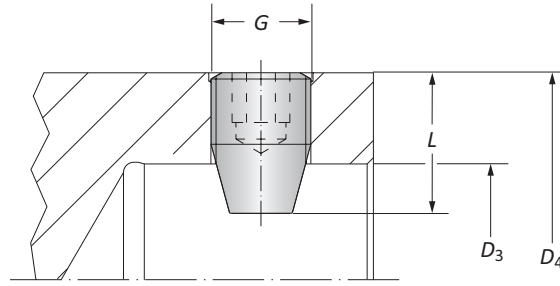


Accessories

Threaded Taper Pins for MVS Connections

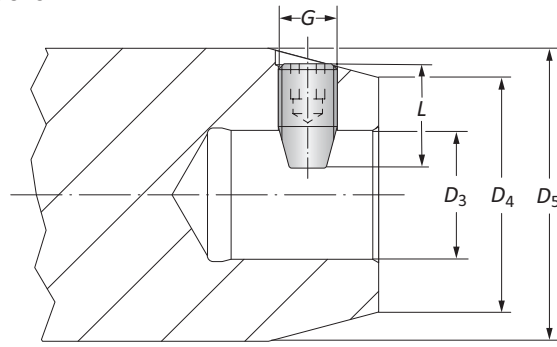


	Connection	Taper Pin		Service Key	Steel	Titanium
	$D_4 D_3$	G	L		Part No.	Part No.
E	19.5 - 11	M5 x 0.5	6.50	s2.5 / A	115949	-
	22 - 11	M5 x 0.5	8.30	s2.5 / A	215375	-
m	25 - 14	M8 x 1.0	8.30	s4 / B	132174	-
	32 - 18	M8 x 1.0	10.40	s4 / B	132142	-
	40 - 22	M10 x 1.0	14.50	s5 / B	133113	-
	50 - 28	M12 x 1.0	16.70	s6 / B	132145	415334
	63 - 36	M16 x 1.5	19.80	s8 / B	132146	415336
F	80 - 36	M16 x 1.5	28.80	s8 / B	132191	415335
	100 - 56	M24 x 2.0	34.00	s12 / B	215470	415337

NOTE: Steel or titanium taper pins are used in balancing the Alu-Line tooling.

Accessories

Threaded Taper Pins for MVS Connections

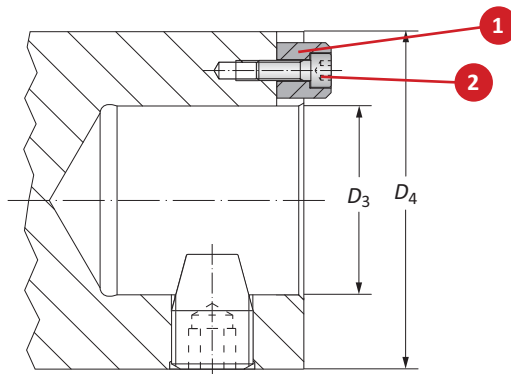


Connection	Taper Pin			Service Key	Steel	Titanium	
	$D_4 D_3$	G	L		D_5	Part No.	Part No.
II	22 - 11	M5 x 0.5	8.30	32.00	s2.5 / A	215375	-
	22 - 11	M5 x 0.5	16.00	40.00	s2.5 / A	215376	-
	22 - 11	M5 x 0.5	16.00	50.00	s2.5 / A	215376	-
	22 - 11	M5 x 0.5	16.00	63.00	s2.5 / A	215376	-
	25 - 14	M8 x 1.0	10.40	32.00	s4 / B	132142	-
	25 - 14	M8 x 1.0	10.40	36.00	s4 / B	132142	-
	32 - 18	M8 x 1.0	10.40	35.00	s4 / B	132142	-
	32 - 18	M8 x 1.0	14.50	37.00	s4 / B	132143	-
	32 - 18	M8 x 1.0	14.50	40.00	s4 / B	132143	-
	32 - 18	M8 x 1.0	14.50	46.00	s4 / B	132143	-
	40 - 22	M10 x 1.0	14.50	40.00	s5 / B	133113	-
	40 - 22	M10 x 1.0	17.80	47.00	s5 / B	132144	-
	40 - 22	M10 x 1.0	17.80	50.00	s5 / B	132144	-
	50 - 28	M12 x 1.0	16.70	63.00	s6 / B	132145	415334
	63 - 36	M16 x 1.5	19.80	80.00	s8 / B	132146	415336

NOTE: Steel or titanium taper pins are used in balancing the Alu-Line tooling.

Accessories

Clamping Pieces for MVS Connection 100 - 56 | D 60 / D 40 Connections



Clamping Pieces for MVS 100 - 56

Connection	1 Torque			2 Cap Screw		
	Service Key	D x L	Part No.	Service Key	D x L	Part No.
100 - 56	-	-	115641	S5 / B	M6 x 1 x 16	115147

Clamping Pieces for D 60 / D 40

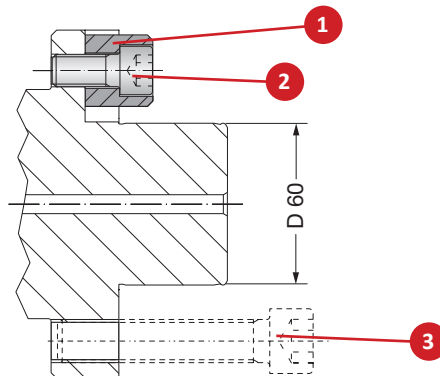
Connection	1 Torque
	Part No.
D 60	115643 (125 mm)
D 60	KW31562 (110 mm)
D 40	117143

Clamping Pieces for D 60 / D 40

Connection	2 Cap Screw		
	Service Key	D x L	Part No.
D 60	s10 / B	M12 x 1.75 x 25	115237
D 40	s5 / B	M6 x 1 x 16	115147

Clamping Pieces for D 60 / D 40

Connection	3 Cap Screw		
	Service Key	D x L	Part No.
D 60	s14 / C	M16 x 2 x 80	115170 ⁽¹⁾
D 60	s14 / C	M16 x 2 x 55	215189 ⁽²⁾
D 40	s10 / B	M12 x 1.75 x 75	315186 ⁽³⁾
D 40	s10 / B	M12 x 1.75 x 50	077104 ⁽²⁾



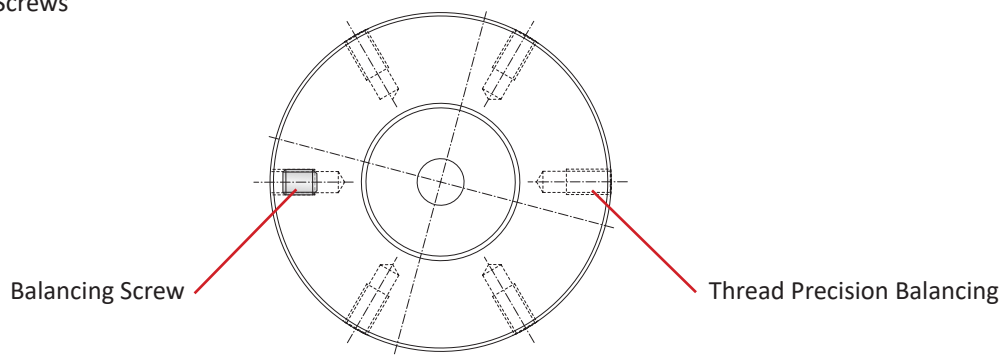
⁽¹⁾ To mount boring tools above $\varnothing 200.00$ mm, see section B10-F

⁽²⁾ Cap screws used for mounting cutter heads to DIN 1830

⁽³⁾ $\varnothing 200.00$ mm - 520.00 mm

Accessories

Heavy Metal Balancing Screws



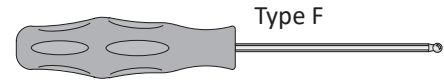
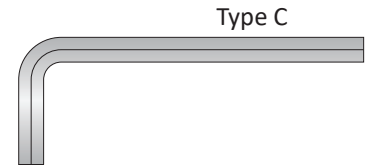
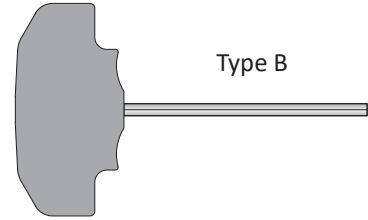
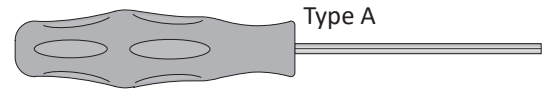
Balancing Screw		
Nominal Size	Service Key	Part No.
M5 x 0.8 x 6	0.8 x 4 / K	415573
M6 x 1 x 6	0.8 x 4 / K	415284
M6 x 1 x 8	0.8 x 4 / K	415341
M6 x 1 x 10	0.8 x 4 / K	415283
M8 x 1.25 x 8	1.2 x 6.5 / K	415285
M8 x 1.25 x 10	1.2 x 6.5 / K	415286
M8 x 1.25 x 12	1.2 x 6.5 / K	415287

Accessories

Torque Drivers | Wrenches

Service Keys for Insert Holders and Fixing Screws (Type A, B, C, F)

Service Key	Part No.
s1.5 / A	215472
s2 / A	215473
s2 / B	415761
s2.5 / A	115575
s2.5 / B	415577
s3 / A	115630
s3 / B	415578
s4 / B	115576
s4 / F	315265
s4 / B	415164
s5 / B	115577
s5 / B	415165
s6 / B	115578
s8 / B	115579
s8 / C	415611
s10 / B	115580
s12 / B	215638
s14 / C	215639

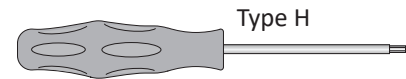


Fixed Torque Driver (Type B, H)

Service Key	Part No.
T6 / H	115537
T7 / H	115591
T8 / H	115590
T15 / H	115664
T20 / H	215150
T25 / B	415121

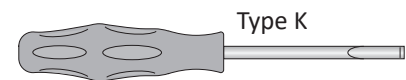
Torque Driver (Type H)

Service Key	Part No.
T6 / H	415507
T7 / H	415508
T8 / H	415514
T15 / H	415510
T20 / H	415543



Torque Driver (Type K)

Service Key	Part No.
0.5 x 3 / K	315322
0.8 x 4 / K	415579
1.2 x 6.5 / K	415580



Wrench (Type P)

Service Key	Part No.
13 / P	315689
15 / P	315690
19 / P	315691



Accessories

Torque Driver Set | 25 Piece Wrench Set



NOTE: Torque driver set pictured

Torque Driver Set: Torx® Bits, Hexagon Bits, Flat Blade Bits

Type	Pieces	Size	Set Part No.
Flat Blade Bit	1	0.3 - 1.2 (Nm)	103086
Flat Blade Bit	1	1.2 - 3.0 (Nm)	
Flat Blade Bit	1	4.0 - 8.0 (Nm)	
Torque Driver	3	T6	
Torque Driver	3	T7	
Torque Driver	3	T8	
Torque Driver	1	T16	
Torque Driver	1	T20	
Torque Driver	1	T25	
Hexagon Bit	3	s2	
Hexagon Bit	3	s2.5	
Hexagon Bit	2	s3	
Hexagon Bit	2	s4	
Hexagon Bit	1	s5	
Flat Blade Bit	1	0.5 x 3.0	

25 Piece Wrench Set

Type	Size	Set Part No.
A	s1.5 / s2 / s2.5 / s3 / s4	103025
B	s4 / s5 / s6 / s8 / s10 / s12 / s14	
C	s7	
F	s4	
H	T6 / T7 / T8 / T15 / T20 / T25	
K	0.5 x 3	
P	s13 / s15 / s19	