

## 2 Guide Bushings

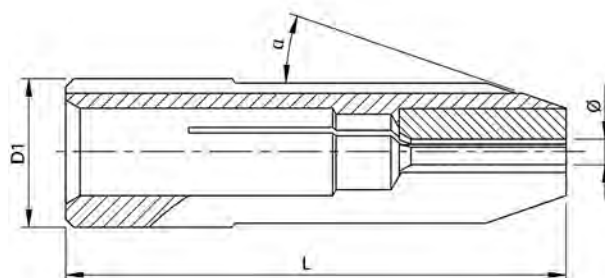
- 2.3 Carbide guide bushings by type
- 2.11 Carbide guide bushings by machine type
- 2.23 Carbide rollers Habegger Guide bushings





# Carbide guide bushings by type

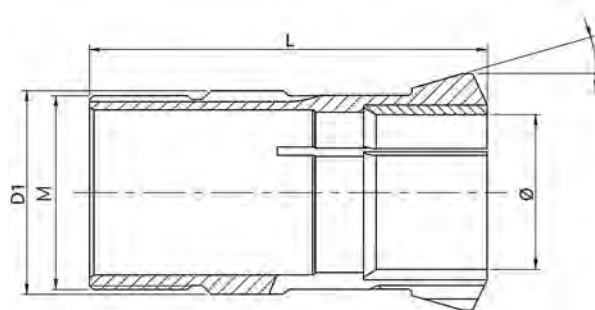
## Carbide guide bushings type A



Item No	D1	L	$\alpha$	$\varnothing$ max	hex. max	square max
701	7.00	19.00	30°	3.00	2.70	2.20
202	8.60	34.00	28°	3.00	2.70	2.20
451	9.00	30.00	19°	4.00	3.50	3.00
702	9.00	30.00	30°	4.00	3.50	3.00
453	11.00	30.00	19°	6.50	5.50	4.50
703	13.00	30.00	40°	7.00	6.00	5.00
455	14.00	35.00	19°	8.00	7.00	5.50
203	16.00	40.00	30°	8.00	7.00	5.50
457	16.00	35.00	19°	10.00	8.50	7.00
704	16.00	30.00	40°	11.00	9.00	7.50
458	18.00	40.00	19°	12.00	10.50	8.00
204	20.00	40.00	30°	11.00	9.00	7.50
705	22.00	42.00	40°	14.00	12.50	10.00
459	24.00	42.00	19°	15.00	13.00	10.50
706	26.00	42.00	30°	16.00	14.00	11.00
460	28.00	45.00	29°	20.00	17.50	14.00
205	30.00	60.00	29°	17.50	14.50	12.00
209	30.00	42.00	29°	18.00	15.00	13.00
707	30.00	42.00	30°	20.00	17.50	14.00
461	32.00	45.00	19°	22.00	19.50	15.50
206	34.00	60.00	29°	22.00	19.50	15.50
210	34.00	42.00	29°	22.00	19.50	15.50
708	34.00	48.00	30°	23.00	20.00	16.00
462	38.00	45.00	19°	28.00	24.00	19.50
463	38.00	60.00	19°	28.00	24.00	19.50
207	42.00	72.00	29°	26.00	22.00	18.00
465	42.00	60.00	19°	28.00	24.00	19.50
464	46.00	60.00	19°	32.00	28.00	23.00
208	48.00	72.00	29°	28.00	24.00	19.50
211	52.00	72.00	29°	33.00	28.00	23.00

# Carbide guide bushings by type

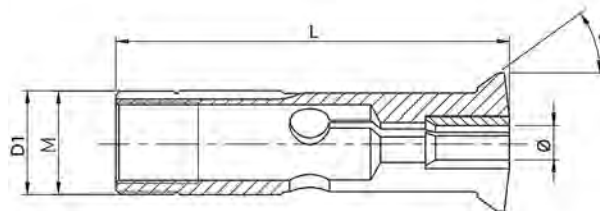
## Carbide guide bushings type B



Item No	D1	L	M	$\alpha$	$\emptyset$ max	hex. max	square max	Sleeve D	Sleeve L1
600	7.00	29.00	M6.00x0.50	30°	4.00	3.50	3.00	10.00	24.00
1601	7.00	30.00	M6.00x0.50	16°	3.50	3.00	2.50	10.00	24.00
351	9.00	50.00	M8.00x0.60	30°	5.00	4.50	3.50	13.00	40.00
1351	9.00	44.00	M8.00x0.75	16°	5.00	4.50	3.50	13.00	39.00
600S	9.00	26.00	M6.00x0.50	30°	4.50	4.00	3.00	13.00	36.00
352	11.00	50.00	M10.00x0.60	30°	7.50	6.50	5.00	15.00	40.00
1352	11.00	53.00	M10.00x0.80	16°	7.50	6.50	5.00	15.00	50.00
103	12.00	50.00	M12.00x1.00	30°	8.00	7.00	5.50	16.00	40.00
1603	12.00	50.00	M10.00x0.75	16°	7.50	6.50	5.00	16.00	48.50
603	16.00	61.00	M15.00x1.00	30°	11.00	9.50	8.00	20.00	50.00
1353	16.00	59.00	M14.00x1.00	16°	10.50	9.00	7.50	22.00	52.00
1604	16.00	58.00	M14.00x1.00	16°	10.50	9.00	7.50	20.00	52.00
353	17.00	61.00	M15.00x1.00	30°	12.00	10.50	8.50	22.00	50.00
853	18.00	59.00	M16.00x1.00	30°	13.00	11.00	9.00	22.00	44.00
104	20.00	55.00	M20.00x1.00	30°	13.00	11.00	9.00	34.00	40.00
1354	22.00	68.00	M19.00x1.00	16°	16.00	14.00	11.00	32.00	63.00
605	24.00	61.00	M24.00x1.00	30°	16.00	14.00	11.00	30.00	50.00
354	25.00	63.00	M25.00x1.00	30°	18.00	15.50	13.00	32.00	50.00
1357	28.00	81.00	M25.00x1.00	30°	21.00	18.00	15.00	40.00	71.00
355	32.00	71.00	M32.00x1.00	30°	22.00	19.00	15.50	40.00	50.00
105	40.00	71.00	M40.00x1.00	30°	30.00	26.00	22.00	56.00	50.00
854	40.00	72.00	M36.00x1.00	30°	26.00	22.00	18.00	50.00	53.00
1355	44.00	87.00	M40.00x1.00	20°	32.00	28.00	23.00	56.00	71.00
106	48.00	81.00	M48.00x1.25	30°	32.00	28.00	23.00	77.00	65.00

# Carbide guide bushings by type

## Magic carbide guide bushings



Item No	D1	L	M	$\alpha$	$\emptyset$ max	hex. max	square max
CMF-201	10.00	56.50	M10.00x1.00	36°	5.50	4.50	3.50
CRD-143	13.00	68.00	M13.00x1.00	36°	7.50	6.50	5.00
CRA-165	18.00	68.00	M18.00x1.00	36°	12.70	10.00	8.00
RK-15007	30.00	74.50	Type A	19°	15.00	13.00	10.50
RK-15013	30.00	73.00	M22.00x1.00	19°	16.00	14.00	11.00
RK-10439	36.00	73.50	M27.00x1.00	19°	21.00	18.00	15.00
RK-10427	38.00	74.50	Type A	19°	20.00	17.50	14.00

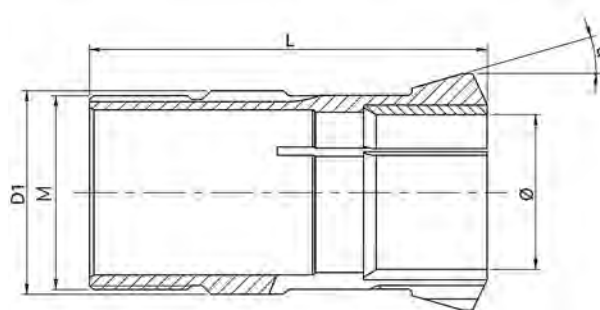
## Automatic carbide guide bushings



Item No	D1	L	M	$\alpha$	$\emptyset$ max	hex. max	square max	Sleeve D	Sleeve L1
1107	7.00	32.00	M6.82x0.62	8° 30'	3.00	2.70	2.20	10.00	37.00
1102	9.00	51.00	M8.00x0.60	8° 30'	4.00	3.50	3.00	13.00	56.00
1104	9.00	51.00	M8.00x0.60	8° 30'	4.00	3.50	3.00	13.00	56.00
1105	9.00	63.00	M8.00x0.60	8° 30'	4.00	3.50	3.00	13.00	67.00

# Carbide guide bushings by type

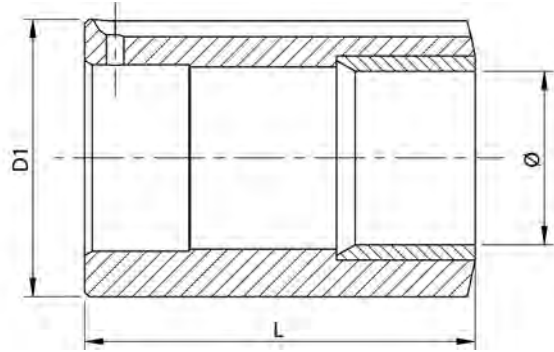
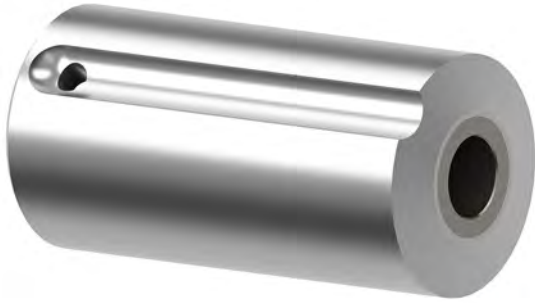
## Drawn carbide guide bushings



Item No	D1	L	M	$\alpha$	$\varnothing$ max	hex. max	square max
3400T	13.00	41.50	M12.50x0.75	15°	8.00	7.00	5.50
3300T	14.00	64.00	M13.00x0.75	16°	8.00	7.00	5.50
TOP100	18.00	100.00	M18.00x1.00	20°	13.00	11.00	9.00
221T	21.00	57.50	M18.00x1.00	12°	11.00	9.50	8.00
3401T	21.00	57.50	M18.00x1.00	12°	11.00	9.50	8.00
221T Traub	21.00	65.50	M18.00x1.00	12°	14.00	12.00	9.00
39001T	22.00	68.00	M22.00x1.00	16°	18.00	15.00	13.00
222T	23.00	73.00	M22.00x1.00	16°	17.00	14.00	11.00
TD26	26.00	77.00	M25.00x1.00	16°	20.00	17.00	14.00
3402T	27.00	57.50	M24.00x1.00	12°	16.00	14.00	11.00
223T	28.00	82.00	M25.00x1.00	16°	21.00	18.00	15.00
227T	34.00	87.50	M34.00x1.00	10°	25.00	22.00	18.00
TOP200	34.00	150.00	M32.00x1.50	20°	26.00	22.00	18.00
228T	41.00	54.00	M38.00x1.00	10°	32.00	27.00	20.00
229T	42.00	82.00	M40.00x1.00	16°	32.00	28.00	23.00
245T	45.00	82.00	M42.00x1.00	16°	32.00	27.00	20.00
249T	48.00	81.00	M46.00x1.00	10°	38.00		
248T	48.00	82.00	M46.00x1.00	16°	38.00	32.00	25.00

# Carbide guide bushings by type

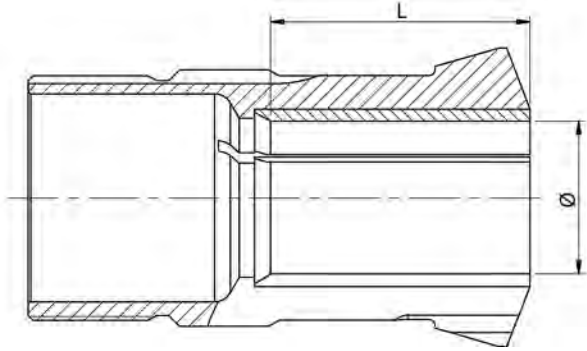
## Fixed guide bushings



Item No	D1	L	Ø max	hex. max	square max
751	6.00	11.00	3.50	3.00	2.50
501	10.00	15.00	4.50	4.00	3.00
651	12.00	20.00	6.00	5.50	4.00
502	13.00	30.00	7.00	6.00	5.00
503	15.00	30.00	10.00	8.50	7.00
252	16.00	30.00	10.00	8.50	7.00
755	20.00	30.00	12.00	10.50	8.00
504	22.00	32.00	13.00	11.00	9.00
505	24.00	32.00	16.00	14.00	11.00
756	25.00	35.00	16.00	14.00	11.00
253	30.00	35.00	20.00	17.50	14.00
507	32.00	45.00	21.00	18.00	15.00
254	34.00	34.00	22.00	19.50	15.50
758	35.00	35.00	25.00	22.00	18.00
1006	36.00	45.00	25.00	22.00	18.00
508	40.00	45.00	25.00	22.00	18.00
761	50.00	46.00	30.00	26.00	22.00
255	56.00	60.00	27.00	23.00	18.50
256	77.00	80.00	32.00	28.00	22.50

# Carbide guide bushings by type

## Long carbide execution



### Long carbide lined execution on demande

Following length available :

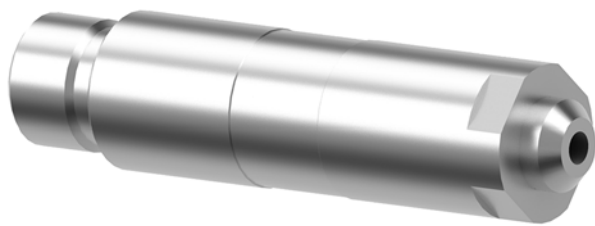
- 20.00 mm
- 22.50 mm
- 25.00 mm
- 28.00 mm
- 30 - 34 mm
- 35.00 mm
- 40.00 mm
- 42 - 43 mm

# Carbide guide bushings by type

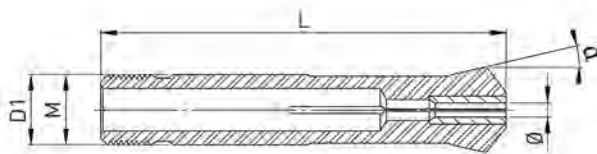
## Esco D2 guide bushings



## Esco D6 guide bushings



## Esco New Mach guide bushings



Item No	D1	L	M	$\alpha$
New Mach	10.00	58.00	M10.00x0.75	13°





# Carbide guide bushings by machine type

## Bechler machines



**ANDRÉ BECHLER SA MOUTIER**  
Fabrique de machines

Machine type	Guide bushes	Main spindle collet
<b>A-</b>		
A-4	1351 / 351	F10/1178 (111E)
A-7	1603 / 352 / 103	F10/1178 (111E)
A-10/AR-10	1603 / 352 / 103	F14/98 (117E)
<b>BR-</b>		
BR-12/-16/-20	1354 / 1357 / 355 / 105	F18/85 / F22/88 / F26/90

## Petermann machines



# Petermann

Machine type	Guide bushes	Main spindle collet
<b>P-</b>		
P-3	1601 / 600	F7/206
P-4	1351 / 351 / 600S	F8/577 (101E)
P-7	1603 / 103	F10/86 (109E)
P-7R	1603 / 1604	F15/358 / F16/104 (104E)
P-16/P-16R	1354 / 1357 / 355 / 605	F22/727
P-20R/P-25	355 / 105	F32/1023
10-HS	1604 / 104 / 1354	F16/104 (104E) / F20/102

# Carbide guide bushings by machine type

## Citizen machines



# CITIZEN

Machine type	Guide bushes	Main spindle collet	Sub spindle collet
<b>A-</b>			
A-20	223T	F25/64 (145E)	F25/64 (145E)
<b>B-</b>			
B-12	853	F16/1076 (1212E)	F16/1076 (1212E)
B-20	223T	F25/64 (145E)	F25/64 (145E)
<b>C-</b>			
C-16	605	F20/87 (138E)	F20/87 (138E)
<b>E-</b>			
E-16	605	F25/64 (145E)	F25/64 (145E)
E-20	355	F25/64 (145E)	F25/64 (145E)
E-25	227T	F30/63 (153E)	F30/63 (153E)
E-32	229T	F37/740 (1536E)	F37/740 (1536E)
<b>F-</b>			
F-12	853	F16/1076 (1212E)	F16/1076 (1212E)
F-16	605	F25/64 (145E)	F25/64 (145E)
F-20	355	F25/64 (145E)	F25/64 (145E)
F-25	227T	F30/63 (157E)	F30/63 (157E)
<b>K-</b>			
K-12	853	F16/1076 (1212E)	F16/1076 (1212E)
K-16	605	F20/87 (138E)	F20/87 (138E)
<b>L-</b>			
L-10 I	1604	F15/580 (120E)	F15/580 (120E)
L-10 Watch	1351	F15/580 (120E)	F15/580 (120E)
L-12	853	F16/1076 (1212E)	F16/1076 (1212E)
L-16	605	F25/64 (145E)	F25/64 (145E)
L-20	223T	F25/64 (145E)	F25/64 (145E)
L-25	227T	F30/63 (157E)	F30/63 (157E)
L-32	229T	F37/740 (1536E)	F37/740 (1536E)
<b>M-</b>			
M-12	853	F16/1076 (1212E)	F16/1076 (1212E)
M-16	605	F20/87 (138E)	F20/87 (138E)
M-20	223T	F25/64 (145E)	F25/64 (145E)
M-32	229T	F37/740 (1536E)	F37/740 (1536E)
<b>MSL-</b>			
MSL-12	853	F16/1076 (1212E)	F16/1076 (1212E)
<b>R-</b>			
R-04	1351	F8/577 (101E)	F8/577 (101E)
R-07	1352	F15/580 (120E)	F15/580 (120E)

# Carbide guide bushings by machine type

## Hanwha machines



Machine type	Guide bushes	Main spindle collet	Sub spindle collet
<b>SL-</b>			
SL-12 S/H	853	F15/580 (120E) or F16/1076 (1212E)	F15/580 (120E)
SL-16 S/H	39001T	F22/71 (140E)	F22/71 (140E)
SL-20 S	223T	F25/64 (145E)	F25/64 (145E)
SL-26 HP II	227T	F32/221 (161E)	F32/221 (161E)
SL-26 S/H	227T	F32/221 (161E)	F32/221 (161E)
SL-32 HP II	229T	F37/740 (1536E)	F37/740 (1536E)
SL-32 HPD	229T	F37/740 (1536E)	F37/740 (1536E)
SL-32 S/HE	229T	F37/740 (1536E)	F37/740 (1536E)
SL-35 HP	245T	Special collet	Special collet
<b>STL-</b>			
STL-32 H	229T	F37/740 (1536E)	F37/740 (1536E)
STL-38	Special JBS	F48/81 (173E)	F42/99 (171E)
<b>XD-</b>			
XD-07	1352	F10/86 (109E)	F10/86 (109E)
XD-12 H	853	F15/580 (120E)	F15/580 (120E)
XD-12 J	853	F16/1076 (1212E)	
XD-16 H	39001T	F22/71 (140E)	F22/71 (140E)
XD-20 H	223T	F25/64 (145E)	F25/64 (145E)
XD-20 M	223T	F25/64 (145E)	F25/64 (145E)
XD-20 N	(work with collet)	F25/64 (145E)	F25/64 (145E)
XD-20 V	223T	F25/64 (145E)	F25/64 (145E)
XDI-20	223T	F25/64 (145E)	F25/64 (145E)
XD-26 H	227T	F32/221 (161E)	F32/221 (161E)
XD-32 H	229T	F37/740 (1536E)	F37/740 (1536E)
XD-35	245T	F42/99 (171E)	
XD-38	Special JBS	F48/81	F48/81 (173E)
<b>XP-</b>			
XP-12 S	853	F15/580 (120E)	F15/580 (120E)
XP-16 S	39001T	F22/71 (140E)	F22/71 (140E)
XP-20 S	223T	F25/64 (145E)	F25/64 (145E)
XP-26 S	227T	F32/221 (161E)	F32/221 (161E)

# Carbide guide bushings by machine type

## Manurhin-KMX Machines



Machine type	Guide bushes	Main spindle collet
<b>Compact</b>		
Compact	605	F20/201 (136E)
<b>First-</b>		
First 226/326C	1354/1357/227T	F20/201 (136E)
<b>KMX-</b>		
KMX-20/220	1357/1354	F25/64 (145E) / F32/221 (161E)
KMX-26/226	227T/1357/1354	F25/64 (145E) / F32/221 (161E)
<b>Mirabel</b>		
Mirabel PM32	1357/1354/229T	F25/64 (145E) / F42/99 (171E)
<b>OM- / KL-</b>		
OM-98/KL-32	229T	
<b>Swing-</b>		
Swing-13	853	
Swing-20	1357	
Swing-26	227T/1354	F38/72 (164E)
Swing-32	227T/1357/1354/229T	F42/99 (171E)
<b>Traminer-</b>		
Traminer-13	853	F18/85
Traminer-16	1354	F20/87 (138E)
Traminer-20	1357/1354	F25/64 (145E)
<b>Twin-</b>		
Twin-13	1354	F20/201 (136E)
Twin-20	1354/1357	F20/201 (136E)
<b>XL-</b>		
XL-32	229T	F42/99 (171E)
XL-36	106	F42/99 (171E) / F48/81 (173E)

# Carbide guide bushings by machine type

Star Machines



# star

2 Guide Bushings

Machine type	Guide bushes	Main spindle collet	Sub spindle collet
<b>B-</b>			
B-20	223T	F25/64 (145E)	F25/64 (145E)
<b>ECAS</b>			
ECAS20	223T	F25/64 (145E)	F25/64 (145E)
ECAS32	229T	F37/740 (1536E)	F37/740 (1536E)
<b>F-</b>			
F-20	355	F25/64 (145E)	F25/64 (145E)
F-25	227T	F30/63 (157E)	F30/63 (157E)
<b>JNC-</b>			
JNC-10	1604 (év. 1353)	F15/580 (120E)	F15/580 (120E)
JNC-16	39001T	F20/87 (138E)	F20/87 (138E)
JNC-25/32	229T	F37/740 (1536E)	F37/740 (1536E)
<b>KJR-</b>			
KJR-16	39001T	F20/87 (138E)	F20/87 (138E)
KJR-25	227T	F30/63 (157E)	F30/63 (157E)
<b>KNC-</b>			
KNC-16/20	223T	F25/64 (145E)	F25/64 (145E)
KNC-25/32	229T	F37/740 (1536E)	F37/740 (1536E)
<b>RNC-</b>			
RNC-10	1604	F15/580 (120E)	F15/580 (120E)
RNC-16	39001T	F20/87 (138E)	F20/87 (138E) / F15/580 (120E)
<b>SA-</b>			
SA-12/16	39001T	F20/87 (138E)	F20/87 (138E)
<b>SB-</b>			
SB-12	853	F16/1076 (1212E)	F16/1076 (1212E)
SB-16	39001T	F20/87 (138E)	F20/87 (138E)
SB-20	223T	F25/64 (145E)	F25/64 (145E)
<b>SE-</b>			
SE-16	39001T	F20/87 (138E)	F20/87 (138E)
SE-12	221T	F20/87 (138E)	F20/87 (138E)
<b>SF-</b>			
SF-25			F30/101 (1446E)
<b>SH-</b>			
SH-7	1604	F15/580 (120E)	F15/580 (120E)
SH-12	221T	F20/87 (138E)	F20/87 (138E)
SH-16	39001T	F20/87 (138E)	F20/87 (138E)
<b>SI-</b>			
SI-12 NP	39001T	F20/87 (138E)	F15/580 (120E)
<b>SNC-</b>			
SNC-15	39001T	F20/87 (138E)	F20/87 (138E)
SNC-25	227T	F34/1077	F34/1077

# Carbide guide bushings by machine type

Star Machines

continuation ...

2 Guide Bushings



Machine type	Guide bushes	Main spindle collet	Sub spindle collet
<b>SR-</b>			
SR-10J	1604 (év. 1353)*	F15/580 (120E)	F15/580 (120E)
SR-16	39001T	F20/87 (138E)	F20/87 (138E)
SR-20J	223T	F25/64 (145E)	F25/64 (145E)
SR-16R	39001T	F20/87 (138E)	F20/87 (138E)
SR-20R	223T	F25/64 (145E)	F25/64 (145E)
SR-32J	229T	F37/740 (1536E)	F37/740 (1536E)
<b>SST-</b>			
SST-16	39001T	F20/87 (138E)	F20/87 (138E)
<b>ST-</b>			
ST-38	248T	F48/81 (1446E)	F30/101 (1446E)
<b>SV-</b>			
SV-12	39001T	F20/87 (138E)	F20/87 (138E)
SV-20	223T	F25/64 (145E)	F25/64 (145E)
SV-32	229T	F37/740 (1536E)	F37/740 (1536E)
SV-38R	248T	F48/81 (173E)	F30/101 (1446E)
<b>SW-</b>			
SW-7	1352	F15/580 (120E)	F15/580 (120E)
SW-7R	1604 (év. 1353)	F15/580 (120E)	F15/580 (120E)
SW-20	223T	F25/64 (145E)	F25/64 (145E)
<b>VNC-</b>			
VNC-12	221T	F20/87 (138E)	F20/87 (138E)
VNC-20	223T	F25/64 (145E)	F25/64 (145E)
VNC-32	229T	F37/740 (1536E)	F37/740 (1536E)

# Carbide guide bushings by machine type

## Tornos machines



Machine type	Guide bushes	Main spindle collet	Sub spindle collet
<b>Cam-type lathes</b>			
M-4/ T-4	1351 (Magic CMF 201)	F8/577 (101E)	Trans-T
M-7	1352 (Magic CRD 143)	F10/86 (109E)	Trans-T
MS-7	1352 (Magic CRD 143)	F13/357 (116E)	Trans-T
MR-28/32	1355	F34/1077 / (F37/740 (1536E))	
NAT-125	1353	F16/1076 (1212E)	
R-10	1353 (Magic CRA-165)	F15/580 (120E) / (F16/1076 (1212E))	Trans-T
R-16	1354	F20/87 (138E)	
RR-20	1354 / (Magic RK)	F25/64 (145E)	
<b>CT-</b>			
CT-20	223T	F25/64 (145E)	F25/64 (145E)
<b>DECO-</b>			
DECO-7	1352	F10/86 (109E)	F10/86 (109E)
DECO-8 SP	(work with collet)	W15/3 (3213E)	F13/357 (116E)
DECO-10	1353	F13/357 (116E)	F13/357 (116E)
DECO-13	605	F20/201 (136E)	F20/201 (136E)
DECO-20	1357	F25/64 (145E)	F25/64 (145E)
DECO-26 (32)	227T (229T)	F25/64 (145E) / (F30/101 (1446E))	F25/64 (145E) / (F30/101 1446E)
<b>DELTA-</b>			
DELTA-12	605	F20/201 (136E) / (F13 or F10)	F20/201 (136E) / (F13 or F10)
DELTA-12 version III	TD26 (605)	F20/201 (136E) / (F13 or F10)	F20/201 (136E) / (F13 or F10)
DELTA-20	1357 (TD26)	F25/64 (145E) / (F13/357 (116E))	F25/64 (145E) / (F13 or F10)
DELTA-20 version III	TD26 (1357)	F25/64 (145E) / (F13/357 (116E))	F25/64 (145E) / (F13 or F10)
DELTA-38	249T	F43/37 special Tsugami	F48/38 special Tsugami
<b>ENC-</b>			
ENC-74/75	1353	F13/357 (116E)	
ENC-163/164/167	605 (227T)	F20/201 (136E)	F20/201 (136E)
ENC-262/264	TOP-200	F30/101 (1446E)	F30/101 (1446E)
<b>EVODECO-</b>			
EVODECO-10	1353	F13/357 (116E)	F13/357 (116E)
EVODECO-16	605	F20/201 (136E)	F20/201 (136E)
<b>GAMMA-</b>			
GAMMA-20/6	TD26 (1357)	F25/64 (145E)	F25/64 (145E)
<b>GT-</b>			
GT-13	853	F16/1076 (1212E)	F16/1076 (1212E)
GT-26	227T	F30/101 (1446E)	F30/101 (1446E)
<b>MICRO-</b>			
MICRO-7	1352	F13/357 (116E) / (F10/86 (109E))	F13/357 (116E) / (F10/86 109E)
MICRO-8	(work with collet)	W15/3 (3213E)	F13/357 (116E) / F10 or F8)
<b>SIGMA-</b>			
SIGMA-8	(work with collet)	W15/3 (3213E)	F13/357 (116E)

# Carbide guide bushings by machine type

Tornos machines

continuation ...



Machine type	Guide bushes	Main spindle collet	Sub spindle collet
<b>SIGMA-</b>			
SIGMA-20	227T (1357)	F30/101 (1446E) / (F20 or F25)	F30/101 (1446E) / (F20 or F25)
SIGMA-32	229T (227T)	F37/740 (1536E) / (F25 or F30)	F37/740 (1536E) F25 or F30)
<b>ST-</b>			
ST-26	227T	F30/101 (1446E)	F30/101 (1446E)
<b>Swiss NANO</b>			
Swiss NANO	1352	F13/357 (116E)	F13/357 (116E) / (F10/86 109E)
<b>TOP-</b>			
TOP-100	TOP-100	F15/580 (120E)	F15/580 (120E)
TOP-200	TOP-200	F30/101 (1446E)	F30/101 (1446E)

Tornos Multispindles



Machine type	Main spindle collet	Sub spindle collet	Feedfinger
<b>AS-</b>			
AS-14	P25/334 (9001E)	F16/830	A17.9/335 (9251E)
<b>BS-</b>			
BS-20	P36/2007 (9020E)	F25/64 (145E) + M22 x 1	A27.7/2000 (9266E)
<b>Multi ALPHA</b>			
Multi ALPHA 6x32	B46/2007 (9039E)	PR35.5 (78-2012) (9039TPU)	A35 (71-2019)
Multi ALPHA 8x20	B34/1820 (9012E)	PR28 (78-2013) (9012TPU)	A25 (71-2018)
Multi ALPHA 8x28	B46/2007 (9039E)	PR35.5 (78-2012) (9039TPU)	A35 (71-2019)
<b>MultiDECO-</b>			
MultiDECO-20/6	B34/1820 (9012E)	PR28 (78-2013) (9012TPU)	A25 (71-2018)
MultiDECO-20/8	B34/1820 (9012E)	PR28 (78-2013) (9012TPU)	A25 (71-2018)
MultiDECO-26/6	B46/2007 (9039E)	PR35.5 (78-2012) (9039TPU)	A35 (71-2019)
MultiDECO-32/6	B46/2007 (9039E)	PR35.5 (78-2012) (9039TPU)	A35 (71-2019)
<b>MultiSigma</b>			
MultiSigma 8x24	B46/2007 (9039E)	PR35.5 (78-2012) (9039TPU)	A35 (71-2019)
MultiSigma 8x28	B46/2007 (9039E)	PR35.5 (78-2012) (9039TPU)	A35 (71-2019)

# Carbide guide bushings by machine type

Tornos Multispindles

continuation ...



2 Guide Bushings

Machine type	Main spindle collet	Sub spindle collet	Feedfinger
<b>MultiSWISS</b>			
MultiSWISS	MultiSWISS special	F20/201 (136E)	F16/830
<b>SAS-</b>			
SAS-16	W25/1923 (9021E)	F16/830	A22.8/71-1922 (9265E)

Tsugami machines



Machine type	Guide bushes	Main spindle collet	Sub spindle collet
B32	B232	F37/740 (1536E)	
B007E	1352	F10/86 (109E)	F10/86 (109E)
B074E	1352	F10/86 (109E)	F10/86 (109E)
B012AE/CE	605	F22/71 (140E)	F22/71 (140E)
B018AE/CE	605	F22/71 (140E)	F22/71 (140E)
B020AE/CE	1357	F25/64 (145E)	F25/64 (145E)
B0123E/4E/5E	605	F22/71 (140E)	F22/71 (140E)
B0203E/4E/5E	1357	F25/64 (145E)	F25/64 (145E)
B0385E, Bar Ø 32	229T	F37/740 (1536E)	F37/740 (1536E)
B0385E, Bar Ø 38	249T		F48/38
BH20E/ZE	1357	F25/64 (145E)	F25/64 (145E)
BH38E, Bar Ø 32	229T	F37/740 (1536E)	F37/740 (1536E)
BH38E, Bar Ø 38	249T	F43/37	F48/38
BN12E	605	F22/71 (140E)	F22/71 (140E)
BN20E	1357	F25/64 (145E)	F25/64 (145E)
B0126	TD26	F22/71 (140E)	F22/71 (140E)
B0206	TD26 / 1357	F25/64 (145E)	F25/64 (145E)
BS 007	1352	F10/86 (109E)	F10/86 (109E)
BS12AE/BE/CE	605	F22/71 (140E)	F22/71 (140E)
BS125HE/6HE	605	F22/71 (140E)	F22/71 (140E)
BS18AE/BE/CE	605	F22/71 (140E)	F22/71 (140E)

# Carbide guide bushings by machine type

Tsugami machines

continuation ...

2 Guide Bushings



# TSUGAMI

NP SWISS

Machine type	Guide bushes	Main spindle collet	Sub spindle collet
BS20AE/BE/CE	1357	F25/64 (145E)	F25/64 (145E)
BS32CE	B232	F37/740 (1536E)	F37/740 (1536E)
BS205HE/6HE	1357	F25/64 (145E)	F25/64 (145E)
BS26AE/BE/CE	227T	F32/221 (161E)	F32/221 (161E)
BU20E	1357	F25/64 (145E)	F25/64 (145E)
BU26E	227T	F32/221 (161E)	F32/221 (161E)
BU/MU 26	B227	F32/221 (161E)	F32/221 (161E)
BU/MU 38	249T	F37/740 (1536E)	F37/740 (1536E)
BW07E	1352	F10/86 (109E)	
BW12E	605	F22/71 (140E)	F22/71 (140E)
BW20E	1357	F25/64 (145E)	F25/64 (145E)
HS20	1357	F25/64 (145E)	F25/64 (145E)
HS26	227T	F30/101 (1446E)	F30/101 (1446E)
HS32	229T	F37/740 (1536E)	F37/740 (1536E)
HS207	1357	F25/64 (145E)	F25/64 (145E)
NB 12	605	F22/71 (140E)	F22/71 (140E)
NP-4W	1352	F10/86 (109E)	
NT-NP 11	853	F15/580 (120E)	
NT-NP 16	1354	F22/71 (140E)	
NT-NP 16-II	605 / 1354	F22/71 (140E)	
NT-NP 17	605 / 1354	F22/71 (140E)	
NT-NP 20	355	F25/64 (145E)	
NT-NP 20-II	1357	F25/64 (145E)	
NT-NP 32	229T	F37/740 (1536E)	
P01E	1352	F10/86 (109E)	F10/86 (109E)
P03E	1352	F10/86 (109E)	F10/86 (109E)
P014HE	1352	F10/86 (109E)	F10/86 (109E)
P034HE	1352	F10/86 (109E)	F10/86 (109E)
TMU1E, Bar Ø 32	229T	F37/740 (1536E)	F37/740 (1536E)
TMU1E, Bar Ø 38	249T	F43/37	F48/38
S20	1357	F25/64 (145E)	

# Carbide guide bushings by machine type

## Traub machines

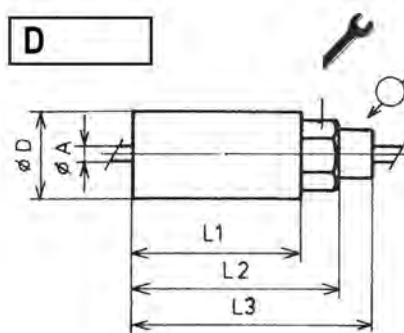


Machine type	Guide bushes	Main spindle collet
<b>A-</b>		
A-205/255/15/25/30/42	1354	F25/64 (145E)
<b>M-</b>		
M-45	1351	F8/577 (101E)
M-75 / M105	1352	F10/86 (109E)
M-105 / M-125	1353	F15/580 (120E)
<b>TNL-</b>		
TNL-12 (950120)	853	F16/1076 (1212E)
TNL-12 (950121)	221T	F16/1076 (1212E)
TNL-12 (989468)	221T long	F16/1076 (1212E)
TNL-16 (989387)	3402T	F16/1076 (1212E)
TNL-16 (989517)	3402T long	F16/1076 (1212E)
TNL-18	B304TR	F25/64 (145E)
TNL-20	223T	F25/64 (145E)
TNL-26 (671733)	854 normal	F30/63 (157E)
TNL-26 (984921)	854 normal	F30/63 (157E)
TNL-26 (985382)	854 3 holes	F30/63 (157E)
TNL-26 (986761)	227T	F30/63 (157E)
TNL-26 (989382)	854 3 holes	F30/63 (157E)
TNL-32	C42	F37/740 (1536E)



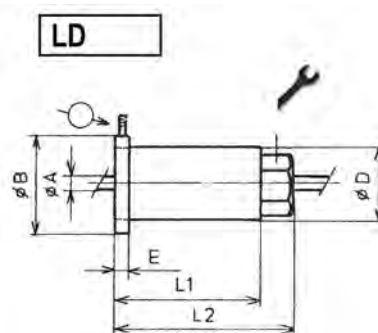
# Carbide rollers Habegger Guide bushings

## Type D



Item No	$\phi A$	$\phi D$	L1	L2	L3	Wrench
D15	1.59 - 3.37	15.00	35.00	59.00	71.00	10.00
D18	3.38 - 4.76	18.00	35.00	59.00	71.00	12.00
D22	4.77 - 5.67	22.00	40.00	59.00	73.00	14.00
D25	5.68 - 7.36	25.00	45.00	59.00	73.00	17.00
D30	7.37 - 10.45	30.00	50.00	62.00	76.00	22.00
D35	10.46 - 18.10	35.00	55.00	67.00	81.00	25.00
D40	18.11 - 22.00	40.00	60.00	72.00	86.00	30.00
D50	22.01 - 26.00	50.00	65.00	79.00	93.00	36.00

## Type LD



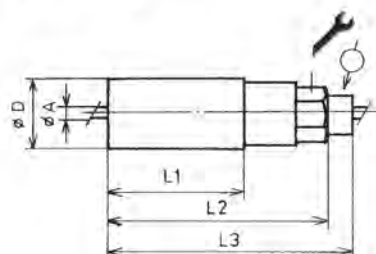
Item No	$\phi A$	$\phi D$	L1	L2	$\phi B$	E	Wrench
LD15	1.59 - 3.37	15.00	35.00	59.00	25.00	5.00	10.00
LD18	3.38 - 4.76	18.00	35.00	59.00	28.00	5.00	12.00
LD22	4.77 - 5.67	22.00	40.00	59.00	32.00	5.00	14.00
LD25	5.68 - 7.36	25.00	45.00	59.00	35.00	5.00	17.00
LD30	7.37 - 10.45	30.00	50.00	62.00	40.00	6.00	22.00
LD35	10.46 - 18.10	35.00	55.00	67.00	45.00	6.00	25.00
LD40	18.11 - 22.00	40.00	60.00	72.00	50.00	6.00	30.00
LD50	22.01 - 26.00	50.00	65.00	79.00	60.00	6.00	36.00

# Carbide rollers Habegger Guide bushings

## Type EXT



EXT

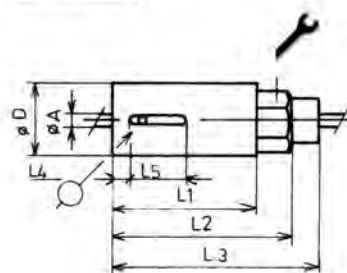


Item No	Ø A	Ø D	L1	L2	L3	Wrench
EXT15	1.59 - 3.37	15.00	35.00	81.00	93.00	10.00
EXT18	3.38 - 4.76	18.00	35.00	81.00	93.00	12.00
EXT22	4.77 - 5.67	22.00	40.00	81.00	93.00	14.00
EXT25	5.68 - 7.36	25.00	45.00	84.00	98.00	17.00
EXT30	7.37 - 10.45	30.00	50.00	84.00	98.00	22.00
EXT35	10.46 - 18.10	35.00	55.00	84.00	98.00	25.00

## Type CNC



CNC



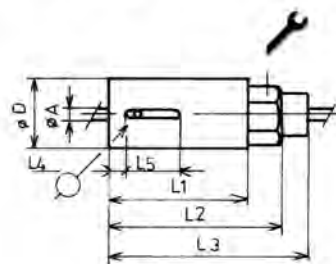
Item No	Ø A	Ø D	L1	L2	L3	L4	L5	Wrench
CNC15	1.59 - 3.37	15.00	35.00	59.00	71.00	5.00	12.00	10.00
CNC18	3.38 - 4.76	18.00	35.00	59.00	71.00	11.50	12.00	12.00
CNC22	4.77 - 5.67	22.00	40.00	59.00	73.00	11.50	12.00	14.00
CNC25	5.68 - 7.36	25.00	45.00	59.00	73.00	11.50	12.00	17.00
CNC30	7.37 - 10.45	30.00	50.00	62.00	76.00	10.50	14.00	22.00
CNC35	10.46 - 18.10	35.00	55.00	67.00	81.00	10.50	14.00	25.00
CNC40	18.11 - 22.00	40.00	60.00	72.00	86.00	10.50	14.00	30.00
CNC50	22.01 - 26.00	50.00	65.00	79.00	93.00	10.50	14.00	36.00

# Carbide rollers Habegger Guide bushings

## Type EN



EN

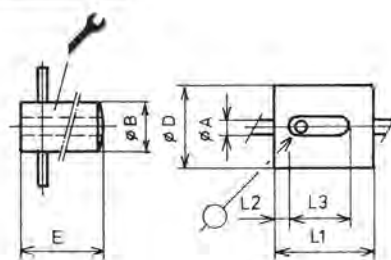


Item No	$\varnothing A$	$\varnothing D$	L1	L2	L3	L4	L5	Wrench
EN15	1.59 - 3.37	15.00	35.00	59.00	71.00	11.50	15.00	10.00
EN18	3.38 - 4.76	18.00	35.00	59.00	71.00	11.50	15.00	12.00
EN22	4.77 - 5.67	22.00	40.00	59.00	73.00	11.50	25.00	14.00
EN25	5.68 - 7.36	25.00	45.00	59.00	73.00	11.50	30.00	17.00
EN30	7.37 - 10.45	30.00	50.00	62.00	76.00	10.50	32.00	22.00
EN35	10.46 - 18.10	35.00	55.00	67.00	81.00	10.50	32.00	25.00
EN40	18.11 - 22.00	40.00	60.00	72.00	86.00	10.50	32.00	30.00
EN50	22.01 - 26.00	50.00	65.00	79.00	93.00	10.50	32.00	36.00

## Type C



C



Item No	$\varnothing A$	$\varnothing D$	L1	L2	$\varnothing B$	E	L3	Wrench
C15	1.59 - 3.37	15.00	27.00	10.00	11.00	45.00	6.00	C15
C18	3.38 - 4.76	18.00	30.00	10.00	14.00	60.00	9.00	C18
C22	4.77 - 5.67	22.00	32.00	10.00	17.00	60.00	12.00	C22
C25	5.68 - 7.36	25.00	36.00	10.00	19.00	60.00	15.00	C25
C30	7.37 - 10.45	30.00	40.00	10.00	23.00	60.00	19.00	C30
C35	10.46 - 18.10	35.00	42.00	10.00	27.00	60.00	22.00	C35
C40	18.11 - 22.00	40.00	50.00	10.00	32.00	80.00	27.00	C40
C50	22.01 - 26.00	50.00	55.00	10.00	38.00	80.00	30.00	C50
C66	26.01 - 32.00	66.00	60.00	10.00	45.00	80.00	30.00	C66