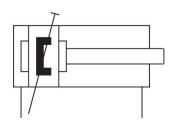
# Stainless Steel Round Cylinder, Series CSL-RD

R481624898

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 Standards Piston Ø Stroke Ports Functional principle Cushioning Magnetic piston Environmental requirements

Piston rod Cylinder special features Industrial Based on ISO 6432 32 mm 80 mm G 1/8 Double-acting Pneumatic pre-adjusted cushioning Piston with magnet Industry standard suitable for use in food processing ATEX optional single Version: hygienic design



Pressure for determining piston forces6,3 barRetracting piston force435 NExtracting piston force505 NMin. ambient temperature-20 °CMax. ambient temperature80 °CWorking pressure min.1 barWorking pressure max10 barPiston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Extracting piston force505 NMin. ambient temperature-20 °CMax. ambient temperature80 °CWorking pressure min.1 barWorking pressure max10 barPiston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Min. ambient temperature-20 °CMax. ambient temperature80 °CWorking pressure min.1 barWorking pressure max10 barPiston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Max. ambient temperature80 °CWorking pressure min.1 barWorking pressure max10 barPiston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Working pressure min.1 barWorking pressure max10 barPiston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Working pressure max10 barPiston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Piston rod threadM10x1,25Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Cushioning length16 mmCushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Cushioning energy3.4 JWeight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Weight 0 mm stroke0.699 kgWeight +10 mm stroke0.015 kg
Weight +10 mm stroke 0.015 kg
Stroke max. 1200 mm
Medium Compressed air
Min. medium temperature -20 °C
Max. medium temperature 80 °C
Max. particle size 50 μm
Oil content of compressed air min. 0 mg/m <sup>3</sup>
Oil content of compressed air max. 5 mg/m <sup>3</sup>
Clamping piece for magnetic field sensor necessary Clamping piece for magnetic field sensor necessary

#### Material

Piston rod Piston material Scraper material

Material, front cover Cylinder tube End cover Piston seal Nut for cylinder mounting Nut for piston rod Guide bushing Part No. Stainless Steel Aluminum Thermoplastic polyurethane (TPU) Ultra-high-molecular-weight polyethylene (UHMW-PE) Stainless Steel Stainless Steel Stainless Steel Nitrile butadiene rubber Stainless Steel Stainless Steel Plastic R481624898



#### 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.

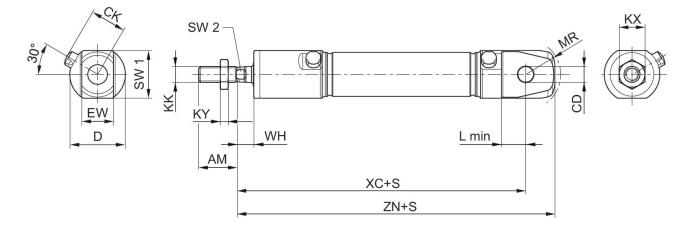
The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

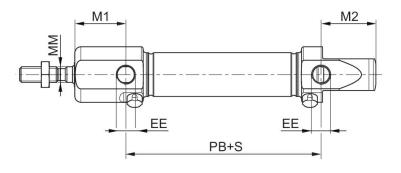
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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





S = stroke

Piston Ø	AM-2	CD H9	СК	D	EE	EW d13	KK	KX	KY
16	16	6	14,7	22	M5	12	M6	10	3,2
20	20	8	17,9	28	G 1/8	16	M8	13	4
25	22	8	20,2	33	G 1/8	16	M10x1,25	17	5

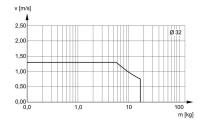


#### Stainless Steel Round Cylinder, Series CSL-RD R481624898

Piston Ø	AM-2	CD H9	СК	D	EE	EW d13	KK	KX	KY
32	22	10	21,5	38	G 1/8	16	M10x1,25	17	5
40	24	12	27	49	G 1/4	18	M12x1,25	18	6
							·	)	
Piston Ø	L min	M1	M2	MM f8	MR	PB ±1	WH ±1,2	XC ±1	ZN ± 1
16	9	21,2	22,7	6	16	43,6	7,5	82	94,7
20	12	25,7	27,7	8	18	48,6	8	95	109,7
25	12	28,2	29,7	10	19	51,8	9,5	104	119,7
32	14	34,6	11,7	12		46	8,9	117,5	129,5
40	16	38	8,7	16		66	10,8	139,6	153,5

Piston Ø	SW 1	SW 2		
16	20	5		
20	24	6		
25	28	8		
32	35	10		
40	45	13		

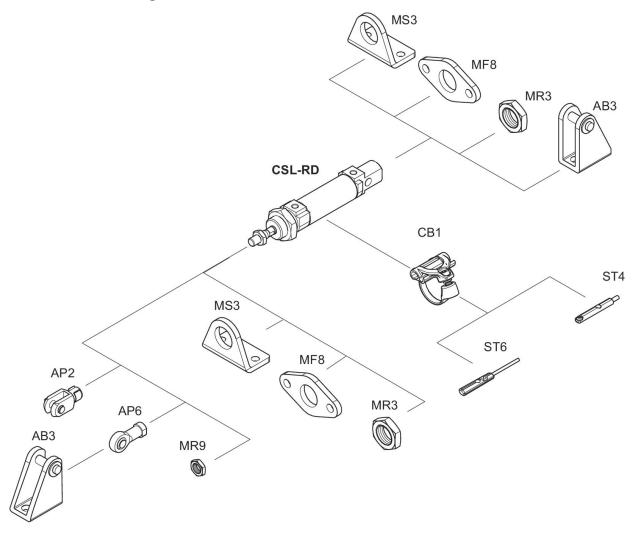
# Cushioning diagram



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.

