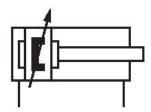
# Stainless Steel Round Cylinder, Series CSL-RD

R481624942

General series information AVENTICS Series CSL-RD Stainless Steel Round Cylinders (ISO 6432)

■ 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.





#### Technical data

Industry Industrial

Standards Based on ISO 6432

 Piston Ø
 50 mm

 Stroke
 80 mm

 Ports
 G 1/4

Functional principle Double-acting

Cushioning Pneumatic adjustable cushioning

Magnetic piston Piston with magnet Environmental requirements Industry standard

suitable for use in food processing

ATEX optional

Piston rod single

Cylinder special features Version: short type



#### R481624942

6,3 bar Pressure for determining piston forces Retracting piston force 1035 N 1235 N Extracting piston force -20 °C Min. ambient temperature 80°C Max. ambient temperature Working pressure min. 1 bar 10 bar Working pressure max Piston rod thread M16x1,5 16 mm Cushioning length 15 J Cushioning energy Weight 0 mm stroke 2.044 kg Weight +10 mm stroke 0.04 kg Stroke max. 1200 mm

Medium Compressed air

 $\begin{array}{lll} \mbox{Min. medium temperature} & -20 \ ^{\circ}\mbox{C} \\ \mbox{Max. medium temperature} & 80 \ ^{\circ}\mbox{C} \\ \mbox{Max. particle size} & 50 \ \mu\mbox{m} \\ \mbox{Oil content of compressed air min.} & 0 \ \mbox{mg/m}^{3} \\ \mbox{Oil content of compressed air max.} & 5 \ \mbox{mg/m}^{3} \\ \end{array}$ 

Clamping piece for magnetic field sensor Clamping piece for magnetic field sensor

necessary necessary

#### Material

Piston rod Stainless Steel

Scraper material Thermoplastic polyurethane (TPU)

Ultra-high-molecular-weight polyethylene

(UHMW-PE)

Material, front cover Stainless Steel
Cylinder tube Stainless Steel
End cover Stainless Steel

Piston seal Nitrile butadiene rubber

Nut for cylinder mountingStainless SteelNut for piston rodStainless Steel

Guide bushing Plastic

Part No. R481624942



## **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.

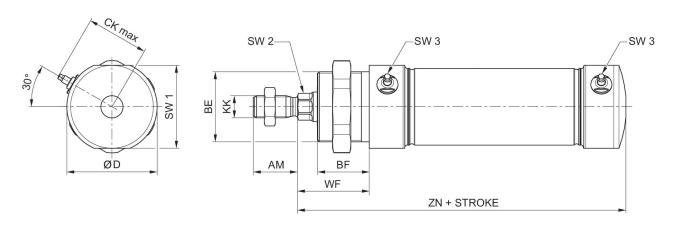
The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

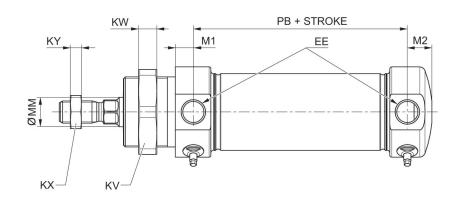
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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 in mm





Piston Ø	AM	BE	BF	CK max.	D	EE	KK	KV	KW
32	22	M30x1,5	25	28	38	G 1/8	M10x1,25	36	8
40	24	M38x1,5	28	36,5	49	G 1/4	M12x1,25	46	10



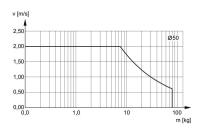
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Piston Ø	AM	BE	BF	CK max.	D	EE	KK	KV	KW
50	32	M45x1,5	32	40,5	57	G 1/4	M16x1,5	55	10
63	32	M45x1,5	32	47	70	G 3/8	M16x1,5	55	10

Piston Ø	KX	KY	M1	M2	MM f8	PB ±1	SW 1	SW 2 h13	SW 3
32	17	5	9,5	14,2	12	46	35	10	3
40	18	6	9,8	13,3	16	66	45	13	3
50	24	8	9,8	12,6	20	68	53	17	3
63	24	8	13	14,5	20	71,5	66	17	3

Piston Ø	SW4	WF	ZN
32	24	34	104
40	30	39	128,2
50	34	44	134,5
63	34	44	143,2

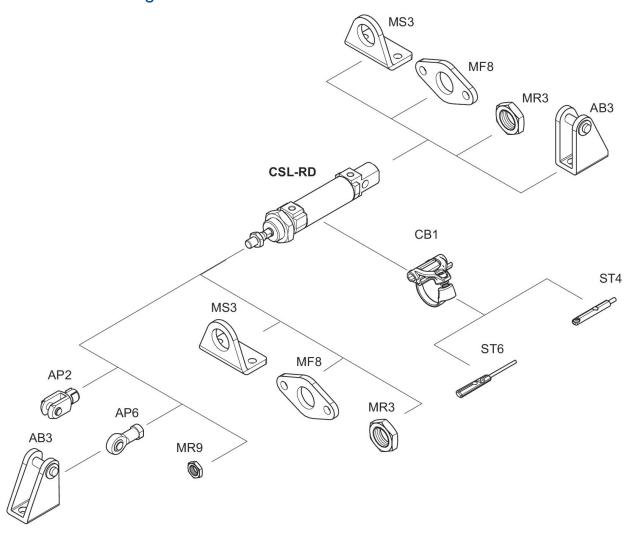
# **Cushioning diagram**



v = Piston velocity [m/s] m = Cushionable mass [kg]



# 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.

