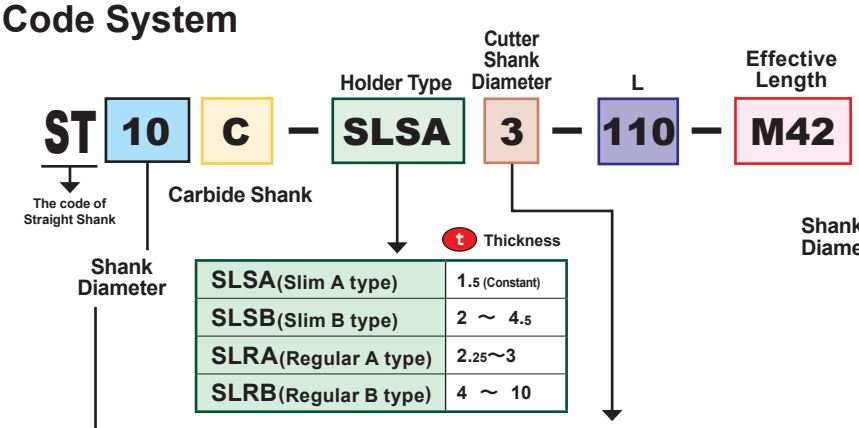
SHRINK-FIT HOLDER

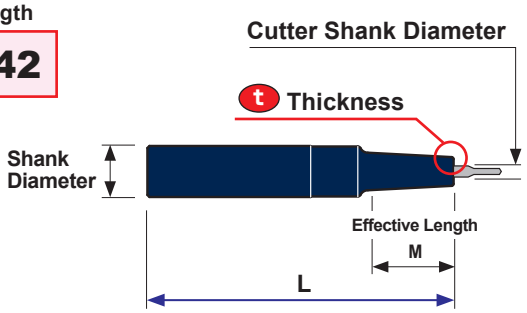
SLIMLINE

Straight Shank

STRAIGHT arbor

Code System





Shank Diameter \ Cutter Shank Diameter	3	3.175	4	5	6	7	8	9	10	11	12	16	20	25	1/8	3/16	1/4	3/8	1/2
10	●	●	●	●															
12					●														
16	●		●		●		●												
19.05															●	●	●		
20	●		●	●	●		●		●		●								
25	●		●	●	●	●	●	●	●	●	●	●							
25.4																		●	●
32					●		●		●		●	●	●						
42									●		●	●	●	●					

Metric

Fig.1

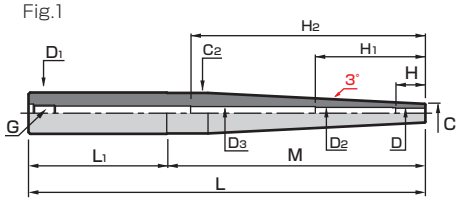


Fig.2

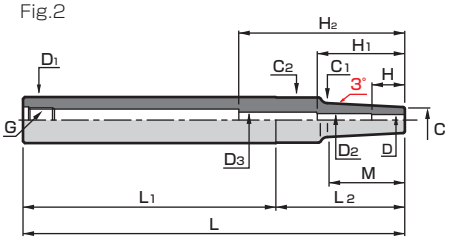
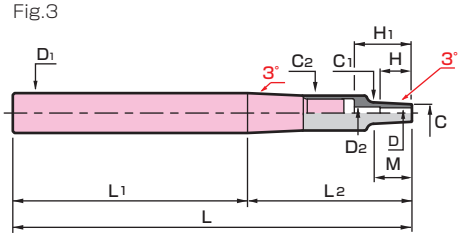


Fig.3

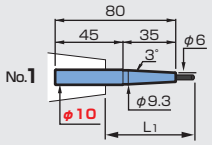


CODE	Fig.	φD	φC	L	M	φD1	H	L1	L2	φC1	φC2	G	Max. insertion length	Kg	φD2	φD3	H1	H2	Scale model
ST10 –SLSA 3– 80–M 35	1	3	6	80	35	10	9	45	35	–	9.3	M 6	64	0.03	4	–	40	–	1
ST16 –SLRA 3– 90–M 22	2		7.5	90	22	16		60	30	9.8	15.5	M10	62	0.09			31.5		2
–SLSA 3–115–M 42			6	115	42				55	10.4			87				51.5		3
–SLRA 3–115–M 42			7.5					65	50	11.9				0.1		8.6		60	4
–SLSA 3–140–M 67			6	140	67			60	80	13			112			6	52.5	82.5	5
–SLRA 3–140–M 67			7.5					65	75	14.5									6
ST10C –SLSA 3–160	3		6	160	12	10		120	40	7.3	10	–	19	0.2		–	15.5	–	7
ST20 –SLRA 3–175–M 97	2		7.5	175	97	20		70	105	17.7	19.5	M10	147			6	51.5	107.5	8
–SLSA 3–200–M 97			6	200				90	110	16.2			172	0.3			52.5	102.5	9
ST25 –SLSA 3–245–M 97				245		25		120	125		24.5		217	0.6		5	47.5	99.5	10
–SLRA 3–245–M 97			7.5							17.7									11
ST16C –SLSA 3–280	3		6	280	12	16		182	98	7.3	10	–	19	0.7		–	15.5	–	12
ST25 –SLSA 3–315–M195	1			315	195	25		120	195	–	24.5	M10	287			5	51.5	104.5	13
–SLRA 3–315–M 67	2		7.5		67			220	95	14.5				0.9			47.5	69.5	14
ST10 –SLSA3.175 – 80–M35	1	3.175	6	80	35	10	10	45	35	–	9.3	M 6	64	0.03	4	–	40	–	15
ST10 –SLSA 4– 80–M 35	1	4	7	80	35	10	12	45	35	–	9.5	M 6	64	0.03	5	–	40	–	16
ST16 –SLRA 4– 90–M 22	2		10	90	22	16		60	30	12.3	15.5	M10	62	0.09			32.5		17
–SLSA 4–115–M 42			7	115	42				55	11.4			87	0.1			60		18
–SLRA 4–115–M 42			10					65	50	14.4						8.6	52.5	60	19
–140–M 60	1			140	60			80	–	–			112				62.5	85	20
–SLSA 4–140–M 67	2		7		67			60	80	14						6		82.5	21
ST10C –SLSA 4–160	3			160	12	10		120	40	8.3	10	–	19	0.2		–	15.5	–	22
ST20 –SLRA 4–175–M 95	1		10	175	95	20		80	–	–	19.5	M10	147	0.3		6	51.5	97.5	23
–SLSA 4–200–M 97	2		7	200	97			90	110	17.2			172			7	37.5	102.5	24
ST25 –SLSA 4–245–M 97				245		25		120	125		24.5		217	0.6		6	50.5	100.5	25
–SLRA 4–245–M 97			10							20.2									26
ST16C –SLSA 4–280	3		7	280	12	16		182	98	8.3	10	–	19	0.7		–	15.5	–	27
ST25 –SLRA 4–315–M 67	2		10	315	67	25		220	95	17	24.5	M10	287	0.9		6	50.5	70.5	28
–SLSA 4–315–M195	1		7		195			120	–	–				0.7				110.5	29
ST10 –SLSA 5– 80–M 35	1	5	8	80	35	10	15	45	–	–	9.5	M 6	70	0.03	6	–	61.5	–	30
ST20 –SLSA 5–200–M110				200	110	20		90			19.2	M10	182	0.3		8.6	69.2	161.5	31
ST25 –SLSA 5–290–M 97	2			290	97	25		180	97	18.2	24.5		272	0.8				241.5	32
ST12 –SLSA 6– 80–M 35	1	6	9	80	35	12	18	45	–	–	11.5	M 8	52	0.04	7	–	40	–	33
ST16 –SLSA 6–115–M 42	2			115	42	16		60	55	13.4	15.5	M10	87	0.1			60		34
–SLSB 6–115–M 42			10					65	50	14.4						8.6	52.5	60	35
ST20 –SLRB 6–120–M 42			14	120		20		70		18.4	19.5		92	0.2					36
ST16 –SLSB 6–140–M 60	1		10	140	60	16		80	–	–	15.5		112	0.1			62.5	85	37
–SLSA 6–140–M 70			9		70			70									72.5		38
ST20 –SLSA 6–175–M105				175	105	20					19.5		147	0.3			107.5	115	39
–SLSB 6–175–M 95			10		95			80									97.5		40
–SLRB 6–175–M 60			14		60			115									62.5		41
ST12C –SLSB 6–175	3		10		12	12		125	50		12	–	27			–	23.5	–	42
ST25 –SLSB 6–205–M127	2			205	127	25		70	135	23.3	24.5	M10	177	0.5		8.6	102.5	135	43
ST16C –SLSB 6–225	3			225	22	16		165	60	12.3	16	–	32	0.6		–	26.5	–	44
ST25 –SLSA 6–230–M 97	2		9	230	97	25		120	110	19.2	24.5	M10	202	0.5		8.6	92.5	160	45
–SLRB 6–240–M 42			14	240	42			170	70	18.4			212	0.7			45.5	50	46
ST32 –SLSB 6–255–M157			10	255	157	32		70	185	26.5	31.5	M16	227	0.8		8	72.5	163.5	47
ST25 –SLSA 6–305–M185	1		9	305	185	25		120	–	–	24.5	M10	277				75.5	160.5	48
ST20C –SLSB 6–320	3		10	320	22	20		221	99	12.3	16	–	32	1.3			26.5	–	49
ST32 –SLRB 6–345–M 67	2		14	345	67	32		250	95	21	31.5	M16	317	1.6			50.5	73.5	50
ST25C –SLSB 6–360	3		10	360	22	25		242	118	12.3	20	–	38	2.2			31.5	–	51
ST32 –SLSB 6–375–M157	2			375	157	32		190	185	26.5	31.5	M16	347	1.4			72.5	163.5	52

CODE	Fig.	φD	φC	L	M	φD1	H	L1	L2	φC1	φC2	G	Max. insertion length	Kg	φD2	φD3	H1	H2	Scale model
ST25 −SLSA 7−230−M 97	2	7	10	230	97	25	20	120	110	20.2	24.5	M10	212	0.5	8	8.6	69.8	181.5	53
−320−M 97				320				210					302	0.9				271.5	54
ST20 −SLRB 8−100−M 30	1	8	18	100	30	20	24	70	−	−	19.5	M10	72	0.2	8.6	−	40	−	55
ST16 −SLSA 8−115−M 50			11	115	50	16		65			15.5		87	0.1			60		56
ST20 −SLSB 8−145−M 70			13	145	70	20		75			19.5		117	0.2			85		57
ST25 −SLRB 8−160−M 42	2		18	160	42	25		110	50	22.4	24.5		132	0.5			90		58
ST20 −SLSA 8−175−M 85	1		11	175	85	20		90	−	−	19.5		147	0.3			115		59
ST25 −SLSB 8−175−M 97	2		13		97	25		70	105	23.2	24.5			0.4			105		60
−SLRB 8−210−M 90	1		18	210	90			120	−	−			182	0.6			70		61
ST16C−SLSB 8−225	3		13	225	22	16		165	60	15.3	16	—	32				27.5		62
ST25 −SLSA 8−230−M 97	2		11	230	97	25		120	110	21.2	24.5	M10	202				160		63
−SLSB 8−260−M140	1		13	260	140				−	−			232	0.7			120		64
ST20C−SLSB 8−270	3			270	22	20		200	70	15.3	20	—	38	1.1			31.5		65
ST25 −SLSA 8−280−M160	1		11	280	160	25		120	−	−	24.5	M10	252	0.7			140		66
ST32 −SLRB 8−285−M 67	2		18	285	67	32		190	95	25	31.5	M16	257	1.3			73.5		67
ST25C−SLSB 8−360	3		13	360	22	25		242	118	15.3	20	—	38	2.2			31.5		68
ST32 −SLSB 8−375−M157	2			375	157	32		190	185	29.5	31.5	M16	347	1.5		12	72.5	164.5	69
ST25 −SLSA 9−230−M 97	2	9	12	230	97	25	30	120	110	22.2	24.5	M10	60	0.6	9.6	−	181.5	−	70
−320−M 97				320				210						0.9			271.5		71
ST25 −SLRB10−120−M 35	1	10	22	120	35	25	30	85	−	−	24.5	M10	60	0.4	10.6	−	50	−	72
ST20 −SLSB10−120−M 50			16		50	20		70			19.5			0.2			60		73
ST25 −SLSB10−145−M 67	2			145	67	25			75	23	24.5			0.4			75		74
ST20 −SLSA10−145−M 70	1		13		70	20		75	−	−	19.5			0.2			85		75
ST25 −SLSB10−175−M105			16	175	105	25		70			24.5			0.5					76
−SLRB10−210−M 90			22	210	90			120						0.7			70		77
ST32 −SLSB10−240−M170			16	240	170	32		70			31.5	M16	212	0.9		12	59.5	149.5	78
ST25 −SLSA10−255−M135			13	255	135	25		120			24.5	M10	60	0.7		−	115	−	79
ST20C−SLSB10−270	3		16	270	22	20		200	70	18.3	20	—	38	1.1	11		33.5		80
ST25 −SLSB10−275−M105	1			275	105	25		170	−	−	24.5	M10	60	0.8	10.6		85		81
ST32 −SLRB10−285−M 67	2		22	285	67	32		190	95	29	31.5	M16	257	1.4		12	59.5	74.5	82
−SLSA10−340−M210	1		13	340	210			130	−	−			312	1.3				167.5	83
ST25C−SLSB10−360	3		16	360	22	25		242	118	18.3	20	—	38	2.2	11	−	33.5	−	84
ST32 −SLSB10−360−M170	1				170	32		190	−	−	31.5	M16	332	1.5	10.6	12	59.5	149.5	85
ST42 −SLSB10−445−M157	2			445	157	42		260	185	32.5	41.5	M24	417	2.7				162.5	86
ST25 −SLSA11−230−M110	1	11	14	230	110	25	30	120	−	−	24.5	M10	60	0.6	11.6	−	181.5	−	87
−320−M110				320				210						0.9			271.5		88
ST25 −SLSB12−120−M 42	2	12	19	120	42	25	30	70	50	23.4	24.5	M10	60	0.3	12.6	−	50	−	89
ST20 −SLSA12−120−M 50	1		15		50	20			−	−	19.5			0.2			60		90
ST32 −SLRB12−140−M 60			26	140	60	32		80			31.5	M16	112	0.7	13		70		91
ST25 −SLSB12−150−M 80			19	150	80	25		70			24.5	M10	60	0.4	12.6		60		92
ST32 −SLSB12−220−M150				220	150	32					31.5	M16	192	0.9	13		130		93
ST25 −SLSA12−230−M110			15	230	110	25		120			24.5	M10	60	0.6	12.6		160		94
−SLSB12−250−M 80			19	250	80			170						0.8			60		95
ST32 −SLRB12−260−M 70			26	260	70	32		190			31.5	M16	232	1.3	13		190		96
−SLSA12−315−M185			15	315	185			130					287	1.2			165		97
−SLSB12−340−M150			19	340	150			190					312	1.5			130		98
ST42 −SLSB12−445−M157	2			445	157	42		260	185	35.5	41.5	M24	417	2.8	12.6	14	59.5	162.5	99
ST32 −SLRB16−175−M 45	1	16	32	175	45	32	32	130	−	−	−	M16	80	0.8	16.6	−	105	−	100
ST25 −SLSB16−175−M 50			24		50	25		125				M10		0.5					101
ST32 −SLSB16−290−M100				290	100	32		190			31.5	M16		1.4			80		102
ST42 −SLRB16−355−M 67	2		32	355	67	42		260	95	39	41.5	M24	327	2.7	17		73.5		103
−SLSB16−445−M157	1		24	445	157				−	40.5			417	3.0		20	142.5	163.5	104
ST42 −SLRB20−170−M 70	1	20	38	170	70	42	40	100	−	−	41.5	M24	142	1.3	21.6	−	49.5	−	105
ST32 −SLSB20−175−M 50			29	175	50	32		125			31.5	M16	80	0.8			103.5		106
ST42 −SLSB20−255−M155				255	155	42		100			41.5	M24	227	1.7		22	69.5	135	107
−SLRB20−330−M 70			38	330	70			260					302	2.6		−	49.5	−	108
−SLSB20−415−M155			29	415	155								387	2.9		22	69.5	135	109
ST42 −SLRB25−170−M 42	2	25	45	170	42	42	45	100	70	49.4	50	M24	80	1.5	25.6	−	50	−	110
−SLRB25−250−M 42				250				180						2.1					111

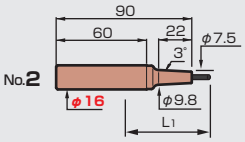
φ3

ST10−SLSA3−80−M35



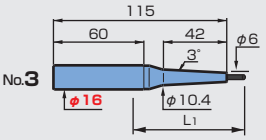
L1	49
↓	8.3

ST16−SLRA3−90−M22



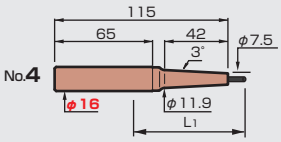
L1	41
↓	3.0

ST16−SLSA3−115−M42



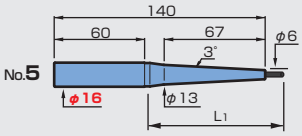
L1	73
↓	11.0

ST16−SLRA3−115−M42



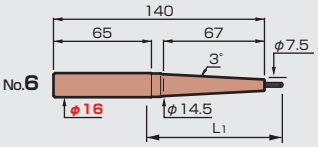
L1	73
↓	6.5

ST16−SLSA3−140−M67



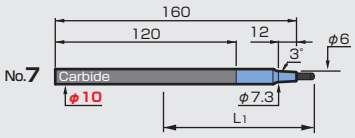
L1	89
↓	16.3

ST16−SLRA3−140−M67



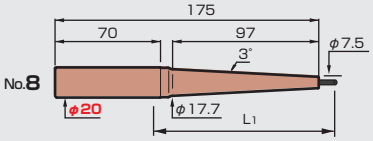
L1	89
↓	9.8

ST10C−SLSA3−160



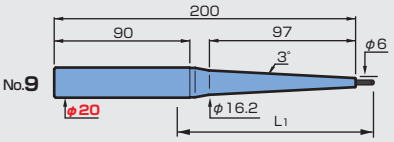
L1	59	79	99
↓	8.6	11.9	17.4

ST20−SLRA3−175−M97



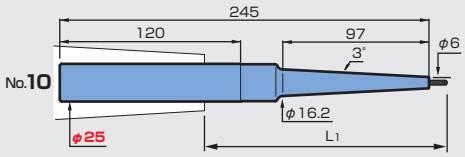
L1	114
↓	12.7

ST20−SLSA3−200−M97



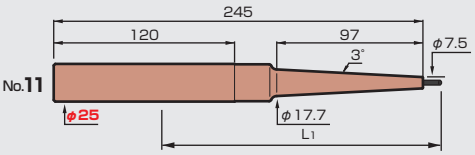
L1	129
↓	22.4

ST25−SLSA3−245−M97



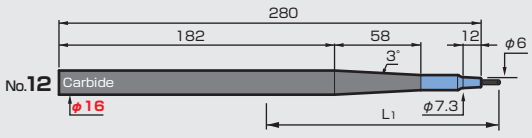
L1	134	184
↓	21.1	24.3

ST25−SLRA3−245−M97



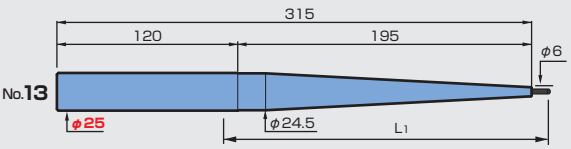
L1	134	184
↓	13.3	16.5

ST16C−SLSA3−280



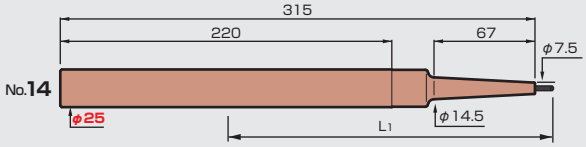
L1	121	153
↓	12.8	16.0

ST25−SLSA3−315−M195



L1	209
↓	32.3

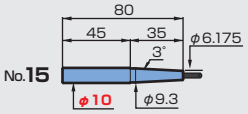
ST25−SLRA3−315−M67



L1	109	159	209
↓	9.3	11.6	15.9

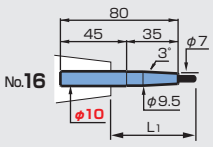
φ3.175

ST10−SLSA3.175−80−M35



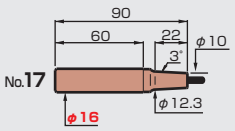
φ4

ST10–SLSA4–80–M35



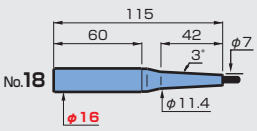
L1	52
↓	7.4

ST16–SLRA4–90–M22



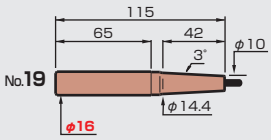
L1	44
↓	1.8

ST16–SLSA4–115–M42



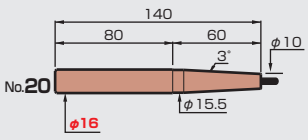
L1	76
↓	8.9

ST16–SLRA4–115–M42



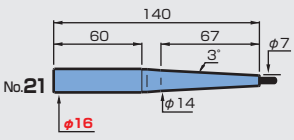
L1	76
↓	4.3

ST16–SLRA4–140–M60



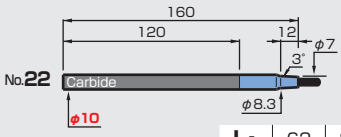
L1	76
↓	4.4

ST16–SLSA4–140–M67



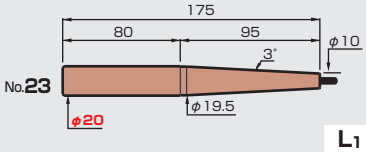
L1	92
↓	13.0

ST10C–SLSA4–160



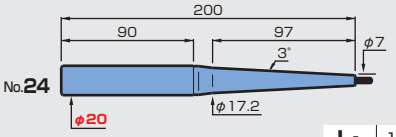
L1	62	82	102
↓	9.6	13.2	19.1

ST20–SLRA4–175–M95



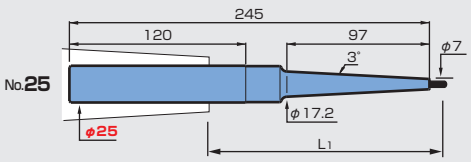
L1	112
↓	7.0

ST20–SLSA4–200–M97



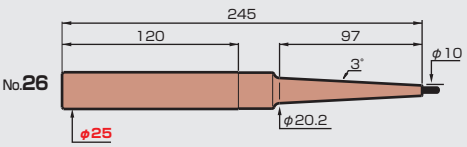
L1	132
↓	18.6

ST25–SLSA4–245–M97



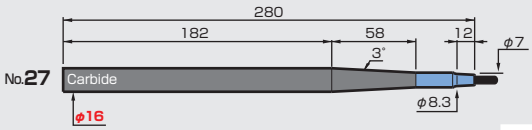
L1	137	187
↓	17.1	20.4

ST25–SLRA4–245–M97



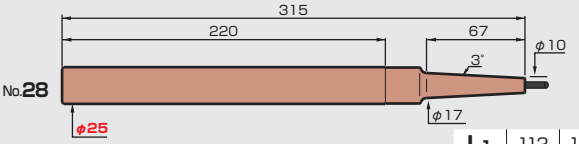
L1	137	187
↓	8.0	11.3

ST16C–SLSA4–280



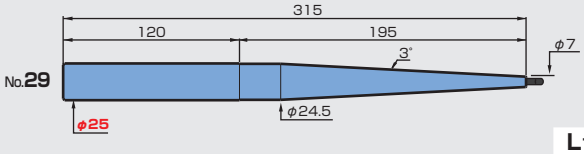
L1	124	156
↓	14.2	17.5

ST25–SLRA4–315–M67



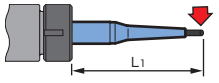
L1	112	162	212
↓	5.5	7.9	12.3

ST25–SLSA4–315–M195



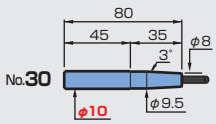
L1	212
↓	26.8

Rigidity Value(μm/kgf)
(Reference) P.159

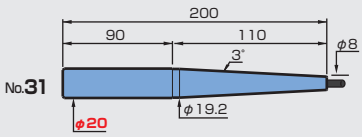


φ5

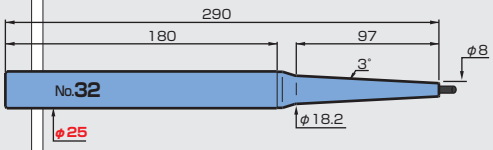
ST10–SLSA5–80–M35



ST20–SLSA5–200–M110

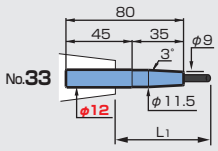


ST25–SLSA5–290–M97



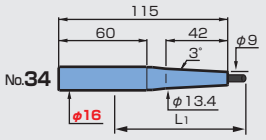
φ6

ST12–SLSA6–80–M35



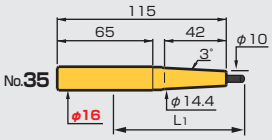
L1	54
↓	4.0

ST16–SLSA6–115–M42



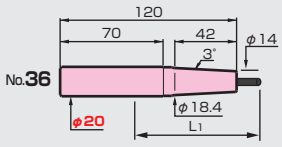
L1	82
↓	6.5

ST16–SLSB6–115–M42



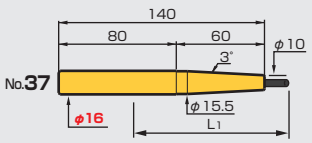
L1	82
↓	5.1

ST20–SLRB6–120– M42



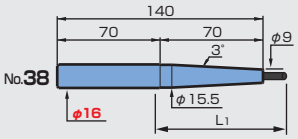
L1	78
↓	2.0

ST16–SLSB6–140–M60



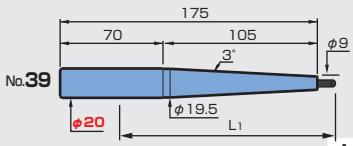
L1	82
↓	5.3

ST16–SLSA6–140–M70



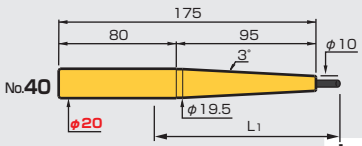
L1	98
↓	9.1

ST20–SLSA6–175–M105



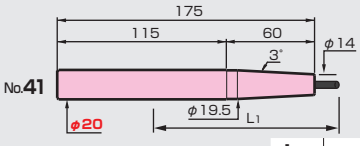
L1	138
↓	12.8

ST20–SLSB6–175–M95



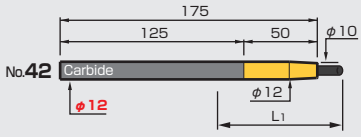
L1	118
↓	8.2

ST20–SLRB6–175–M60



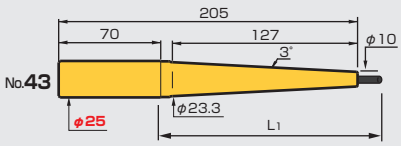
L1	78	118
↓	2.0	4.5

ST12C–SLSB6–175



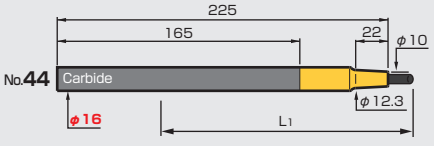
L1	78	102	126
↓	6.9	10.2	15.4

ST25–SLSB6–205–M127



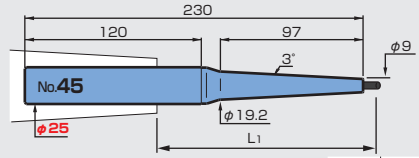
L1	153
↓	10.7

ST16C–SLSB6–225



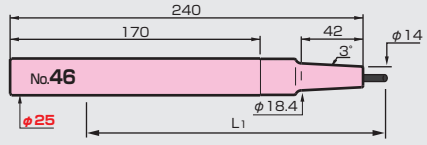
L1	98	130	162
↓	4.6	6.8	10.4

ST25–SLSA6–230–M97



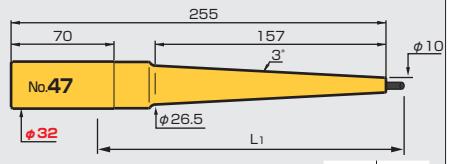
L1	143
↓	11.9

ST25–SLRB6–240–M42



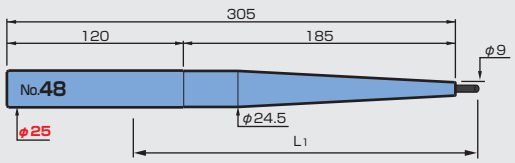
L1	93	143	193
↓	2.0	3.7	7.3

ST32–SLSB6–255–M157



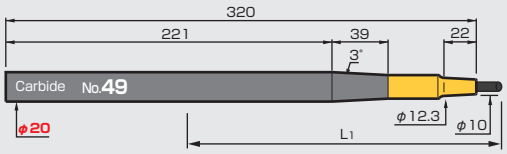
L1	203
↓	13.3

ST25−SLSA6−305−M185



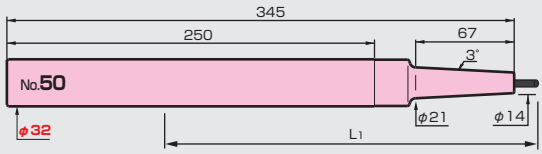
L1	218
⇩	20.0

ST20C−SLSB6−320



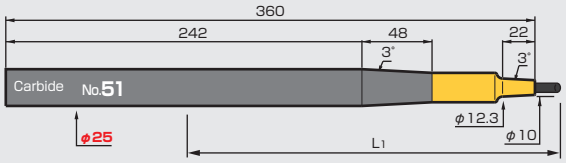
L1	118	158	198
⇩	5.0	6.7	9.4

ST32−SLRB6−345−M67



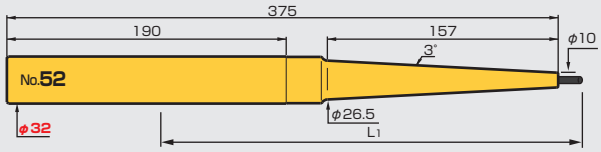
L1	114	178	242
⇩	2.6	4.0	6.7

ST25C−SLSB6−360



L1	143	193	243
⇩	3.9	5.1	7.2

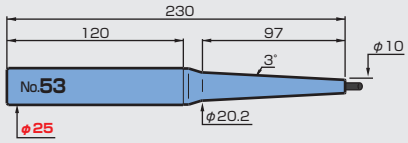
ST32−SLSB6−375−M157



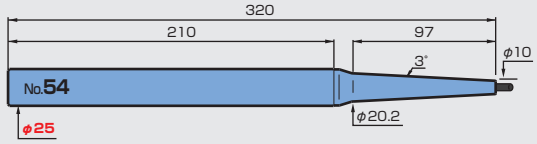
L1	210	274
⇩	13.6	17.3

φ7

ST25−SLSA7−230−M97

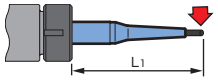


ST25−SLSA7−320−M97



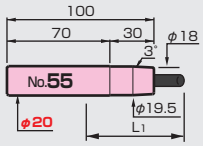
Rigidity Value(μm/kgf)

(Reference) P.159



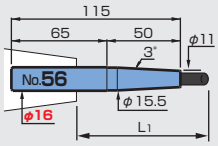
φ8

ST20-SLRB8-100-M30



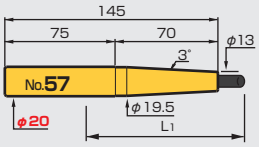
L1	64
↓	1.0

ST16-SLSA8-115-M50



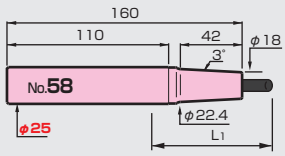
L1	88
↓	5.1

ST20-SLSB8-145-M70



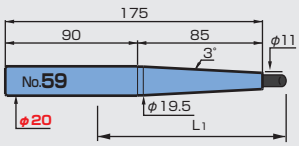
L1	104
↓	4.0

ST25-SLRB8-160-M42



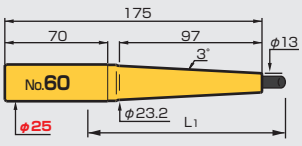
L1	74
↓	1.0

ST20-SLSA8-175-M85



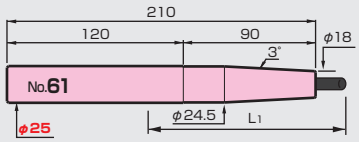
L1	124
↓	7.7

ST25-SLSB8-175-M97



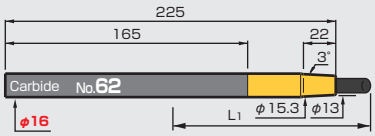
L1	129
↓	5.1

ST25-SLRB8-210-M90



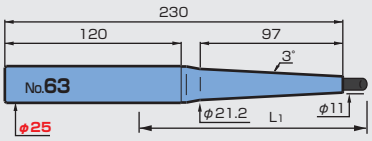
L1	124
↓	2.4

ST16C-SLSB8-225



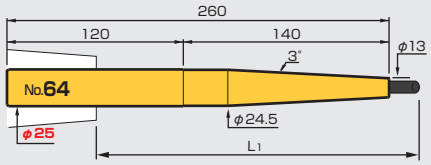
L1	104	136	168
↓	4.4	6.8	10.7

ST25-SLSA8-230-M97



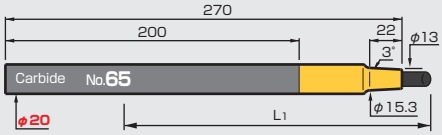
L1	149
↓	8.8

ST25-SLSB8-260-M140



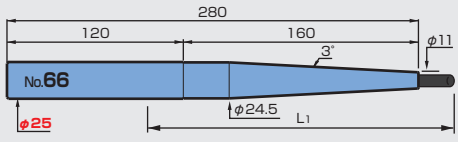
L1	174
↓	7.9

ST20C-SLSB8-270



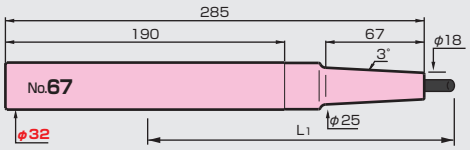
L1	124	164	204
↓	3.2	5.0	7.9

ST25-SLSA8-280-M160



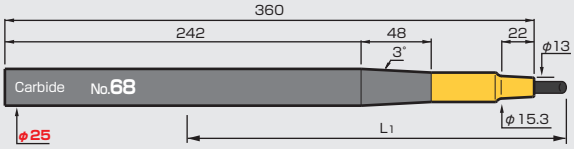
L1	199
↓	13.3

ST32-SLRB8-285-M67



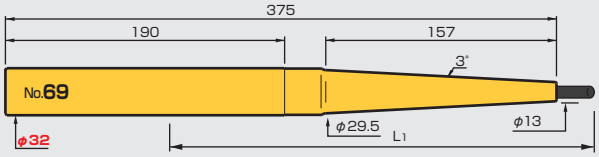
L1	120	184
↓	1.7	3.2

ST25C-SLSB8-360



L1	149	199	249
↓	3.5	4.8	7.0

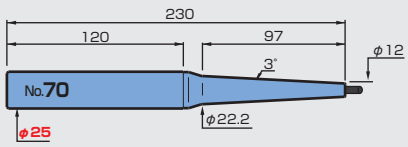
ST32-SLSB8-375-M157



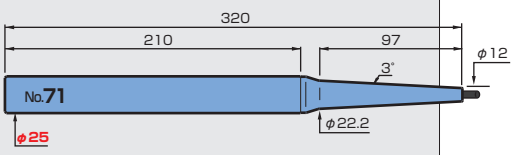
L1	216	280
↓	9.2	13.0

φ9

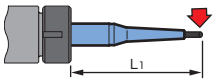
ST25−SLSA9−230−M97



ST25−SLSA9−320−M97

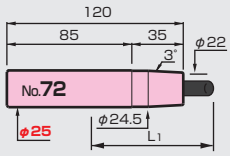


Rigidity Value(μm/kgf)
(Reference) P.159



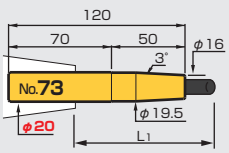
φ10

ST25−SLRB10−120−M35



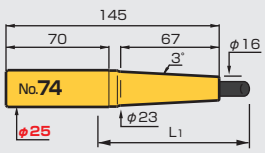
L1	80
↓	0.8

ST20−SLSB10−120−M50



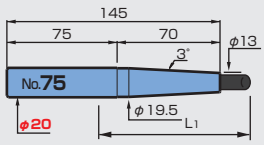
L1	90
↓	2.0

ST25−SLSB10−145−M67



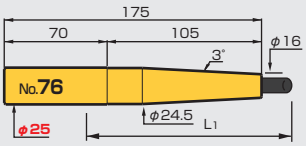
L1	105
↓	2.3

ST20−SLSA10−145−M70



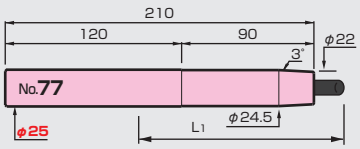
L1	110
↓	4.5

ST25−SLSB10−175−M105



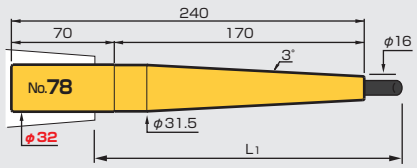
L1	135
↓	3.5

ST25−SLRB10−210−M90



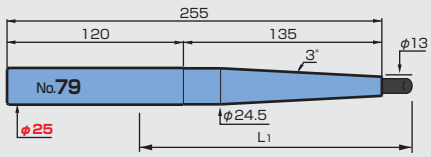
L1	130
↓	2.3

ST32−SLSB10−240−M170



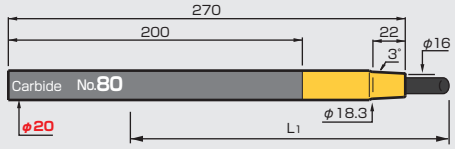
L1	200
↓	5.6

ST25−SLSA10−255−M135



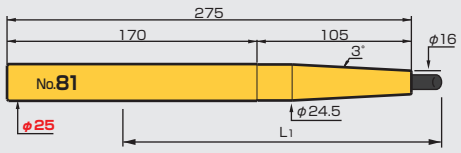
L1	180
↓	8.8

ST20C−SLSB10−270



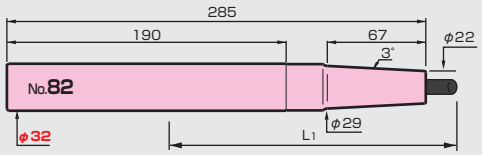
L1	130	170	210
↓	3.2	5.1	8.3

ST25−SLSB10−275−M105



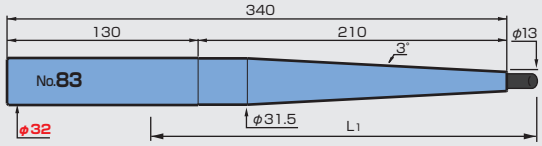
L1	155	205
↓	4.6	8.7

ST32−SLRB10−285−M67



L1	126	190
↓	1.3	2.8

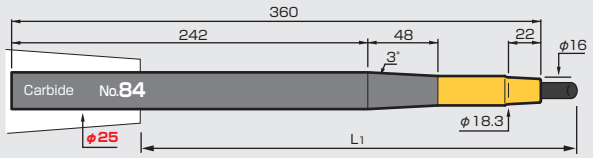
ST32−SLSA10−340−M210



L1	254
↓	12.1

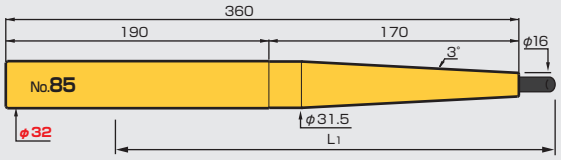
Scale Model S=1:5

ST25C–SLSB10–360



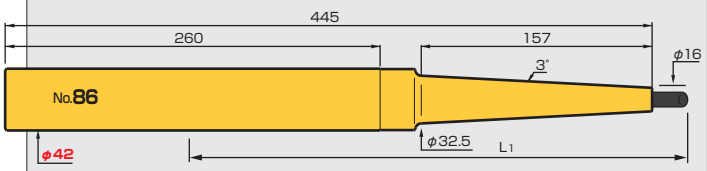
L1	155	205	255
↓	3.5	4.9	7.3

ST32–SLSB10–360–M170



L1	222	286
↓	6.6	10.5

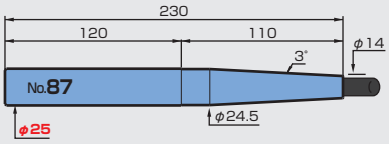
ST42–SLSB10–445–M157



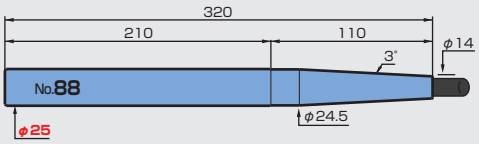
L1	240	324
↓	6.0	8.3

φ11

ST25–SLSA11–230–M110

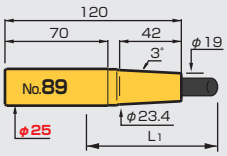


ST25–SLSA11–320–M110



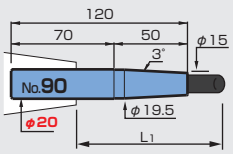
φ12

ST25–SLSB12–120–M42



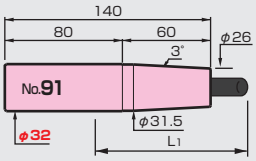
L1	86
↓	1.0

ST20–SLSA12–120–M50



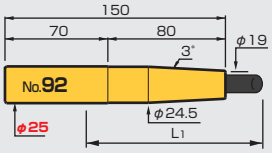
L1	96
↓	2.6

ST32–SLRB12–140–M60



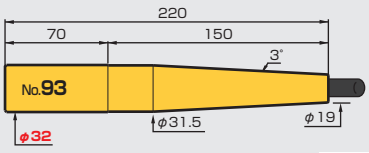
L1	100
↓	0.6

ST25–SLSB12–150–M80



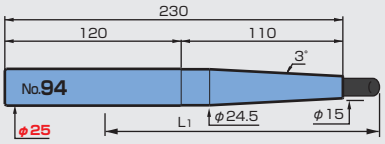
L1	116
↓	1.9

ST32–SLSB12–220–M150



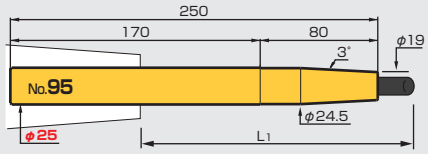
L1	186
↓	3.6

ST25–SLSA12–230–M110



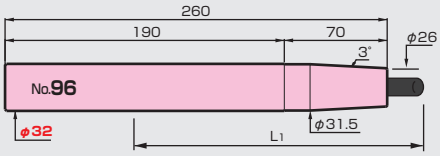
L1	161
↓	5.7

ST25–SLSB12–250–M80



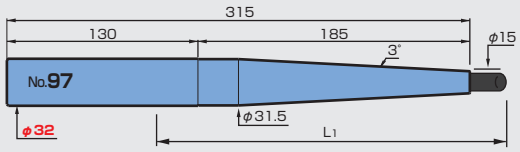
L1	136	186
↓	2.7	6.0

ST32–SLRB12–260–M70



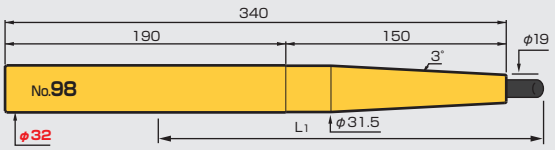
L1	132	196
↓	1.1	2.8

ST32–SLSA12–315–M185



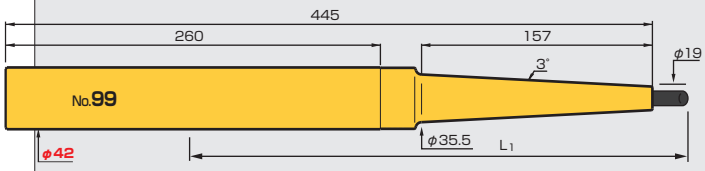
L1	228
↓	8.4

ST32–SLSB12–340–M150



L1	196	260
↓	4.0	7.2

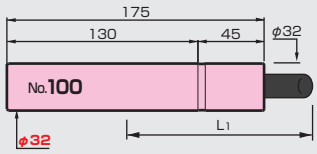
ST42–SLSB12–445–M157



L1	246	330
↓	4.6	6.9

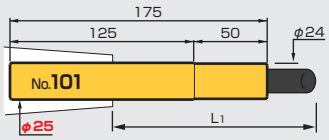
φ16

ST32–SLRB16–175–M45



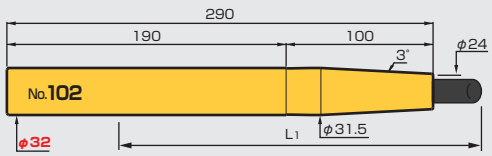
L1	112
↓	0.6

ST25–SLSB16–175–M50



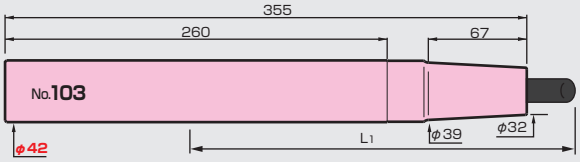
L1	98	148
↓	1.0	3.2

ST32–SLSB16–290–M100



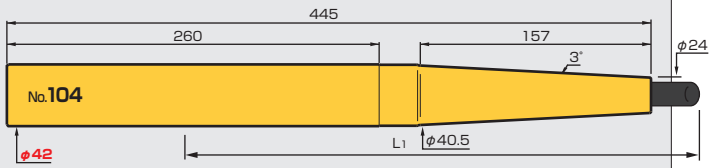
L1	176	240
↓	2.3	5.0

ST42–SLRB16–355–M67



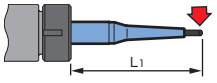
L1	174	258
↓	0.9	2.2

ST42–SLSB16–445–M157



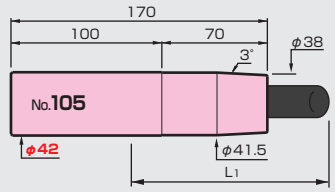
L1	258	342
↓	3.4	5.9

Rigidity Value(μm/kgf)
(Reference) P.159



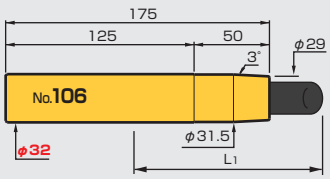
φ20

ST42–SLRB20–170–M70



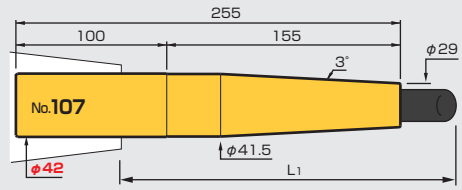
L1	130
↓	0.4

ST32–SLSB20–175–M50



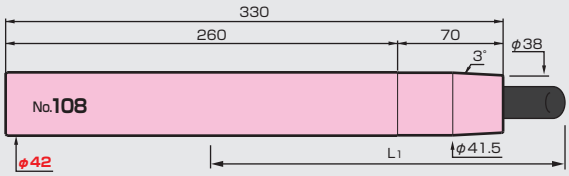
L1	124
↓	0.7

ST42–SLSB20–255–M155



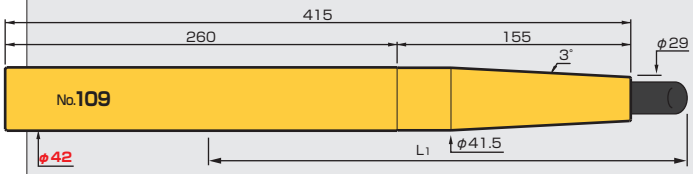
L1	215
↓	1.7

ST42–SLRB20–330–M70



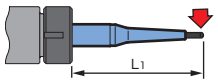
L1	144	228
↓	0.5	1.5

ST42–SLSB20–415–M155



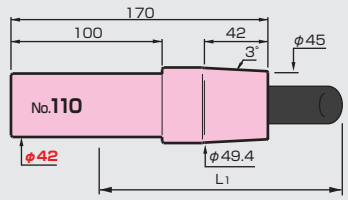
L1	228	312
↓	1.9	4.0

Rigidity Value(μm/kgf)
(Reference) P.159



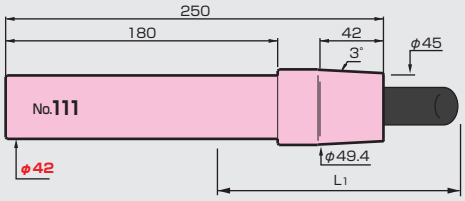
φ25

ST42–SLRB25–170–M42



L1	159
↓	0.4

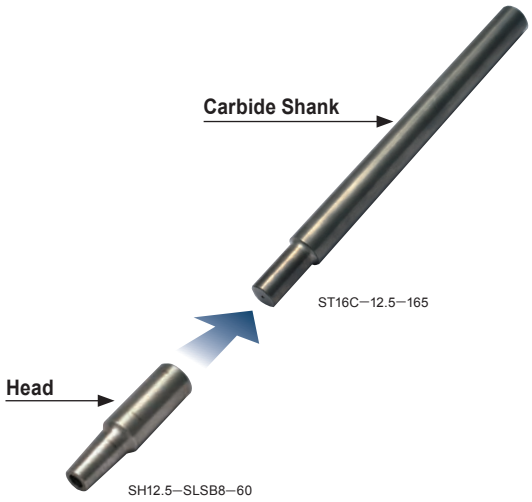
ST42–SLRB25–250–M42



L1	159
↓	0.4

The Parts Code List for Carbide Straight Arbor

SET-CODE	CARBIDE SHANK	HEAD
ST10C—SLSA 3—160	ST10C— 7 —120	SH 7 —SLSA 3—40
—SLSA 4—160		—SLSA 4—40
ST12C—SLSB 6—175	ST12C— 9 —125	SH 9 —SLSB 6—50
ST16C—SLSA 3—280	ST16C— 7 —240	SH 7 —SLSA 3—40
—SLSA 4—280		—SLSA 4—40
—SLSB 6—225	—12.5—165	SH12.5—SLSB 6—60
—SLSB 8—225		—SLSB 8—60
ST20C—SLSB 6—320	ST20C—12.5—260	SH12.5—SLSB 6—60
—SLSB 8—270	—16 —200	SH16 —SLSB 8—70
—SLSB10—270		—SLSB10—70
ST25C—SLSB 6—360	ST25C—16 —290	SH16 —SLSB 6—70
—SLSB 8—360		—SLSB 8—70
—SLSB10—360		—SLSB10—70



Inch

Fig.1

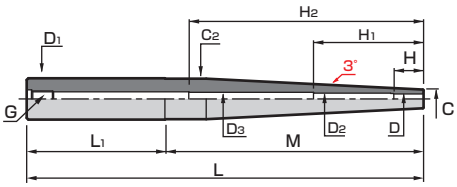
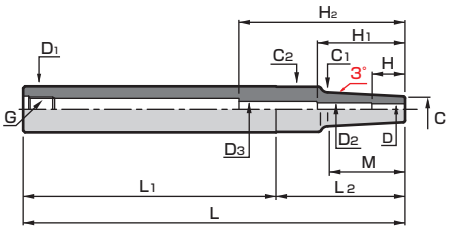


Fig.2



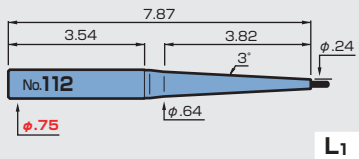
CODE	Fig.	φD	φC	Thickness t	L	M	φD1	H	L1	L2	φC1	φC2	G	Max. insertion length	lbs	φD2	φD3	H1	H2	Scale model
ST19.05–SLS1/ 8–200	2	.1250	.24	.059	7.87	3.82	.750	.38	3.54	4.33	.64	.728	M10	7.20	0.62	.16	.24	2.16	4.13	112
–SLS3/16–200	1	.1850	.31			4.33		.59		–	–				0.55	.24	–	2.76	–	113
–SLS1/ 4–200		.2500	.37			3.94		.71	3.94	3.94						.28				114
ST25.4 –SLS3/ 8–230	2	.3750	.49		9.06	3.82	1.000	1.18	4.72	4.33	.89	.965		2.36	1.43	.40		2.40		115
–SLS1/ 2–230	1	.5000	.62			4.33					–				1.33	.52				116

Scale Model

S=1:5

φ1/8

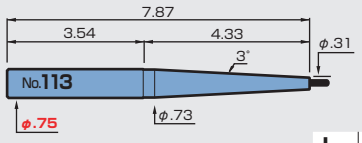
ST19.05–SLS1/8–200



L1	5.10
▼	21.8

φ3/16

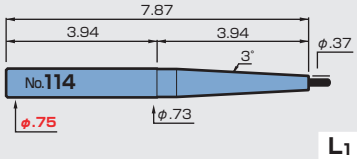
ST19.05–SLS3/16–200



L1	5.29
▼	16.5

φ1/4

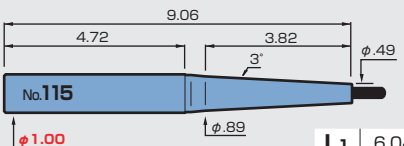
ST19.05–SLS1/4–200



L1	5.47
▼	12.8

φ3/8

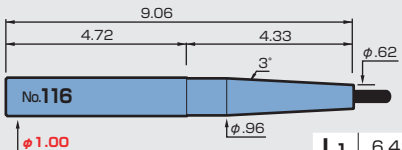
ST25.4–SLS3/8–230



L1	6.04
▼	7.1

φ1/2

ST25.4–SLS1/2–230



L1	6.42
▼	6.0

"L1" represents the overhang length of the straight arbor from the base holder.

▼ shows the rigidity of the straight arbor body at that length. The base deflection is not considered when determining rigidity values.

Rigidity Value(μm/kgf)

(Reference) P.159