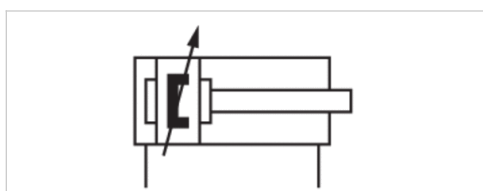


Mini cylinder, Series CSL-RD

- Version: hygienic design
- Ø 16-25 mm
- Ports M5 G 1/8
- double-acting
- with magnetic piston
- Cushioning Pneumatically adjustable
- with integrated rear eye
- Piston rod External thread
- ATEX optional
- suitable for use in food processing



Standards	ISO 6432
Certificates	ATEX optional
Compressed air connection	Internal thread
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	16 mm M6 M5 6 mm	20 mm M8 G 1/8 8 mm	25 mm M10x1,25 G 1/8 10 mm
Stroke 25	R412020431	R412020475	R412020519
50	R412020432	R412020476	R412020520
80	R412020433	R412020477	R412020521
100	R412020434	R412020478	R412020522
125	R412020435	R412020479	R412020523
160	R412020436	R412020480	R412020524
200	R412020437	R412020481	R412020525
250	R412020438	R412020482	R412020526
320	R412020439	R412020483	R412020527
400	R412020440	R412020484	R412020528
500	R412020441	R412020485	R412020529

Technical data

Piston Ø	16 mm	20 mm	25 mm
Retracting piston force	109 N	166 N	260 N
Extracting piston force	127 N	198 N	309 N
Cushioning length	11,5 mm	13 mm	14 mm
Cushioning energy	1 J	1,7 J	2,7 J
Impact energy	0,14 J	0,23 J	0,35 J
Weight 0 mm stroke	0,034 kg	0,063 kg	0,082 kg
Weight +10 mm stroke	0,002 kg	0,005 kg	0,006 kg
Stroke max.	800 mm	1100 mm	1200 mm

Technical information

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 the MediaCentre).

Clamping piece for magnetic field sensor necessary

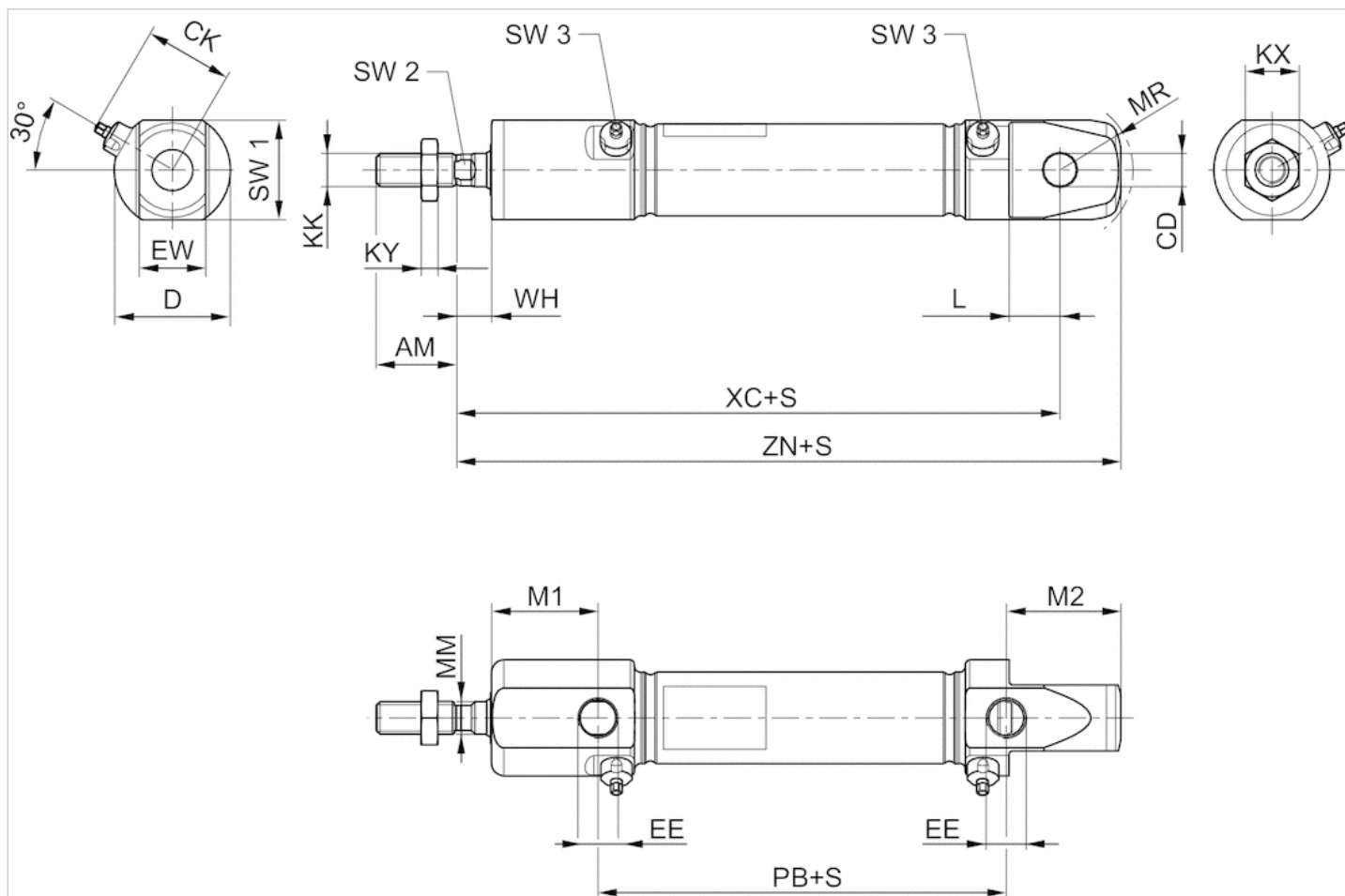
ATEX-certified cylinders with identification II 2G c IIB T4 / II 2D c IP65 T135°C X can be generated in the Internet configurator.
The operating temperature range for ATEX-certified cylinders is - 20 °C ... 50 °C .

Technical information

Material	
Cylinder tube	Stainless steel
Piston rod	Stainless steel
Piston	Aluminum
Front cover	Stainless steel, Electropolished
End cover	Stainless steel, Electropolished
Seal	Nitrile butadiene rubber
Nut for cylinder mounting	Stainless steel
Nut for piston rod	Stainless steel
Scraper	Polyurethane (FDA-compliant)
Guide bushing	Plastic

Dimensions

Dimensions



S = stroke

Dimensions

Piston Ø	AM-2	CD H9	CK 1)	D	EE	EW d13	KK	KX	KY	L 2)	M1	M2	MM f8
16 mm	16	6	19.5	22	M5 t=5	12	M6	10	3.2	9	21.2	22.7	6
20 mm	20	8	23	28	G 1/8 t=8	16	M8	13	4	12	25.7	27.7	8
25 mm	22	8	25.5	33	G 1/8 t=8	16	M10x1,25	17	5	12	28.2	29.7	10

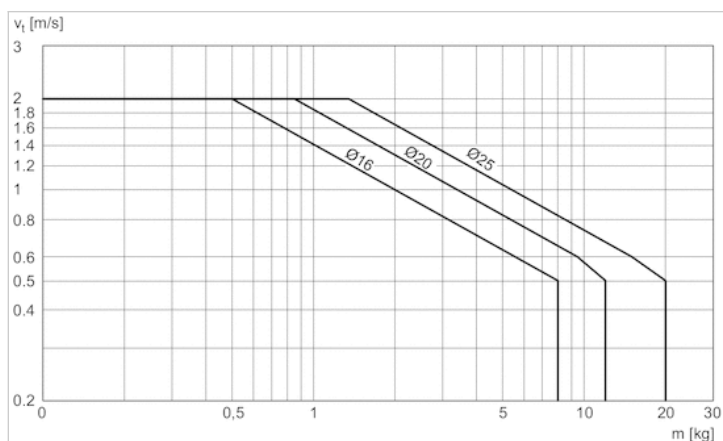
Piston Ø	MR	PB ±1	WH ±1,4	XC ±1	ZN ± 1	SW 1	SW 2 h13	SW 3
16 mm	16	43.6	7.5	82	94.7	20	5	2.5
20 mm	18	48.6	8	95	109.7	24	6	2.5
25 mm	19	51.8	9.5	104	119.7	28	8	2.5

1) max.

2) Min.

Diagrams

Cushioning diagram

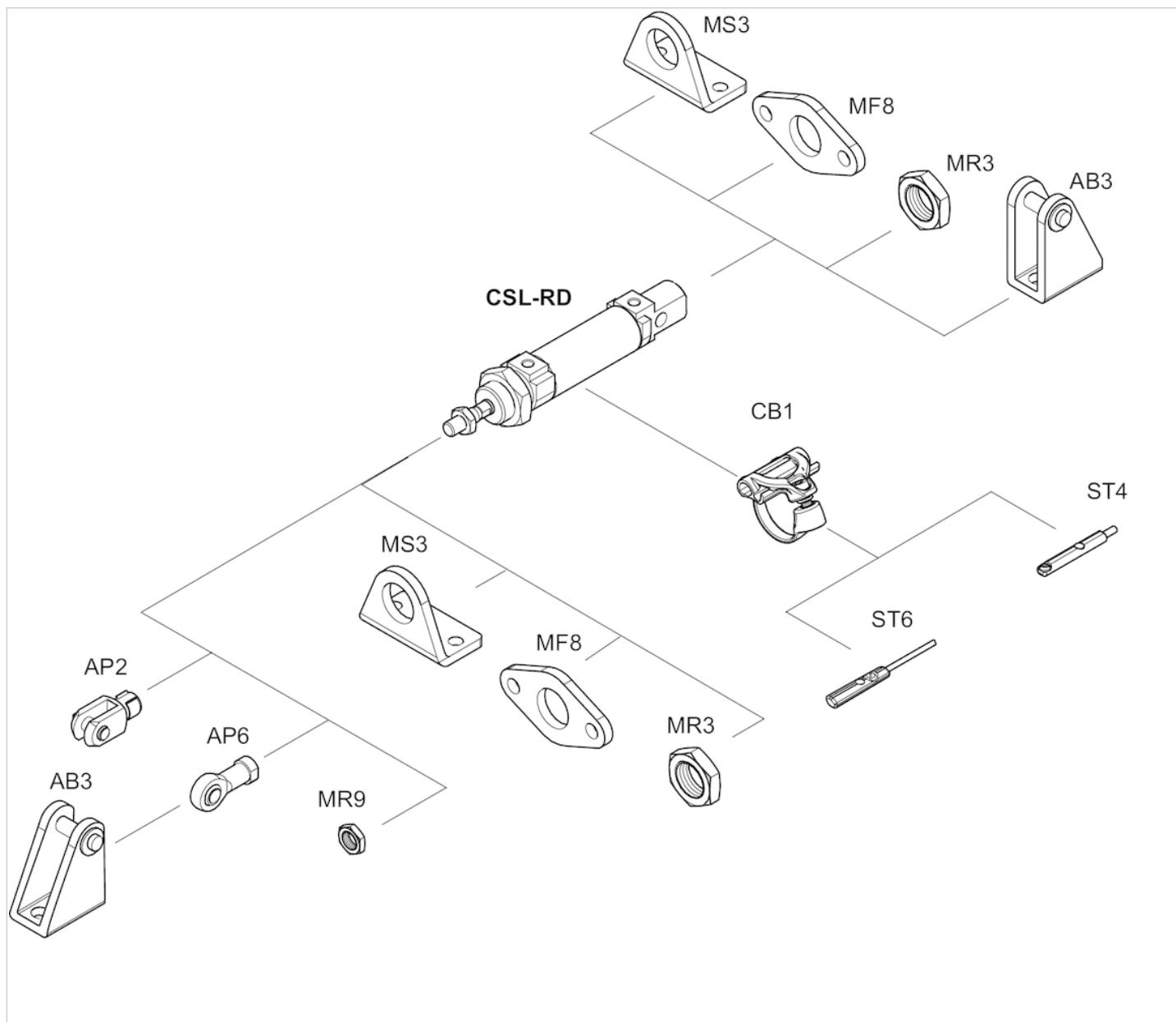


v = Piston velocity [m/s]

m = Cushionable mass [kg]

Accessories overview

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.