

Compact cylinder ISO 21287, Series CCI

- Ø 16-100 mm
- Ports M5, G 1/8
- 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/m³
Pressure for determining piston forces	6 bar

Technical data

Piston Ø	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm	80 mm
Piston rod thread	M4	M6	M6	M8	M8	M10	M10	M12
Ports	M5	M5	M5	G 1/8	G 1/8	G 1/8	G 1/8	G 1/8
Piston rod Ø	8 mm	10 mm	10 mm	12 mm	12 mm	16 mm	16 mm	20 mm
Stroke 5	R422001592	R422001593	R422001594	R422001595	R422001596	R422001597	R422001598	R422001599
10	R422001602	R422001603	R422001604	R422001605	R422001606	R422001607	R422001608	R422001609
15	R422001612	R422001613	R422001614	R422001615	R422001616	R422001617	R422001618	R422001619
20	R422001622	R422001623	R422001624	R422001625	R422001626	R422001627	R422001628	R422001629
25	R422001632	R422001633	R422001634	R422001635	R422001636	R422001637	R422001638	R422001639

Piston Ø	100 mm
Piston rod thread	M12
Ports	G 1/8
Piston rod Ø	25 mm
Stroke 5	R422001600
10	R422001610
15	R422001620
20	R422001630
25	R422001640

Technical data

Piston Ø	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm
Retracting piston force	12 N	13 N	25 N	35 N	43 N	82 N	82 N	105 N	215 N
Extracting piston force	79 N	124 N	191 N	329 N	517 N	789 N	1396 N	2292 N	3671 N
Impact energy	0,11 J	0,15 J	0,2 J	0,4 J	0,52 J	0,64 J	0,75 J	0,75 J	1 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	1,21 kg	2,324 kg
Weight +10 mm stroke	0,02	0,029	0,032	0,052	0,06	0,087	0,103	0,14	0,206
Stroke max.	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm

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.

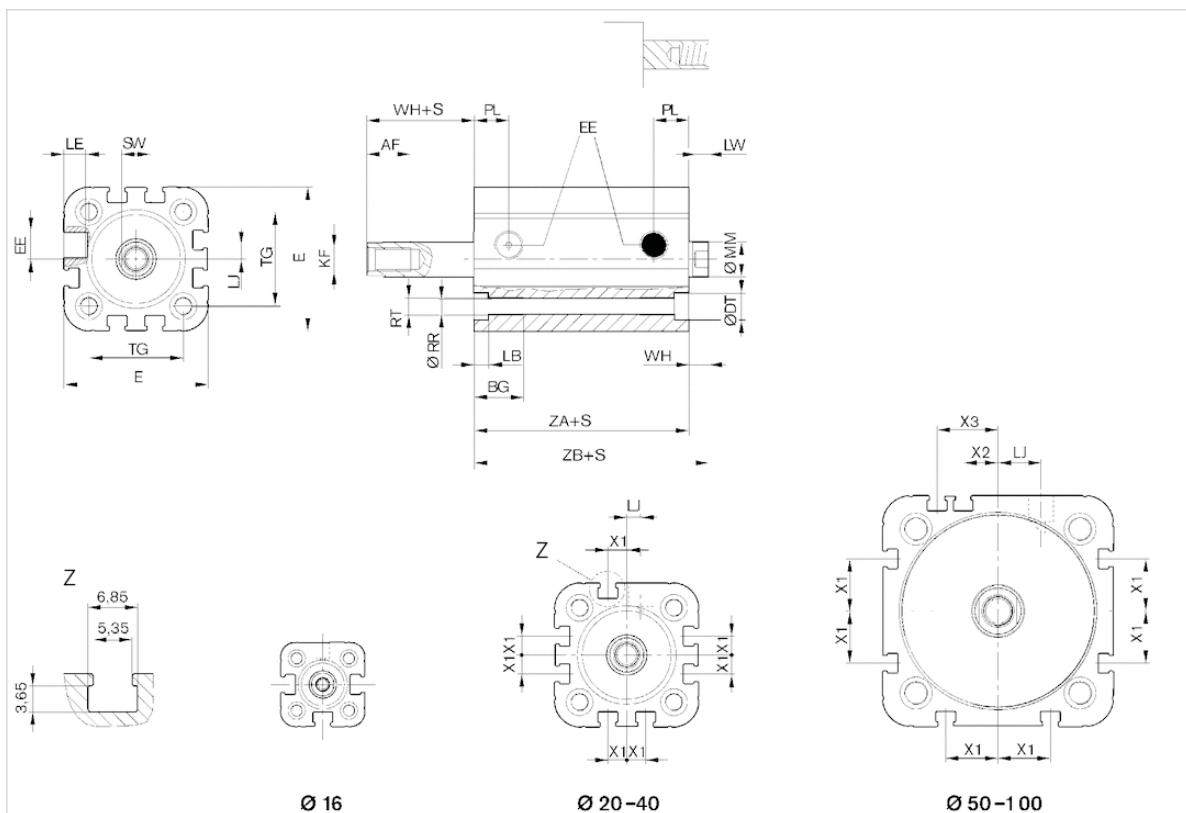
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

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	WH 3)	X1	X2	X3	ZA
16 mm	10	15	6	29.3	M5	M4	3.5	4.5	—	4	8	8	3.3	M4	7	18	4,8 ±0,9	—	—	—	34,9 ±0,1
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	6,3 ±0,9	4.2	—	—	37,3 ±0,1
25 mm	12	15.5	8	40.3	M5	M6	4.5	4.5	4	4	10	10	4.2	M5	8	26	5,6 ±0,9	4.5	—	—	39 ±0,1
32 mm	12	17	9.2	50	G 1/8	M8	5	7.5	4.85	4.5	12	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	—	—	44 ±0,1
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	7,4 ±0,9	11	—	—	45 ±0,1
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	8,4 ±0,9	13	4	13	45,5 ±0,1
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	8,5 ±0,9	18	12	21	49 ±0,1
80 mm	20 2)	20	15	96	G 1/8	M12	5	7.5	22	7	20	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1
100 mm	20 2)	20	15	116	G 1/8	M12	5	7.5	27	7	25	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1

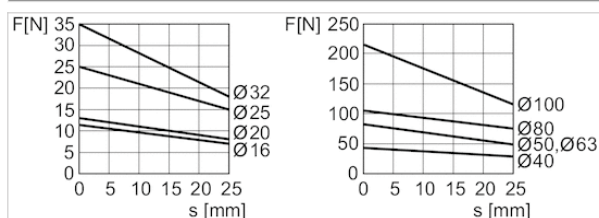
Piston Ø	ZB 3)
16 mm	39,7 ±0,8
20 mm	43,6 ±0,8
25 mm	44,5 ±0,9
32 mm	51,4 ±1

Piston Ø	ZB 3)
40 mm	52,4 ±1
50 mm	53,6 ±1
63 mm	57,4 ±1
80 mm	64,4 ±1
100 mm	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

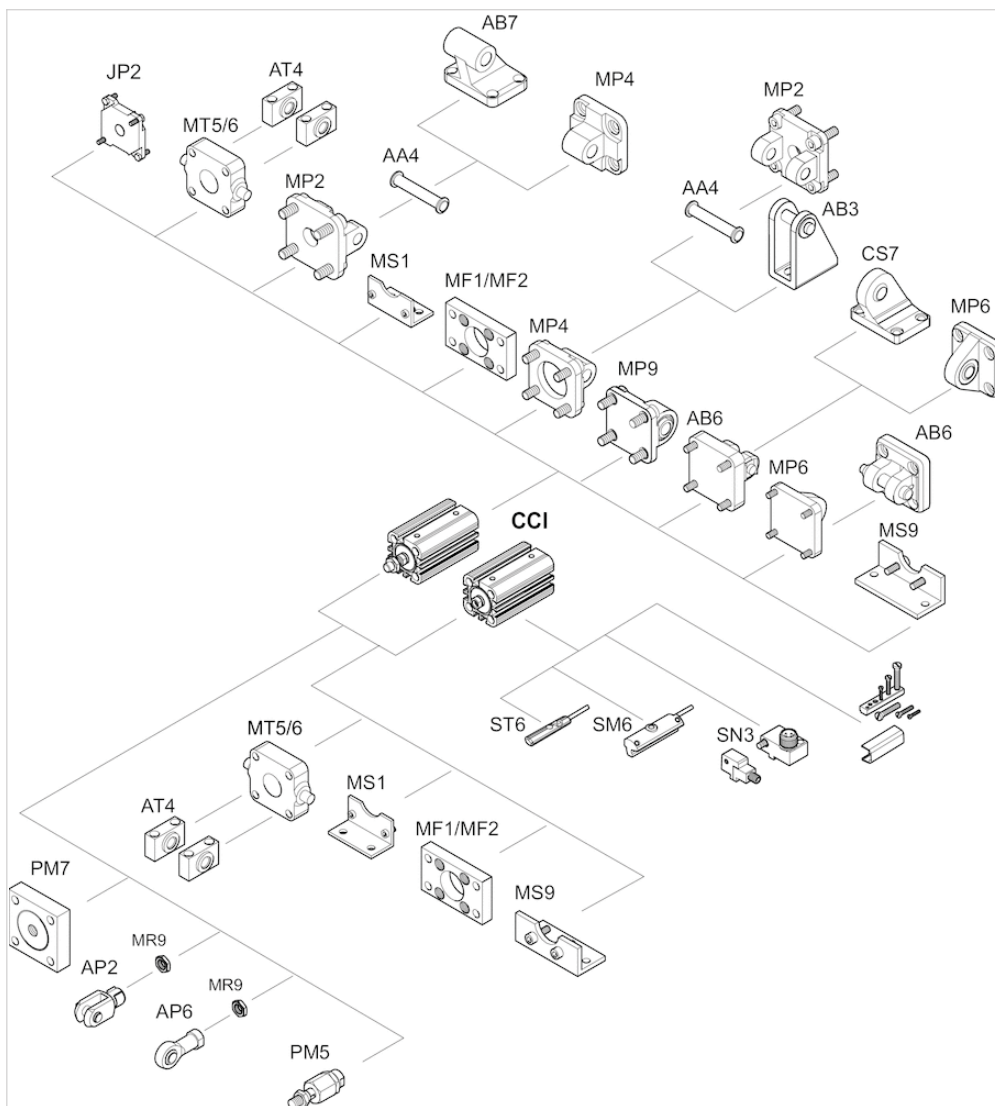
Extracting piston force



F = spring return force, s = return stroke

Accessories overview

Overview drawing



Due to the high possible forces, not all add-on parts are suitable for CCI tandem (see CCI-TD accessories overview).

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.