

AVENTICS Series CCL-IS Standard cylinders (ISO 15552)

The AVENTICS Series CCL-IS (ISO 15552) cylinder in clean design is produced specifically for packaging applications in the food industry. It is characterized by practical sensor mountings and its clean design combines efficient, simple cleaning with low maintenance cycles.

- Easy to clean anodized surfaces
- Scrapers and lubricants (NSF-H1) are approved for food applications
- Hygienic protective caps for unused mounting holes
- Available in eight sizes covering piston diameters from 25 mm to 125 mm
- Selection from elastic or pneumatic cushioning possible
- Option to configure the air connections for supply and exhaust on rear cover, which increases flexibility when designing the system's tubing concept



Technical data

Industry	Industrial
Standards	ISO 15552
Piston Ø	100 mm
Stroke	320 mm
Ports	G 1/2
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 High corrosion
Piston rod thread - type	External thread
Piston rod thread	M20x1,5
Piston rod	single
Scraper	Standard Industry Scraper
Pressure for determining piston forces	6,3 bar
Retracting piston force	4639 N
Extracting piston force	4948 N
Min. ambient temperature	-20 °C

Max. ambient temperature	80 °C
Min. working pressure	1.5 bar
Max. working pressure	10 bar
Cushioning length	19.5 mm
Cushioning energy	88 J
Weight 0 mm stroke	4.42 kg
Weight +10 mm stroke	0.133 kg
Stroke max.	2800 mm
Medium	Compressed air
Min. medium temperature	-20 °C
Max. medium temperature	80 °C
Max. particle size	50 µm
Min. oil content of compressed air	0 mg/m ³
Max. oil content of compressed air	5 mg/m ³

Material

Piston rod	Stainless Steel
Scraper material	Polyester
Material tie-rod	Stainless Steel
Material, front cover	Aluminum
Cylinder tube	Aluminum
End cover	Aluminum
Part No.	R480060077

Technical information

Further options can be generated in the Internet configurator.

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.

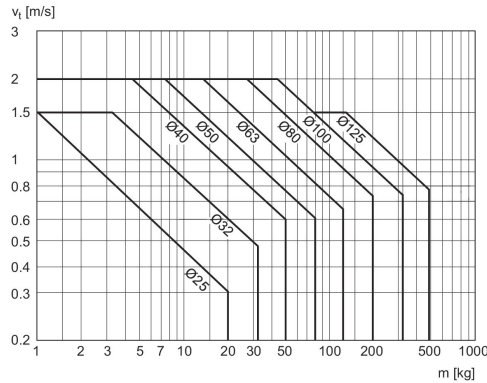
Ø25 not according to ISO 15552

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

Ø25 not according to ISO 15552

The material for heat-resistant scraper and seal variants (ambient temperature: -10 °C ... 120 °C) is PTFE.

Cushioning diagram



V = velocity [m/s]
m = mass

Standard cylinders ISO 15552, series CCL-IS

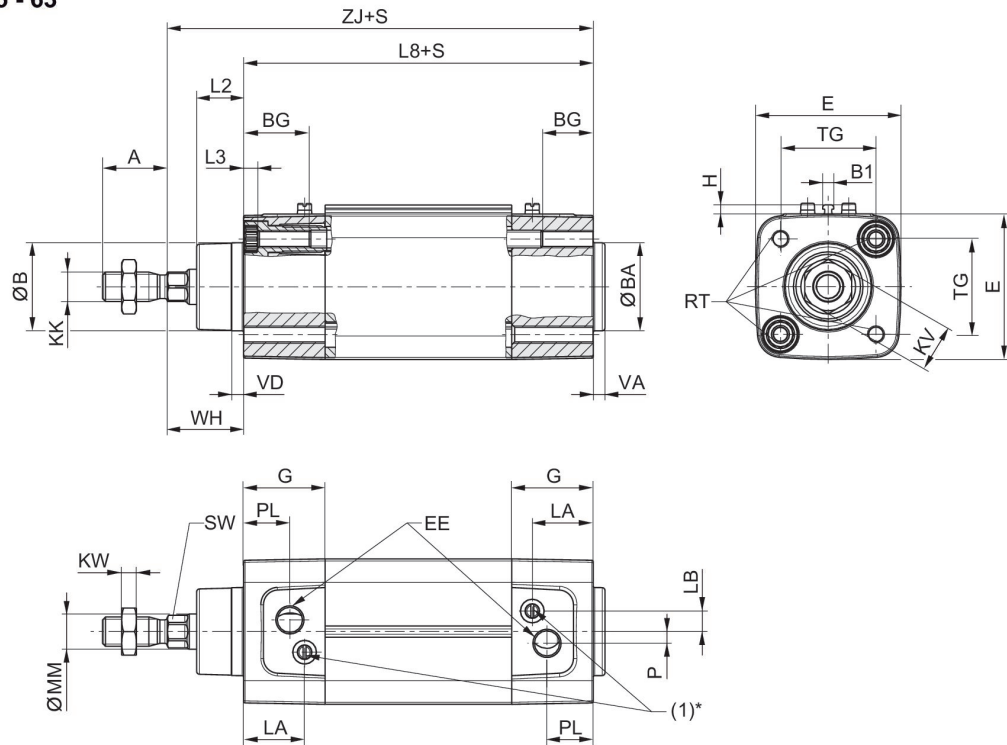
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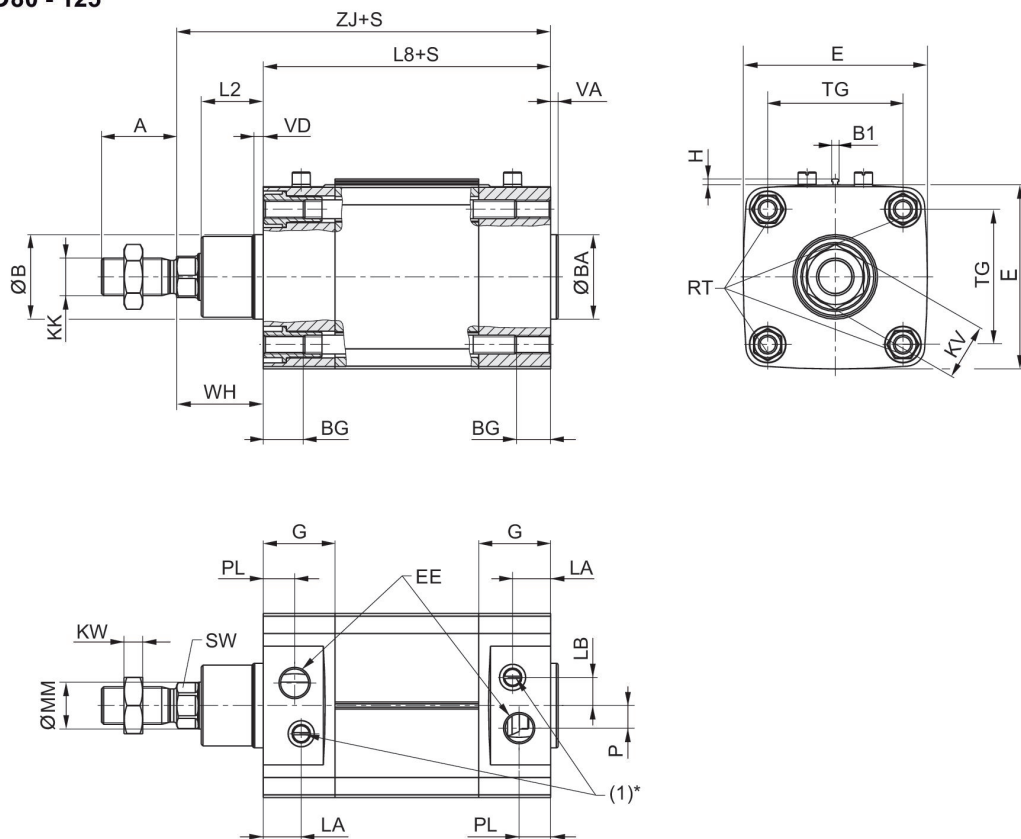
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Dimensions

Ø 25 - 63



Ø80 - 125



S = stroke

* The flow control screw (1) only has a function in cylinders with adjustable cushioning.

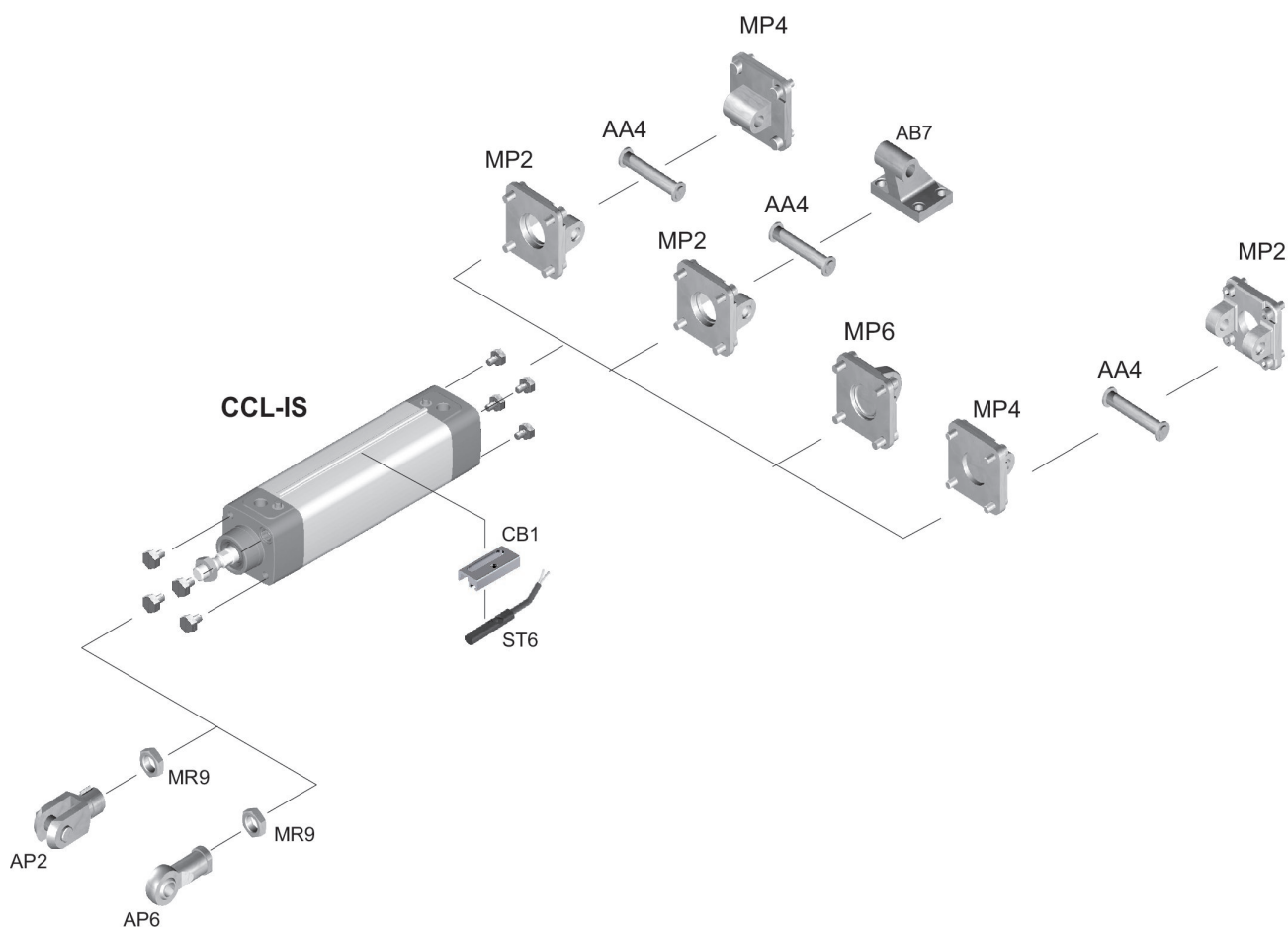
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Overview drawing



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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Piston Ø	A	ØB / ØBA d11	B1	BG mm	E	EE	G	H	KK	KV
25	22	24	3.8	12.5	40.5	G1/8	20	3.1	M10x1,25	16
32	22	30	3.8	16	49.5	G1/8	27.75	3.1	M10x1,25	16
40	24	35	3.8	16	57.5	G1/4	33.25	3.1	M12x1,25	18
50	32	40	3.8	16	69.5	G1/4	31	3.1	M16x1,5	24
63	32	45	3.8	16	79.5	G3/8	38,25	3.1	M16x1,5	24
80	40	45	3.8	17	98	G3/8	38,25	3.1	M20x1,5	30
100	40	55	3.8	17	115,5	G1/2	42,25	3.1	M20x1,5	30
125	54	60	3.8	20	145	G1/2	54	3.1	M27x2	41

Piston Ø	KW	L2	L3 max.	L8	LA	LB	MM f8	P	PL	RT
25	5	16	5	74 ±0,4	13.5	6	12	4.5	10.3	M5
32	5	16	5	94 ±0,4	20.75	7	12	4	15.75	M6
40	6	18.25	5	105 ±0,7	22.75	8	16	5	16.75	M6
50	8	25	5	106 ±0,7	20	12	20	7,7	16	M8
63	8	25	5	121 ±0,8	27,25	11	20	11	19,25	M8
80	10	33	-	128 ±0,8	20,25	15	25	12	16,75	M10
100	10	36	-	138 ±1	24,25	14	25	17	19,25	M10
125	13,5	45	-	160 ±1	25,5	4	32	27,5	20	M12

Piston Ø	SW	TG	VA	VD	WH	ZJ
25	10	26 ±0,4	-	-	24 ±1,4	98
32	10	32,5 ±0,5	4	4	26 ±1,4	120
40	13	38 ±0,5	4	5	30 ±1,4	135
50	17	46,5 ±0,6	4	5	37 ±1,4	143
63	17	56,5 ±0,7	4	5	37 ±1,8	158
80	22	72 ±0,7	4	5	46 ±1,8	174
100	22	89 ±0,7	4	5	51 ±1,8	189
125	27	110 ±1,1	6	6	65 ±2,2	225