

ISO 6432, Series CSL-RD



AVENTICS™

**AVENTICS Series CSL-RD
Stainless Steel Round Cylinders
(ISO 6432)**


EMERSON™

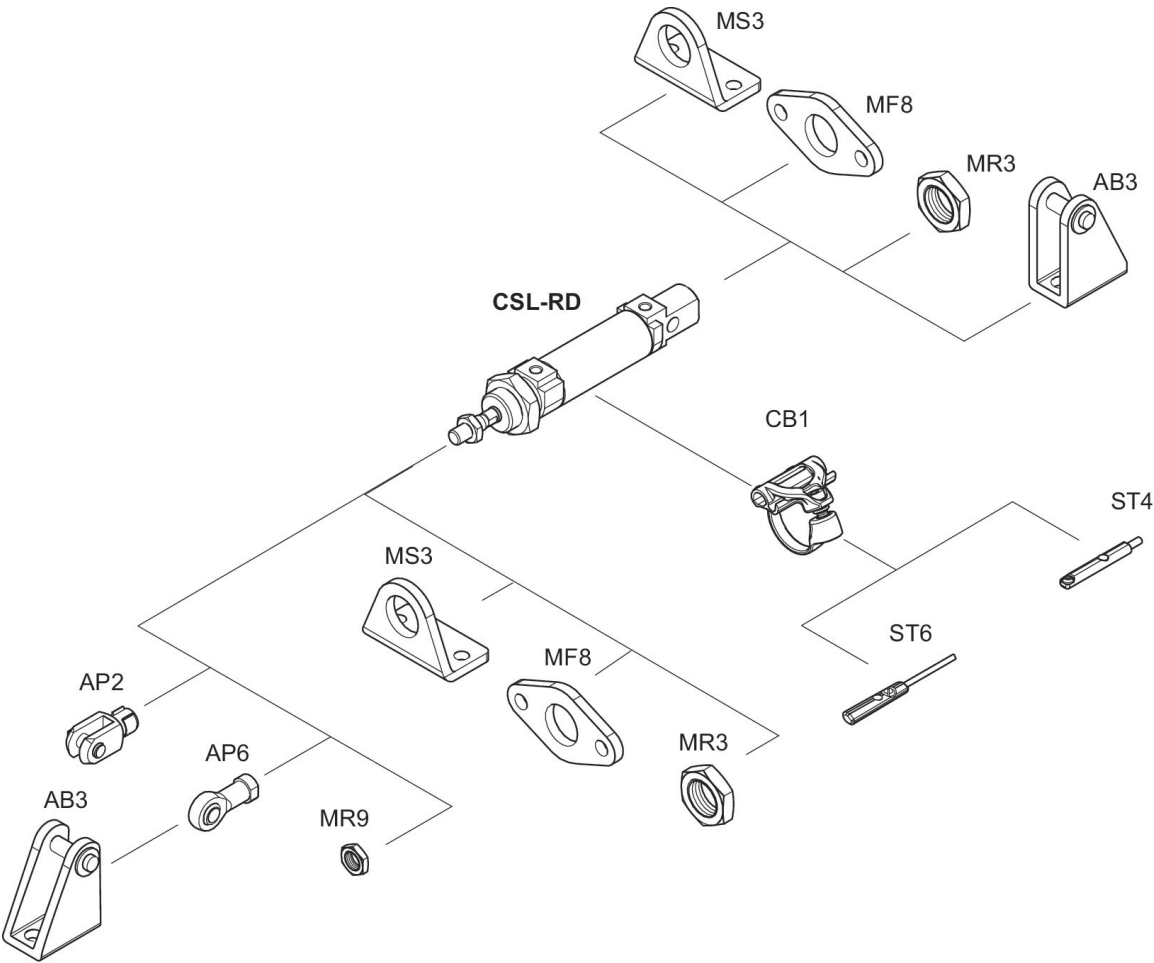
Series CSL-RD

The AVENTICS Series CSL-RD (ISO 6432) cylinder is a stainless-steel round cylinder, configurable in three different designs: standard, hygienic and short. The Series CSL-RD (ISO 6432) has a smooth profile and low surface roughness made of stainless steel, NSF-H1 grease and FDA compliant seals it is suitable for food contact. In addition, the cylinders are certified in accordance with regulation (EC) No 1935/2004.

- Clean and compact design
- The undercut-free scrapers prevent the accumulation of dirt and dead space around the piston rod
- Guaranteed food safety
- Resistant to chemicals
- Offers piston diameters from 16 mm to 63 mm
- Configurations available as single piston rod, elastic/ pre-adjusted/ manual adjusted cushioning, with magnetic detection, ATEX

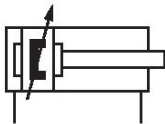


Accessories overview



Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: standard type
single
Piston with magnet
Pneumatic adjustable cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020409
16	50	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020410
16	80	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020411
16	100	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020412
16	125	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020413
16	160	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020414
16	200	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020415
16	250	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020416
16	320	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020417
16	400	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020418
16	500	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020419
20	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020453

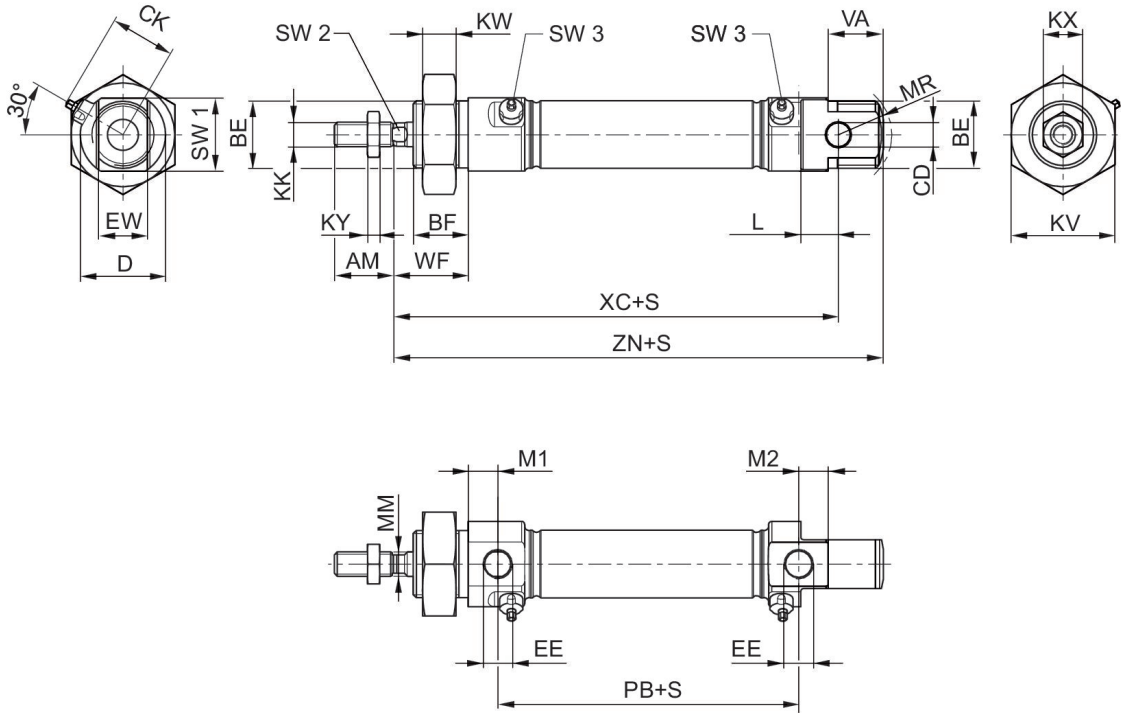
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020454
20	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020455
20	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020456
20	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020457
20	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020458
20	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020459
20	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020460
20	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020461
20	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020462
20	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020463
25	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020497
25	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020498
25	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020499
25	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020500
25	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020501
25	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020502
25	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020503
25	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020504

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
25	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020505
25	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020506
25	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020507
32	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624742
32	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624743
32	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624744
32	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624745
32	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624746
32	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624747
32	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624748
32	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624749
32	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624750
32	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624751
32	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624752
40	25	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624753
40	50	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624754
40	80	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624755
40	100	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624756

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
40	125	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624757
40	160	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624758
40	200	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624759
40	250	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624760
40	320	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624761
40	400	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624762
40	500	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624763
50	25	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624764
50	50	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624765
50	80	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624766
50	100	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624767
50	125	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624768
50	160	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624769
50	200	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624770
50	250	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624771
50	320	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624772
50	400	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624773
50	500	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624774

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
63	25	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624775
63	50	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624776
63	80	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624777
63	100	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624778
63	125	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624779
63	160	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624780
63	200	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624781
63	250	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624782
63	320	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624783
63	400	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624784
63	500	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624785

Dimensions in mm



S = stroke

Piston Ø	AM-2	BE	BF	CD H9	CK max.	D	EE	EW d13	KK	KV
16	16	M16x1,5	16	6	19,5	22	M5	12	M6	24
20	20	M22x1,5	18	8	23	28	G 1/8	16	M8	32
25	22	M22x1,5	20	8	25,5	33	G 1/8	16	M10x1,25	32
32	22	M30x1,5	25	10	28	38	G 1/8	16	M10x1,25	36
40	24	M38x1,5	28	12	36,5	49	G 1/4	18	M12x1,25	46
50	32	M45x1,5	32	16	40,5	57	G 1/4	21	M16x1,5	55
63	32	M45x1,5	32	16	47	70	G 3/8	21	M16x1,5	55

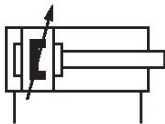
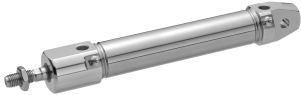
Piston Ø	KW	KX	KY	L min.	M1	M2	MM f8	MR	PB ±1	VA
16	8	10	3,2	9	6,7	6,7	6	16	43,6	16
20	11	13	4	12	9,7	9,7	8	18	48,6	18
25	11	17	5	12	9,7	9,7	10	19	51,8	20
32	8	17	5	14	9,5	11,7	12	-	46	-
40	10	18	6	16	9,8	8,7	16	-	66	-
50	10	24	8	17	9,8	8,3	20	-	68	-
63	10	24	8	17	13	9,7	20	-	71,5	-

Piston Ø	WF ±1,4	XC ±1	ZN ± 1	SW 1	SW 2 h13	SW 3
16	22	82	94,7	20	5	2,5
20	24	95	109,7	24	6	2,5
25	28	104	119,7	28	8	2,5

Piston Ø	WF ±1,4	XC ±1	ZN ± 1	SW 1	SW 2 h13	SW 3
32	34	117,5	129,5	35	10	3
40	39	139,6	153,5	45	13	3
50	44	147,2	163	53	17	3
63	44	155	171	66	17	3

Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: hygienic design
single
Piston with magnet
Pneumatic adjustable cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020431
16	50	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020432
16	80	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020433
16	100	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020434
16	125	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020435
16	160	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020436
16	200	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020437
16	250	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020438
16	320	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020439
16	400	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020440
16	500	M5	Pneumatic adjustable cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020441
20	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020475

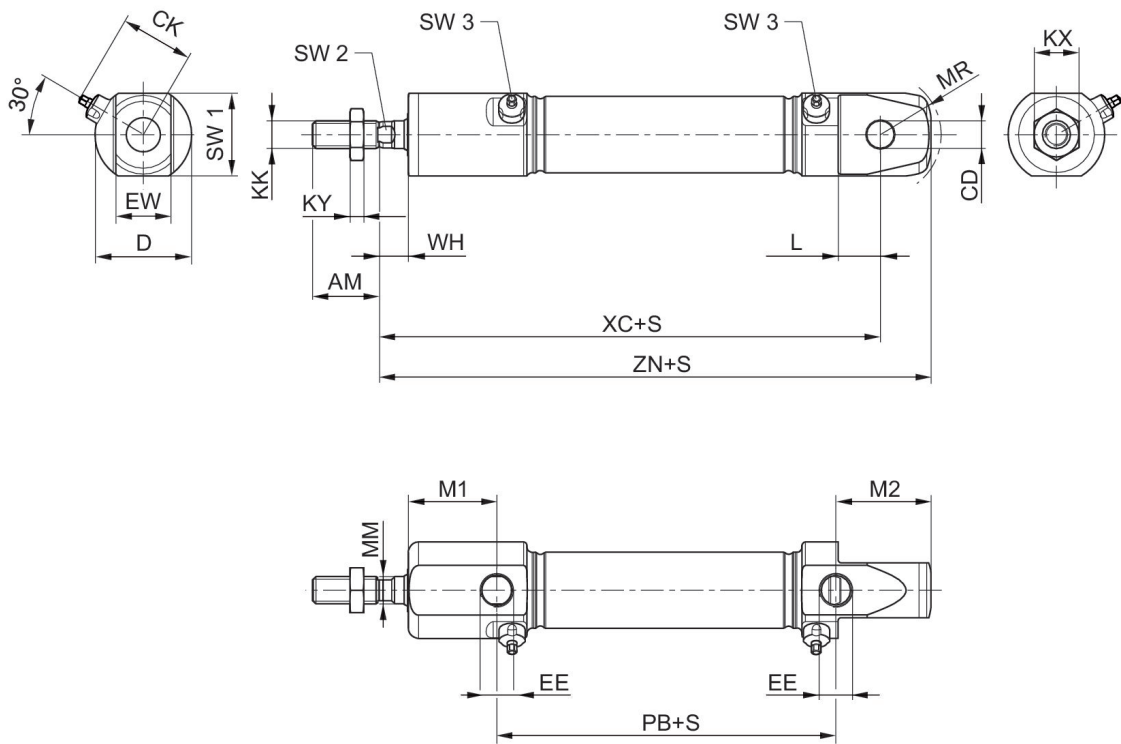
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020476
20	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020477
20	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020478
20	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020479
20	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020480
20	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020481
20	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020482
20	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020483
20	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020484
20	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020485
25	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020519
25	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020520
25	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020521
25	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020522
25	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020523
25	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020524
25	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020525
25	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020526

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
25	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020527
25	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020528
25	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020529
32	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624852
32	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624853
32	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624854
32	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624855
32	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624856
32	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624857
32	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624858
32	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624859
32	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624860
32	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624861
32	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624862
40	25	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624863
40	50	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624864
40	80	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624865
40	100	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624866

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
40	125	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624867
40	160	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624868
40	200	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624869
40	250	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624870
40	320	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624871
40	400	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624872
40	500	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624873
50	25	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624874
50	50	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624875
50	80	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624876
50	100	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624877
50	125	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624878
50	160	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624879
50	200	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624880
50	250	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624881
50	320	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624882
50	400	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624883
50	500	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624884

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
63	25	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624885
63	50	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624886
63	80	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624887
63	100	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624888
63	125	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624889
63	160	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624890
63	200	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624891
63	250	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624892
63	320	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624893
63	400	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624894
63	500	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624895

Dimensions



S = stroke

Piston Ø	AM	CD H9	CK max.	D	EE	EW d13	KK	KX	KY	L min.
16	16	6	19,5	22	M5	12	M6	10	3,2	9
20	20	8	23	28	G 1/8	16	M8	13	4	12
25	22	8	25,5	33	G 1/8	16	M10x1,25	17	5	12
32	22	10	28	38	G 1/8	16	M10x1,25	17	5	14
40	24	12	36,5	49	G 1/4	18	M12x1,25	18	6	16
50	32	16	40,5	57	G 1/4	21	M16x1,5	24	8	17
63	32	16	47	70	G 3/8	21	M16x1,5	24	8	17

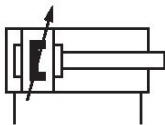
Piston Ø	M1	M2	MM f8	MR	PB ±1	WH ±1,4	XC ±1	ZN ± 1	SW 1	SW 2 h13
16	21,2	22,7	6	16	43,6	7,5	82	94,7	20	5
20	25,7	27,7	8	18	48,6	8	95	109,7	24	6
25	28,2	29,7	10	19	51,8	9,5	104	119,7	28	8
32	34,6	11,7	12	-	46	8,9	117,5	129,5	35	10
40	38	8,7	16	-	66	10,8	139,6	153,5	45	13
50	42,1	8,3	20	-	68	11,7	147,2	163	53	17
63	45,3	9,4	20	-	71,5	11,7	155	171	66	17

Piston Ø	SW 3
16	2,5
20	2,5
25	2,5

Piston Ø	SW 3
32	3
40	3
50	3
63	3

Stainless Steel Round Cylinder, Series CSL-RD

Based on ISO 6432
Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: short type
single
Piston with magnet
Pneumatic adjustable cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004

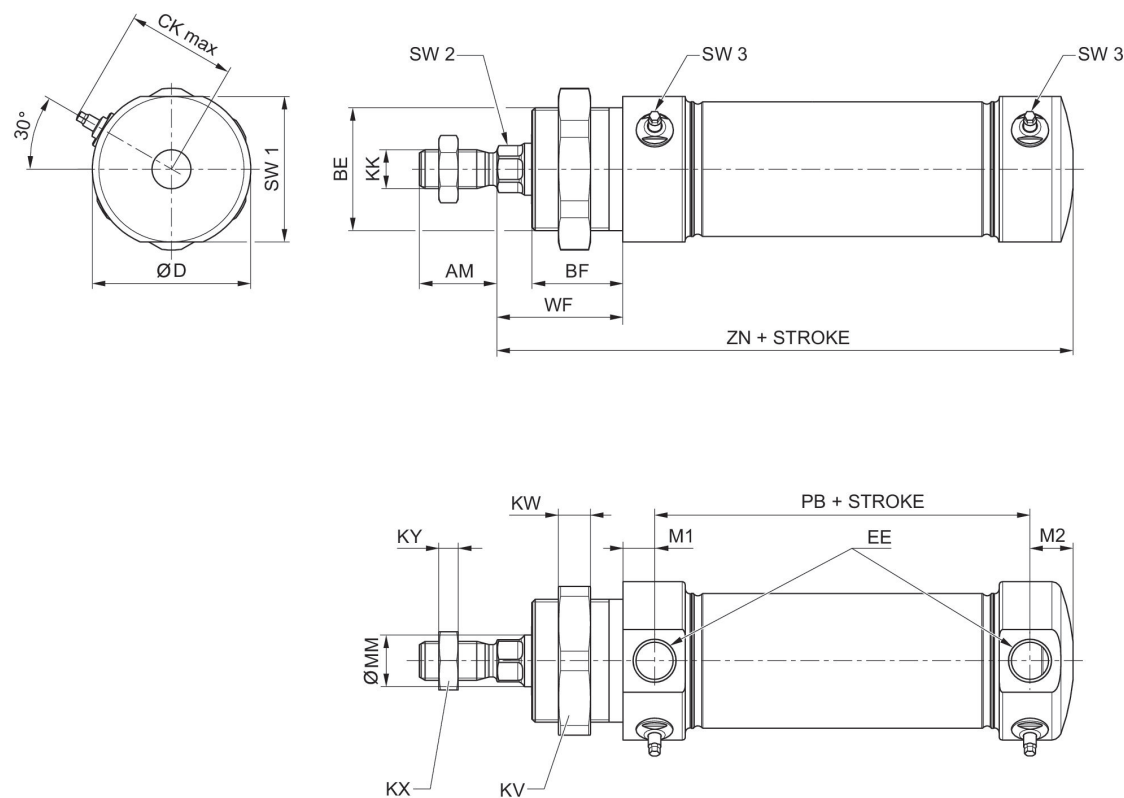


Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet-ic piston	Piston rod thread	Retracting piston force [N]	Extracting piston force [N]	Part No.
32	25	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624918
32	50	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624919
32	80	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624920
32	100	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624921
32	125	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624922
32	160	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624923
32	200	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624924
32	250	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624925
32	320	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624926
32	400	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624927
32	500	G 1/8	Pneumatic adjustable cushioning	Piston with magnet	M10x1,25	435	505	R481624928
40	25	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624929

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Retracting piston force [N]	Extracting piston force [N]	Part No.
40	50	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624930
40	80	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624931
40	100	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624932
40	125	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624933
40	160	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624934
40	200	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624935
40	250	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624936
40	320	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624937
40	400	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624938
40	500	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M12x1,25	660	790	R481624939
50	25	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624940
50	50	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624941
50	80	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624942
50	100	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624943
50	125	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624944
50	160	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624945
50	200	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624946
50	250	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624947

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Retracting piston force [N]	Extracting piston force [N]	Part No.
50	320	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624948
50	400	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624949
50	500	G 1/4	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1035	1235	R481624950
63	25	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624951
63	50	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624952
63	80	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624953
63	100	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624954
63	125	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624955
63	160	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624956
63	200	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624957
63	250	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624958
63	320	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624959
63	400	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624960
63	500	G 3/8	Pneumatic adjustable cushioning	Piston with magnet	M16x1,5	1765	1960	R481624961

Dimensions in mm



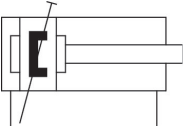
Piston Ø	AM	BE	BF	CK max.	D	EE	KK	KV	KW	KX
32	22	M30x1,5	25	28	38	G 1/8	M10x1,25	36	8	17
40	24	M38x1,5	28	36,5	49	G 1/4	M12x1,25	46	10	18
50	32	M45x1,5	32	40,5	57	G 1/4	M16x1,5	55	10	24
63	32	M45x1,5	32	47	70	G 3/8	M16x1,5	55	10	24

Piston Ø	KY	M1	M2	MM f8	PB ±1	SW 1	SW 2 h13	SW 3	SW4	WF
32	5	9,5	14,2	12	46	35	10	3	24	34
40	6	9,8	13,3	16	66	45	13	3	30	39
50	8	9,8	12,6	20	68	53	17	3	34	44
63	8	13	14,5	20	71,5	66	17	3	34	44

Piston Ø	ZN
32	104
40	128,2
50	134,5
63	143,2

Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: standard type
single
Piston with magnet
Pneumatic pre-adjusted cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



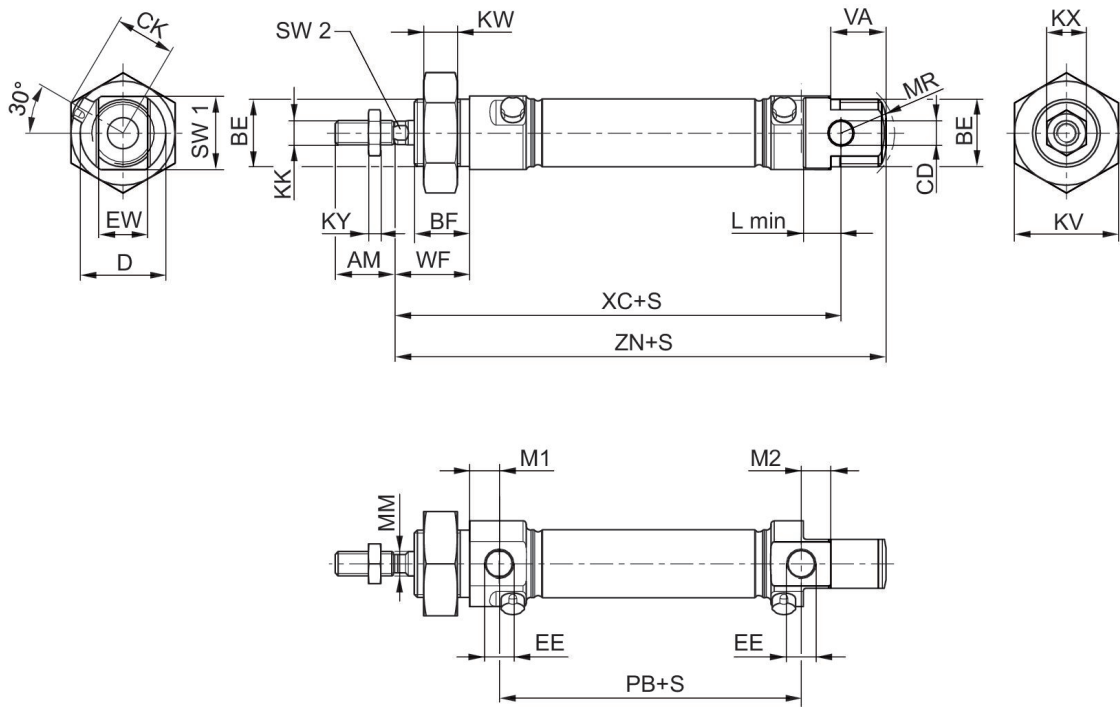
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651366
16	50	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651367
16	80	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651368
16	100	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651369
16	125	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651370
16	160	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651371
16	200	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651372
16	250	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651373
16	320	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651374
16	400	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651375
16	500	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480651376
20	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651377

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651378
20	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651379
20	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651380
20	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651381
20	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651382
20	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651383
20	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651384
20	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651385
20	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651386
20	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480651387
25	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651388
25	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651389
25	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651390
25	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651391
25	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651392
25	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651393
25	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651394
25	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651395

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
25	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651396
25	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651397
25	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480651398
32	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624786
32	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624787
32	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624788
32	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624789
32	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624790
32	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624791
32	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624792
32	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624793
32	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624794
32	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624795
32	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624796
40	25	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624797
40	50	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624798
40	80	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624799
40	100	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624800

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
40	125	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624801
40	160	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624802
40	200	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624803
40	250	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624804
40	320	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624805
40	400	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624806
40	500	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624807

Dimensions



S = stroke

Piston Ø	AM	BE	BF	CD H9	CK	D	EE	EW d13	KK	KV
16	10	M16x1,5	16	6	14,7	22	M5	12	M6	24

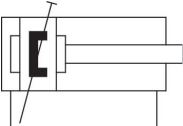
Piston Ø	AM	BE	BF	CD H9	CK	D	EE	EW d13	KK	KV
20	12	M22x1,5	18	8	17,9	28	G 1/8	16	M8	32
25	16	M22x1,5	20	8	20,2	33	G 1/8	16	M10x1,25	32
32	22	M30x1,5	25	10	21,5	38	G 1/8	16	M10x1,25	36
40	24	M38x1,5	28	12	27	49	G 1/4	18	M12x1,25	46

Piston Ø	KW	KX	KY	L min	M1	M2	MM f8	MR	PB ±1	VA
16	8	10	3,2	9	6,7	6,7	6	16	43,6	16
20	11	13	4	12	9,7	9,7	8	18	48,6	18
25	11	17	5	12	9,7	9,7	10	19	52,6	20
32	8	17	5	14	9,5	11,7	12	-	46	-
40	10	18	6	16	9,8	8,7	16	-	66	-

Piston Ø	WF ±1,4	XC ±1	ZN ± 1	SW 1	SW 2
16	22	82	94,7	20	5
20	24	95	109,7	24	6
25	28	104	119,7	28	8
32	34	117,5	129,5	35	10
40	39	139,6	153,58	45	13

Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: hygienic design
single
Piston with magnet
Pneumatic pre-adjusted cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



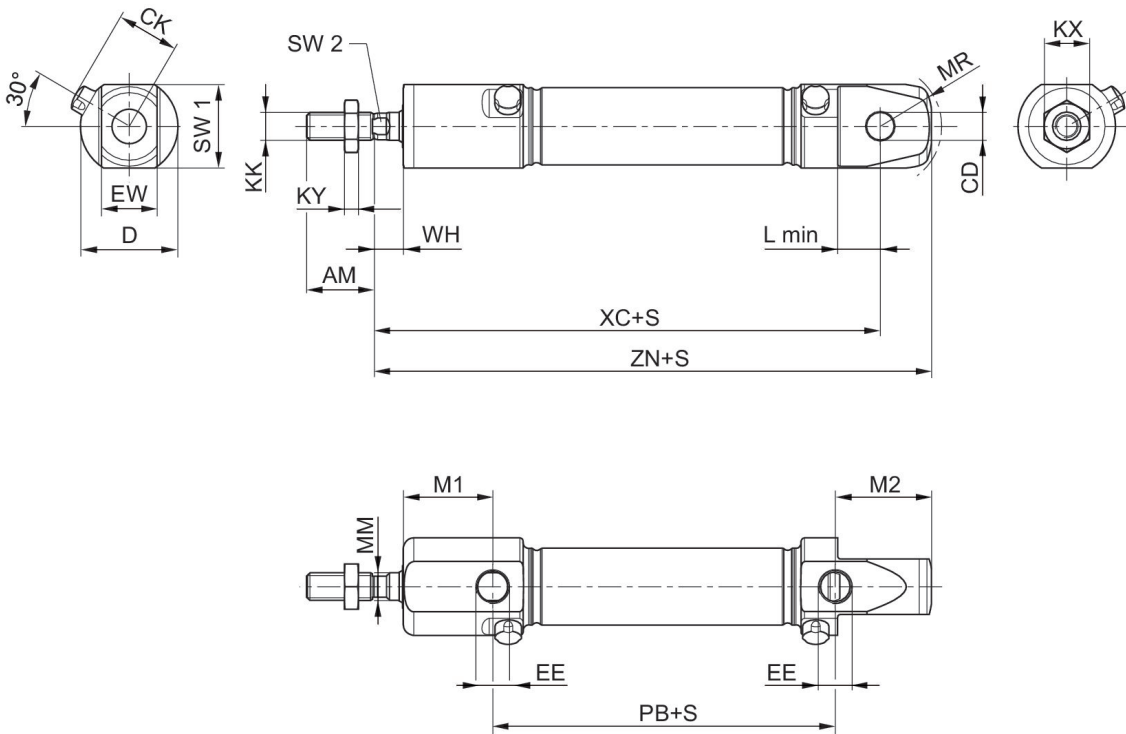
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651399
16	50	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651400
16	80	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651401
16	100	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651402
16	125	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651403
16	160	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651404
16	200	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651405
16	250	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651406
16	320	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651407
16	400	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651408
16	500	M5	Pneumatic pre-adjusted cushioning	Piston with magnet	M6	Heat-Resis- tant Scraper	109	127	R480651409
20	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651410

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651411
20	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651412
20	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651413
20	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651414
20	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651415
20	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651416
20	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651417
20	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651418
20	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651419
20	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M8	Heat-Resis- tant Scraper	166	198	R480651420
25	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651421
25	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651422
25	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651423
25	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651424
25	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651425
25	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651426
25	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651427
25	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651428

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
25	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651429
25	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651430
25	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	260	309	R480651431
32	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624896
32	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624897
32	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624898
32	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624899
32	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624900
32	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624901
32	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624902
32	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624903
32	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624904
32	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624905
32	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	Heat-Resis- tant Scraper	435	505	R481624906
40	25	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624907
40	50	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624908
40	80	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624909
40	100	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624910

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
40	125	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624911
40	160	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624912
40	200	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624913
40	250	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624914
40	320	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624915
40	400	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624916
40	500	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	Heat-Resis- tant Scraper	660	790	R481624917

Dimensions



S = stroke

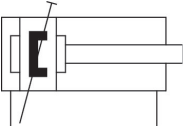
Piston Ø	AM-2	CD H9	CK	D	EE	EW d13	KK	KX	KY	L min
16	16	6	14,7	22	M5	12	M6	10	3,2	9

Piston Ø	AM-2	CD H9	CK	D	EE	EW d13	KK	KX	KY	L min
20	20	8	17,9	28	G 1/8	16	M8	13	4	12
25	22	8	20,2	33	G 1/8	16	M10x1,25	17	5	12
32	22	10	21,5	38	G 1/8	16	M10x1,25	17	5	14
40	24	12	27	49	G 1/4	18	M12x1,25	18	6	16

Piston Ø	M1	M2	MM f8	MR	PB ±1	WH ±1,2	XC ±1	ZN ± 1	SW 1	SW 2
16	21,2	22,7	6	16	43,6	7,5	82	94,7	20	5
20	25,7	27,7	8	18	48,6	8	95	109,7	24	6
25	28,2	29,7	10	19	51,8	9,5	104	119,7	28	8
32	34,6	11,7	12		46	8,9	117,5	129,5	35	10
40	38	8,7	16		66	10,8	139,6	153,5	45	13

Stainless Steel Round Cylinder, Series CSL-RD

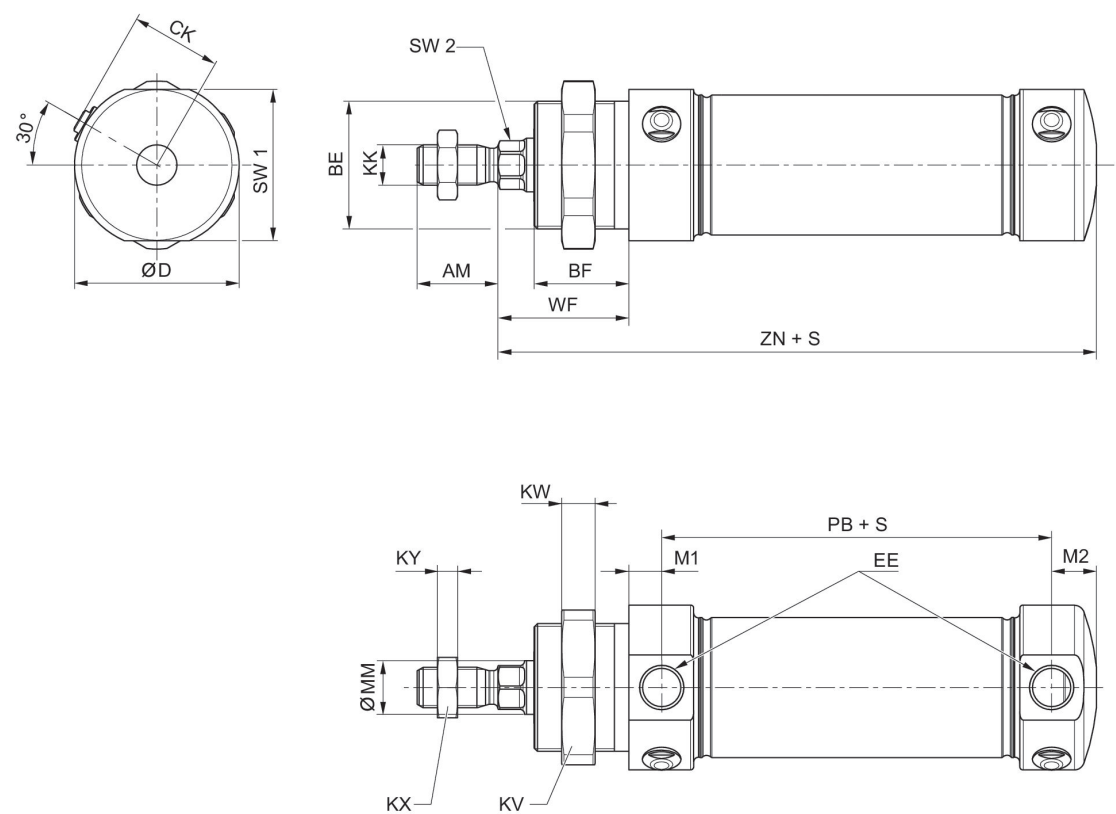
Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: short type
single
Piston with magnet
Pneumatic pre-adjusted cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Retracting piston force [N]	Extracting piston force [N]	Part No.
32	25	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624962
32	50	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624963
32	80	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624964
32	100	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624965
32	125	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624966
32	160	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624967
32	200	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624968
32	250	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624969
32	320	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624970
32	400	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624971
32	500	G 1/8	Pneumatic pre-adjusted cushioning	Piston with magnet	M10x1,25	435	505	R481624972
40	25	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624973

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Retracting piston force [N]	Extracting piston force [N]	Part No.
40	50	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624974
40	80	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624975
40	100	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624976
40	125	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624977
40	160	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624978
40	200	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624979
40	250	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624980
40	320	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624981
40	400	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624982
40	500	G 1/4	Pneumatic pre-adjusted cushioning	Piston with magnet	M12x1,25	660	790	R481624983

Dimensions in mm



S = stroke

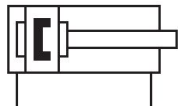
Dimensions in mm

Piston Ø	AM	BE	BF	CK	ØD	EE	KK	KV	KW	KX
32	22	M30x1,5	25	21,5	38	G1/8	M10x1,25	36	8	17
40	24	M38x1,5	28	27	49	G1/4	M12x1,25	46	10	18

Piston Ø	KY	M1	M2	MM	PB	SW1	SW2	SW4	WF	ZN
32	5	9,5	14,2	12	46	35	10	24	34	104
40	6	9,8	13,3	16	66	45	13	30	39	128,2

Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: standard type
single
Piston with magnet
Elastic cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



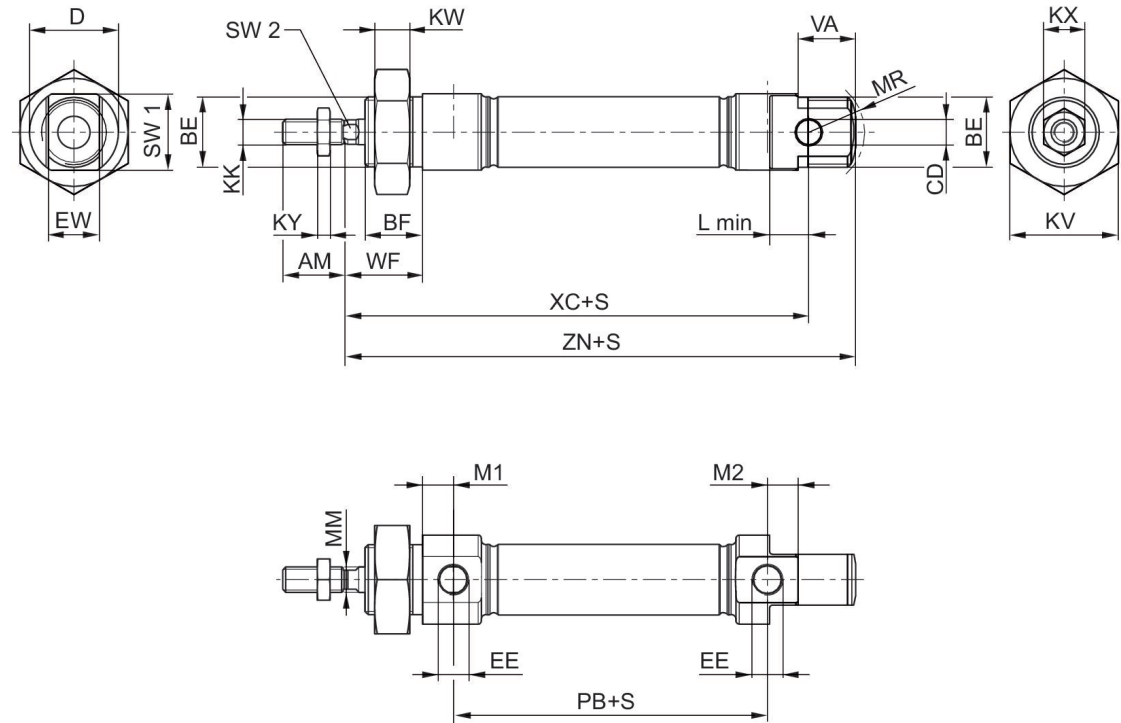
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020398
16	50	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020399
16	80	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020400
16	100	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020401
16	125	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020402
16	160	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020403
16	200	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020404
16	250	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020405
16	320	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020406
16	400	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020407
16	500	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020408
20	25	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020442
20	50	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020443
20	80	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020444
20	100	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020445
20	125	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020446

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	160	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020447
20	200	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020448
20	250	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020449
20	320	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020450
20	400	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020451
20	500	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020452
25	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020486
25	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020487
25	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020488
25	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020489
25	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020490
25	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020491
25	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020492
25	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020493
25	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020494
25	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020495
25	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020496
32	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624698
32	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624699
32	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624700
32	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624701
32	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624702
32	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624703
32	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624704
32	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624705

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
32	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624706
32	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624707
32	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624708
40	25	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624709
40	50	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624710
40	80	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624711
40	100	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624712
40	125	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624713
40	160	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624714
40	200	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624715
40	250	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624716
40	320	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624717
40	400	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624718
40	500	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624719
50	25	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624720
50	50	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624721
50	80	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624722
50	100	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624723
50	125	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624724
50	160	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624725
50	200	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624726
50	250	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624727
50	320	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624728
50	400	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624729
50	500	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624730

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
63	25	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624731
63	50	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624732
63	80	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624733
63	100	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624734
63	125	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624735
63	160	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624736
63	200	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624737
63	250	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624738
63	320	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624739
63	400	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624740
63	500	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624741

Dimensions



S = stroke

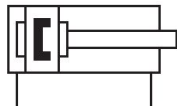
Piston Ø	AM	BE	BF	CD H9	D	EE	EW d13	KK	KV	KW
16	16	M16x1,5	16	6	22	M5	12	M6	24	8
20	20	M22x1,5	18	8	28	G 1/8	16	M8	32	11
25	22	M22x1,5	20	8	33	G 1/8	16	M10x1,25	32	11
32	22	M30x1,5	25	10	38	G 1/8	16	M10x1,25	36	8
40	24	M38x1,5	28	12	49	G 1/4	18	M12x1,25	46	10
50	32	M45x1,5	32	16	57	G 1/4	21	M16x1,25	55	10
63	32	M45x1,5	32	16	70	G 3/8	21	M16x1,25	55	10

Piston Ø	KX	KY	L min	M1	M2	MM f8	MR	PB ±1	VA	WF ±1,4
16	10	3,2	9	6,7	6,7	6	16	43,6	16	22
20	13	4	12	9,7	9,7	8	18	48,6	18	24
25	17	5	12	9,7	9,7	10	19	52,6	20	28
32	17	5	14	9,5	11,7	12	-	46	-	34
40	18	6	16	9,8	8,7	16	-	66	-	39
50	24	8	17	9,8	8,3	20	-	68	-	44
63	24	8	17	13	9,3	20	-	71,5	-	44

Piston Ø	XC ±1	ZN ± 1	SW 1	SW 2
16	82	94,7	20	5
20	95	109,7	24	6
25	104	119,7	28	8
32	117,5	129,5	35	10
40	139,6	153,5	45	13
50	147,2	163	53	17
63	155	171	66	17

Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: hygienic design
single
Piston with magnet
Elastic cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



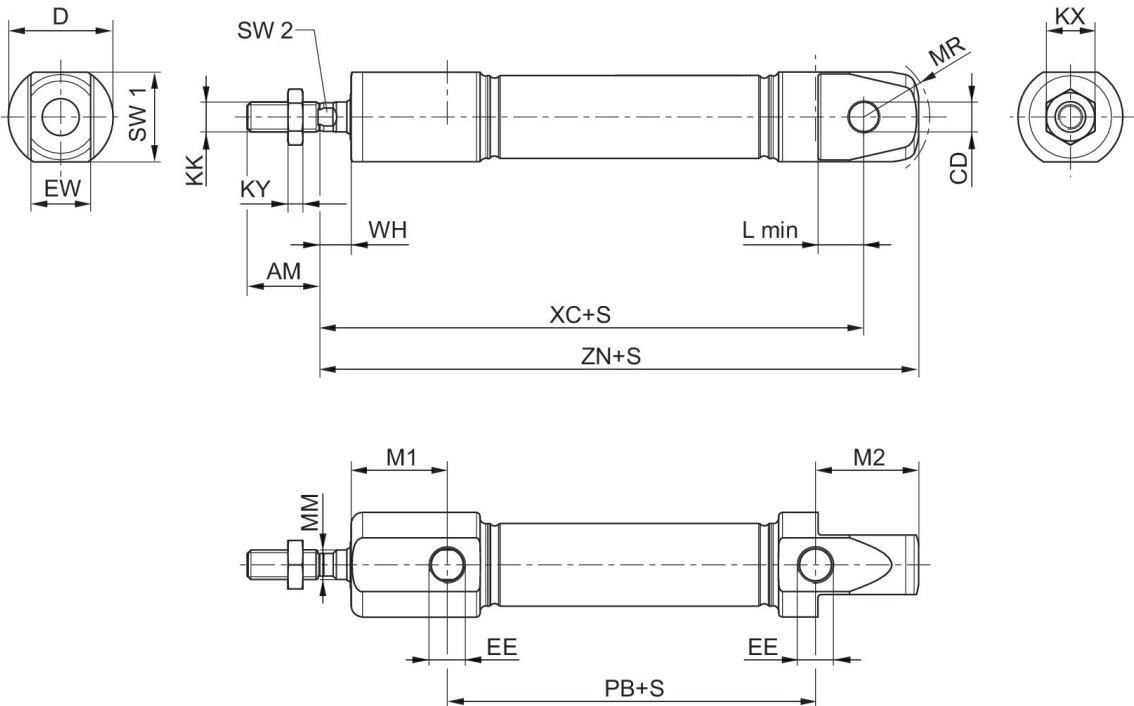
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020420
16	50	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020421
16	80	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020422
16	100	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020423
16	125	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020424
16	160	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020425
16	200	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020426
16	250	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020427
16	320	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020428
16	400	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020429
16	500	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412020430
20	25	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020464
20	50	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020465
20	80	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020466
20	100	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020467
20	125	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020468

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	160	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020469
20	200	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020470
20	250	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020471
20	320	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020472
20	400	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020473
20	500	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412020474
25	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020508
25	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020509
25	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020510
25	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020511
25	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020512
25	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020513
25	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020514
25	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020515
25	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020516
25	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020517
25	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412020518
32	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624808
32	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624809
32	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624810
32	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624811
32	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624812
32	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624813
32	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624814
32	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624815

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
32	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624816
32	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624817
32	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624818
40	25	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624819
40	50	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624820
40	80	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624821
40	100	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624822
40	125	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624823
40	160	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624824
40	200	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624825
40	250	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624826
40	320	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624827
40	400	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624828
40	500	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624829
50	25	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624830
50	50	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624831
50	80	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624832
50	100	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624833
50	125	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624834
50	160	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624835
50	200	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624836
50	250	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624837
50	320	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624838
50	400	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624839
50	500	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481624840

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
63	25	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624841
63	50	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624842
63	80	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624843
63	100	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624844
63	125	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624845
63	160	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624846
63	200	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624847
63	250	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624848
63	320	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624849
63	400	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624850
63	500	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481624851

Dimensions



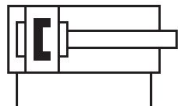
S = stroke

Piston Ø	AM-2	CD H9	D	EE	EW d13	KK	KX	KY	L min	M1
16	16	6	22	M5	12	M6	10	3,2	9	21,2
20	20	8	28	G 1/8	16	M8	13	4	12	25,7
25	22	8	33	G 1/8	16	M10x1,25	17	5	12	28,2
32	22	10	38	G 1/8	16	M10x1,25	17	5	14	34,6
40	24	12	49	G 1/4	18	M12x1,25	18	6	16	38
50	32	16	57	G 1/4	21	M16x1,5	24	8	17	42,1
63	32	16	70	G 3/8	21	M16x1,5	24	8	17	45,3

Piston Ø	M2	MM f8	MR	PB ±1	WH ±1,4	XC ±1	ZN ± 1	SW 1	SW 2
16	22,7	6	16	43,6	7,5	82	94,7	20	5
20	27,7	8	18	48,6	8	95	109,7	24	6
25	29,7	10	19	52,6	9,5	104	119,7	28	8
32	11,7	12	-	46	8,9	117,5	129,5	35	10
40	8,7	16	-	66	10,8	139,6	153,5	45	13
50	8,3	20	-	68	11,7	147,2	163	53	17
63	9,4	20	-	71,5	11,7	155	171	66	17

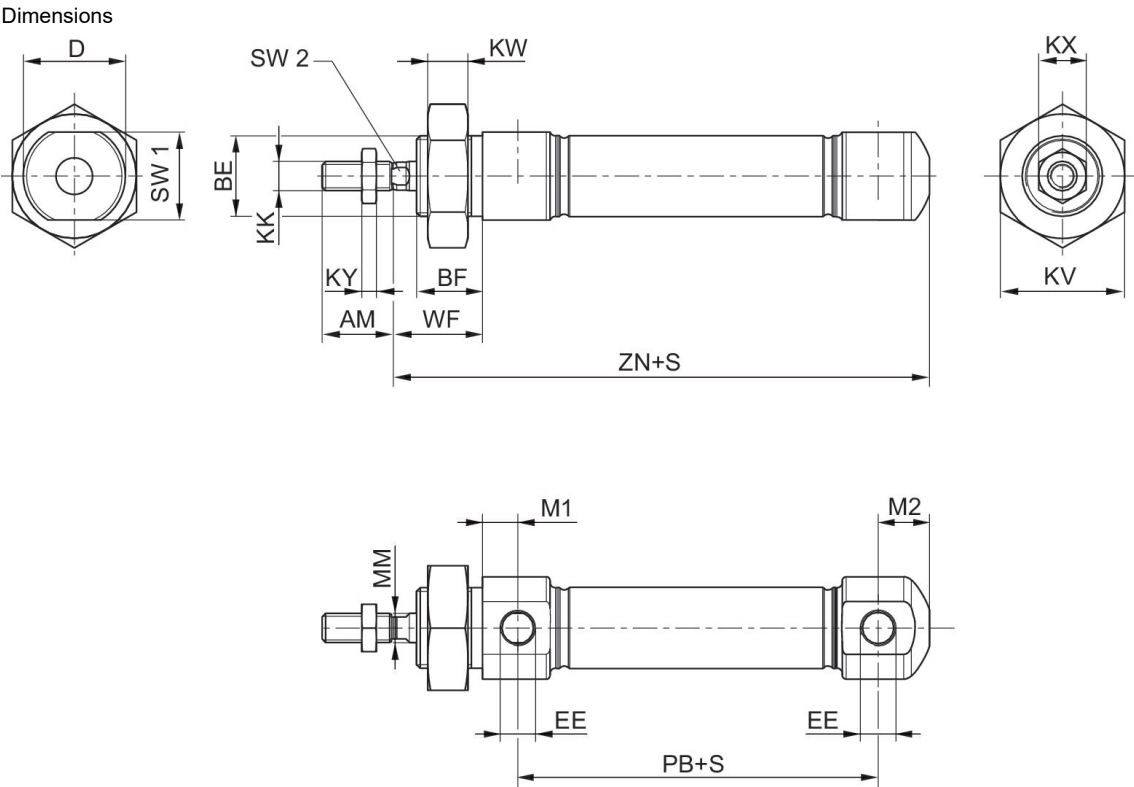
Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
ATEX optional
Version: short type
single
Piston with magnet
Elastic cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021846
16	50	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021847
16	80	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021848
16	100	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021849
16	125	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021850
16	160	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021851
16	200	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021852
16	250	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021853
16	320	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021854
16	400	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021855
16	500	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R412021856
20	25	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021857
20	50	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021858
20	80	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021859
20	100	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021860
20	125	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021861

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	160	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021862
20	200	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021863
20	250	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021864
20	320	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021865
20	400	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021866
20	500	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R412021867
25	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021868
25	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021869
25	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021870
25	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021871
25	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021872
25	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021873
25	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021874
25	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021875
25	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021876
25	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021877
25	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R412021878



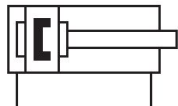
S = stroke

Piston Ø	AM-2	BE	BF	D	EE	KK	KV	KW	KX	KY
16	16	M16x1,5	16	22	M5	M6	24	8	10	3,2
20	20	M22x1,5	18	28	G 1/8	M8	32	11	13	4
25	22	M22x1,5	20	33	G 1/8	M10x1,25	32	11	17	5

Piston Ø	M1	M2	MM f8	PB ±1	WF ±1,4	ZN ± 1	SW 1	SW 2
16	6,7	10	6	43,6	22	82	20	5
20	9,7	14	8	48,6	24	96	24	6
25	9,7	14	10	52,6	28	104	28	8

Stainless Steel Round Cylinder, Series CSL-RD

Mini and round cylinders
Industry standard
suitable for use in food processing
Heat resistant
Version: standard type
single
Piston with magnet
Elastic cushioning
External thread
Internal thread
Suitable for use in food processing (FDA/NSF/EC No. 1935/2004 certified)
Double-acting
EC NO 1935/2004



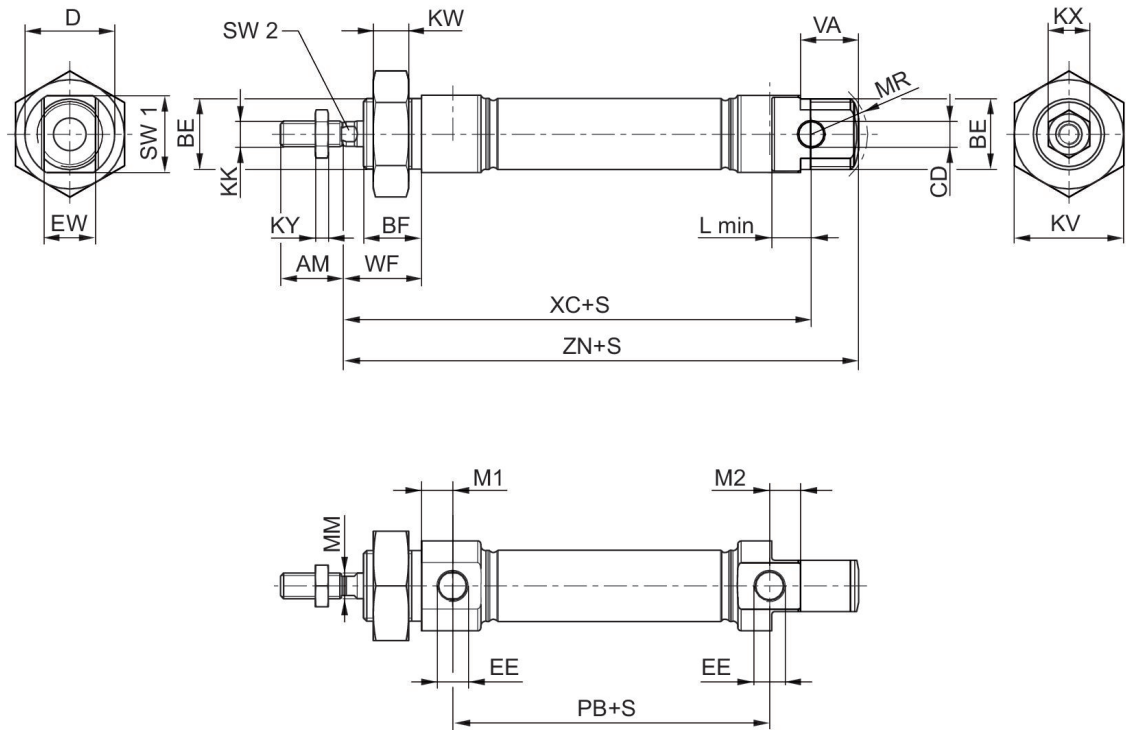
Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
16	25	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646359
16	50	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646360
16	80	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646361
16	100	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646362
16	125	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646363
16	160	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646364
16	200	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646365
16	250	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646366
16	320	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646367
16	400	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646368
16	500	M5	Elastic cushioning	Piston with magnet	M6	Food-Grade Scraper	109	127	R480646369
20	25	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646370
20	50	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646371
20	80	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646372
20	100	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646373
20	125	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646374

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
20	160	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646375
20	200	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646376
20	250	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646377
20	320	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646378
20	400	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646379
20	500	G 1/8	Elastic cushioning	Piston with magnet	M8	Food-Grade Scraper	166	198	R480646380
25	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646381
25	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646382
25	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646383
25	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646384
25	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646385
25	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646386
25	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646387
25	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646388
25	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646389
25	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646390
25	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	260	309	R480646391
32	25	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624984
32	50	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624985
32	80	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624986
32	100	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624987
32	125	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624988
32	160	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624989
32	200	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624990
32	250	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624991

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
32	320	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624992
32	400	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624993
32	500	G 1/8	Elastic cushioning	Piston with magnet	M10x1,25	Food-Grade Scraper	435	505	R481624994
40	25	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624995
40	50	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624996
40	80	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624997
40	100	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624998
40	125	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481624999
40	160	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481625000
40	200	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481625001
40	250	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481625002
40	320	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481625003
40	400	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481625004
40	500	G 1/4	Elastic cushioning	Piston with magnet	M12x1,25	Food-Grade Scraper	660	790	R481625005
50	25	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625006
50	50	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625007
50	80	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625008
50	100	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625009
50	125	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625010
50	160	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625011
50	200	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625012
50	250	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625013
50	320	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625014
50	400	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625015
50	500	G 1/4	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1035	1235	R481625016

Piston Ø [mm]	Stroke [mm]	Ports	Cushioning	Magnet- ic piston	Piston rod thread	Scraper	Retract- ing pis- ton force [N]	Extract- ing pis- ton force [N]	Part No.
63	25	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625017
63	50	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625018
63	80	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625019
63	100	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625020
63	125	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625021
63	160	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625022
63	200	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625023
63	250	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625024
63	320	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625025
63	400	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625026
63	500	G 3/8	Elastic cushioning	Piston with magnet	M16x1,5	Food-Grade Scraper	1765	1960	R481625027

Dimensions



S = stroke

Dimensions in mm

Piston Ø	AM-2	BE	BF	CD H9	D	EE	EW d13	KK	KV	KW
16	16	M16x1,5	16	6	22	M5	12	M6	24	8
20	20	M22x1,5	18	8	28	G 1/8	16	M8	32	11
25	22	M22x1,5	20	8	33	G 1/8	16	M10x1,25	32	11
32	22	M30x1,5	25	10	38	G 1/8	16	M10x1,25	36	8
40	24	M38x1,5	28	12	49	G 1/4	18	M12x1,25	46	10
50	32	M45x1,5	32	16	57	G 1/4	21	M16x1,5	55	10
63	32	M45x1,5	32	16	70	G 3/8	21	M16x1,5	55	10

Piston Ø	KX	KY	L min	M1	M2	MM f8	MR	PB ±1	VA	WF ±1,4
16	10	3,2	9	6,7	6,7	6	16	43,6	16	22
20	13	4	12	9,7	9,7	8	18	48,6	18	24
25	17	5	12	9,7	9,7	10	19	52,6	20	28
32	17	5	14	9,5	11,7	12	-	46	-	34
40	18	6	16	9,8	8,7	16	-	66	-	39
50	24	8	17	9,8	8,3	20	-	68	-	44
63	24	8	17	13	9,4	20	-	71,5	-	44

Piston Ø	XC ±1	ZN ± 1	SW 1	SW 2
16	82	94,7	20	5
20	95	109,7	24	6
25	104	119,7	28	8
32	117,5	129,5	35	10
40	139,6	153,5	45	13
50	147,2	163	53	17
63	155	171	66	17

Modular scraper system

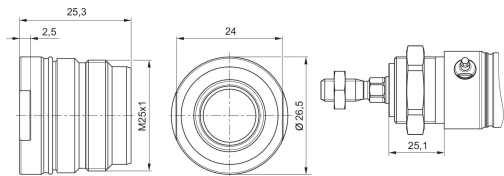
ISO 15552
CSL-RD



Piston diameter [mm]	Piston rod seal	Scraper	Part No.
32	Nitrile butadiene rubber	Thermoplastic elastomer	R412028343
40	Nitrile butadiene rubber	Thermoplastic elastomer	R412028347
50, 63	Nitrile butadiene rubber	Thermoplastic elastomer	R412028351

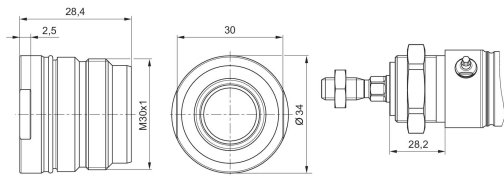
R412028343

Dimensions in mm



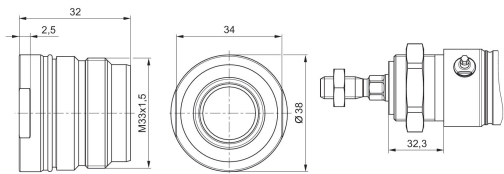
R412028347

Dimensions in mm



R412028351

Dimensions in mm



Modular scraper system

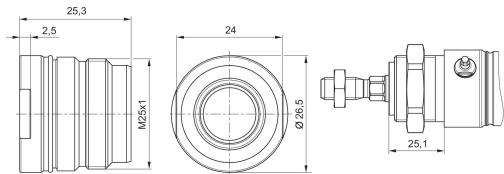
ISO 15552
CSL-RD



Piston diameter [mm]	Piston rod seal	Scraper	Part No.
32	Nitrile butadiene rubber	Ultra-high-molecular-weight polyethylene (UHMW-PE), Thermoplastic polyurethane (TPU)	R412028344
40	Nitrile butadiene rubber	Ultra-high-molecular-weight polyethylene (UHMW-PE), Thermoplastic polyurethane (TPU)	R412028348
50, 63	Nitrile butadiene rubber	Ultra-high-molecular-weight polyethylene (UHMW-PE), Thermoplastic polyurethane (TPU)	R412028352

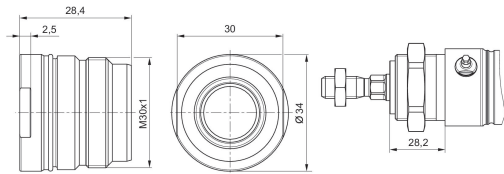
R412028344

Dimensions in mm



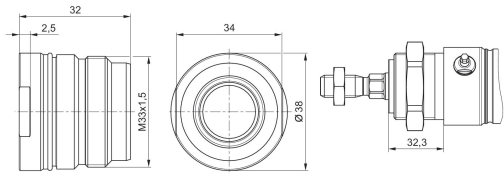
R412028348

Dimensions in mm



R412028352

Dimensions in mm



Modular scraper system

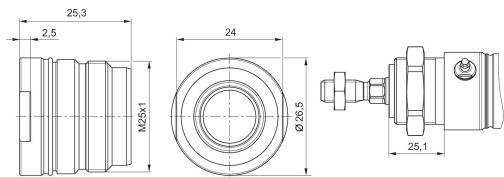
ISO 15552
CSL-RD



Piston diameter [mm]	Piston rod seal	Scraper	Part No.
32	Ultra-high-molecular-weight polyethylene (UHMW-PE)	Ultra-high-molecular-weight polyethylene (UHMW-PE)	R412028345
40	Ultra-high-molecular-weight polyethylene (UHMW-PE)	Ultra-high-molecular-weight polyethylene (UHMW-PE)	R412028349
50, 63	Ultra-high-molecular-weight polyethylene (UHMW-PE)	Ultra-high-molecular-weight polyethylene (UHMW-PE)	R412028353

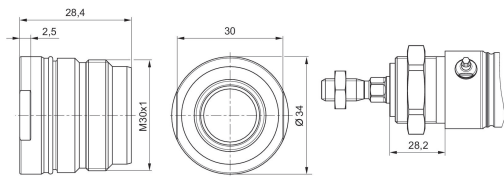
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Dimensions in mm



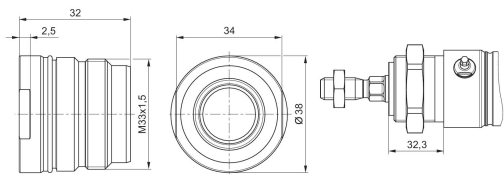
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Dimensions in mm



R412028353

Dimensions in mm



Modular scraper system

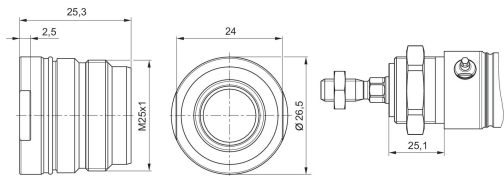
ISO 15552
CSL-RD



Piston diameter [mm]	Piston rod seal	Scraper	Part No.
32	Fluorocaoutchouc	Polytetrafluorethylene	R412028346
40	Fluorocaoutchouc	Polytetrafluorethylene	R412028350
50, 63	Fluorocaoutchouc	Polytetrafluorethylene	R412028354

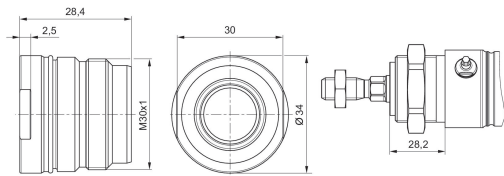
R412028346

Dimensions in mm



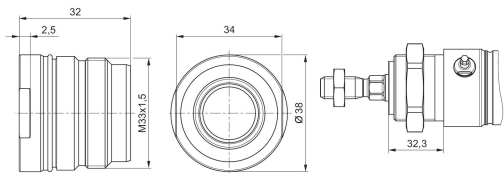
R412028350

Dimensions in mm



R412028354

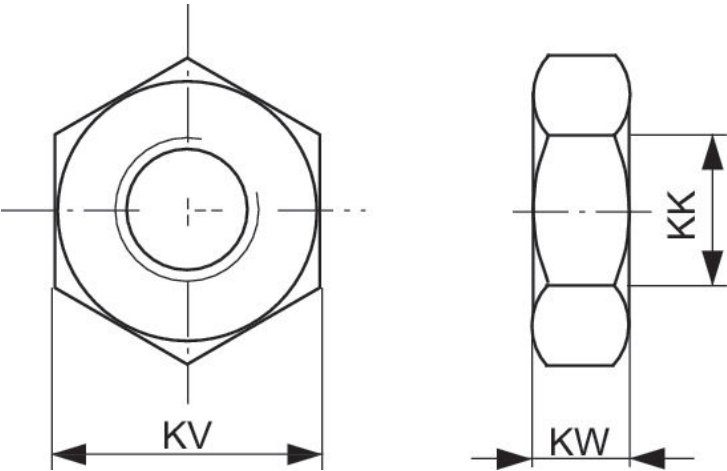
Dimensions in mm



Piston rod nut MR9



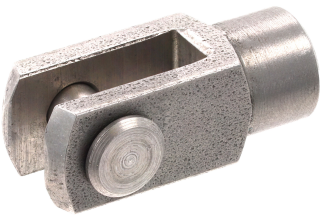
Thread size	Material	Part No.
M6	Stainless Steel	8103190644
M8	Stainless Steel	8103190164
M10x1,25	Stainless Steel	8103190464
M12x1,25	Stainless Steel	3590304000
M16x1,5	Stainless Steel	3590305000



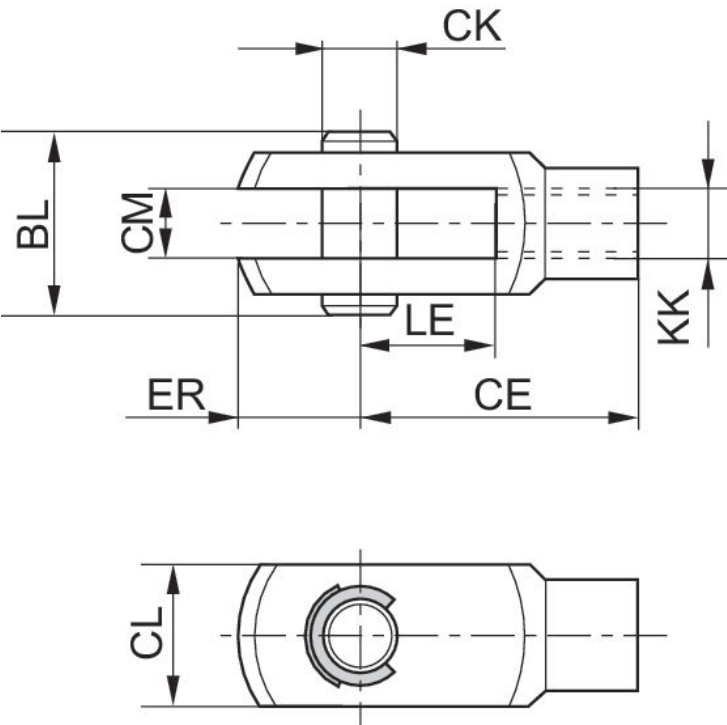
KK	Part No.	KV	KW
M4	1823300033	10	3.2
M6	1823300034	13	4
M8	1823A00021	19	6
M10	8103190344	19	6
M10x1,25	1823300030	24	8
M20x1,5	1823300031	30	10
M27x2	1823A00029	41	13.5
M36x2	8103190414	50	16
M42x2	8103190424	60	21
M6	8103190644	10	3.2
M8	8103190164	13	4

KK	Part No.	KV	KW
M10x1,25	8103190464	17	5
M4	3330310000	7	2.2
M12x1,25	3590304000	19	6
M16x1,5	3590305000	24	8
M20x1,5	3590308000	30	10
M20x1,5	8103040344	30	10
M24x2	8103190394	36	12
M48x2	8103190434	65	25
M10x1,25	2990600303	17	5
M12x1,25	2990600304	19	6
M16x1,5	2990600305	24	8
M20x1,5	2990600308	30	10
M27x2	2990600312	41	13.5
M36x2	2990600316	50	16
M42x2	2990600325	60	21

Rod clevis AP2, Series CM2



for series	Material	Part No.
CSL-RD, SSI, ICM	Stainless Steel	3330516000
CCL-IC, CSL-RD, CCI, ICM	Stainless Steel	3330520000
CCL-IS, CCL-IC, CCI, CSL-RD, SSI, ICM, ICS-D2, 167	Stainless Steel	3590502000
CCL-IS, CCL-IC, CCI, SSI, 167, ICS-D2	Stainless Steel	3590504000
CCL-IS, ICS-D2, 167	Stainless Steel	3590505000



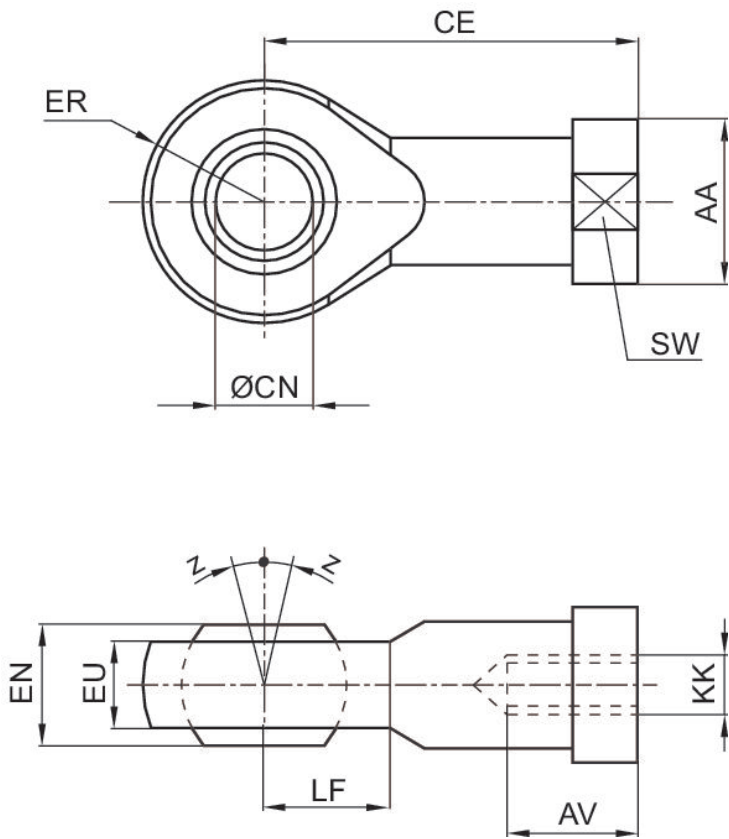
KK	Part No.	CE	CK e8	CL	CM B12	ER	BL	LE
M4	3330510000	16	4	10	5	6	15	8
M6	3330516000	24	6	12	6	7	17	12
M8	3330520000	32	8	16	8	10	22	16
M10x1,25	3590502000	40	10	20	10	12	26	20
M12x1,25	3590504000	48	12	24	12	14	31	24

KK	Part No.	CE	CK e8	CL	CM B12	ER	BL	LE
M16x1,5	3590505000	64	16	32	16	19	39	32
M20x1,5	3590508000	80	20	40	20	20	49	40

Ball eye rod end AP6, series CM2



for series	Swivel bearing Ø [mm]	Material	Part No.
CCL-IC, CSL-RD, ICM	6	Stainless Steel	8958209012
CCL-IC, CSL-RD, ICM	8	Stainless Steel	8958209022
CCL-IS, CCL-IC, SSI, CSL-RD, ICM, ICS-D2	10	Stainless Steel	8958209032
CCL-IS, CCL-IC, SSI, ICS-D2	12	Stainless Steel	8958209042
CCL-IS, CCL-IC, SSI, ICS-D2	16	Stainless Steel	8958209052



KK	Part No.	AA	AV min.	CE	Ø CN H7	EN -0,1	ER	EU max.	LF	SW
M4	8958209002	11	8	27	5	8	9	6	9	9

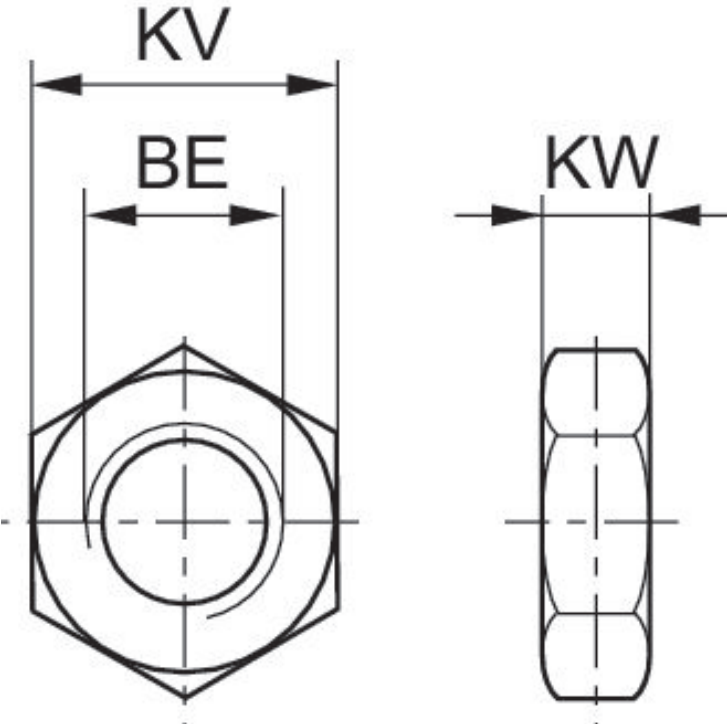
KK	Part No.	AA	AV min.	CE	Ø CN H7	EN -0,1	ER	EU max.	LF	SW
M6	8958209012	13	9	30	6	9	10	6,75	10	11
M8	8958209022	16	12	36	8	12	12	9	12	14
M10x1,25	8958209032	19	15	43	10	14	14	10.5	14	17
M12x1,25	8958209042	22	18	50	12	16	16	12	16	19
M16x1,5	8958209052	27	24	64	16	21	21	15	21	22
M20x1,5	8958209062	34	30	77	20	25	25	18	25	30
M27x2	8958209072	50	45	110	30	37	35	25	35	41

KK	Z [°] max.
M4	6,5
M6	6,5
M8	6,5
M10x1,25	6,5
M12x1,25	6,5
M16x1,5	7,5
M20x1,5	7,5
M27x2	7,5

Nut MR3, series CM1



Suitable piston Ø [mm]	Thread size	Material	Part No.
16	M16x1,5	Stainless Steel	2918540030
20, 25	M22x1,5	Stainless Steel	R913030290
32	M30x1,5	Stainless Steel	R412027981
40	M38x1,5	Stainless Steel	R412027982
50, 63	M45x1,5	Stainless Steel	R412027983

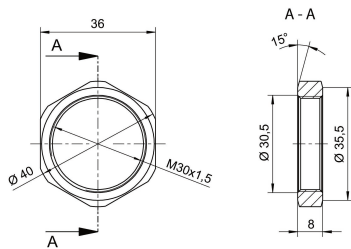


Piston Ø	Part No.	For series	BE	KV	KW
8, 10	1823300024	MNI	M12x1,25	17	5.5
12, 16	2915A51204	MNI	M16x1,5	22	6
20, 25	2915051207	CSL-RD, MNI	M22x1,5	30	7
8, 10	0413215803	ICM	M12x1,25	17	6.75

Piston Ø	Part No.	For series	BE	KV	KW
16	0413214505	ICM	M16x1,5	24	7
16	2918540030	CSL-RD	M16 x1,5	27	8
20, 25	0413214602	ICM	M22 x1,5	30	8
20, 25	R913030290	CSL-RD	M22 x1,5	32	11
32	0413214718	ICM	M30x1,5	41	11
80	3008010180	102	M24x2	36	8
60, 85	3056010180	102	M24	36	8
32	R412027809	102	M30x1,5	36	10
40	R412027810	RPC	M36x1,5	46	10
113, 160	3012010180	102	M36x3	52	10
40	R412027811	RPC	M38x1,5	46	10
50, 63	R412027812	RPC	M45x1,5	60	12
250	3075010180	102	M48x3	65	12

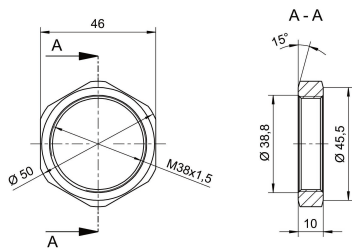
R412027981

Dimensions in mm



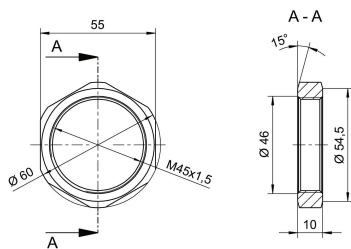
R412027982

Dimensions in mm



R412027983

Dimensions in mm

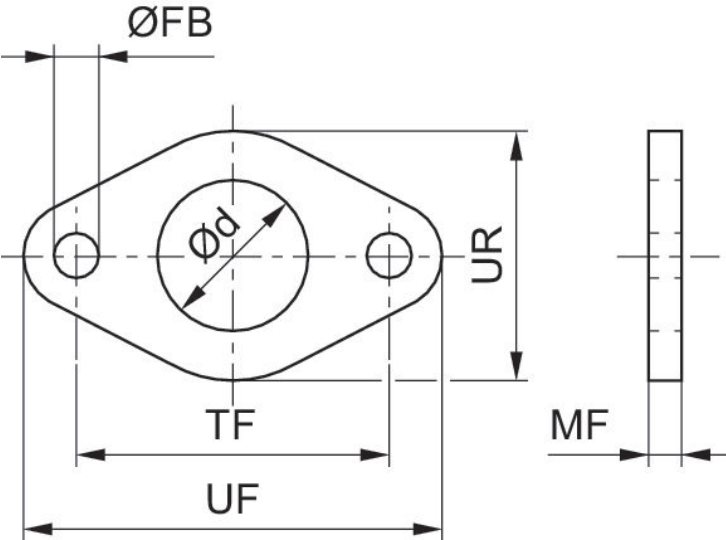


Flange mounting MF8, Series CM1

ISO 6432



Piston diameter [mm]	Standardization	Material	Part No.
12, 16	ISO 6432	Stainless Steel	3322016000
20, 25	ISO 6432	Stainless Steel	3322020000



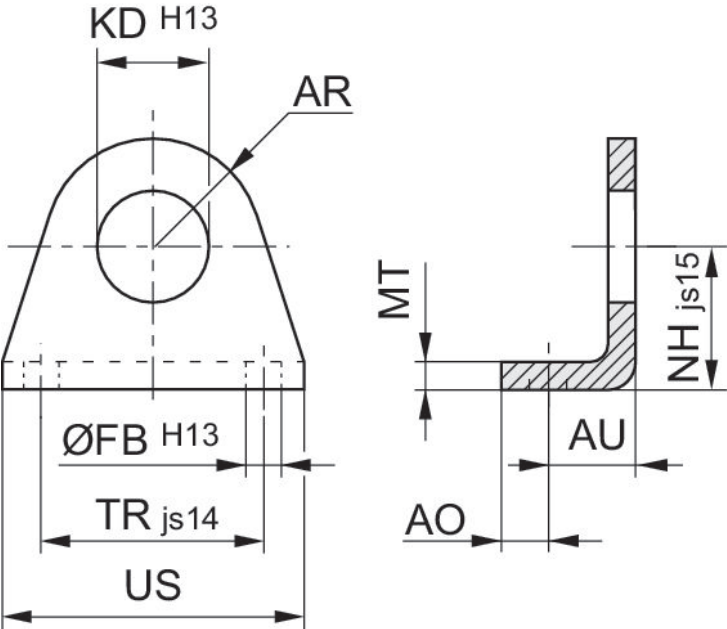
Piston Ø	Part No.	Ø d	Ø FB	MF	TF js14	UF	UR
8, 10	3322010000	12	4.5	3	30	40	22
12, 16	3322016000	16	5.5	4	40	52	30
20, 25	3322020000	22	6.6	5	50	66	40
8, 10	1821036012	12	4.5	3	30	40	25
12, 16	1821036011	16	5.5	4	40	52	30
20, 25	1821036010	22	6.6	5	50	66	40

Foot mounting MS3, Series CM1

ISO 6432



Piston diameter [mm]	Standardization	Material	Part No.
12, 16	ISO 6432	Stainless Steel	3322216000
20, 25	ISO 6432	Stainless Steel	3322220000

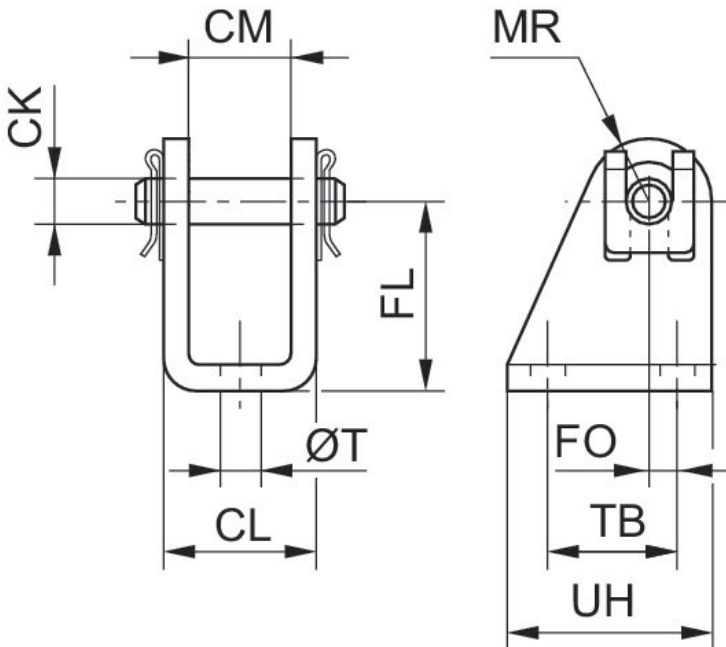


Piston Ø	Part No.	AO	AR	AU	Ø FB H13	Ø KD H13	MT	NH ±0,3 js15	TR js14	US
8, 10	3322210000	5	10	11	4.5	12	3	16	25	35
8, 10	1821332029	5	10	11	4.5	12.1	3	16	25	35
12, 16	3322216000	6	12.5	14	5.5	16.1	4	20	32	42
12, 16	1821332028	6	13	14	5.5	16.1	4	20	32	42
20, 25	3322220000	8	20	17.5	6.6	22.1	5	25	40	54
20, 25	1821332027	8	20	17	6.6	22.1	5	25	40	54
32	3322232000	9	24	20	6.6	30.1	5	32	48	65

Clevis mounting AB3, Series CM1



Piston diameter [mm]	Swivel bearing Ø [mm]	Material	Part No.
12, 16	6	Stainless Steel	3323416000
20, 25	8	Stainless Steel	3323420000



Piston Ø	Part No.	CM	Ø CK	CL	FL	FO	MR	Ø T	TB	UH
8, 10	1827001447	8,1	4	13,1	24	1,5	5	4,5	12,5	20
8, 10	3323410000	8	4	13	24	1,5	5	4.5	12	20
12, 16	1827001446	12,1	6	18,1	27	2,0	7	5,5	15	25
12, 16	3323416000	12	6	18	27	2,0	7	5.5	15	25
20, 25	1827001445	16,1	8	24,1	30	4,0	10	6,6	20	32
20, 25	3323420000	16	8	24	30	4,0	10	6.6	22	34
32	3323432000	26	10	36	32	6,0	12	6.6	24	36

Clevis mounting AB3, Series CM1

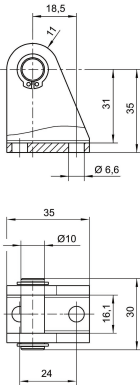
CSL-RD



Piston diameter [mm]	Swivel bearing Ø [mm]	Material	Part No.
32	10	Stainless Steel	R412027966
40	12	Stainless Steel	R412027967
50, 63	16	Stainless Steel	R412027968

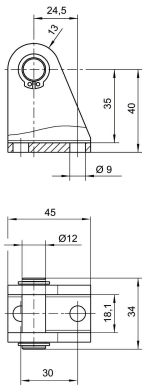
R412027966

Dimensions in mm



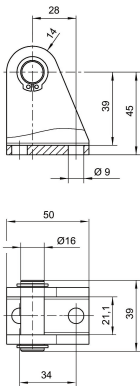
R412027967

Dimensions in mm



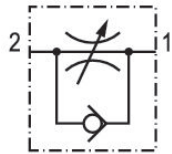
R412027968

Dimensions in mm



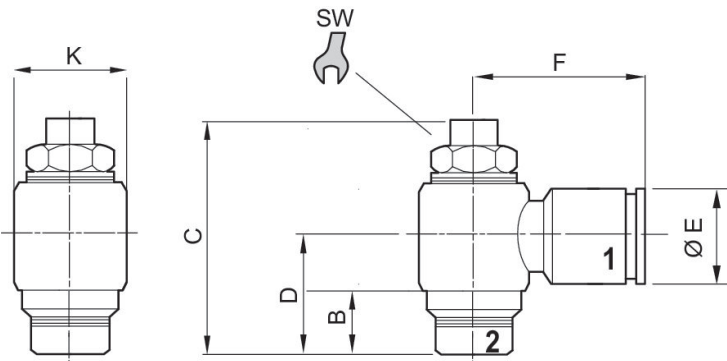
Check-choke valve, stainless steel, Series CC02-SL

External thread
push-in fitting
Heat resistant
NSF/ANSI 169
FDA conform
EU Regulation 1935/2004



Compressed air connection 1	Compressed air connection 2	direction of throttle	Nominal flow Qn 2 to 1 [l/min]	Housing material	Part No.
Ø 4	M5	2 > 1	50	Stainless Steel	R412024736
Ø 4	G 1/8	2 > 1	150	Stainless Steel	R412024737
Ø 6	G 1/8	2 > 1	190	Stainless Steel	R412024738
Ø 8	G 1/8	2 > 1	200	Stainless Steel	R412024739
Ø 6	G 1/4	2 > 1	370	Stainless Steel	R412024740
Ø 8	G 1/4	2 > 1	420	Stainless Steel	R412024741
Ø 10	G 3/8	2 > 1	1000	Stainless Steel	R412024742

Dimensions



Part No.	Port 1	Port 2	B	C	D	ØE	F	ØK	SW
R412024736	Ø 4	M5	5	28.5	12.5	9	18	10	6
R412024737	Ø 4	G 1/8	5	32	15.5	9	19.5	14	9
R412024738	Ø 6	G 1/8	5	32	15.5	12	22	14	9
R412024739	Ø 8	G 1/8	5	32	15.5	14	22.5	14	9
R412024740	Ø 6	G 1/4	6.5	40	17.5	12	23.5	17	10
R412024741	Ø 8	G 1/4	6.5	40	17.5	14	24	17	10
R412024742	Ø 10	G 1/4	9	52	22	16	28	22	14

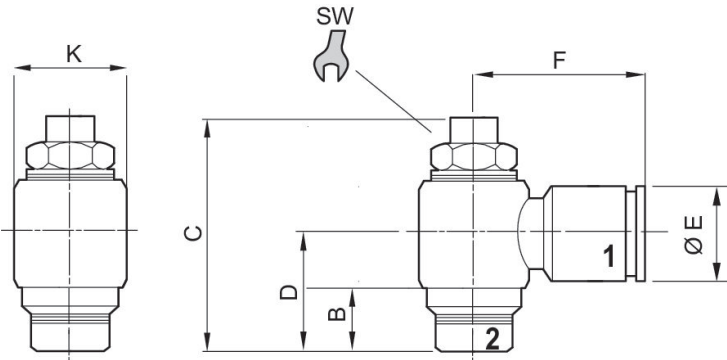
Check-choke valve, stainless steel, Series CC02-SL

push-in fitting
External thread
Heat resistant



Compressed air connection 1	Compressed air connection 2	direction of throttle	Nominal flow Qn 1 to 2 [l/min]	Housing material	Part No.
Ø 4	G 1/8	1 > 2	150	Stainless Steel	R412024749
Ø 6	G 1/8	1 > 2	190	Stainless Steel	R412024750
Ø 6	G 1/4	1 > 2	370	Stainless Steel	R412024751
Ø 8	G 1/4	1 > 2	420	Stainless Steel	R412024752
Ø 10	G 3/8	1 > 2	1000	Stainless Steel	R412024753

Dimensions



Part No.	Port 1	Port 2	B	C	D	ØE	F	ØK	SW
R412024749	Ø 4	G 1/8	5	32	15.5	9	19.5	14	9
R412024750	Ø 6	G 1/8	5	32	15.5	12	22	14	9
R412024751	Ø 6	G 1/4	6.5	40	17.5	12	23.5	17	10
R412024752	Ø 8	G 1/4	6.5	40	17.5	14	24	17	10
R412024753	Ø 10	G 3/4	9	52	22	16	28	22	14

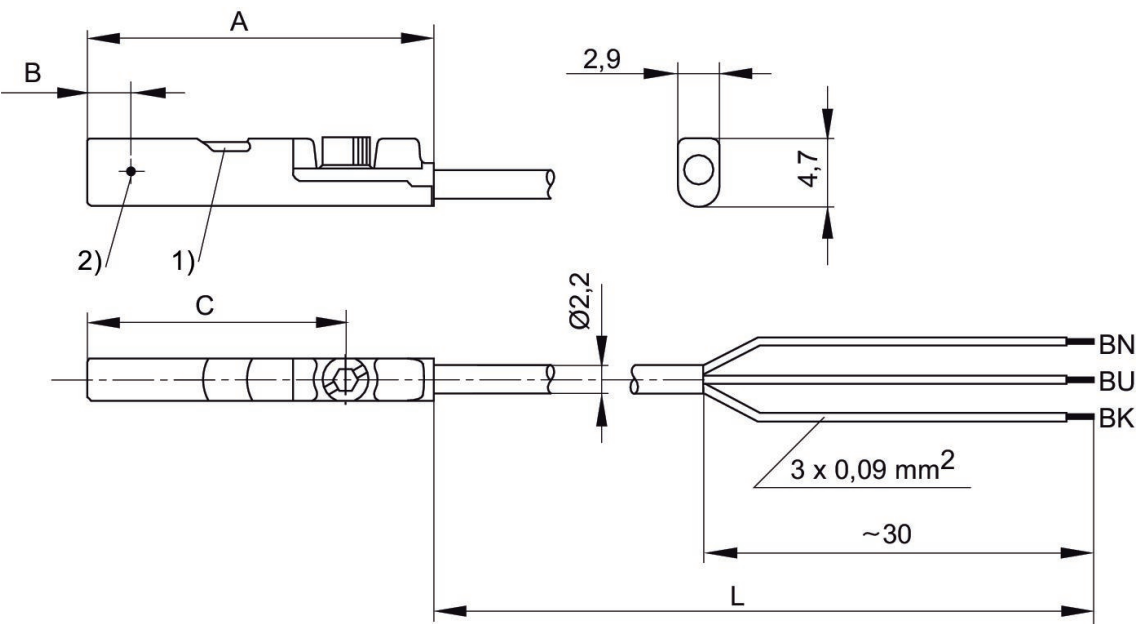
Sensor, Series ST4

PRA
SSI
GSU
RTC
CKP
GPC
MSC
MSN
RCM
CVI
open cable ends
UL (Underwriters Laboratories)
cULus
RoHS



Direct mounting for series	Type of contact	Cable length L [m]	Max. DC switching current [A]	Max. AC switching current [A]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Version	Part No.
PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI	Reed	3	0.13	0.13	5	30	Protected against polarity reversal	R412019488
PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI	Reed	5	0.13	0.13	5	30	Protected against polarity reversal	R412019489
PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI	electronic PNP	3	0.1		10	30	short circuit resistant, Protected against polarity reversal	R412019680
PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI	electronic PNP	5	0.1		10	30	short circuit resistant, Protected against polarity reversal	R412019681

Dimensions



1) LED 2) Switching point
L = cable length BN = brown, BK = black, BU = blue

Part No.	A	B	C
R412019488	26.3	6.3	20.3
R412019489	26.3	6.3	20.3
R412019680	23.7	2.8	17.7
R412019681	23.7	2.8	17.7
R412019684	23.7	2.8	17.7
R412019685	23.7	2.8	17.7

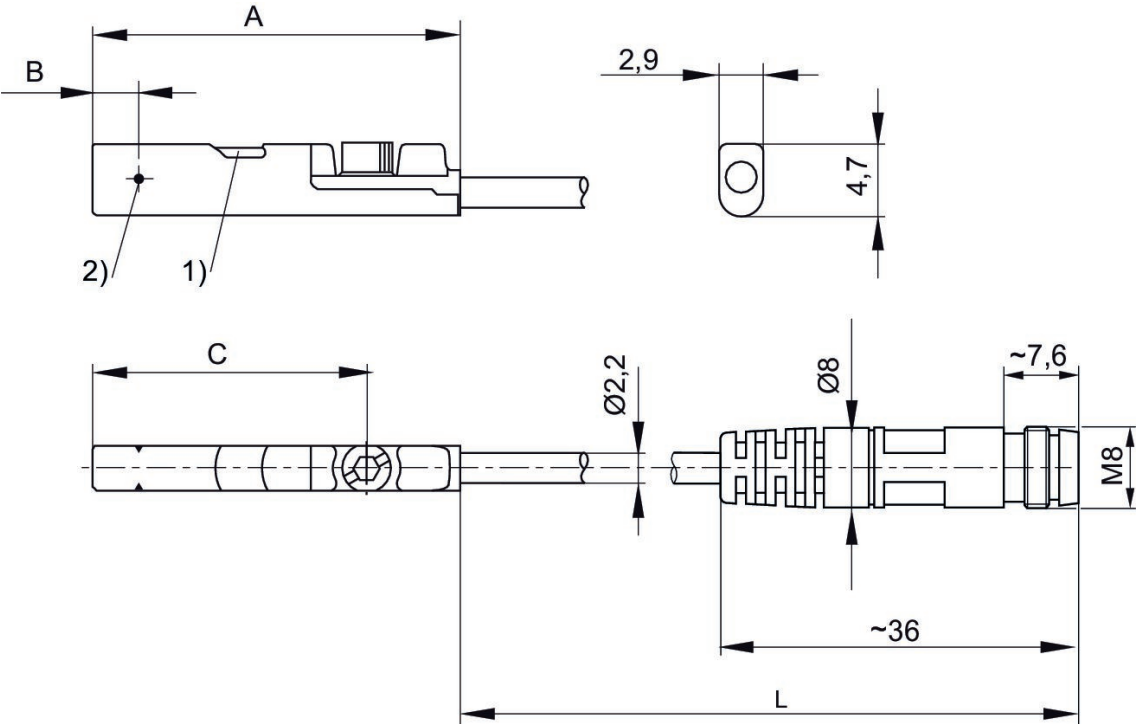
Sensor, Series ST4

PRA
SSI
GSU
RTC
CKP
GSP
MSC
MSN
RCM
CVI
Plug
M8
UL (Underwriters Laboratories)
cULus
RoHS



Direct mounting for series	Type of contact	Cable length L [m]	Max. DC switching current [A]	Max. AC switching current [A]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Version	Part No.
PRA, SSI, GSU, RTC, CKP, GSP, MSC, MSN, RCM, CVI	Reed	0.3	0.13	0.13	5	30	Protected against polarity reversal	R412019682
PRA, SSI, GSU, RTC, CKP, GSP, MSC, MSN, RCM, CVI	electronic PNP	0.3	0.1		10	30	short circuit resistant, Protected against polarity reversal	R412019683

Dimensions

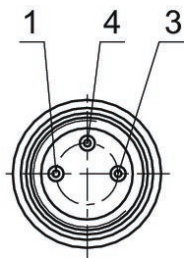


1) LED 2) Switching point
L = cable length

Part No.	A	B	C
R412019682	26.3	6.3	20.3
R412019683	23.7	2.8	17.7
R412019694	23.7	2.8	17.7

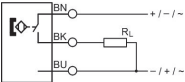
R412019682, R412019683

Pin assignment M8x1 (3-pin)



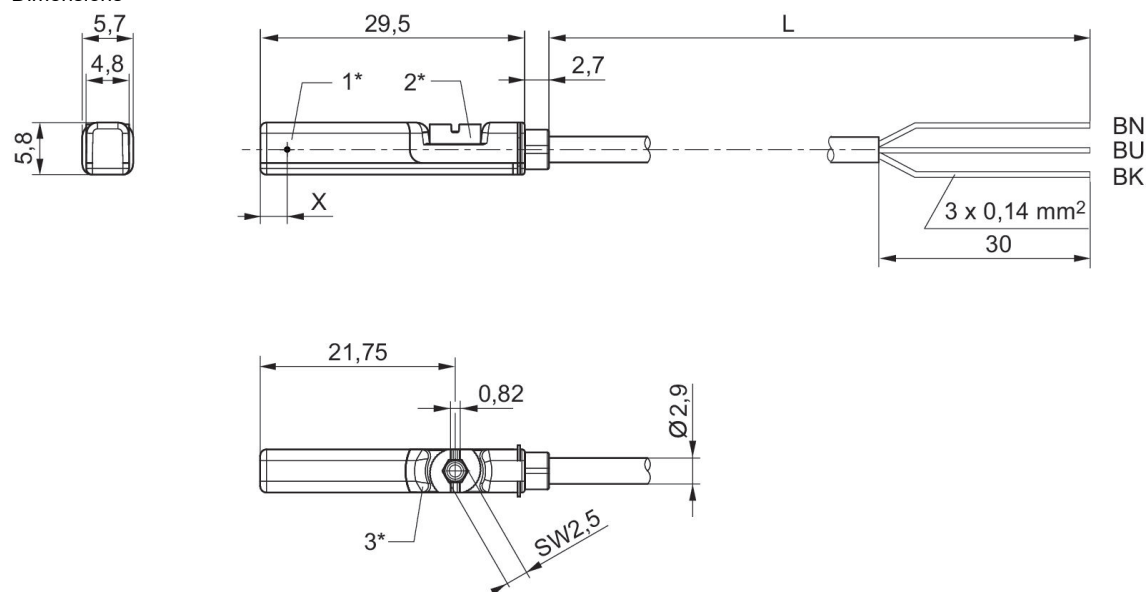
Sensor, Series ST6

PRA
PRE
CCI
KPZ
SSI
GPC
CVI
without wire end ferrule, tin-plated
CE declaration of conformity
cULus
RoHS
UL (Underwriters Laboratories)



Direct mounting for series	Type of contact	Cable sheath	Cable length L [m]	Max. DC switching current [A]	Max. AC switching current [A]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Min. operating voltage AC [V AC]	Max. operational voltage AC [V AC]	Version	Part No.
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane	3	0.3	0.5	10	30	10	30	Protected against polarity reversal	R412022869
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane	5	0.3	0.5	10	30	10	30	Protected against polarity reversal	R412022870
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane	10	0.3	0.5	10	30	10	30	Protected against polarity reversal	R412022871
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electron PNP	Polyurethane	3	0.13		10	30			short circuit resistant, Protected against polarity reversal	R412022853
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electron PNP	Polyurethane	5	0.13		10	30			short circuit resistant, Protected against polarity reversal	R412022855

Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length BN = brown, BK = black, BU = blue
X = electronic: 11.6 mm

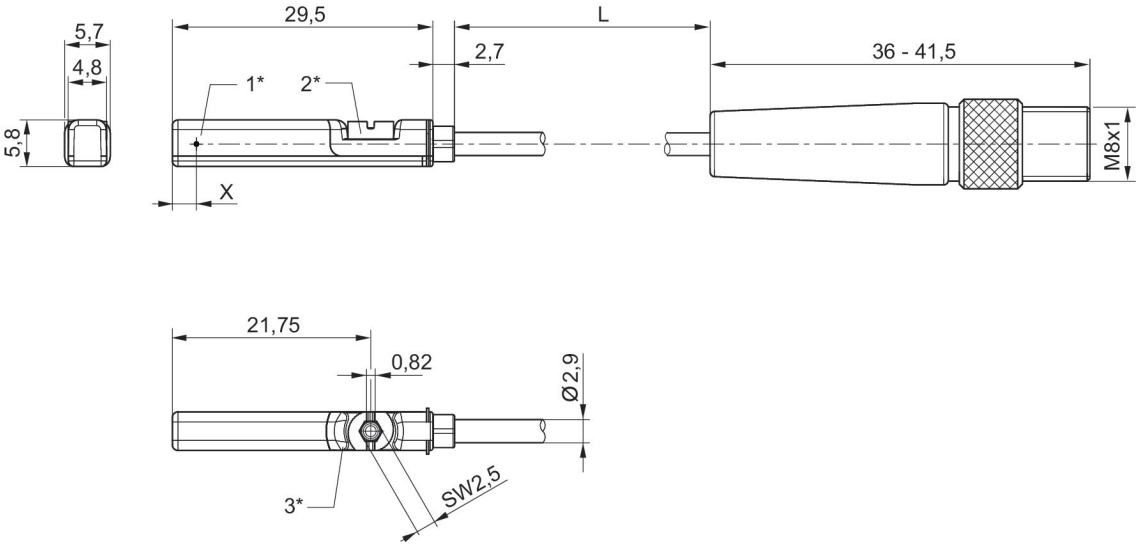
Sensor, Series ST6

PRA
PRE
CCI
KPZ
SSI
GPC
CVI
Plug
CE declaration of conformity
cULus
RoHS
UL (Underwriters Laboratories)



Direct mounting for series	Type of contact	Cable sheath	Cable length L [m]	Max. DC switching current [A]	Max. AC switching current [A]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Min. operating voltage AC [V AC]	Max. operational voltage AC [V AC]	Version	Part No.
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyvinyl chloride	0.3	0.3	0.5	10	30	10	30	Protected against polarity reversal	R412022875
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	electronic PNP	Polyurethane	0.3	0.13		10	30			short circuit resistant, Protected against polarity reversal	R412022859

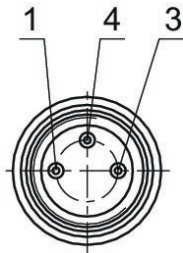
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

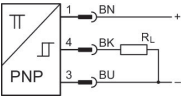
R412022875, R412022859

Pin assignment M8x1 (3-pin)



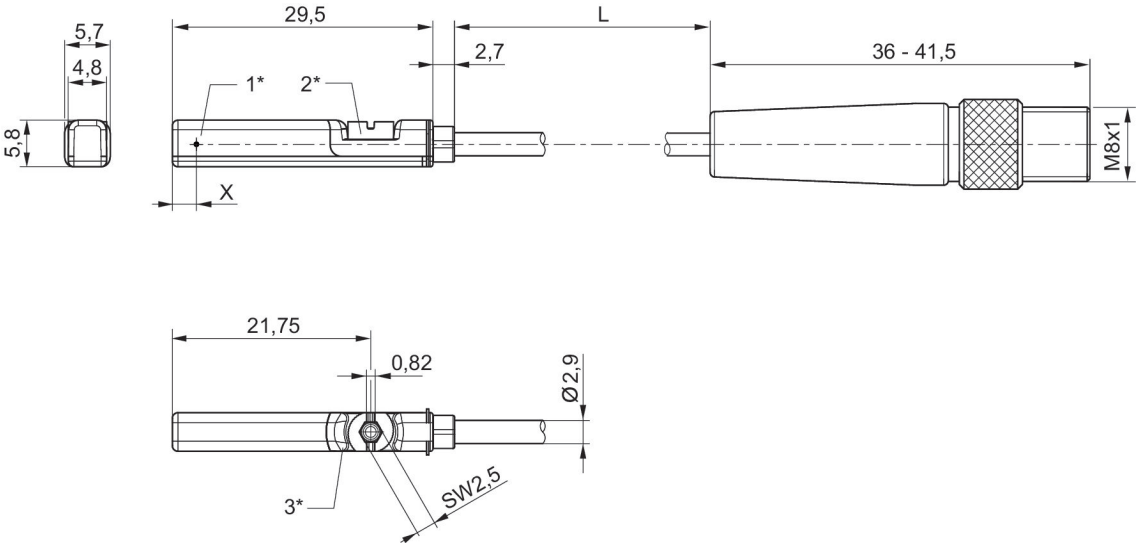
Sensor, Series ST6

PRA
PRE
CCI
KPZ
SSI
GPC
CVI
Plug
M8
ATEX
CE declaration of conformity
cULus
RoHS
UL (Underwriters Laboratories)



Direct mounting for series	Type of contact	Cable sheath	Cable length L [m]	Max. DC switching current [A]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Version	Part No.
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	PNP	Polyurethane	0.3	0.1	10	30	short circuit resistant, Protected against polarity reversal	R412022860

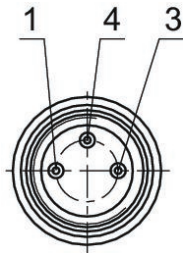
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

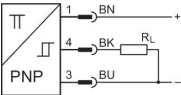
R412022860

Pin assignment M8x1 (3-pin)



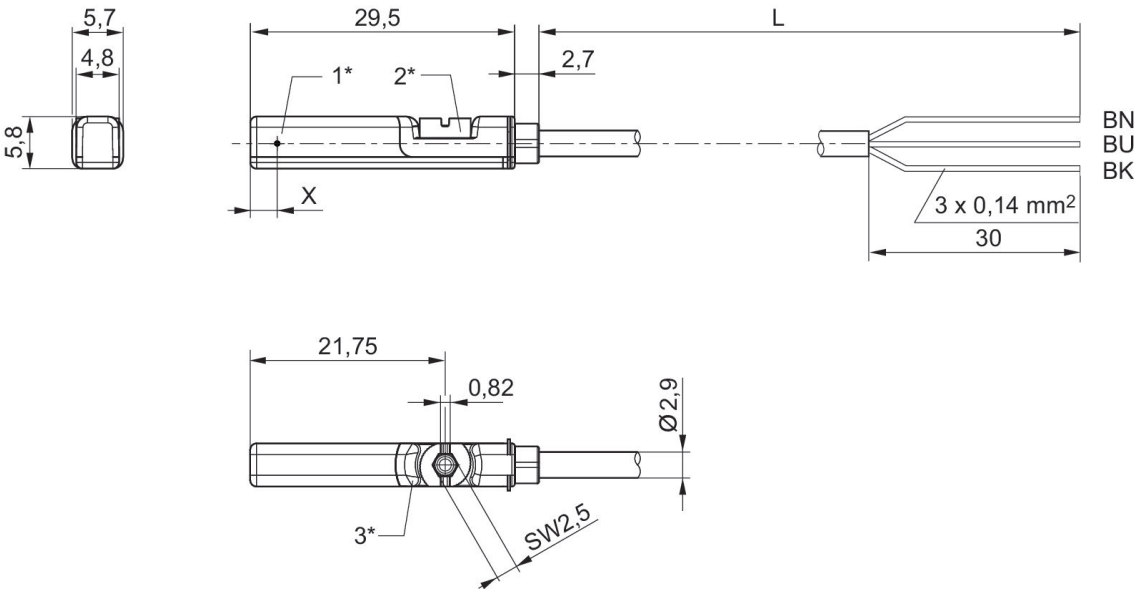
Sensor, Series ST6

PRA
PRE
CCI
KPZ
SSI
GPC
CVI
open cable ends
ATEX
CE declaration of conformity
cULus
RoHS
UL (Underwriters Laboratories)



Direct mounting for series	Type of contact	Cable sheath	Cable length L [m]	Max. DC switching current [A]	Min. operating voltage DC [V DC]	Max. operating voltage DC [V DC]	Version	Part No.
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	PNP	Polyurethane	3	0.1	10	30	short circuit resistant, Protected against polarity reversal	R412022854
PRA, PRE, CCI, KPZ, SSI, GPC, CVI	PNP	Polyurethane	5	0.1	10	30	short circuit resistant, Protected against polarity reversal	R412022856

Dimensions



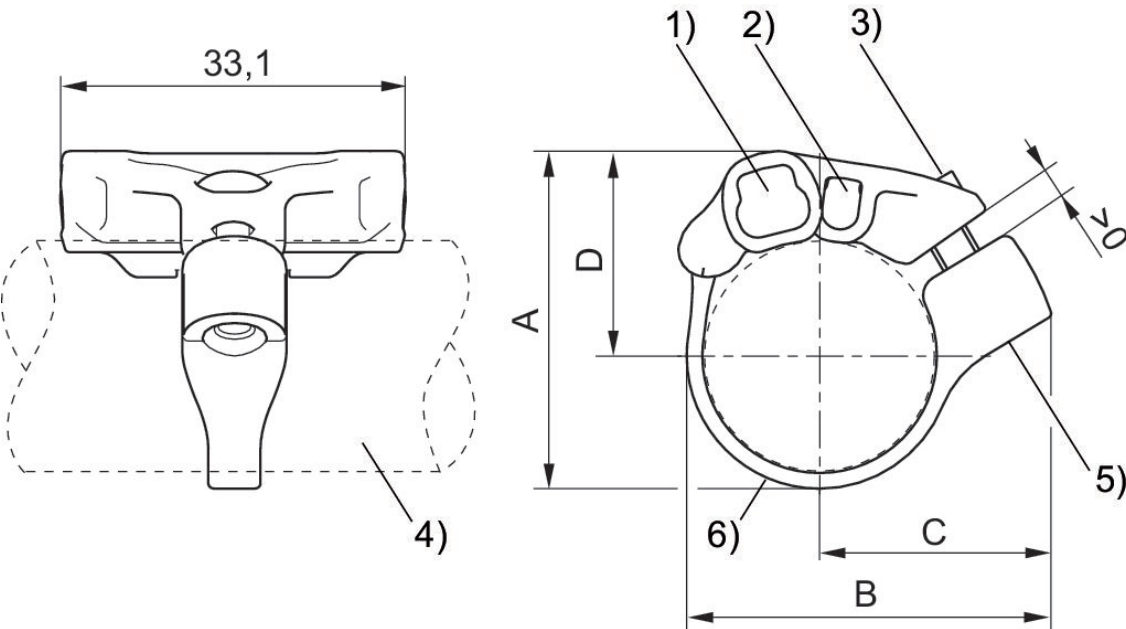
1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length BN = brown, BK = black, BU = blue
X = electronic: 11.6 mm

Sensor mounting, Series CB1

ST4
ST6



Min. cylinder Ø [mm]	Material	Part No.
16	Polyamide, Stainless Steel	R412021791
20	Polyamide, Stainless Steel	R412021792
25	Polyamide, Stainless Steel	R412021793

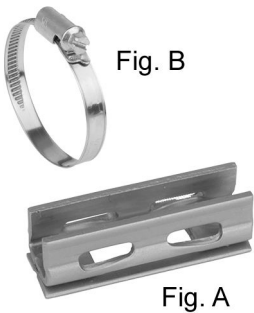


1) Sensor slot for ST6 2) Sensor slot for ST4 3) Mounting screw (made of stainless steel) 4) Cylinder profile 5) Thread insert (made of stainless steel) 6) Tightening strap

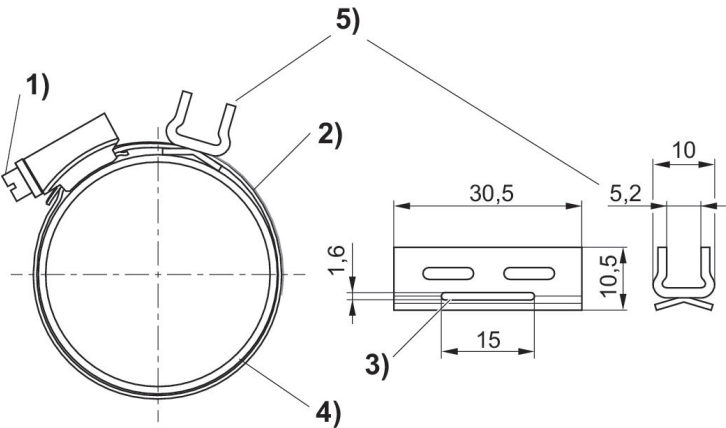
Part No.	A	B	C	D
R412021791	27.7	32.5	22.1	17.3
R412021792	32.4	35	22.4	19.7
R412021793	37.4	39.5	24.3	22.2

Sensor mounting, Series CB1

ST6



Min. cylinder Ø [mm]	Max. cylinder Ø [mm]	Material	Part No.
25	32	Stainless Steel	R412024050
40	40	Stainless Steel	R412024051
50	50	Stainless Steel	R412024052
63	63	Stainless Steel	R412024053
25	63	Stainless Steel	R412024054



1) Mounting screw 2) Tightening strap 3) Opening for tightening strap 4) Cylinder tube 5) Sensor holder

Part No.	Cylinder tube Ø	For series	Fig.
R412024050	25 - 32 mm	ST6	Fig. B
R412024051	40 mm	ST6	Fig. B
R412024052	50 mm	ST6	Fig. B
R412024053	63 mm	ST6	Fig. B
R412024054	25 - 63 mm	ST6	Fig. A

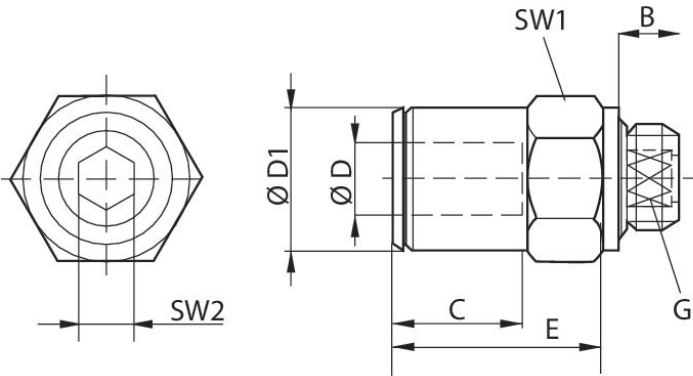
Series QR2-C-RPN, stainless steel

Straight fitting
suitable for use in food processing



G	Ø D	Delivery unit [piece]	Part No.
M5	Ø 4	2	2544004050
G 1/8	Ø 4	2	R412004890
G 1/8	Ø 6	2	R412004891
G 1/8	Ø 8	2	R412004892
G 1/4	Ø 6	2	R412004893
G 1/4	Ø 8	2	R412004894
G 1/4	Ø 10	2	R412004895
G 3/8	Ø 10	2	R412004896
G 3/8	Ø 12	2	R412004897

Dimensions



Part No.	Port D	Port G	A	B	C	E*	SW1	SW2	ØD1
2544004050	Ø 4	M5	20.5	4	7	15	9	–	9
R412026847	Ø 6	M5	22.5	4	–	16	9	–	11
R412010036	Ø 4	M7	22.5	5.5	5	15	11	2.5	9
R412010037	Ø 6	M7	24	5.5	6	16	11	3.5	11
R412004890	Ø 4	G 1/8	17	5.5	7	15	13	3	9
R412004891	Ø 6	G 1/8	23.5	5.5	12.5	16	13	4	11
R412004892	Ø 8	G 1/8	23.5	5.5	12.5	18	13	5	13

Part No.	Port D	Port G	A	B	C	E*	SW1	SW2	ØD1
R412004893	Ø 6	G 1/4	21.5	6.5	5.5	16	16	4	11
R412004894	Ø 8	G 1/4	25.5	6.5	9.5	16	16	6	13
R412004895	Ø 10	G 1/4	27.5	6.5	7.5	16	16	7	15
R412004896	Ø 10	G 3/8	25.5	9	7	19	21	8	15
R412004897	Ø 12	G 3/8	31	9	7	20	21	10	17
R412010043	Ø 10	G 1/2	29	9	7	19	23	8	15
R412010524	Ø 12	G 1/2	29	9	7	20	23	10	17

* Insertion depth

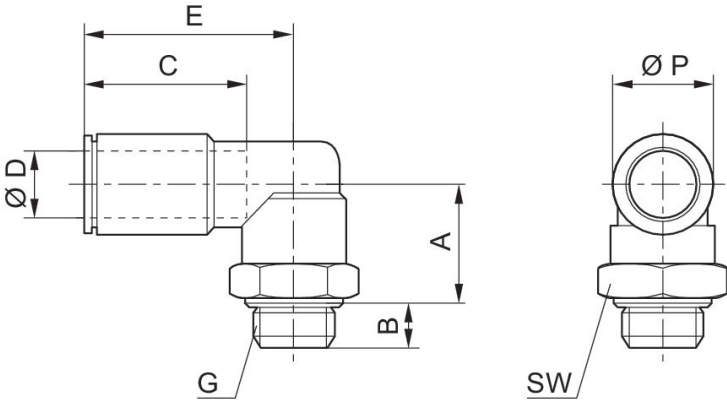
Series QR2-C-RVT , stainless steel

Elbow fitting
suitable for use in food processing



G	Ø D	Delivery unit [piece]	Part No.
M5	Ø 4	2	R412005617
M5	Ø 6	2	R412026810
G 1/8	Ø 4	2	R412004898
G 1/8	Ø 6	2	R412004899
G 1/8	Ø 8	2	R412004900
G 1/4	Ø 6	2	R412004901
G 1/4	Ø 8	2	R412005616
G 3/8	Ø 10	1	R412004902
G 3/8	Ø 12	1	R412004903

Dimensions



Part No.	Port D	Port G	A	B	C	E	SW	Ø P
R412005617	Ø 4	M5	15	4	15	14.5	9	9
R412026810	Ø 6	M5	16	4	15	14.5	9	9
R412004898	Ø 4	G 1/8	14.5	5.5	15	19.5	13	9
R412004899	Ø 6	G 1/8	16.5	5.5	16	19.5	13	11
R412004900	Ø 8	G 1/8	18.5	5.5	18	19.5	13	13
R412004901	Ø 6	G 1/4	15.5	6.5	16	20.5	16	11
R412005616	Ø 8	G 1/4	17.5	6.5	18	20.5	16	13

Part No.	Port D	Port G	A	B	C	E	SW	Ø P
R412004902	Ø 10	G 3/8	18.5	7	19	24	21	16
R412004903	Ø 12	G 3/8	21	7	19	26.5	21	19
R412026809	Ø 12	G 1/2	33,5	11	19	28.5	20	19

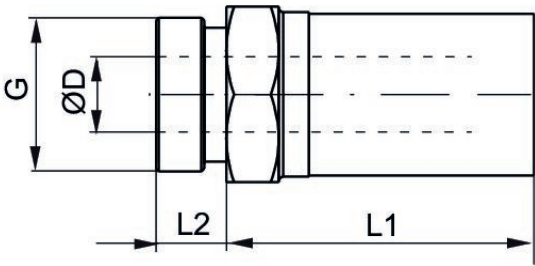
Silencers, series SI1

External thread
Stainless Steel



Compressed air connection	Sound pressure level [dB]	Nominal flow [l/min]	Delivery unit [piece]	Weight [kg]	Part No.
M5	85	73	1	0.003	R412010090
G 1/8	90	1312	1	0.011	R412010081
G 1/4	93	1852	1	0.021	R412010082
G 3/8	101	2678	1	0.028	R412010083

Dimensions



Part No.	Port G	SW	Ø D	L1	L2
R412010090	M5	8	3.1	10.5	3.5
R412010081	G 1/8	13	6.6	20	6
R412010082	G 1/4	16	8.6	29.5	7.5
R412010083	G 3/8	19	12.1	33.5	7.5
R412010084	G 1/2	24	15.3	39.5	9.5
R412010085	G 3/4	30	19.3	45	10
R412010086	G 1	36	25.5	49.5	11.5

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