



# Compact cylinder ISO 21287, Series CCI

series CCI

R422001310

2023-11-23

---

Max. working pressure	10 bar
Impact energy	2.5 J
Weight 0 mm stroke	2.64 kg
Weight +10 mm stroke	0.188 kg
Stroke max.	500 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 <sup>3</sup>
Max. oil content of compressed air	5 mg/m <sup>3</sup>

## Material

Piston rod	Stainless Steel
Scraper material	Polyurethane
Seal material	Polyurethane
Material, front cover	Aluminum
Cylinder tube	Aluminum
End cover	Aluminum
Front plate	Aluminum
Nut for piston rod	Steel, chrome-plated
Part No.	R422001310

## Technical information

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>).

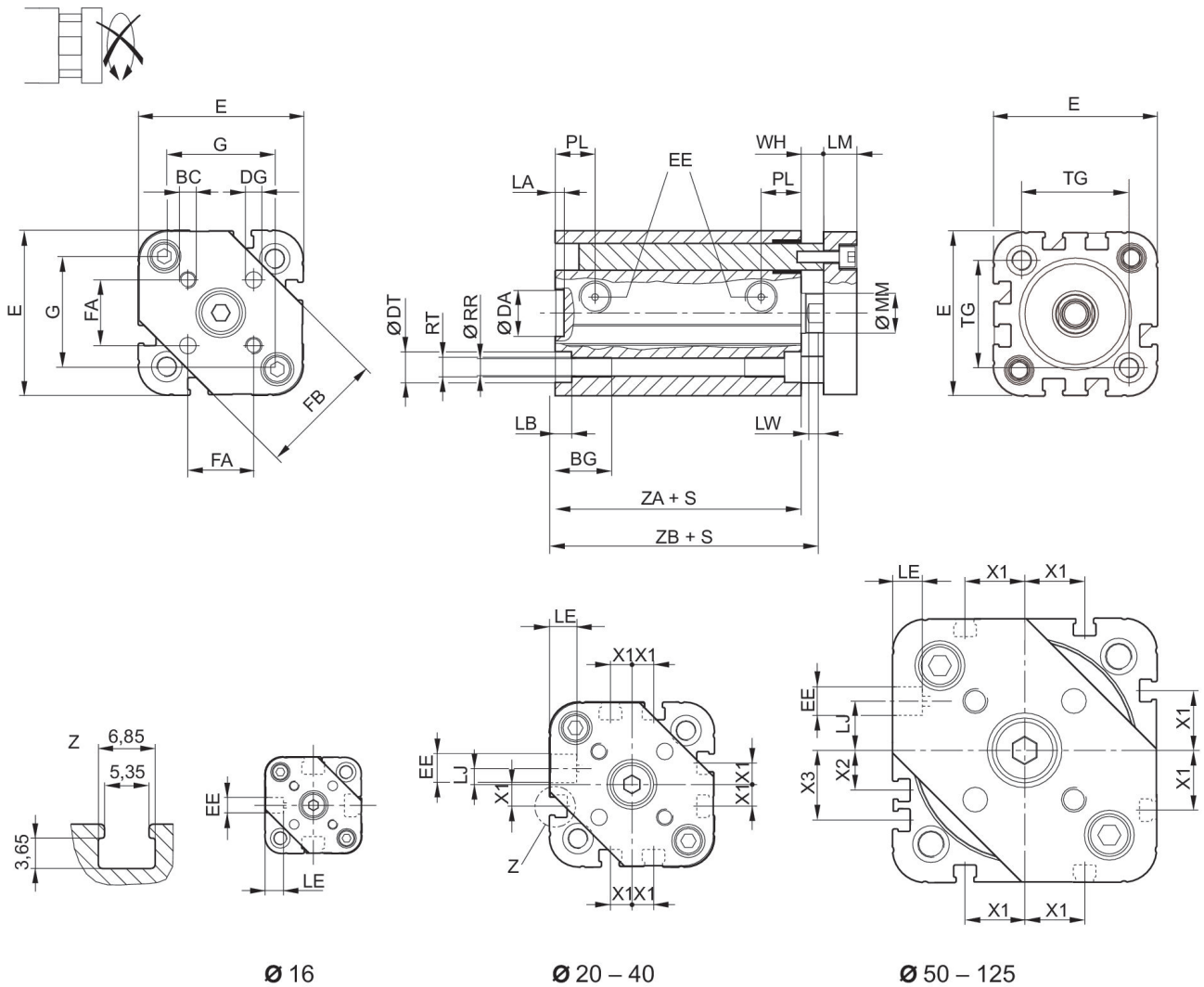
# Compact cylinder ISO 21287, Series CCI

series CCI

R422001310

2023-11-23

## Dimensions



S = stroke  
G = distance between the guide rods

Piston Ø	BC	BG	DA H11	DG H13	DT	E	EE	FA	FB
16	M3	15	10	3	6	29.3	M5	9.9 ±0.1	20
20	M4	15.5	12	4	7.5	36.3	M5	12 ±0.1	24
25	M5	15.5	12	5	8	40.3	M5	15.6 ±0.1	30
32	M5	17	14	5	8.6	50	G 1/8	19.8 ±0.1	38
40	M5	17	14	5	9.2	58	G 1/8	23.3 ±0.1	44
50	M6	17	18	6	11	68.3	G 1/8	29.7 ±0.1	54
63	M6	17	18	6	11	80	G 1/8	35.4 ±0.1	62
80	M8	20	23	8	15	96	G 1/8	46 ±0.1	80
100	M10	20	28	10	15	116	G 1/8	56.6 ±0.1	100
125	M10	35	12	10	-	134.6	G 1/4	63.64 ±0.1	120

# Compact cylinder ISO 21287, Series CCI

series CCI

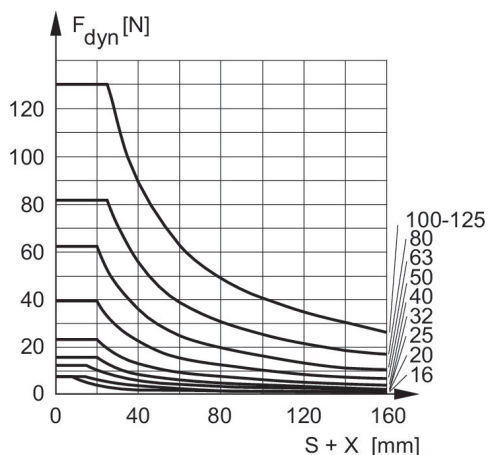
R422001310

2023-11-23

Piston Ø	G	LA	LB	LE	LJ	LM	LW	MM f8	PL
16	19	2.5	3.5	4.5	–	6	4	8	8
20	25	2.5	4.5	4.5	4.5	8	4	10	10
25	27	2.5	4.5	4.5	4	8	4	10	10
32	34	2.5	5	7.5	4.85	10	4.5	12	12
40	42	2.5	5	7.5	9.85	10	4.5	12	12
50	49	2.5	5	7.5	12	12	6	16	12
63	60	2.5	5	7.5	14.8	12	6	16	12
80	72	3	5	7.5	22	14	7	20	14
100	92	3	5	7.5	27	14	7	25	16.5
125	110	2.6	-	???	39	18	7.5	25	20.5

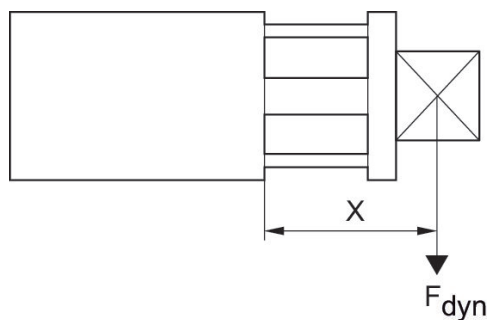
Piston Ø	RR	RT 6H	TG	WH	X1	X2	X3	ZA ±0,1	ZB
16	3.3	M4	18	4.8 ±0.9	–	–	–	34.9	39.7 ±0.8
20	4.2	M5	22	5.6 ±0.9	4.2	–	–	37.3	43.6 ±0.8
25	4.2	M5	26	5.6 ±0.9	4.5	–	–	39	44.5 ±0.9
32	5.1	M6	32.5	7.4 ±0.9	6.5	–	–	44	51.4 ±1
40	5.1	M6	38	7.4 ±0.9	11	–	–	45	52.4 ±1
50	6.7	M8	46.5	8.4 ±0.9	13	4	13	45.5	53.6 ±1
63	6.7	M8	56.5	8.5 ±0.9	18	12	21	49	57.4 ±1
80	8.5	M10	72	9.8 ±1	18	16.5	25.5	54.7	64.4 ±1
100	8.5	M10	89	9.8 ±1	20	20	29	67	76.7 ±1
125	11.1	M12	110	11	29	29	38	81	92 ±1

## Maximum admissible lateral force dynamic



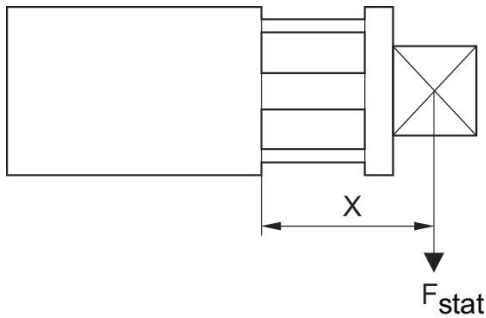
$F_{dyn}$  = dynamic lateral force  
 $X$  = distance between force application point and cylinder cover  
 $S$  = stroke

## Maximum admissible lateral force dynamic



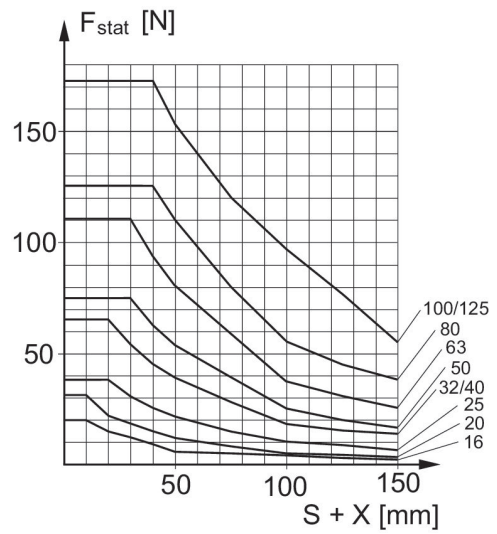
$F_{dyn}$  = dynamic lateral force  
 $X$  = distance between force application point and cylinder cover

## Maximum admissible lateral force static



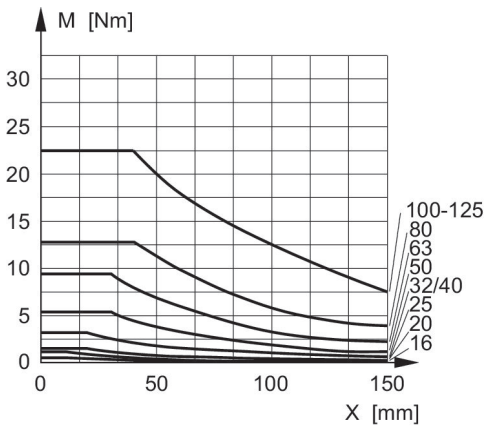
$F_{stat}$  = static lateral force  
 $X$  = distance between force application point and cylinder cover

## Maximum admissible lateral force static



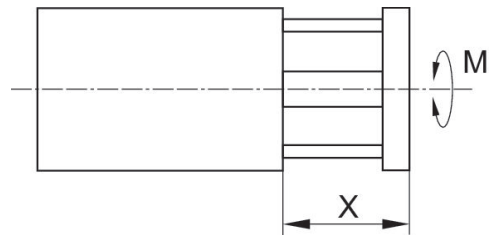
$F_{stat}$  = static lateral force  
 $X$  = distance between force application point and cylinder cover  
 $S$  = stroke

## Max. permissible torque



$M$  = max. permissible torque  
 $X$  = spacing between torque contact surface and cylinder cover

## Max. permissible torque



$M$  = max. permissible torque  
 $X$  = distance between force application point and cylinder cover

# Compact cylinder ISO 21287, Series CCI

series CCI

R422001310

2023-11-23

## 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.