
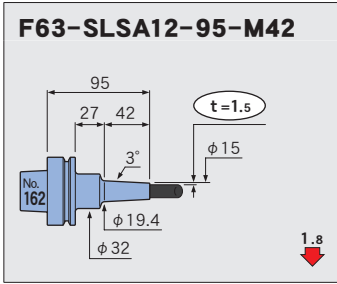
STRAIGHT
arbor

OTHERS

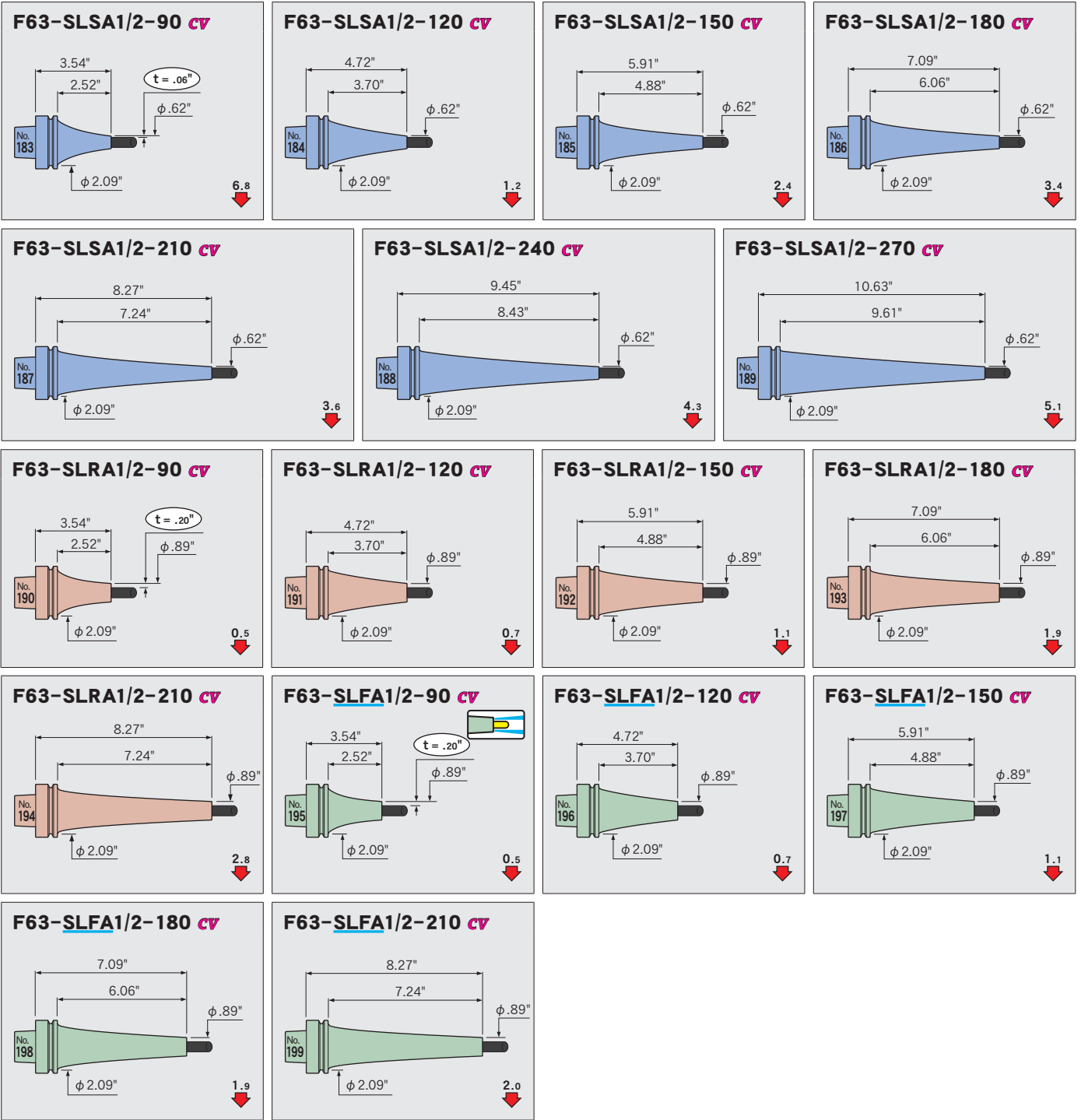
PERIPHERALS

Technical
data

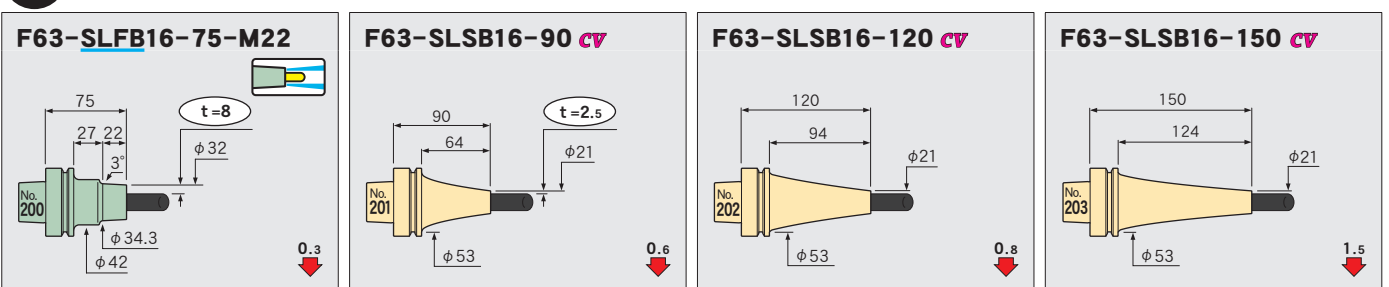
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical data

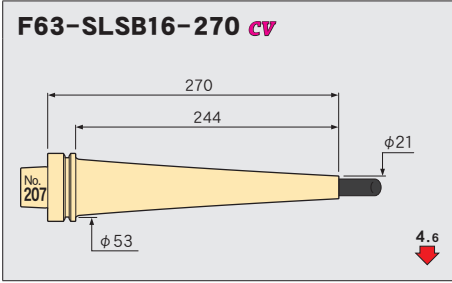
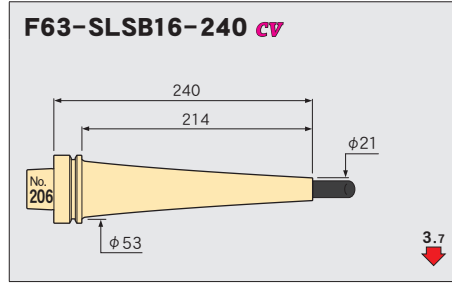
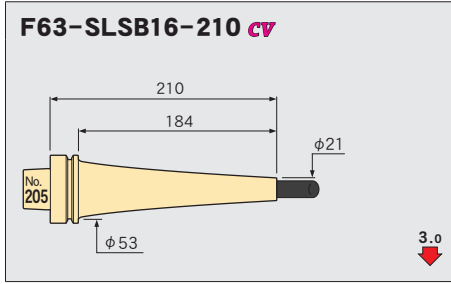
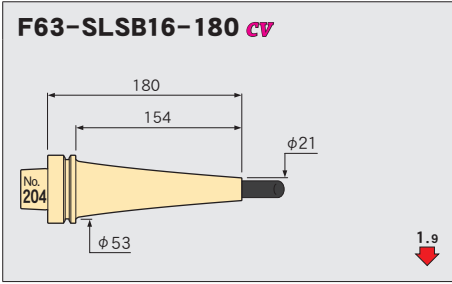


$\phi 1/2$

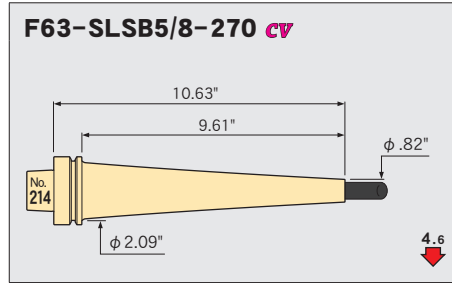
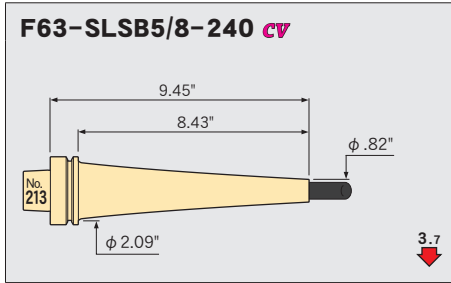
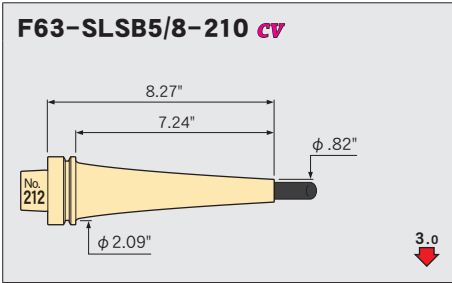
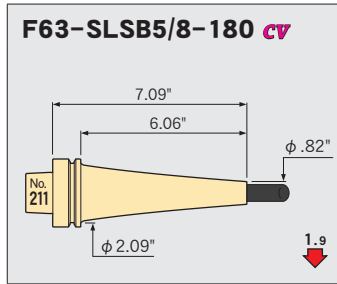
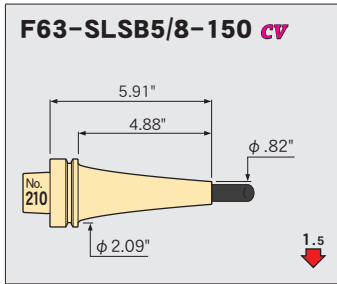
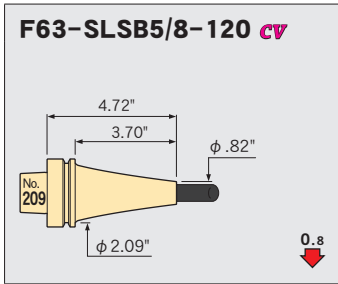
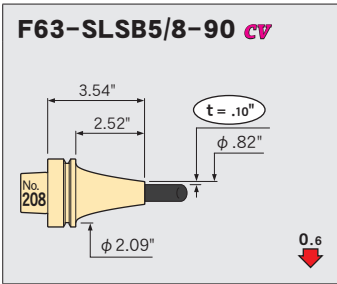


$\phi 16$

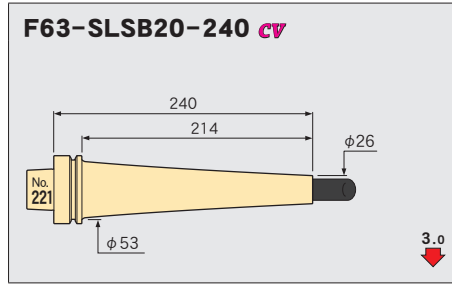
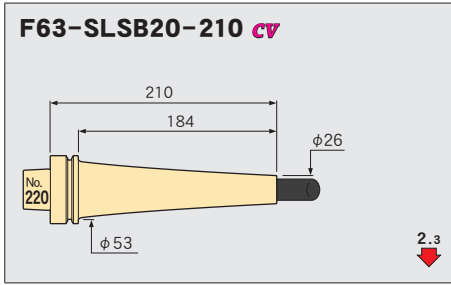
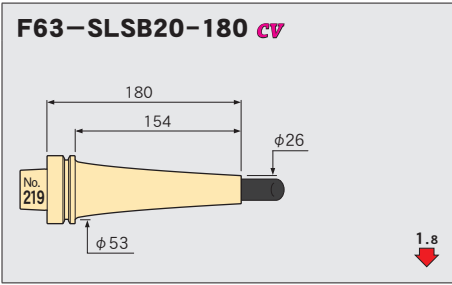
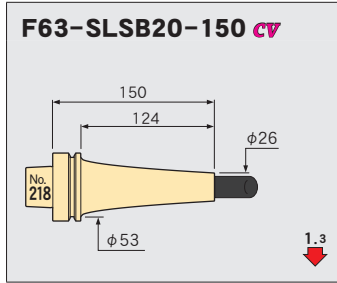
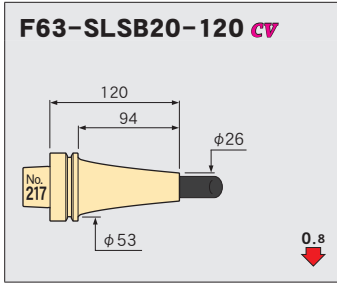
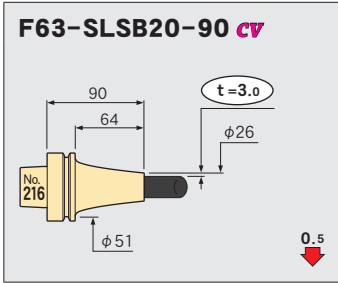
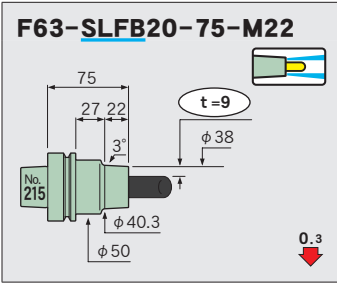




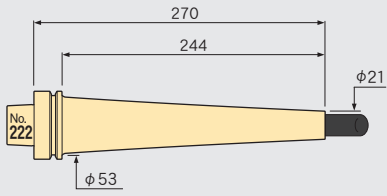
φ 5/8



φ 20

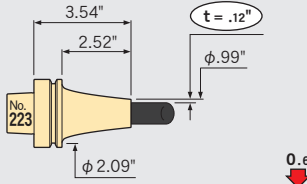


F63-SLSB20-270 CV

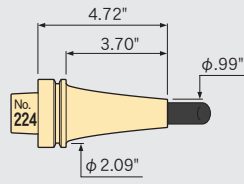


φ 3/4

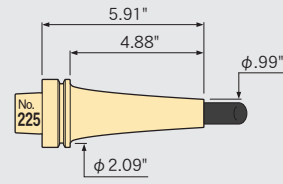
F63-SLSB3/4-90 CV



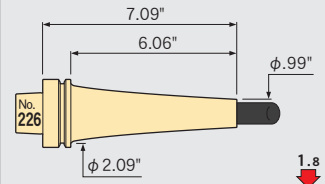
F63-SLSB3/4-120 CV



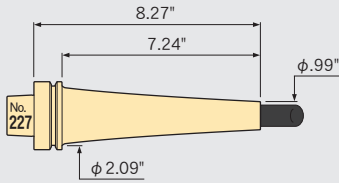
F63-SLSB3/4-150 CV



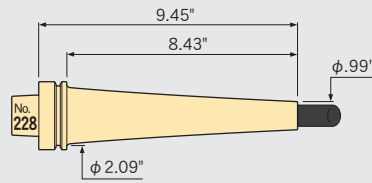
F63-SLSB3/4-180 CV



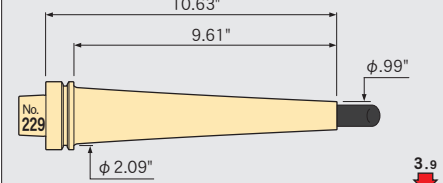
F63-SLSB3/4-210 CV



F63-SLSB3/4-240 CV

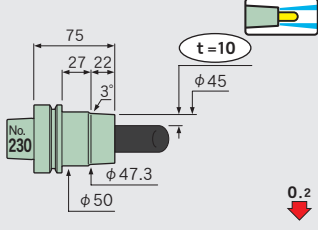


F63-SLSB3/4-270 CV



φ 25

F63-SLFB25-75-M22



Feature
Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

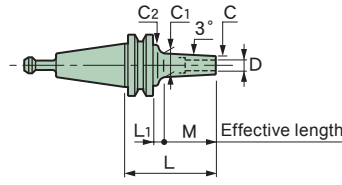
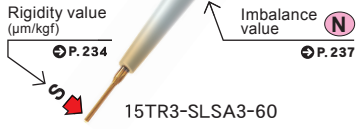
OTHERS

PERIPHERALS

Technical
data

15T

MONO 3°



Caution
 • Setting cutters --Be sure to insert the tool beyond the safety mark.

BROTHER TC-20A
TC-20B

Compatibility table for HRD-01S
 [O] Available [X] Not available

CODE	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	(N)	S	Scale model	
15TR3-SLSA 3-40	3	6	1.5	40	22	5.5	8.3	18	9	46	0.1	0.3	4.7	○	1
-60				60	42					66			9.3		2
15TR3-SLSA3.175-40	3.175	6.175	1.5	40	22	5.5	8.5	18	9	46	0.1	0.3	4.4	○	3
-60				60	42					66			8.8		4
15TR3-SLSA 4-40	4	7	1.5	40	22	5.5	9.3	18	12	46	0.1	0.3	3.6	○	5
-60				60	42					66			7.3		6
15TR3-SLSA 5-40	5	8	1.5	40	22	5.5	10.3	18	15	46	0.1	0.3	2.9	○	7
-60				60	42					66			5.9		8
15TR3-SLSA 6-60	6	9	1.5	60	42	5.5	13.4	18	18	66	0.1	0.4	4.9	○	9
-SLRA 6-35				12	3					35			19.6		2.9
15TR3-SLRA 8-35	8	14	3	35	19.6	2.9	16.1	—	20	51	0.1	0.3	0.9	×	11
15TR3-SLRA10-35	10	16	3	35	19.6	2.9	18.1	—	20	51	0.1	0.4	0.8	×	12

S=1:3

φ3
 15TR3-SLSA3-40 (No.1), 15TR3-SLSA3-60 (No.2), 15TR3-SLSA3.175-40 (No.3), 15TR3-SLSA3.175-60 (No.4)

φ4
 15TR3-SLSA4-40 (No.5), 15TR3-SLSA4-60 (No.6)

φ5
 15TR3-SLSA5-40 (No.7), 15TR3-SLSA5-60 (No.8)

φ6
 15TR3-SLSA6-60 (No.9)

φ8
 15TR3-SLRA6-35 (No.10), 15TR3-SLRA8-35 (No.11)

φ10
 15TR3-SLRA10-35 (No.12)

S20T

MONO 3°

Rigidity value
($\mu\text{m}/\text{kgf}$)

Ⓟ P. 234

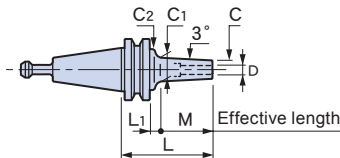
50

Imbalance value

Ⓝ

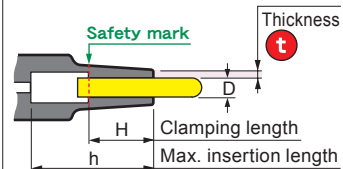
Ⓟ P. 237

S20TR2-SLRA8-35



Caution

- Setting cutters · Be sure to insert the tool beyond the safety mark.



SUGINO

V9 / NSV9 / H5 / H7 / H9



Thickness

Compatibility table for HRD-01S

[O] Available [X] Not available

CODE	ϕD	ϕC	t	L	M	L ₁	ϕC_1	ϕC_2	H	h	Kg	N	S	Scale model
S20TR2-SLSA 3-40	3	6	1.5	40	22	5.5	8.3	20	9	46	0.1	0.4	4.6	1
				60	42		10.4			66			9.2	
S20TR2-SLSA3.175-40	3.175	6.175	1.5	40	22	5.5	8.5	20	9	46	0.1	0.4	4.4	3
				60	42		10.6			66			8.8	
S20TR2-SLSA 4-40	4	7	1.5	40	22	5.5	9.3	20	12	46	0.1	0.4	3.6	5
				60	42		11.4			66			7.2	
S20TR2-SLSA 5-40	5	8	1.5	40	22	5.5	10.3	20	15	46	0.1	0.4	2.8	7
				60	42		12.4			66			5.8	
S20TR2-SLSA 6-60	6	9	1.5	60	42	5.5	13.4	20	18	66	0.1	0.5	4.7	9
				-SLRA 6-35	12		3			35			19.6	
S20TR2-SLRA 8-35	8	14	3	35	19.6	2.9	16.1	—	20	51	0.1	0.4	0.9	11
S20TR2-SLRA10-35	10	16	3	35	19.6	2.9	18.1	—	20	51	0.1	0.5	0.8	12
S20TR2-SLRA12-45	12	20	4	45	32.5	—	23.4	—	30	51	0.2	0.6	0.8	13

S=1:4

S20TR2-SLSA3-40

S20TR2-SLSA3-60

S20TR2-SLSA3.175-40

S20TR2-SLSA3.175-60

S20TR2-SLSA4-40

S20TR2-SLSA4-60

S20TR2-SLSA5-40

S20TR2-SLSA5-60

S20TR2-SLSA6-60

S20TR2-SLRA6-35

S20TR2-SLRA8-35

S20TR2-SLRA10-35

S20TR2-SLRA12-45

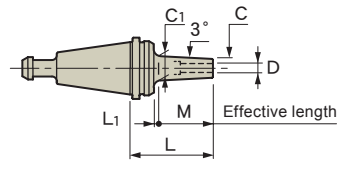
RS20

MONO 3°

Rigidity value (μm/kgf)
P.234

Imbalance value (N)
P.237

RS20-SLSA3.175-35



Caution
Setting cutters... Be sure to insert the tool beyond the safety mark.

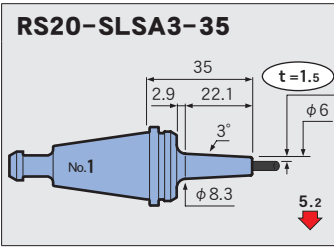
ROKU-ROKU
MEGA

Compatibility table for HRD-01S
[O] Available [X] Not available

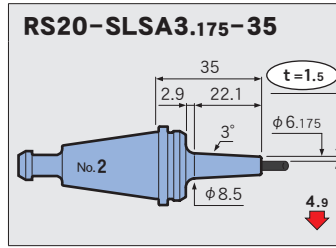
CODE	φD	φC	t	L	M	L ₁	φC ₁	H	h	Kg	N	S	縮図
RS20-SLSA 3-35	3	6	1.5	35	22.1	2.9	8.3	9	46	0.1	0.2	5.2	○ 1
RS20-SLSA 3.175-35	3.175	6.175	1.5	35	22.1	2.9	8.5	9	46	0.1	0.2	4.9	○ 2
RS20-SLSA 4-35	4	7	1.5	35	22.1	2.9	9.3	12	46	0.1	0.2	4	○ 3
RS20-SLSA 5-35	5	8	1.5	35	22.1	2.9	10.3	15	46	0.1	0.2	3.2	○ 4
RS20-SLRA 6-30	6	12	3	30	17.1	2.9	13.8	18	46	0.1	0.2	1.1	× 5
RS20-SLRA 8-30	8	14	3	30	17.2	2.8	15.8	20	51	0.1	0.3	0.9	× 6
RS20-SLRA10-30	10	16	3	30	17.6	2.4	17.9	20	51	0.1	0.4	0.7	× 7

S=1:2.5

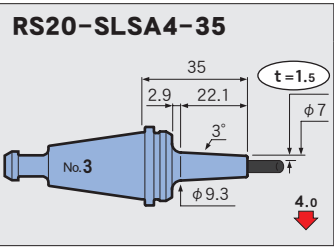
φ3



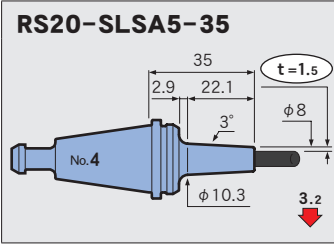
φ3.175



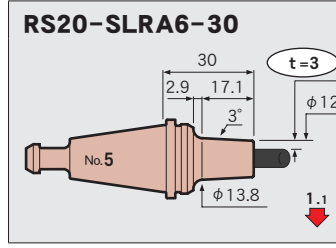
φ4



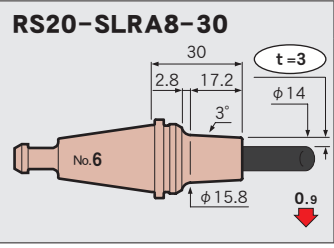
φ5



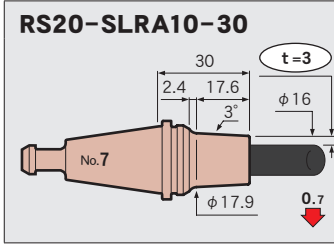
φ6



φ8

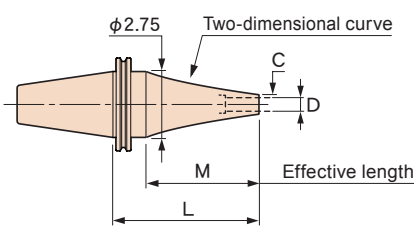


φ10



CT50

MONO CURVE



Option

- Retention knob

Caution

- Retention knob: Use a retention knob with hole, or remove the retention knob and heat it.
- Setting cutters: Be sure to insert the tool beyond the safety mark.

Compatibility table for HRD-01S

[O] Available [X] Not available
[▲] Usable by raising the heating unit. → P.233

CODE	φD	φC	t	L	M	H	h	lbs	N	S	Scale model	
CT50-SLSA3/16-165 CV	3/16	.31	.06	6.50	5.12	.59	8.66	8.4	13.7	2.6	○	
-195 CV				7.68	6.30		9.84	8.7	14.7	4	2	
-225 CV				8.86	7.48		11.02	9.1	15.7	5.9	3	
-255 CV				10.04	8.66		12.20	9.4	17.4	8.2	▲	4
-285 CV				11.22	9.84		13.39	10.0	18.9	10.5	5	
-315 CV				12.40	11.02		14.57	10.5	20.5	13.3	6	
CT50-SLSA1/4 -165 CV	1/4	.37	.06	6.50	5.12	.71	8.66	8.5	13.1	2.4	○	
-195 CV				7.68	6.30		9.84	9.6	16	2.5	8	
-225 CV				8.86	7.48		11.02	10.0	16.9	3.9	9	
-255 CV				10.04	8.66		12.20		19.2	5.6	▲	10
-285 CV				11.22	9.84		13.39	10.5	20.8	7.4	11	
-315 CV				12.40	11.02		14.57	11.1	22.4	9.5	12	
CT50-SLSA5/16-165 CV	5/16	.49	.06	6.50	5.12	.94	8.66	9.0	15.2	1.5	○	
-195 CV				7.68	6.30		9.84	9.3	16.2	2.4	14	
-225 CV				8.86	7.48		11.02	9.4	17.5	3.9	15	
-255 CV				10.04	8.66		12.20	9.9	19.1	5.2	▲	16
-285 CV				11.22	9.84		13.39	10.8	21.6	6	17	
-315 CV				12.40	11.02		14.57	11.7	23.9	7.1	18	
-SLRA5/16-195 CV	5/16	.63	.16	7.68	6.30	.94	9.84	9.6	17	1.5	○	
-225 CV				8.86	7.48		11.02	10.8	19.9	1.6	20	
-255 CV				10.04	8.66		12.20	10.9	20.4	2.6	▲	21
-285 CV				11.22	9.84		13.39	11.6	23.5	3.2	22	
-SLFA5/16-195 CV	5/16	.63	.16	7.68	6.30	.94	9.84	9.6	17	1.5	○	
-225 CV				8.86	7.48		11.02	10.8	19.9	1.6	24	
-255 CV				10.04	8.66		12.20	10.9	20.4	2.6	▲	25
-285 CV				11.22	9.84		13.39	11.6	23.5	3.2	26	
CT50-SLSA3/8 -165 CV	3/8	.49	.06	6.50	5.12	1.18	8.66	8.9	14.9	1.5	○	
-195 CV				7.68	6.30		9.84	9.1	15.8	2.4	28	
-225 CV				8.86	7.48		11.02	9.3	16.7	3.8	▲	29
-255 CV				10.04	8.66		12.20	9.8	19.3	5	30	
-285 CV				11.22	9.84		13.39	11.0	22.5	5.2	31	
-315 CV				12.40	11.02		14.57	11.5	24.4	6.9	32	

Feature: Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

CODE	φD	φC	t	L	M	H	h	lbs	N	S	HRD-01S	Scale model
CT50-SLRA3/8-165 CV	3/8	.73	.18	6.50	5.12	1.18	8.66	8.8	15.4	1	×	33
-195 CV				7.68	6.30		9.84	9.2	16.9	1.5	○	34
-225 CV				8.86	7.48		11.02	10.1	18.5	1.9	▲	35
-255 CV				10.04	8.66		12.20		20.1	3		36
-285 CV				11.22	9.84		13.39	11.3	23.3	3.3		37
-SLFA3/8-165 CV				3/8	.73		.18	6.50	5.12	1.18	8.66	8.8
 -195 CV				7.68	6.30		9.84	9.2	16.9	1.5	○	39
-225 CV				8.86	7.48		11.02	10.1	18.5	1.9	▲	40
-255 CV				10.04	8.66		12.20		20.1	3		41
-285 CV				11.22	9.84		13.39	11.3	23.3	3.3		42
CT50-SLSA1/2-165 CV	1/2	.62	.06	6.50	5.12	1.18	8.66	8.9	15.8	1.2	○	43
-195 CV				7.68	6.30		9.84	9.3	17.5	1.9		44
CT50 -225 CV				8.86	7.48		11.02	9.8	19.1	2.7		45
-255 CV				10.04	8.66		12.20	10.3	20.8	3.8	▲	46
-285 CV				11.22	9.84		13.39	10.7	26.5	4.7		47
-315 CV				12.40	11.02		14.57	11.4	28.8	5.2		48
-SLRA1/2-165 CV				1/2	.89		.20	6.50	5.12	1.18	8.66	9.2
-195 CV				7.68	6.30		9.84	9.5	17.8	1.3		50
-225 CV				8.86	7.48		11.02	10.7	21	1.4	○	51
-255 CV				10.04	8.66		12.20	11.0	22.4	2.1	▲	52
-285 CV				11.22	9.84		13.39	11.9	29.6	2.3		53
-SLFA1/2-165 CV	1/2	.89	.20	6.50	5.12	1.18	8.66	9.2	16.4	0.8	×	54
 -195 CV				7.68	6.30		9.84	9.5	17.8	1.3		55
-225 CV				8.86	7.48		11.02	10.7	21	1.4	○	56
-255 CV				10.04	8.66		12.20	11.0	22.4	2.1	▲	57
-285 CV				11.22	9.84		13.39	11.9	29.6	2.3		58
CT50-SLSB5/8-165 CV				5/8	.82		.10	6.50	5.12	1.26	8.66	8.6
-195 CV	7.68	6.30	9.84			9.3		20.2	1.5			60
-225 CV	8.86	7.48	11.02			9.9		22.9	2			61
-255 CV	10.04	8.66	12.20			10.1		24.3	3.1			62
-285 CV	11.22	9.84	13.39			10.7		27	3.9			63
-315 CV	12.40	11.02	14.57			11.4		29.7	4.8			64
CT50-SLSB3/4-165 CV	3/4	.99	.12	6.50	5.12	1.50	8.66	9.1	19	0.8		65
-195 CV				7.68	6.30		9.84	9.7	21.9	1.2		66
-225 CV				8.86	7.48		11.02	9.8	23.9	1.8		67
-255 CV				10.04	8.66		12.20	10.4	26.8	2.5		68
-285 CV				11.22	9.84		13.39	11.1	29.7	3.2		69
-315 CV				12.40	11.02		14.57	11.7	32.6	4.1		70

■ Cleaning tool for a spindle taper hole, STAR DUST

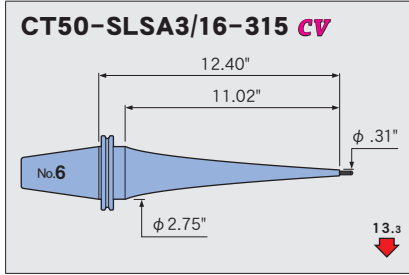
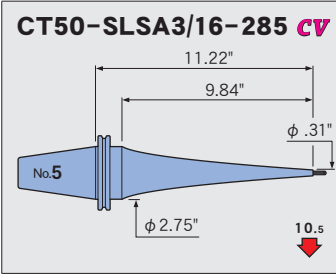
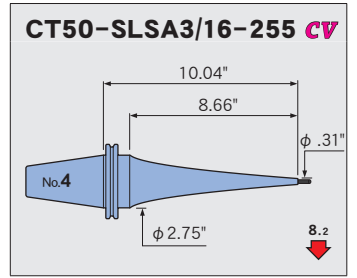
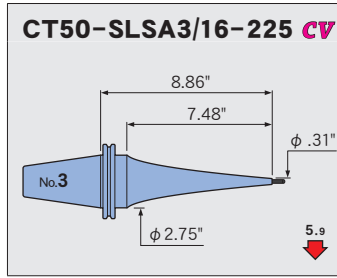
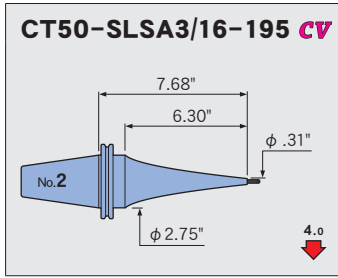
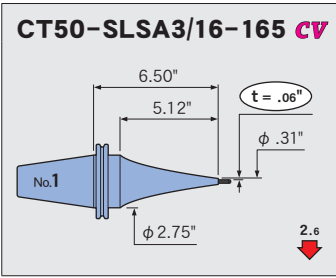
CODE
CLT-NT50-G3

Ⓢ P.226

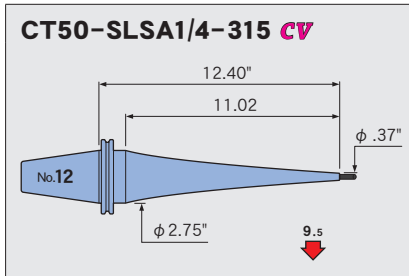
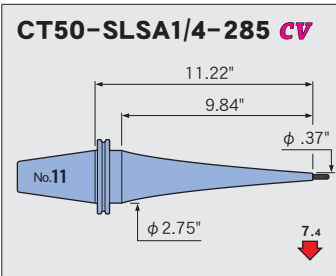
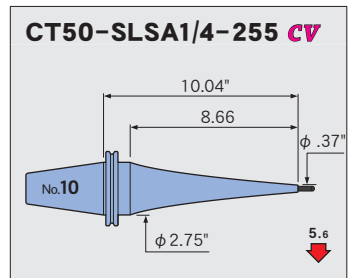
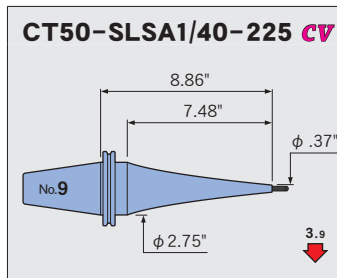
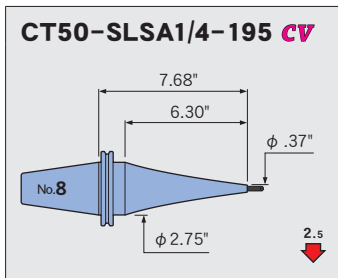
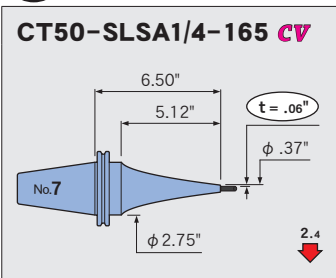


Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT arbor
OTHERS
PERIPHERALS
Technical Information

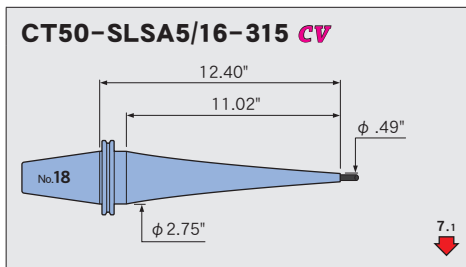
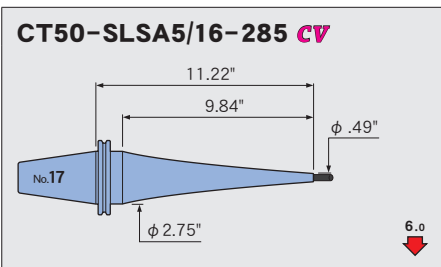
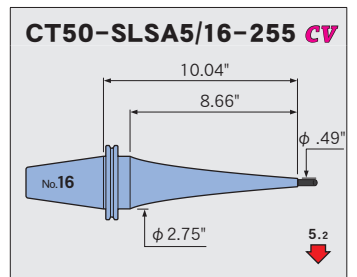
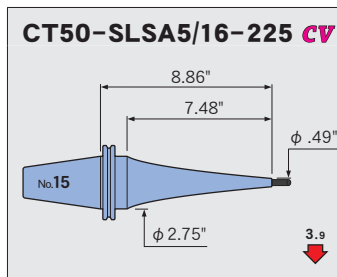
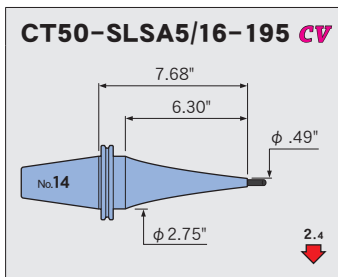
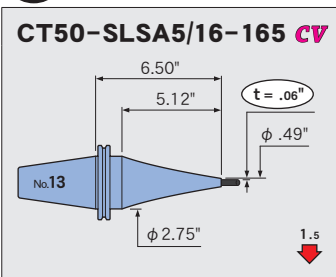
$\phi 3/16$



$\phi 1/4$



$\phi 5/16$



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

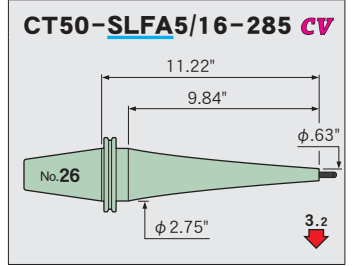
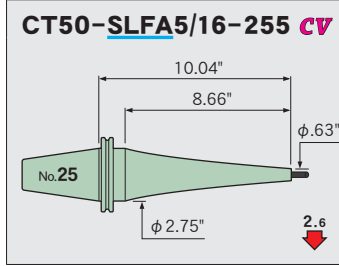
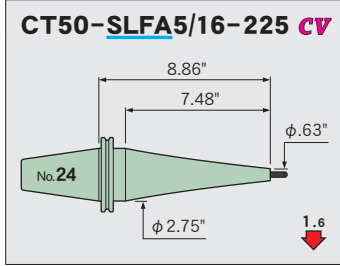
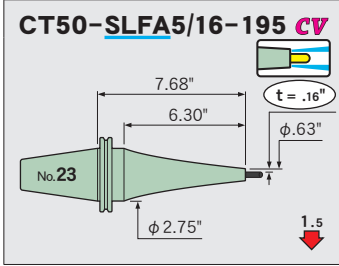
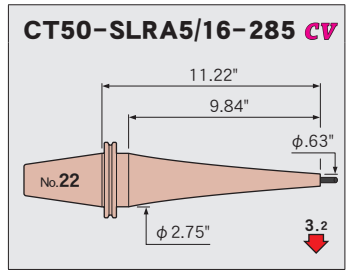
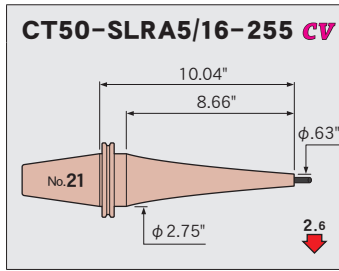
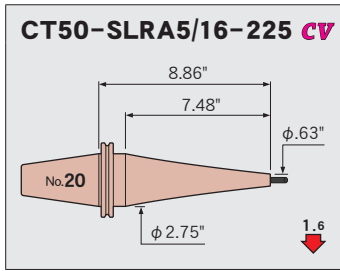
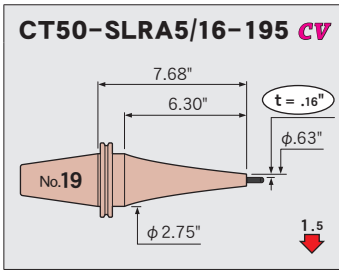
STRAIGHT
arbor

OTHERS

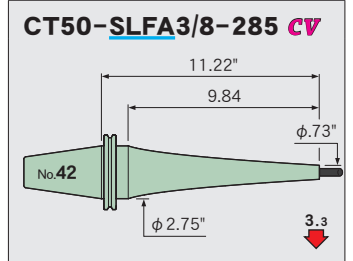
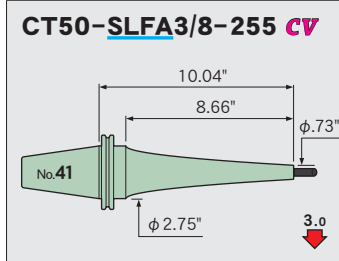
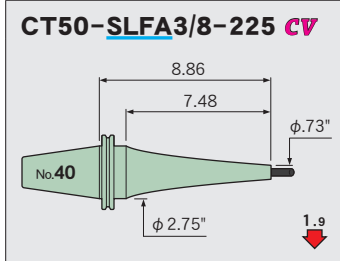
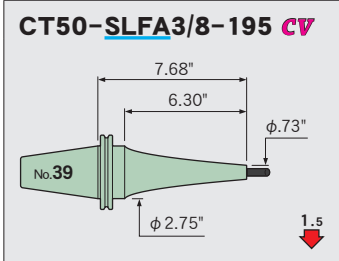
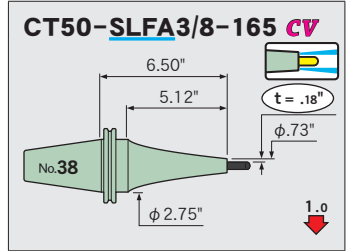
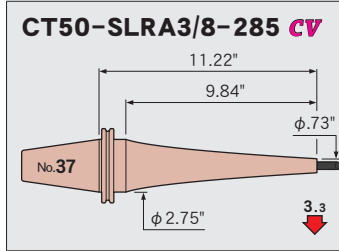
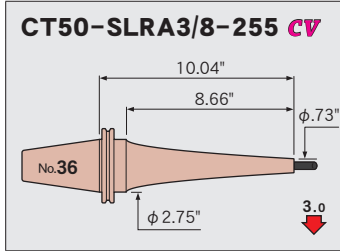
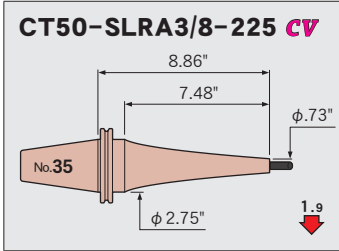
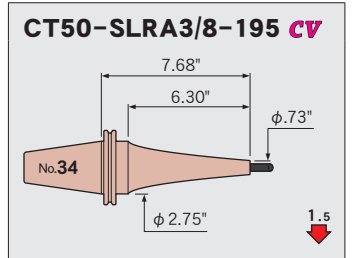
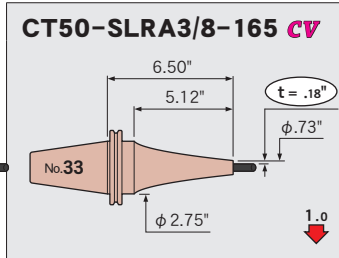
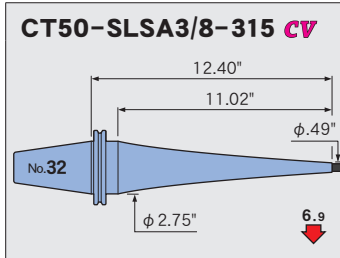
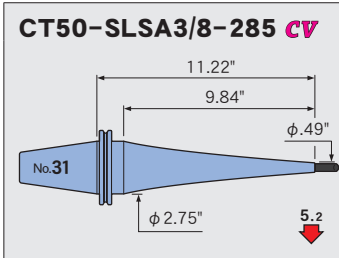
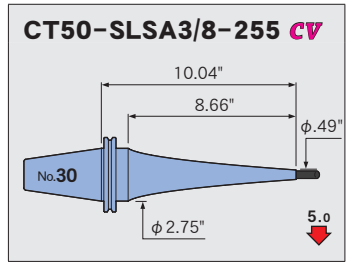
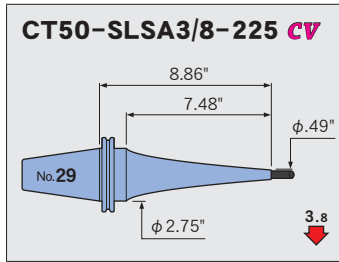
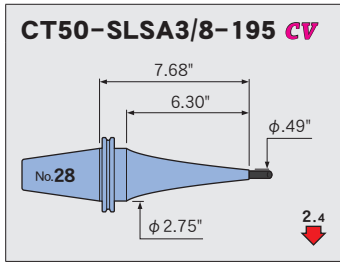
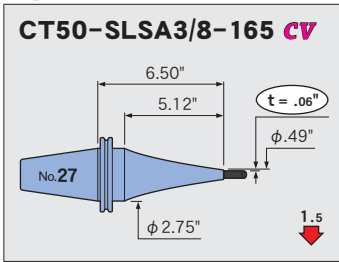
PERIPHERALS

Technical
information

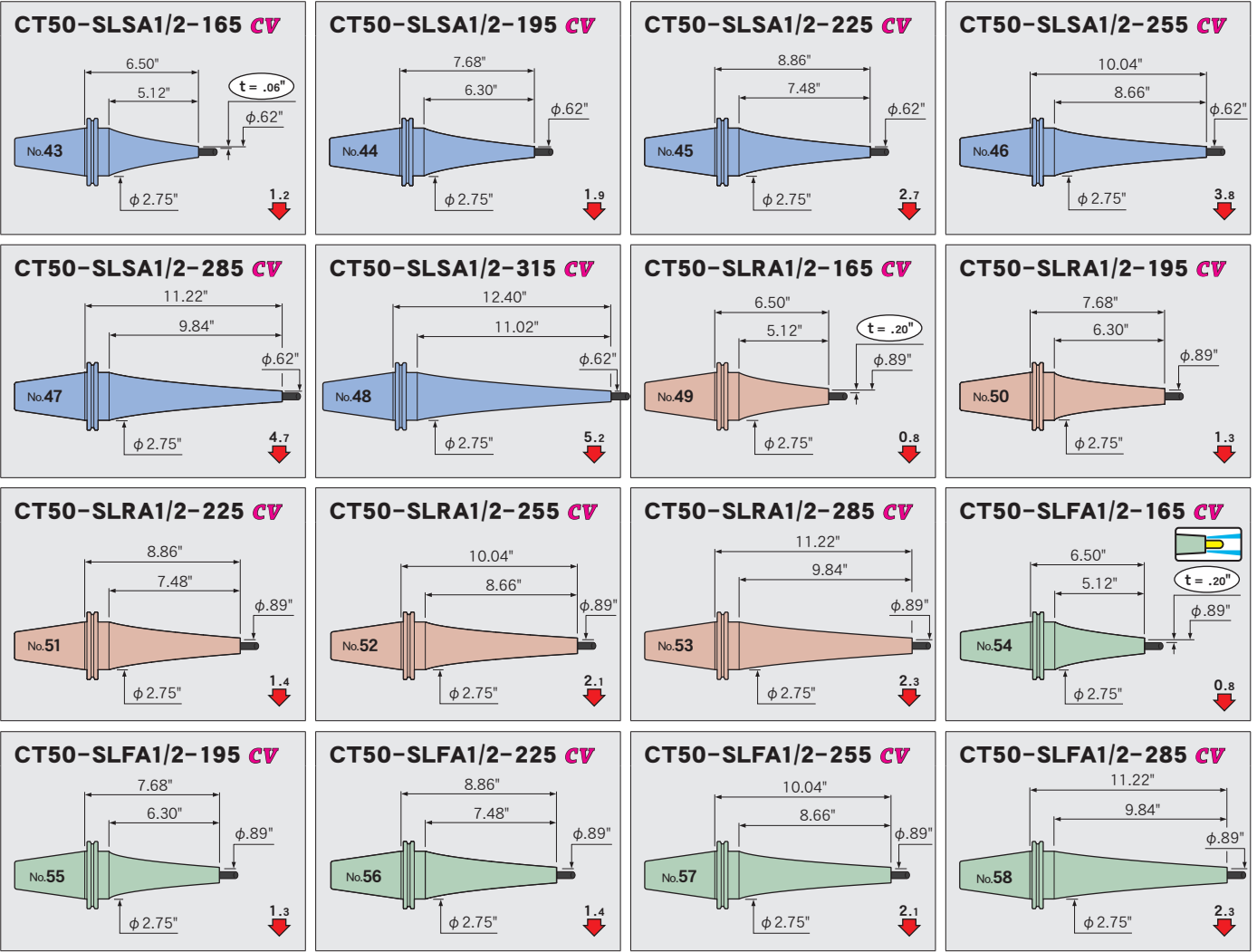
Feature
Shrink-fit Heater
MONO 3° MONO CURVE
MONO Series
2PIECE type
UNO
HYPER version
STRAIGHT anbor
OTHERS
PERIPHERALS
Technical Information



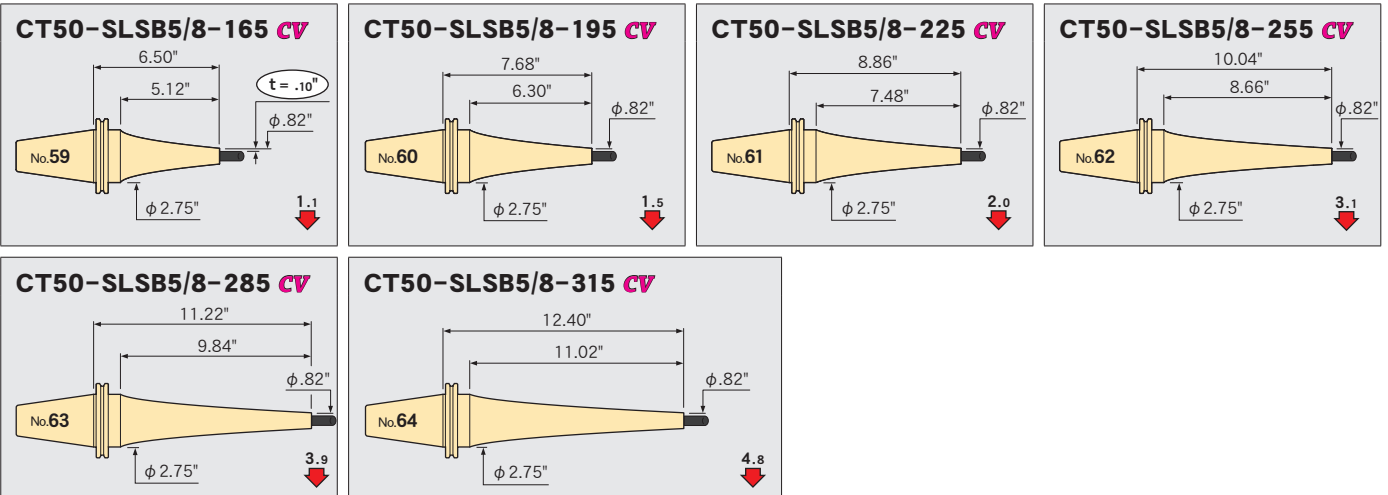
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$\phi 5/8$



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
airbor

OTHERS

PERIPHERALS

Technical
Information

$\phi 3/4$

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

