

Stainless Steel Round Cylinder, Series CSL-RD

R412020401

General series information 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



Technical data

Industry
Industrial

Standards
ISO 6432

Type
Version: standard type

Piston Ø
16 mm

Stroke
100 mm

Functional principle
Double-acting

Cushioning
Elastic cushioning

Magnetic piston
Piston with magnet

Environmental requirements
Industry standard
suitable for use in food processing
ATEX optional

Piston rod
single

Scraper
Food-Grade Scraper

Pressure for determining piston forces 6,3 bar	Weight 0 mm stroke 0.034 kg
Retracting piston force 109 N	Weight +10 mm stroke 0.0024 kg
Extracting piston force 127 N	Stroke max. 800 mm
Min. ambient temperature -20 °C	Medium Compressed air
Max. ambient temperature 80 °C	Min. medium temperature -20 °C
Working pressure min. 1 bar	Max. medium temperature 80 °C
Working pressure max 10 bar	Max. particle size 50 µm
Ports M5	Oil content of compressed air min. 0 mg/m ³
Piston rod thread M6	Oil content of compressed air max. 5 mg/m ³
Impact energy 0.14 J	Clamping piece for magnetic field sensor necessary Clamping piece for magnetic field sensor necessary

Material

Piston rod Stainless Steel	Piston seal Nitrile butadiene rubber
Scraper material Thermoplastic polyurethane (TPU)	Nut for cylinder mounting Stainless Steel
Material, front cover Stainless Steel	Nut for piston rod Stainless Steel
Cylinder tube Stainless Steel	Guide bushing Plastic
End cover Stainless Steel	Part No. R412020401

Technical information

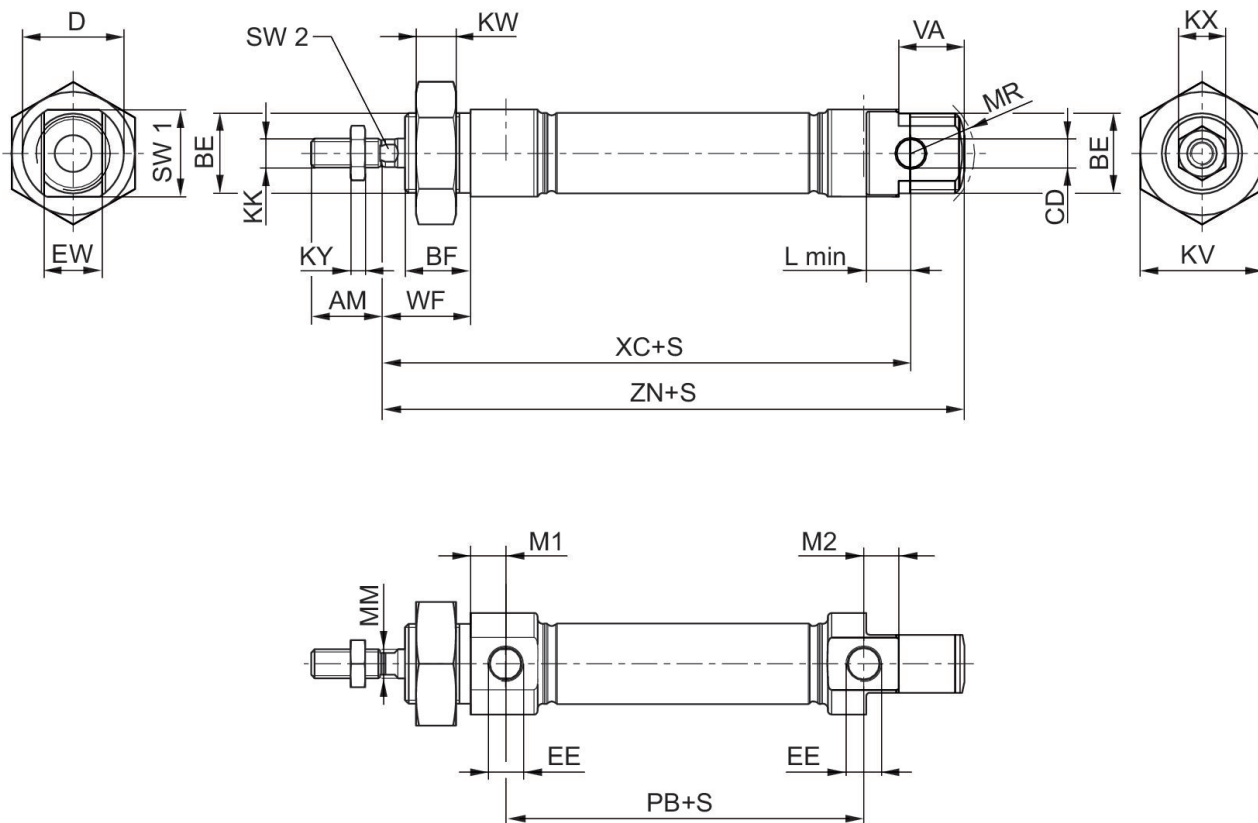
ATEX-certified cylinders with identification II 2G Ex h IIC T4 Gb / II 2D Ex h IIIC T135°C Db_X can be generated in the Internet configurator.

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in <https://www.emerson.com/en-us/support>).

Dimensions



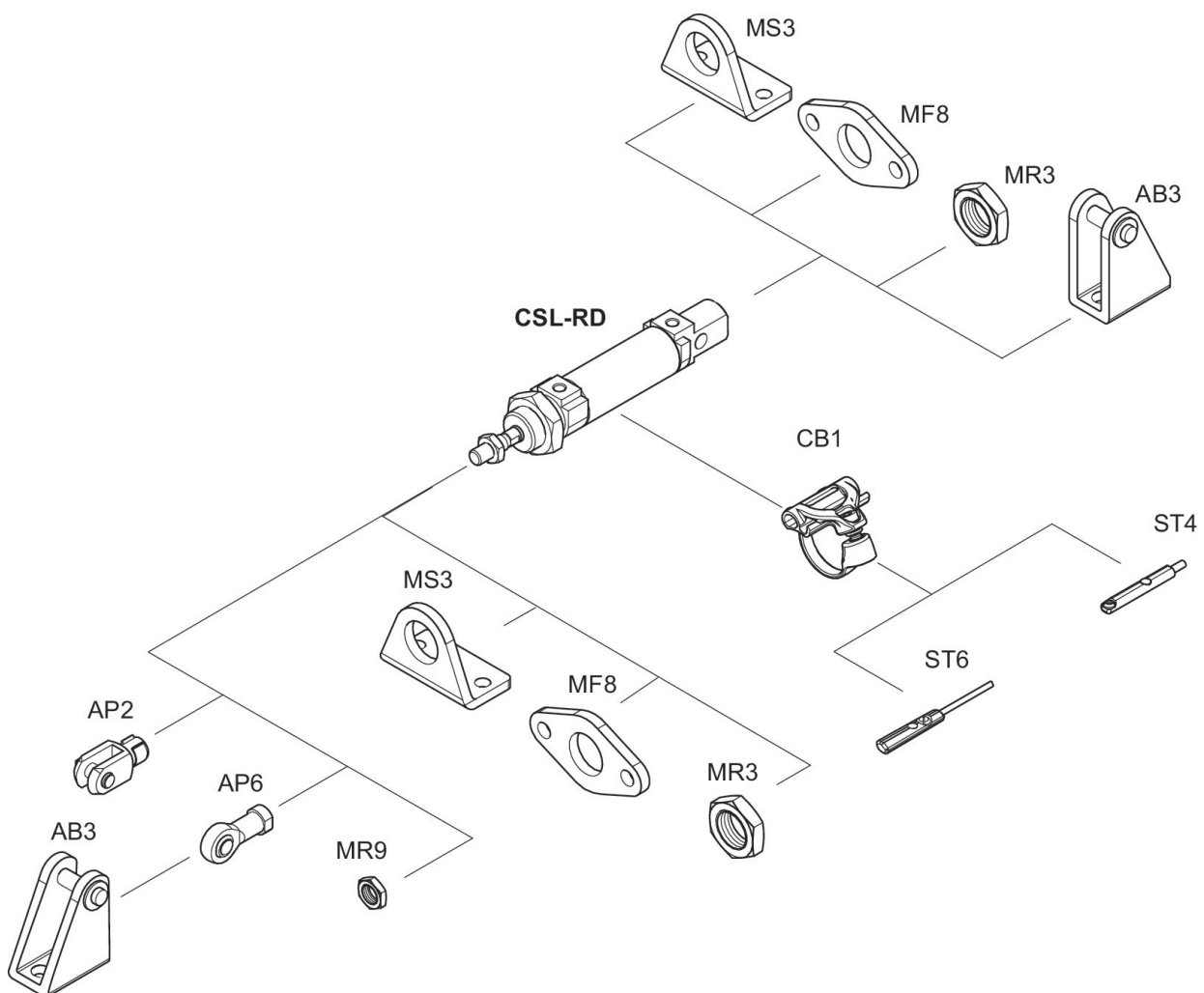
S = stroke

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

Piston Ø	KW	KX	KY	L min	M1	M2	MM f8	MR	PB ±1
16	8	10	3,2	9	6,7	6,7	6	16	43,6
20	11	13	4	12	9,7	9,7	8	18	48,6
25	11	17	5	12	9,7	9,7	10	19	52,6
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	9,3	20	-	71,5

Piston Ø	VA	WF ±1,4	XC ±1	ZN ± 1	SW 1	SW 2
16	16	22	82	94,7	20	5
20	18	24	95	109,7	24	6
25	20	28	104	119,7	28	8
32	-	34	117,5	129,5	35	10
40	-	39	139,6	153,5	45	13
50	-	44	147,2	163	53	17
63	-	44	155	171	66	17

Overview drawing



NOTE: This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.