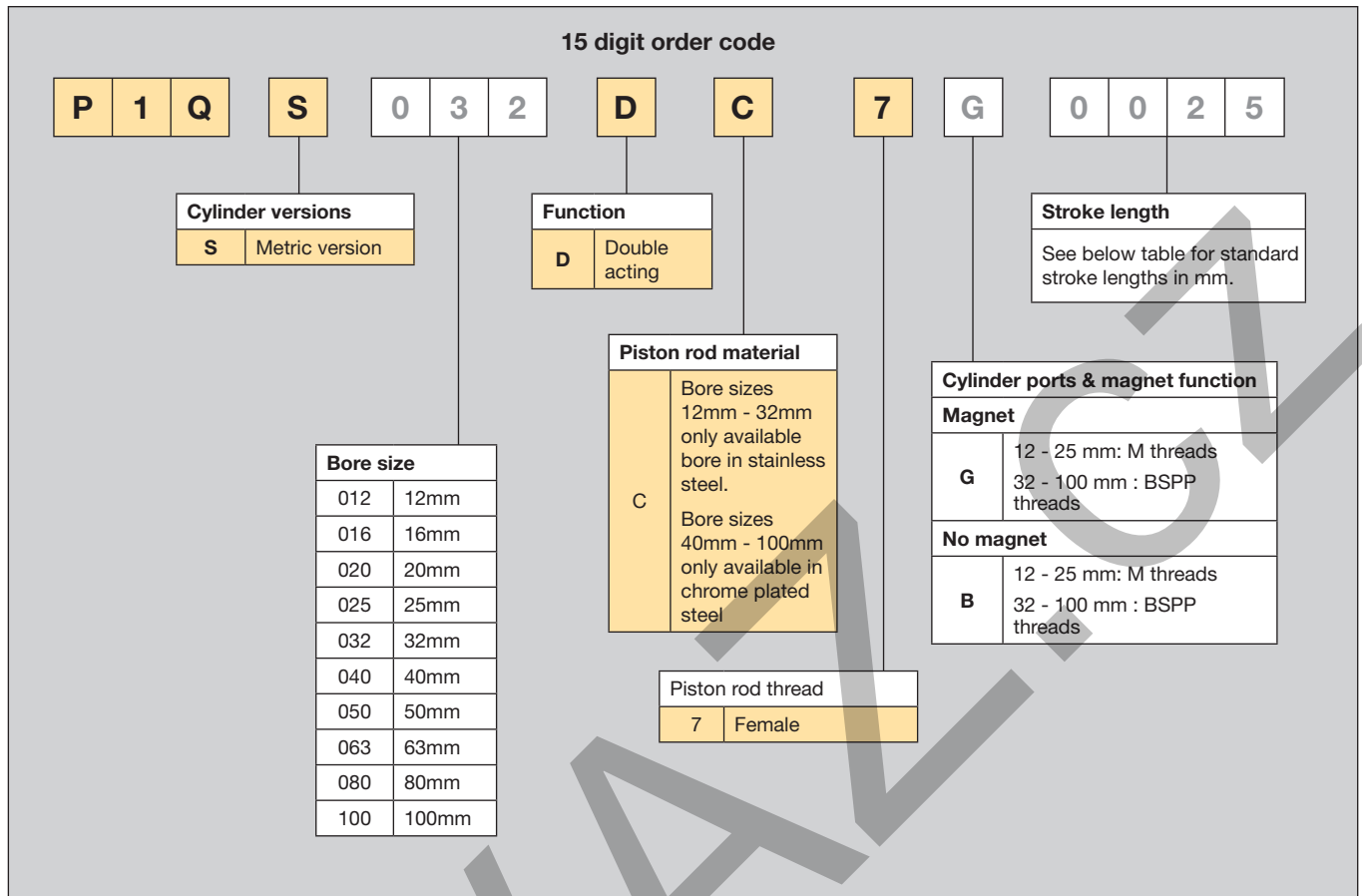


Order Code Key



Standard strokes (mm)

Bore size [mm]	5	10	15	20	25	30	40	50	75	100
12 - 16	•	•	•	•	•	•				
20 - 25		•	•	•	•	•	•	•		
32		•	•	•	•	•	•	•	•	•
40 - 50			•	•	•	•	•	•	•	•
63 - 100			•	•	•	•	•	•	•	

Double Acting/Non Magnetic -
Female Threaded Piston Rod

ISO 15524 - Ø20 to 100

Ø12 & 16 not in the ISO standard



12 mm

Stroke [mm]	Order Code
5	P1QS012DC7B0005
10	P1QS012DC7B0010
15	P1QS012DC7B0015
20	P1QS012DC7B0020
25	P1QS012DC7B0025
30	P1QS012DC7B0030

16 mm

5	P1QS016DC7B0005
10	P1QS016DC7B0010
15	P1QS016DC7B0015
20	P1QS016DC7B0020
25	P1QS016DC7B0025
30	P1QS016DC7B0030

20 mm

10	P1QS020DC7B0010
15	P1QS020DC7B0015
20	P1QS020DC7B0020
25	P1QS020DC7B0025
30	P1QS020DC7B0030
40	P1QS020DC7B0040
50	P1QS020DC7B0050

25 mm

10	P1QS025DC7B0010
15	P1QS025DC7B0015
20	P1QS025DC7B0020
25	P1QS025DC7B0025
30	P1QS025DC7B0030
40	P1QS025DC7B0040
50	P1QS025DC7B0050

32 mm

Stroke [mm]	Order Code
10	P1QS032DC7B0010
15	P1QS032DC7B0015
20	P1QS032DC7B0020
25	P1QS032DC7B0025
30	P1QS032DC7B0030
40	P1QS032DC7B0040
50	P1QS032DC7B0050
75	P1QS032DC7B0075
100	P1QS032DC7B0100

40 mm

15	P1QS040DC7B0015
20	P1QS040DC7B0020
25	P1QS040DC7B0025
30	P1QS040DC7B0030
40	P1QS040DC7B0040
50	P1QS040DC7B0050
75	P1QS040DC7B0075
100	P1QS040DC7B0100

50 mm

15	P1QS050DC7B0015
20	P1QS050DC7B0020
25	P1QS050DC7B0025
30	P1QS050DC7B0030
40	P1QS050DC7B0040
50	P1QS050DC7B0050
75	P1QS050DC7B0075
100	P1QS050DC7B0100

63 mm

Stroke [mm]	Order Code
15	P1QS063DC7B0015
20	P1QS063DC7B0020
25	P1QS063DC7B0025
30	P1QS063DC7B0030
40	P1QS063DC7B0040
50	P1QS063DC7B0050
75	P1QS063DC7B0075

80 mm

15	P1QS080DC7B0015
20	P1QS080DC7B0020
25	P1QS080DC7B0025
30	P1QS080DC7B0030
40	P1QS080DC7B0040
50	P1QS080DC7B0050
75	P1QS080DC7B0075

100 mm

15	P1QS100DC7B0015
20	P1QS100DC7B0020
25	P1QS100DC7B0025
30	P1QS100DC7B0030
40	P1QS100DC7B0040
50	P1QS100DC7B0050
75	P1QS100DC7B0075

Double Acting/Magnetic -
 Female Threaded Piston Rod
 ISO 15524 - Ø20 to 100
 Ø12 & 16 not in the ISO standard



12 mm

Stroke [mm]	Order Code
5	P1QS012DC7G0005
10	P1QS012DC7G0010
15	P1QS012DC7G0015
20	P1QS012DC7G0020
25	P1QS012DC7G0025
30	P1QS012DC7G0030

16 mm

5	P1QS016DC7G0005
10	P1QS016DC7G0010
15	P1QS016DC7G0015
20	P1QS016DC7G0020
25	P1QS016DC7G0025
30	P1QS016DC7G0030

20 mm

10	P1QS020DC7G0010
15	P1QS020DC7G0015
20	P1QS020DC7G0020
25	P1QS020DC7G0025
30	P1QS020DC7G0030
40	P1QS020DC7G0040
50	P1QS020DC7G0050

25 mm

10	P1QS025DC7G0010
15	P1QS025DC7G0015
20	P1QS025DC7G0020
25	P1QS025DC7G0025
30	P1QS025DC7G0030
40	P1QS025DC7G0040
50	P1QS025DC7G0050

32 mm

Stroke [mm]	Order Code
10	P1QS032DC7G0010
15	P1QS032DC7G0015
20	P1QS032DC7G0020
25	P1QS032DC7G0025
30	P1QS032DC7G0030
40	P1QS032DC7G0040
50	P1QS032DC7G0050
75	P1QS032DC7G0075
100	P1QS032DC7G0100

40 mm

15	P1QS040DC7G0015
20	P1QS040DC7G0020
25	P1QS040DC7G0025
30	P1QS040DC7G0030
40	P1QS040DC7G0040
50	P1QS040DC7G0050
75	P1QS040DC7G0075
100	P1QS040DC7G0100

50 mm

15	P1QS050DC7G0015
20	P1QS050DC7G0020
25	P1QS050DC7G0025
30	P1QS050DC7G0030
40	P1QS050DC7G0040
50	P1QS050DC7G0050
75	P1QS050DC7G0075
100	P1QS050DC7G0100

63 mm

Stroke [mm]	Order Code
15	P1QS063DC7G0015
20	P1QS063DC7G0020
25	P1QS063DC7G0025
30	P1QS063DC7G0030
40	P1QS063DC7G0040
50	P1QS063DC7G0050
75	P1QS063DC7G0075

80 mm

15	P1QS080DC7G0015
20	P1QS080DC7G0020
25	P1QS080DC7G0025
30	P1QS080DC7G0030
40	P1QS080DC7G0040
50	P1QS080DC7G0050
75	P1QS080DC7G0075

100 mm

15	P1QS100DC7G0015
20	P1QS100DC7G0020
25	P1QS100DC7G0025
30	P1QS100DC7G0030
40	P1QS100DC7G0040
50	P1QS100DC7G0050
75	P1QS100DC7G0075

Main data: P1Q

Cylinder designation	Cylinder bore area		Piston rod area		Thread (female)	at	addition	Air consumption	Port size
	mm	cm ²	mm	cm ²		0 mm stroke	per 5 mm stroke		
P1Q012	12	1.1	6	0.28	M3 x 0.5	0.06	0.01	0.0139 ¹⁾	M5
P1Q016	16	2.0	8	0.50	M4 x 0.7	0.07	0.02	0.0246 ¹⁾	M5
P1Q020	20	3.1	10	0.79	M5 x 0.8	0.09	0.03	0.0385 ¹⁾	M5
P1Q025	25	4.9	12	1.1	M6 x 1.0	0.13	0.03	0.0633 ¹⁾	M5
P1Q032	32	8.0	16	2.0	M8 x 1.25	0.19	0.03	0.1050 ¹⁾	G1/8
P1Q040	40	12.6	16	2.0	M8 x 1.25	0.25	0.03	0.1620 ¹⁾	G1/8
P1Q050	50	19.6	20	3.1	M10 x 1.5	0.45	0.04	0.2530 ¹⁾	G1/4
P1Q063	63	31.2	20	3.1	M10 x 1.5	0.68	0.05	0.4140 ¹⁾	G1/4
P1Q080	80	50.3	25	4.9	M16 x 2.0	1.25	0.07	0.6690 ¹⁾	G3/8
P1Q100	100	78.5	30	7.0	M20 x 2.5	1.93	0.15	1.0430 ¹⁾	G3/8

¹⁾ Free air consumption per 10 mm stroke length for a double stroke at 6 bar

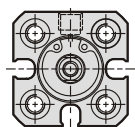
Cylinder forces, double acting variants

Cyl. bore/ pist. rod mm	Stroke	Piston area cm ²	Max theoretical force in N (bar)									
			1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
12/6	+	1.1	11	23	34	45	57	68	79	90	102	113
	-	0.8	8	17	25	34	42	51	59	68	76	85
16/8	+	2.0	20	40	60	80	101	121	141	161	181	201
	-	1.5	15	30	45	60	75	90	106	121	136	151
20/10	+	3.1	31	63	94	126	157	188	220	251	283	314
	-	2.4	24	47	71	94	118	141	165	188	212	236
25/12	+	4.9	49	98	147	196	245	295	344	393	442	491
	-	3.8	38	76	113	151	189	227	264	302	340	378
32/16	+	8.0	80	161	241	322	402	483	563	643	724	804
	-	6.0	60	121	181	241	302	362	422	483	543	603
40/16	+	12.6	126	251	377	503	628	754	880	1005	1131	1257
	-	10.6	106	211	317	422	528	633	739	844	950	1056
50/20	+	19.6	196	393	589	785	982	1178	1374	1571	1767	1963
	-	16.5	165	330	495	660	825	990	1155	1319	1484	1649
63/20	+	31.2	312	623	935	1247	1559	1870	2182	2494	2806	3117
	-	28.0	280	561	841	1121	1402	1682	1962	2242	2523	2803
80/25	+	50.3	503	1005	1508	2011	2513	3016	3519	4021	4524	5027
	-	45.4	454	907	1361	1814	2268	2721	3175	3629	4082	4536
100/30	+	78.5	785	1571	2356	3142	3927	4712	5498	6283	7069	7854
	-	71.5	715	1430	2145	2860	3575	4290	5005	5720	6435	7150

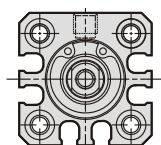
+ = Outward stroke
- = Return stroke

Note:
Select a theoretical force 50-100% larger than the force required

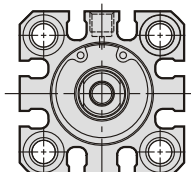
Front profiles by bore sizes



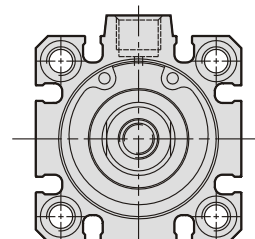
Ø12



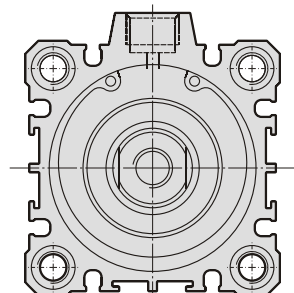
Ø16



Ø20, Ø25



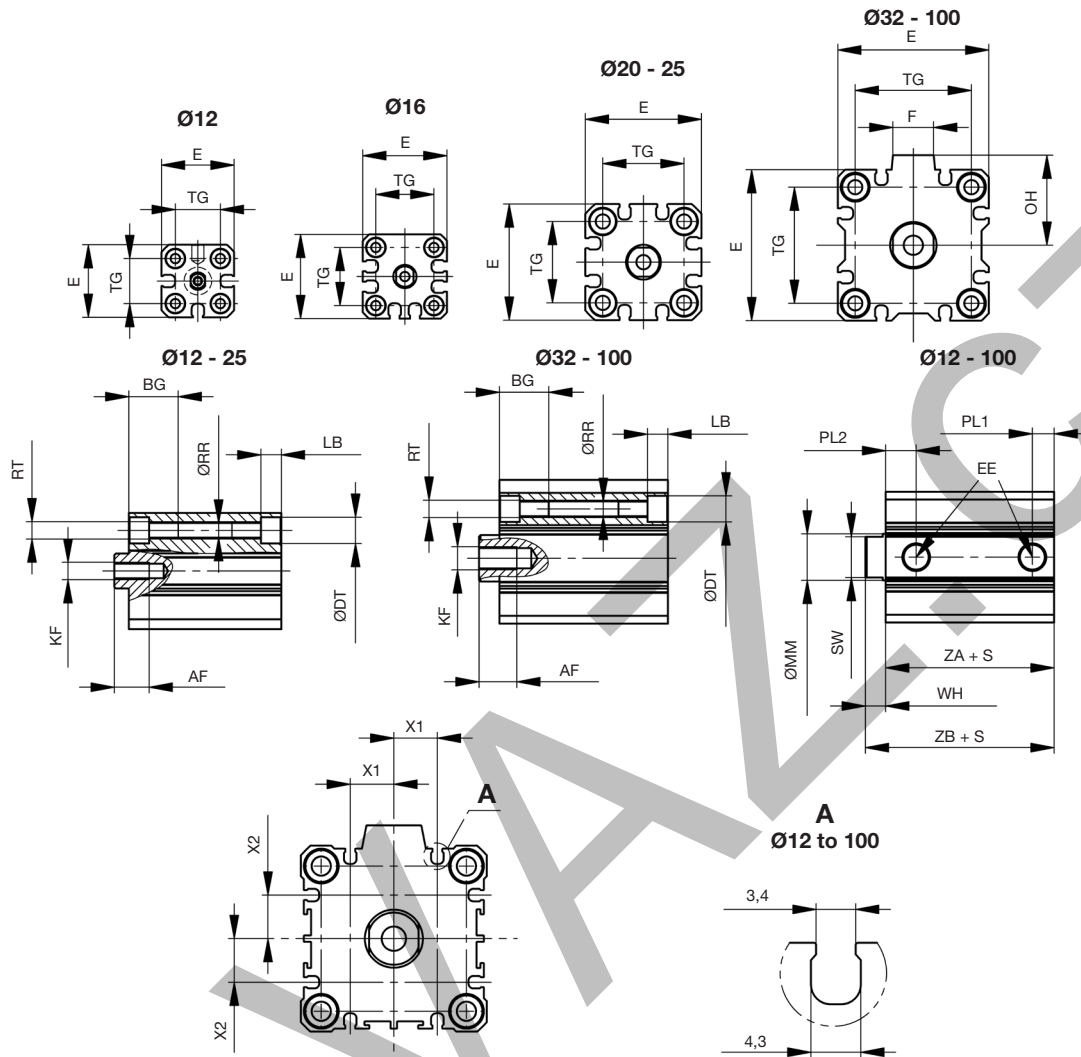
Ø32, Ø40



Ø50 to Ø100

Dimensions (mm)

Double acting, non magnetic piston, elastic cushioning, piston rod with internal thread



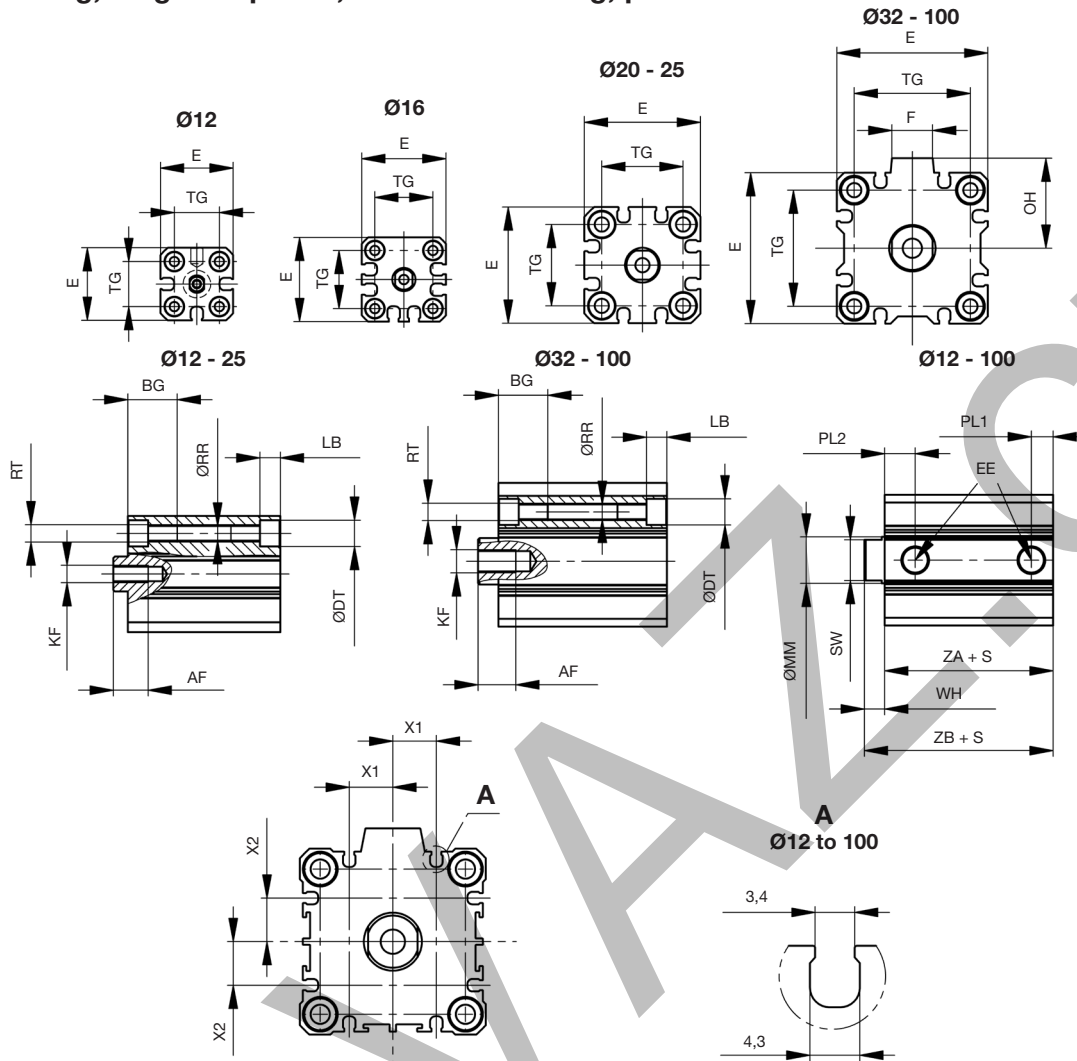
The non magnetic version is not in the ISO standard, ZA and ZB could be different depending on the cylinder's manufacturer
 WH and ZB are without pressure in the cylinder, deformation of elastic bumpers under pressure gives different dimensions

Bore size Ø [mm]	E	TG	F	OH	RT 6H	BG	KF	AF	ØRR	LB	ØDT	ØMM	SW	PL1	PL2	EE	X1	X2	WH	ZA		ZB	
																				5 to 50mm	75 to 100mm	5 to 50mm	75 to 100mm
12	25	15.5 ±0.3	-	12.5	M4	11.0	M3	6	3.5	4.0	6.5	6	5	5.0	7.5	M5	0	0	3.5 ±1.5	17.0	-	20.5	-
16	29	20 ±0.3	-	14.5	M4	11.0	M4	8	3.5	4.0	6.5	8	6	5.0	7.5	M5	3.5	3.5	3.5 ±1.5	17.0	-	20.5	-
20	36	25.5 ±0.3	7.6	18.0	M6	17.0	M5	7	5.4	7.0	9.0	10	8	5.5	9.0	M5	5.5	5.5	4.5 ±1.5	19.5	-	24.0	-
25	40	28 ±0.3	16.4	20.0	M6	17.0	M6	12	5.4	7.0	9.0	12	10	5.5	11.0	M5	6.5	6.5	5 ±1.5	22.5	-	27.5	-
32	45	34 ±0.3	14.0	27.0	M6	17.0	M8	13	5.5	7.0	9.0	16	14	7.5	10.5	G1/8	10.0	10.0	7 ±2	23.0	33.0	30.0	40.0
40	52	40 ±0.3	14.0	31.0	M6	17.0	M8	13	5.5	7.0	9.0	16	14	8.0	11.0	G1/8	11.0	11.0	7 ±2	29.5	39.5	36.5	46.5
50	64	50 ±0.5	26.0	39.0	M8	22.0	M10	15	6.6	8.0	11.0	20	17	10.5	10.5	G1/4	15.0	15.0	8 ±2	30.5	40.5	38.5	48.5
63	77	60 ±0.5	19.0	44.5	M10	28.5	M10	15	9.0	10.5	14.0	20	17	10.5	15.0	G1/4	18.0	18.0	8 ±2	36.0	46.0	44.0	54.0
80	98	77 ±0.5	26.0	55.0	M12	35.5	M16	21	11.0	13.5	17.5	25	22	12.5	16.0	G3/8	22.0	22.0	10 ±2	43.5	53.5	53.5	63.5
100	117	94 ±0.5	26.0	65.0	M12	35.5	M20	27	11.0	13.5	17.5	30	27	13.0	23.0	G3/8	22.0	22.0	12 ±2.5	53.0	63.0	65.0	75.0

S = stroke, following ISO tolerance on ZB is ±2, bore sizes 12 and 16 mm are not in the ISO standard

Dimensions (mm)

Double acting, magnetic piston, elastic cushioning, piston rod with internal thread



WH and ZB are without pressure in the cylinder, deformation of elastic bumpers under pressure gives different dimensions

Bore size Ø [mm]	E	TG	F	OH	RT 6H	BG	KF	AF	ØRR	LB	ØDT	ØMM f8	SW	PL1	PL2	EE	X1	X2	WH	ZA	ZB
12	25	15.5 ±0.3	-	12.5	M4	11.0	M3	6	3.5	4.0	6.5	6	5	5.0	7.5	M5	0	0	3.5 ±1.5	22.0	25.5
16	29	20 ±0.3	-	14.5	M4	11.0	M4	8	3.5	4.0	6.5	8	6	5.0	7.5	M5	3.5	3.5	3.5 ±1.5	22.0	25.5
20	36	25.5 ±0.3	7.6	18.0	M6	17.0	M5	7	5.4	7.0	9.0	10	8	5.5	9.0	M5	5.5	5.5	4.5 ±1.5	29.5	34.0
25	40	28 ±0.3	16.4	20.0	M6	17.0	M6	12	5.4	7.0	9.0	12	10	5.5	11.0	M5	6.5	6.5	5 ±1.5	32.5	37.5
32	45	34 ±0.3	14.0	27.0	M6	17.0	M8	13	5.5	7.0	9.0	16	14	7.5	10.5	G1/8	10.0	10.0	7 ±2	33.0	40.0
40	52	40 ±0.3	14.0	31.0	M6	17.0	M8	13	5.5	7.0	9.0	16	14	8.0	11.0	G1/8	11.0	11.0	7 ±2	39.5	46.5
50	64	50 ±0.5	26.0	39.0	M8	22.0	M10	15	6.6	8.0	11.0	20	17	10.5	10.5	G1/4	15.0	15.0	8 ±2	40.5	48.5
63	77	60 ±0.5	19.0	44.5	M10	28.5	M10	15	9.0	10.5	14.0	20	17	10.5	15.0	G1/4	18.0	18.0	8 ±2	46.0	54.0
80	98	77 ±0.5	26.0	55.0	M12	35.5	M16	21	11.0	13.5	17.5	25	22	12.5	16.0	G3/8	22.0	22.0	10 ±2	53.5	63.5
100	117	94 ±0.5	26.0	65.0	M12	35.5	M20	27	11.0	13.5	17.5	30	27	13.0	23.0	G3/8	22.0	22.0	12 ±2.5	63.0	75.0

S = stroke, following ISO tolerance on ZB is ±2, bore sizes 12 and 16 mm are not in the ISO standard