

Compact cylinder ISO 21287, Series CCI

2023-11-23

R481654377

Stroke max.	300 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	Polyurethane
Seal material	Polyurethane
Material, front cover	Brass
Cylinder tube	Aluminum
End cover	Aluminum
Part No.	R481654377

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.

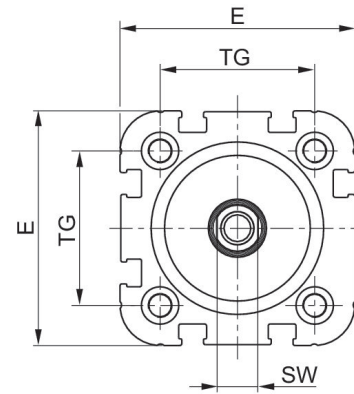
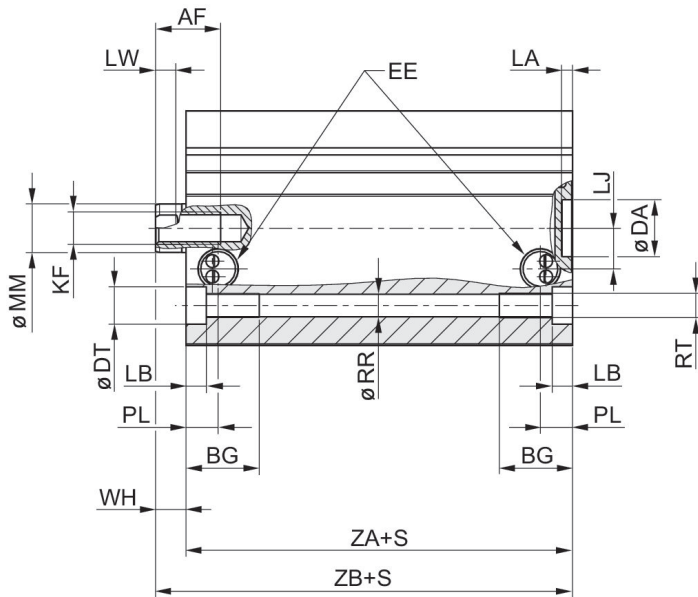
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

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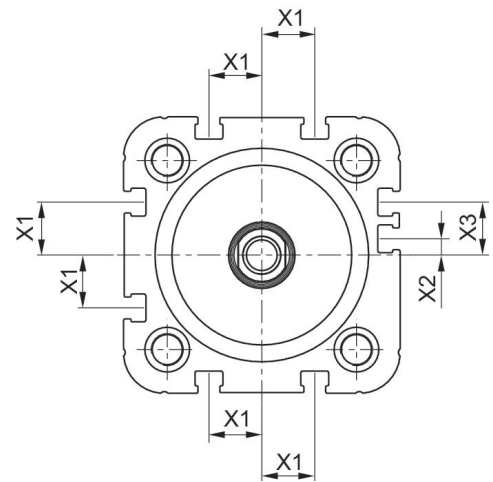
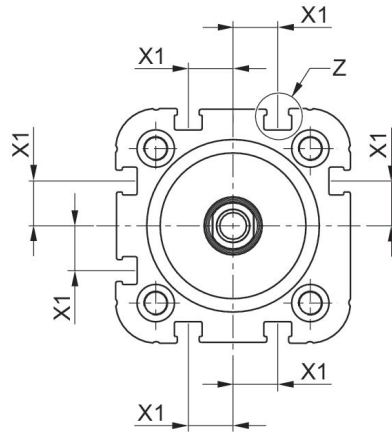
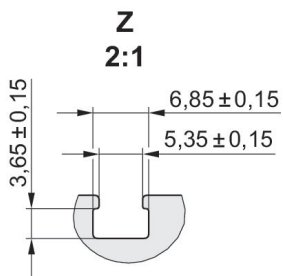
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Dimensions



CCI-PC ϕ 20- ϕ 40

CCI-PC ϕ 50- ϕ 63



Piston ϕ	AF	BG	DA H11	DT	E	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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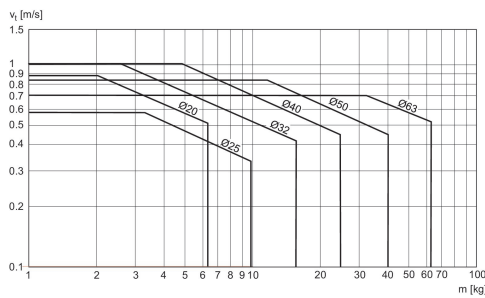
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Piston Ø	LJ	LW	MM f8	PL	RR min.	RT 6H	SW	TG	WH
20	4.5	3.7	10	8	4.2	M5	8	22 ±0.4	5.6 ±1.4
25	4	3.7	10	8	4.2	M5	8	26 ±0.4	5.6 ±1.4
32	5	5	12	11	5.1	M6	10	32.5 ±0.5	7.5 ±1.6
40	10	5	12	7.9	5.1	M6	10	38 ±0.5	7.5 ±1.6
50	11.5	5.7	16	8	6.7	M8	13	46.5 ±0.6	8 ±1.6
63	15	5.7	16	8.2	6.7	M8	13	56.5 ±0.7	8 ±1.6

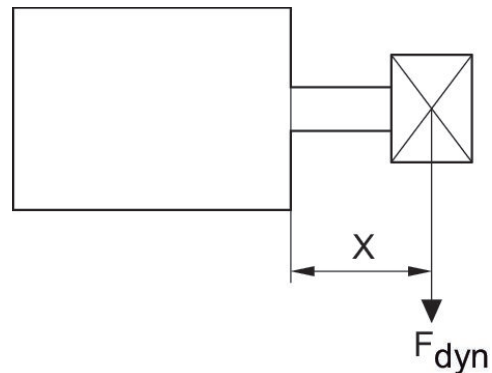
Piston Ø	X1	X2	X3	ZA ±0,1	ZB
20	4.2	–	–	37.3	42.9 ±0.8
25	4.5	–	–	39	44.6 ±0.9
32	6.5	–	–	44	51.5 ±1
40	11	–	–	45	52.1 ±1
50	13	4	13	45.5	53.1 ±1
63	18	12	21	49	57 ±1

Cushioning diagram



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

Maximum admissible lateral force dynamic

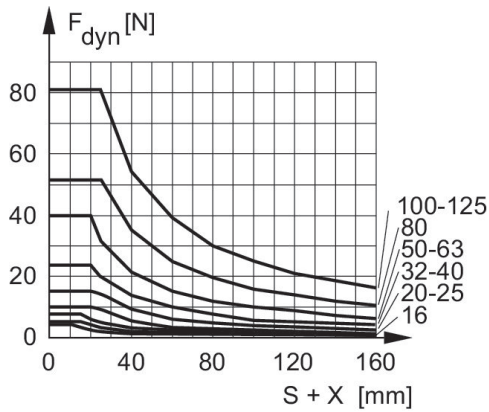


F_{dyn} = dynamic lateral force

X = distance between force application point and cylinder cover

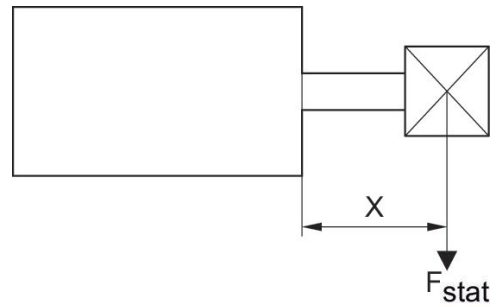
S = stroke

Maximum admissible lateral force dynamic



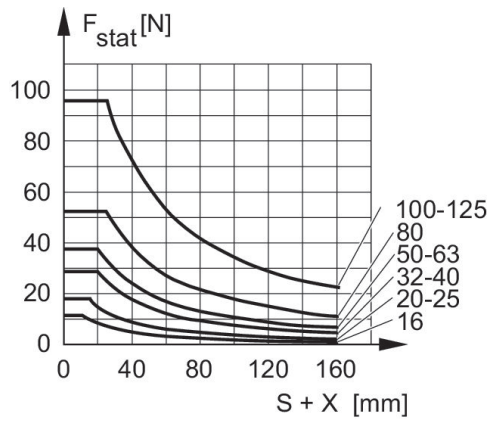
F dyn. = dynamic lateral force
 X = distance between force application point and cylinder cover
 S = stroke

Maximum admissible lateral force static



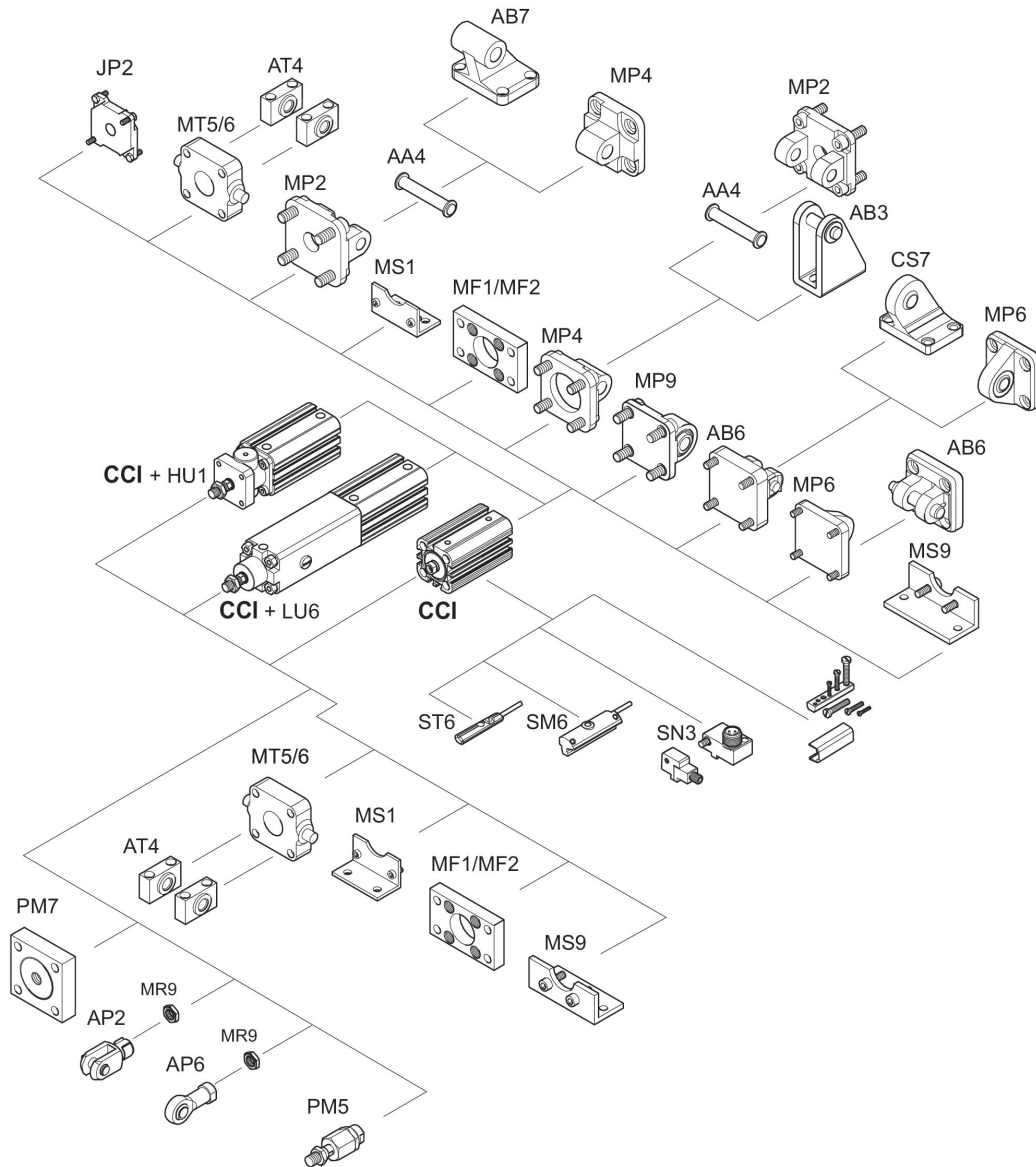
F stat. = static lateral force
 X = distance between force application point and cylinder cover

Maximum admissible lateral force static



F stat. = static lateral force
 X = distance between force application point and cylinder cover
 S = stroke

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.