

# Compact cylinder ISO 21287, Series CCI

- Ø 16 mm
- Ports M5
- Single-acting, retracted without pressure
- with magnetic piston
- Cushioning elastic
- Piston rod Internal thread
- Piston rod through



Standards	ISO 21287
Compressed air connection	Internal thread
Working pressure min./max.	1,5 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m <sup>3</sup>
Pressure for determining piston forces	6.3 bar

## Technical data

Piston Ø	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm
Piston rod thread	M4	M6	M6	M8	M8	M10
Ports	M5	M5	M5	G 1/8	G 1/8	G 1/8
Piston rod Ø	8 mm	10 mm	10 mm	12 mm	12 mm	16 mm
Stroke 5	R422001592	R422001593	R422001594	R422001595	R422001596	R422001597
10	R422001602	R422001603	R422001604	R422001605	R422001606	R422001607
15	R422001612	R422001613	R422001614	R422001615	R422001616	R422001617
20	R422001622	R422001623	R422001624	R422001625	R422001626	R422001627
25	R422001632	R422001633	R422001634	R422001635	R422001636	R422001637

Piston Ø	63 mm	80 mm	100 mm
Piston rod thread	M10	M12	M12
Ports	G 1/8	G 1/8	G 1/8
Piston rod Ø	16 mm	20 mm	25 mm
Stroke 5	R422001598	R422001599	R422001600
10	R422001608	R422001609	R422001610
15	R422001618	R422001619	R422001620
20	R422001628	R422001629	R422001630
25	R422001638	R422001639	R422001640

## 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).

Retracting piston force	12 N	13 N	25 N	35 N	43 N	82 N	82 N
Extracting piston force	83 N	135 N	235 N	400 N	677 N	1028 N	1745 N
Impact energy	0,11 J	0,15 J	0,2 J	0,4 J	0,52 J	0,64 J	0,75 J
Weight 0 mm stroke	0,066 kg	0,109 kg	0,131 kg	0,25 kg	0,325 kg	0,486 kg	0,732 kg
Weight +10 mm stroke	0,02 kg	0,029 kg	0,032 kg	0,052 kg	0,06 kg	0,087 kg	0,103 kg
Stroke max.	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm

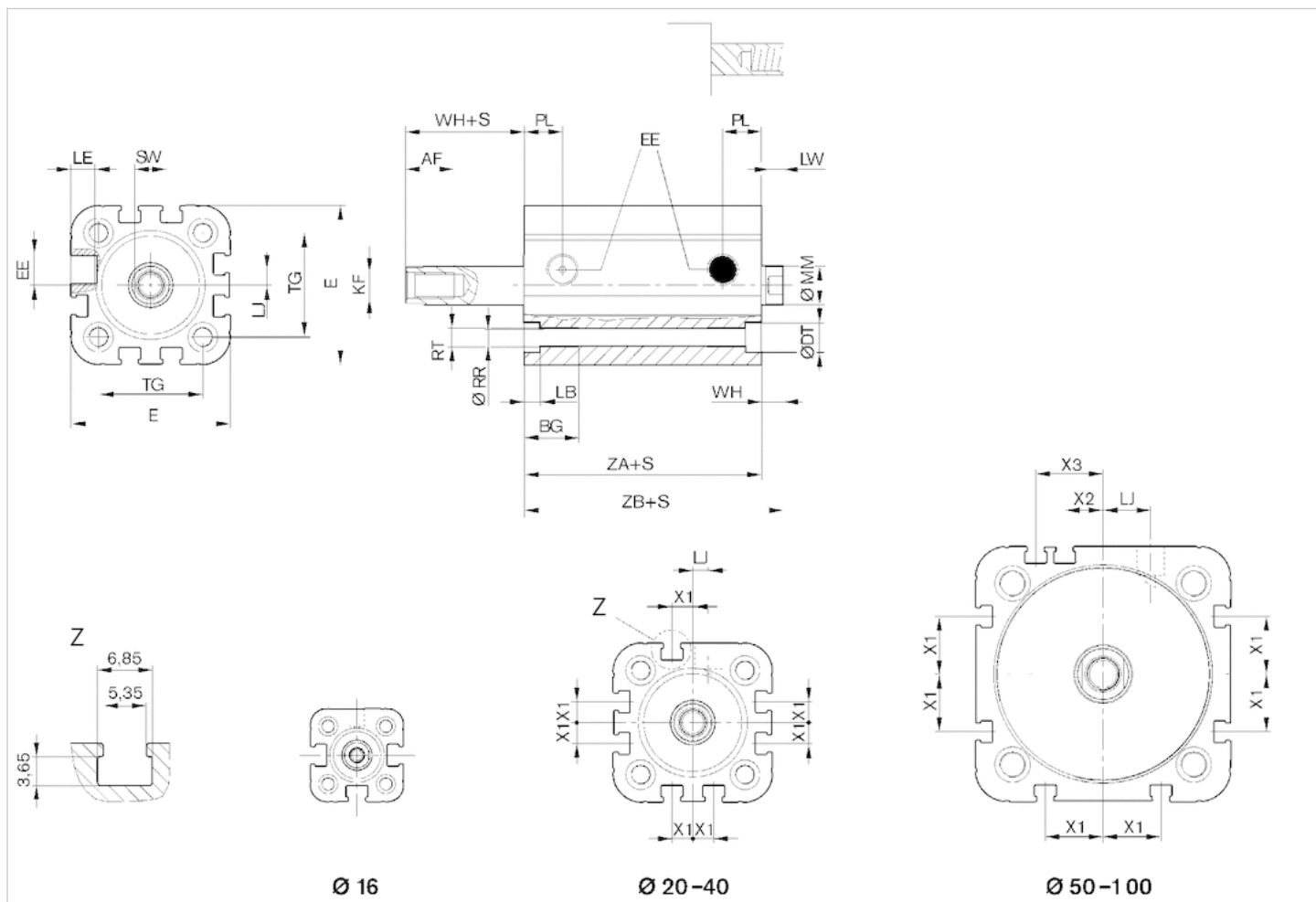
Piston Ø	80 mm	100 mm
Retracting piston force	105 N	215 N
Extracting piston force	2864 N	4424 N
Impact energy	0,75 J	1 J
Weight 0 mm stroke	1,21 kg	2,324 kg
Weight +10 mm stroke	0,14 kg	0,206 kg
Stroke max.	25 mm	25 mm

## Technical information

Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Scraper	Polyurethane

# Dimensions

Ø 16 mm ... 100 mm



S = stroke

# Dimensions

Piston Ø	AF	BG	DT	E	EE	KF	LB	LE	LJ	LW	MM f8	PL	RR	RT 6H	SW	TG
16 mm	10	15	6	29.3	M5	M4	3.5	4.5	-	4	8	8	3.3	M4	7	18
20 mm	12	15.5	7.5	36.3	M5	M6	4.5	4.5	4.5	4	10	10	4.2	M5	8	22
25 mm	12	15.5	8	40.3	M5	M6	4.5	4.5	4	4	10	10	4.2	M5	8	26
32 mm	12	17	8.6	50	G 1/8	M8	5	7.5	4.85	4.5	12	12	5.1	M6	10	32.5
40 mm	12	17	9.2	58	G 1/8	M8	5	7.5	9.85	4.5	12	12	5.1	M6	10	38
50 mm	16 1)	17	11	68.3	G 1/8	M10	5	7.5	12	6	16	12	6.7	M8	13	46.5
63 mm	16 1)	17	11	80	G 1/8	M10	5	7.5	14.8	6	16	12	6.7	M8	13	56.5
80 mm	20 2)	20	15	96	G 1/8	M12	5	7.5	22	7	20	14	8.5	M10	16	72
100 mm	20 2)	20	15	116	G 1/8	M12	5	7.5	27	7	25	16.5	8.5	M10	21	89

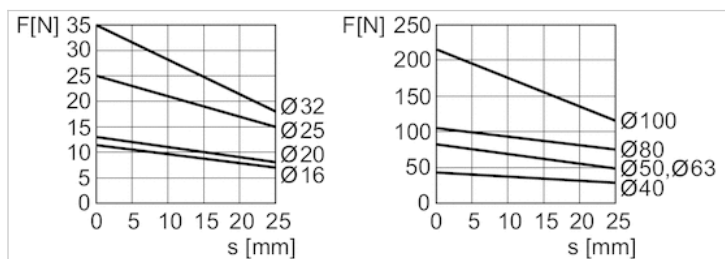
Piston Ø	WH 3)	X1	X2	X3	ZA	ZB 3)
16 mm	4,8 ±0,9	-	-	-	34,9 ±0,1	39,7 ±0,8
20 mm	6,3 ±0,9	4.2	-	-	37,3 ±0,1	43,6 ±0,8
25 mm	5,6 ±0,9	4.5	-	-	39 ±0,1	44,5 ±0,9
32 mm	7,4 ±0,9	6.5	-	-	44 ±0,1	51,4 ±1

Piston Ø	WH 3)	X1	X2	X3	ZA	ZB 3)
40 mm	7,4 ±0,9	11	–	–	45 ±0,1	52,4 ±1
50 mm	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1
63 mm	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1
80 mm	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100 mm	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1

- 1) Stroke 5 mm: AF= 11 mm
- 2) Stroke 5 mm: AF= 15 mm
- 3) With cylinders with a piston rod extension, dimensions "WH" and "ZB" are increased by the value of the piston rod extension.

## Diagrams

### Extracting piston force



F = spring return force, s = return stroke