



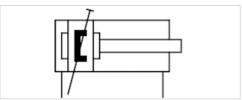
## Mini cylinder, Series CSL-RD

- Version: ISO-type
- ISO 6432
- Ø 16-25 mm
- Ports M5 G 1/8
- double-acting
- with magnetic piston
- Cushioning pneumatically non-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

 $\begin{tabular}{lll} Max. particle size & 50 \ \mu m \\ Oil content of compressed air & 0 ... 5 \ mg/m^3 \\ Pressure for determining piston forces & 6.3 \ bar \\ \end{tabular}$ 



## 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	R480651366	R480651377	R480651388
50	R480651367	R480651378	R480651389
80	R480651368	R480651379	R480651390
100	R480651369	R480651380	R480651391
125	R480651370	R480651381	R480651392
160	R480651371	R480651382	R480651393
200	R480651372	R480651383	R480651394
250	R480651373	R480651384	R480651395
320	R480651374	R480651385	R480651396
400	R480651375	R480651386	R480651397
500	R480651376	R480651387	R480651398



## 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	0,75 J	1,3 J	1,9 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 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.

## Technical information

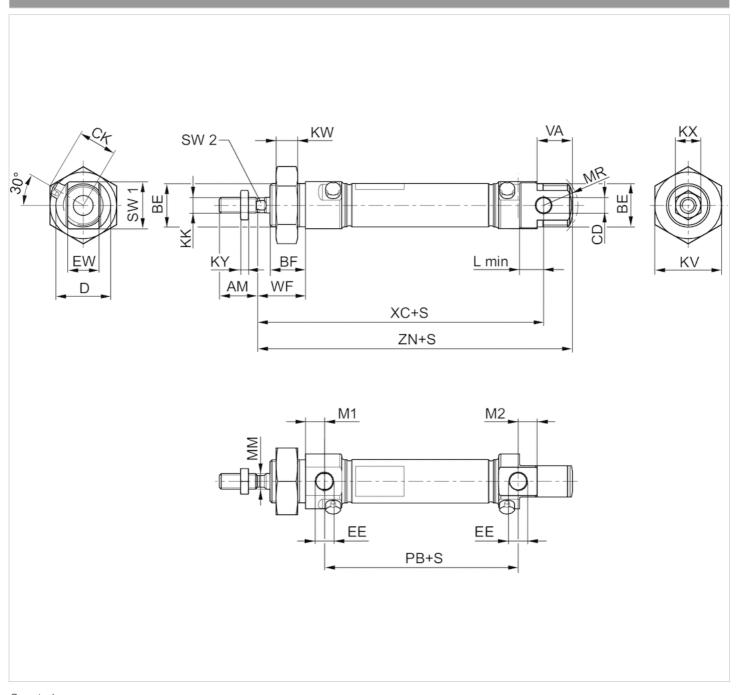
Material	
Cylinder tube	Stainless steel, ground
Piston rod	Stainless steel, ground
Piston	Aluminum
Front cover	Stainless steel, Electropolished
End cover	Stainless steel, Electropolished
Seal	Nitrile butadiene rubber
Nut for cylinder mounting	Stainless steel, ground
Nut for piston rod	Stainless steel, ground
Scraper	Thermoplastic polyurethane (TPU)
Guide bushing	Steel





## Dimensions

#### Dimensions



S = stroke

## Dimensions

Piston Ø	AM-2	BE	BF	CD H9	CK	D	EE t = depth of thread	EW d13	KK	KV	KW
16 mm	16	M16x1,5	16	6	14.7	22	M5 t=5	12	M6	24	8
20 mm	20	M22x1,5	18	8	17.9	28	G 1/8 t=8	16	M8	32	11
25 mm	22	M22x1,5	20	8	20.2	33	G 1/8 t=8	16	M10x1,25	32	11

Piston Ø	KX	KY	L min	M1	M2	MM f8	MR	PB ±1	VA	WF ±1,4	XC ±1	ZN ± 1	SW 1	SW 2	
16 mm	10	3.2	9	6.7	6.7	6	16	43.6	16	22	82	94.7	20	5	

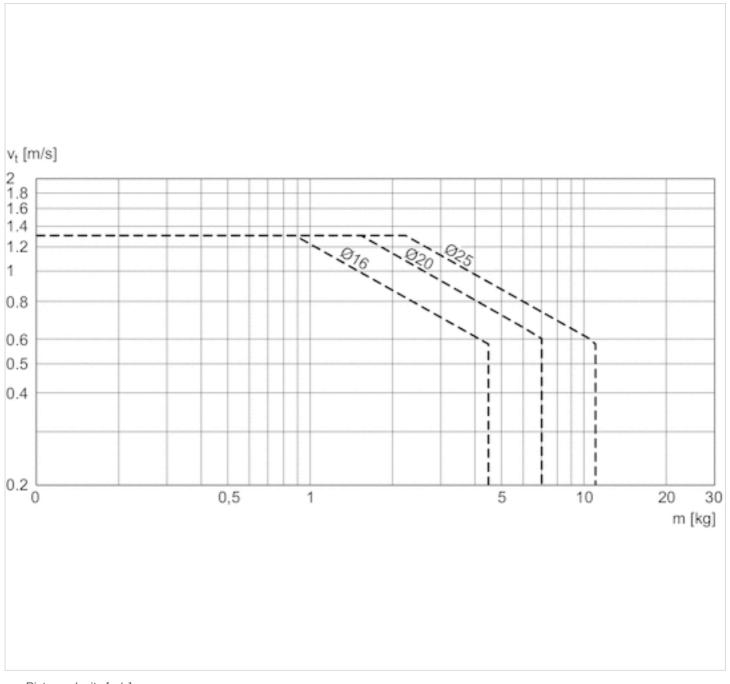




Piston Ø	KX	KY	L min	M1	M2	MM f8	MR	PB ±1	VA	WF ±1,4	XC ±1	ZN ± 1	SW 1	SW 2
20 mm	13	4	12	9.7	9.7	8	18	48.6	18	24	95	109.7	24	6
25 mm	17	5	12	9.7	9.7	10	19	52.6	20	28	104	119.7	28	8

## Diagrams

#### Cushioning diagram



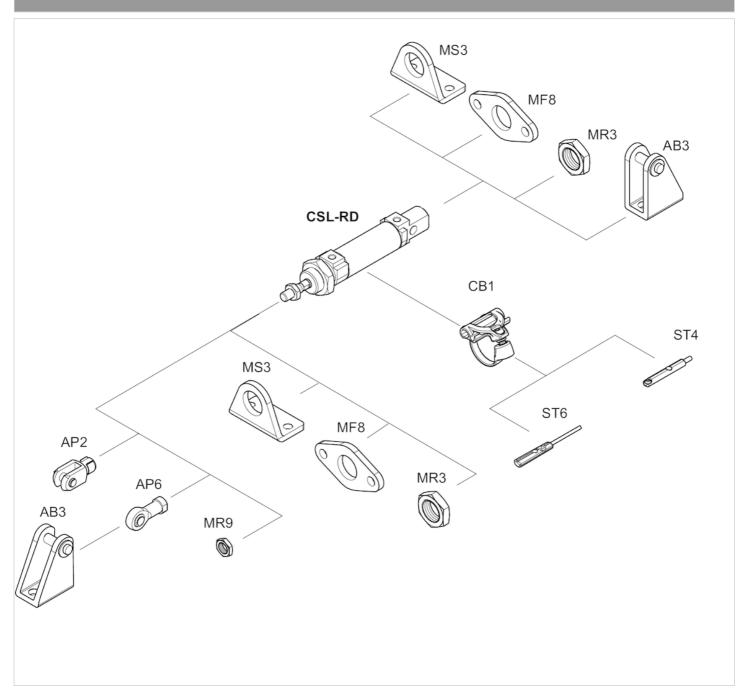
v = Piston velocity [m/s]

m = Cushionable mass [kg]



## Accessories overview

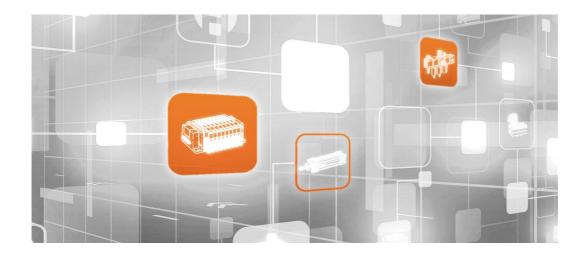
#### Overview drawing



#### 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.

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