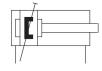
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AVENTICS Series CCI Compact cylinders (ISO 21287)

The AVENTICS Series CCI (ISO 21287) cylinders stand for innovative, compact construction and an easy to clean design. The Series CCI (ISO 21287) is ideal for long strokes and increased requirements for optimized cycle times and moving masses. The sensors can be installed quickly and easily on all sides and over the entire cylinder lengths.





Technical data

Industry Industrial ISO 21287 Standards Piston Ø 63 mm 100 mm Stroke **Ports** G 1/8

Functional principle Double-acting

Cushioning Pneumatic pre-adjusted cushioning

Magnetic piston Piston with magnet Environmental requirements Industry standard ATEX optional

Piston rod thread - type Internal thread

M10 Piston rod thread Piston rod single

Standard Industry Scraper Scraper

Pressure for determining piston forces 6,3 bar Retracting piston force 1827 N Extracting piston force 1964 N -20 °C Min. ambient temperature 80°C Max. ambient temperature Min. working pressure 1 bar Max. working pressure 10 bar Cushioning energy 4.88 J Weight 0 mm stroke 0.689 kg Weight +10 mm stroke 0.087 kg

series CCI

Compact cylinder ISO 21287, Series CCI

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Stroke max. 300 mm

Medium Compressed air

Min. medium temperature -20 °C Max. medium temperature 80 °C Max. particle size 50 μ m Min. oil content of compressed air 0 mg/m³ Max. oil content of compressed air 5 mg/m³

Material

Piston rod Stainless Steel
Scraper material Polyurethane
Seal material Polyurethane
Material, front cover Aluminum
Cylinder tube Aluminum
End cover Aluminum
Part No. R481654440

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.

With cylinders with a piston rod extension, dimensions "WH" and "ZB" are increased by the value of the piston rod extension.

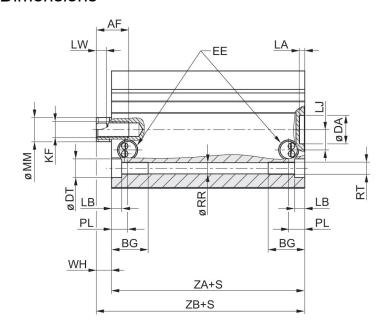
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

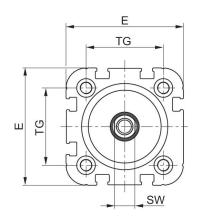
The oil content of compressed air must remain constant during the life cycle.

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).

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Dimensions

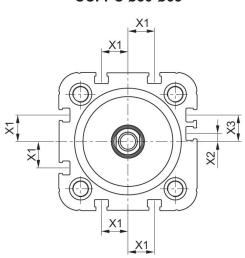




CCI-PC ø20-ø40

Z 2:1 5,35±0,15 5,35±0,15

CCI-PC ø50-ø63



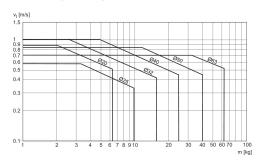
Piston Ø	AF	BG	DA H11	DT	Е	EE	KF	LA	LB min.
20	12	15.5	12	7.5	36.3	M5	M6	2.5	4.5
25	12	15.5	12	8	40.3	M5	M6	2.5	4.5
32	12	17	14	8.6	50	G 1/8	M8	2.5	5
40	12	17	14	9.2	58	G 1/8	M8	2.5	5
50	16	17	18	11	68.3	G 1/8	M10	2.5	5
63	16	17	18	11	80	G 1/8	M10	2.5	5

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Piston Ø	LJ	LW	MM f8	PL	RR min.	RT 6H	SW	TG	WH
20	4.5	3.7	10	8	4.2	M5	8	22 ±0.4	5.6 ±1.4
25	4	3.7	10	8	4.2	M5	8	26 ±0.4	5.6 ±1.4
32	5	5	12	11	5.1	M6	10	32.5 ±0.5	7.5 ±1.6
40	10	5	12	7.9	5.1	M6	10	38 ±0.5	7.5 ±1.6
50	11.5	5.7	16	8	6.7	M8	13	46.5 ±0.6	8 ±1.6
63	15	5.7	16	8.2	6.7	M8	13	56.5 ±0.7	8 ±1.6

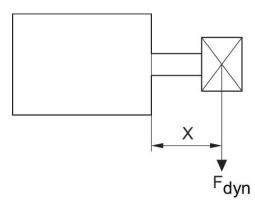
Piston Ø	X1	X2	X3	ZA ±0,1	ZB
20	4.2	-	-	37.3	42.9 ±0.8
25	4.5	-	-	39	44.6 ±0.9
32	6.5	_	-	44	51.5 ±1
40	11	-	-	45	52.1 ±1
50	13	4	13	45.5	53.1 ±1
63	18	12	21	49	57 ±1

Cushioning diagram



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

Maximum admissible lateral force dynamic



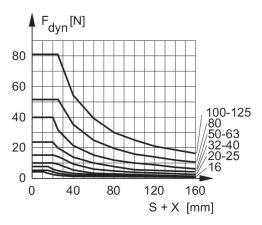
F dyn. = dynamic lateral force

X = distance between force application point and cylinder cover

S = stroke

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Maximum admissible lateral force dynamic

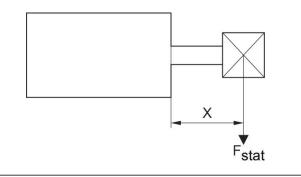


F dyn. = dynamic lateral force

X = distance between force application point and cylinder cover

S = stroke

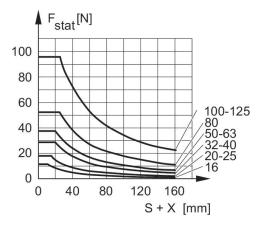
Maximum admissible lateral force static



F stat. = static lateral force

X = distance between force application point and cylinder cover

Maximum admissible lateral force static



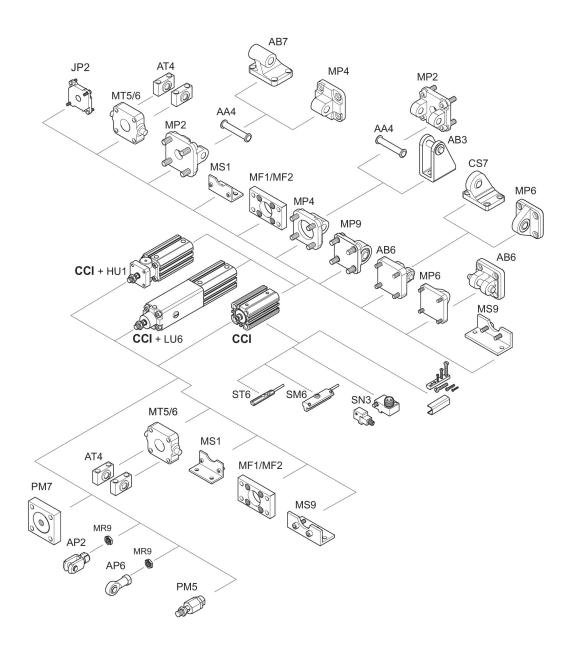
F stat. = static lateral force

X = distance between force application point and cylinder cover

S = stroke

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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.