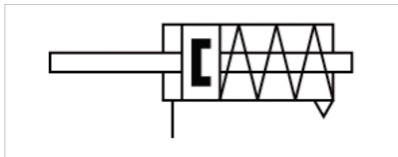


Compact cylinder ISO 21287, Series CCI

- Ø 16-100 mm
- Ports M5, G 1/8
- Single-acting, retracted without pressure
- with magnetic piston
- Cushioning elastic
- Piston rod External 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 Piston rod thread Ports Piston rod Ø	16 mm M6x1 M5 8 mm	20 mm M8x1,25 M5 10 mm	25 mm M8x1,25 M5 10 mm	32 mm M10x1,25 G 1/8 12 mm	40 mm M10x1,25 G 1/8 12 mm	50 mm M12x1,25 G 1/8 16 mm	63 mm M12x1,25 G 1/8 16 mm	80 mm M16x1,5 G 1/8 20 mm
Stroke 5	R422001642	R422001643	R422001644	R422001645	R422001646	R422001647	R422001648	R422001649
10	R422001652	R422001653	R422001654	R422001655	R422001656	R422001657	R422001658	R422001659
15	R422001662	R422001663	R422001664	R422001665	R422001666	R422001667	R422001668	R422001669
20	R422001672	R422001673	R422001674	R422001675	R422001676	R422001677	R422001678	R422001679
25	R422001682	R422001683	R422001684	R422001685	R422001686	R422001687	R422001688	R422001689

Piston Ø Piston rod thread Ports Piston rod Ø	100 mm M16x1,5 G 1/8 25 mm
Stroke 5	R422001650
10	R422001660
15	R422001670
20	R422001680
25	R422001690

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	0,074 kg	0,147 kg	0,169 kg	0,297 kg	0,372 kg	0,566 kg	0,811 kg	1,359 kg	2,474 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 .

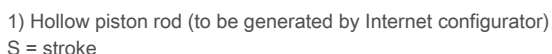
The oil content of compressed air must remain constant during the life cycle.

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
Nut for piston rod	Steel, galvanized
Scraper	Polyurethane

Ø 16 mm .. 100 mm



Piston Ø	A 1)	AF	BG	Ø DS	DT	E	EE	KK 4)	KV	KW	LB	LE	LJ	LW	MM f8	PL	RR	RT 6H	SW
16 mm	12	10	15	2	6	29.3	M5	M6 / M5	10	3	3.5	4.5	0	4	8	8	3.3	M4	7
20 mm	16	12	15.5	3.8	7.5	36.3	M5	M8 / G 1/8	13	4	4.5	4.5	4.5	4	10	10	4.2	M5	8
25 mm	16	12	15.5	3.8	8	40.3	M5	M8 / G 1/8	13	4	4.5	4.5	4	4	10	10	4.2	M5	8
32 mm	19	12	17	4.5	9.2	50	G 1/8	M10x1,25 / G 1/8	17	5	5	7.5	4.85	4.5	12	12	5.1	M6	10
40 mm	19	12	17	4.5	9.2	58	G 1/8	M10x1,25 / G 1/8	17	5	5	7.5	9.85	4.5	12	12	5.1	M6	10
50 mm	22	16 2)	17	6	11	68.3	G 1/8	M12x1,25 / G 1/4	19	6	5	7.5	12	6	16	12	6.7	M8	13
63 mm	22	16 2)	17	6	11	80	G 1/8	M12x1,25 / G 1/4	19	6	5	7.5	14.8	6	16	12	6.7	M8	13
80 mm	28	20 3)	20	8	15	96	G 1/8	M16x1,5 / M16x1,5	24	8	5	7.5	22	7	20	14	8.5	M10	16
100 mm	28	20 3)	20	8	15	116	G 1/8	M16x1,5 / M16x1,5	24	8	5	7.5	27	7	25	16.5	8.5	M10	21

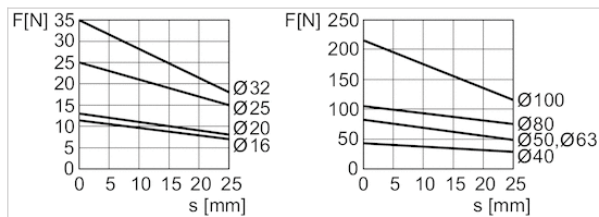
Piston Ø	TG	WH 5)	X1	X2	X3	ZA	ZB 5)
16 mm	18	4,8 ±0,9	–	–	–	34,9 ±0,1	39,7 ±0,8
20 mm	22	6,3 ±0,9	4.2	–	–	37,3 ±0,1	43,6 ±0,8

Piston Ø	TG	WH 5)	X1	X2	X3	ZA	ZB 5)
25 mm	26	5,6 ±0,9	4.5	–	–	39 ±0,1	44,5 ±0,9
32 mm	32.5	7,4 ±0,9	6.5	–	–	44 ±0,1	51,4 ±1
40 mm	38	7,4 ±0,9	11	–	–	45 ±0,1	52,4 ±1
50 mm	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1
63 mm	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1
80 mm	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100 mm	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1

- 1) With cylinders with external thread extension, dimension "A" is increased by the value of the thread extension.
- 2) Stroke 5 mm: AF= 11 mm
- 3) Stroke 5 mm: AF= 15 mm
- 4) Solid piston rod/hollow piston rod
- 5) With cylinders with a piston rod extension, dimensions "WH" and "ZB" are increased by the value of the piston rod extension.

Diagrams

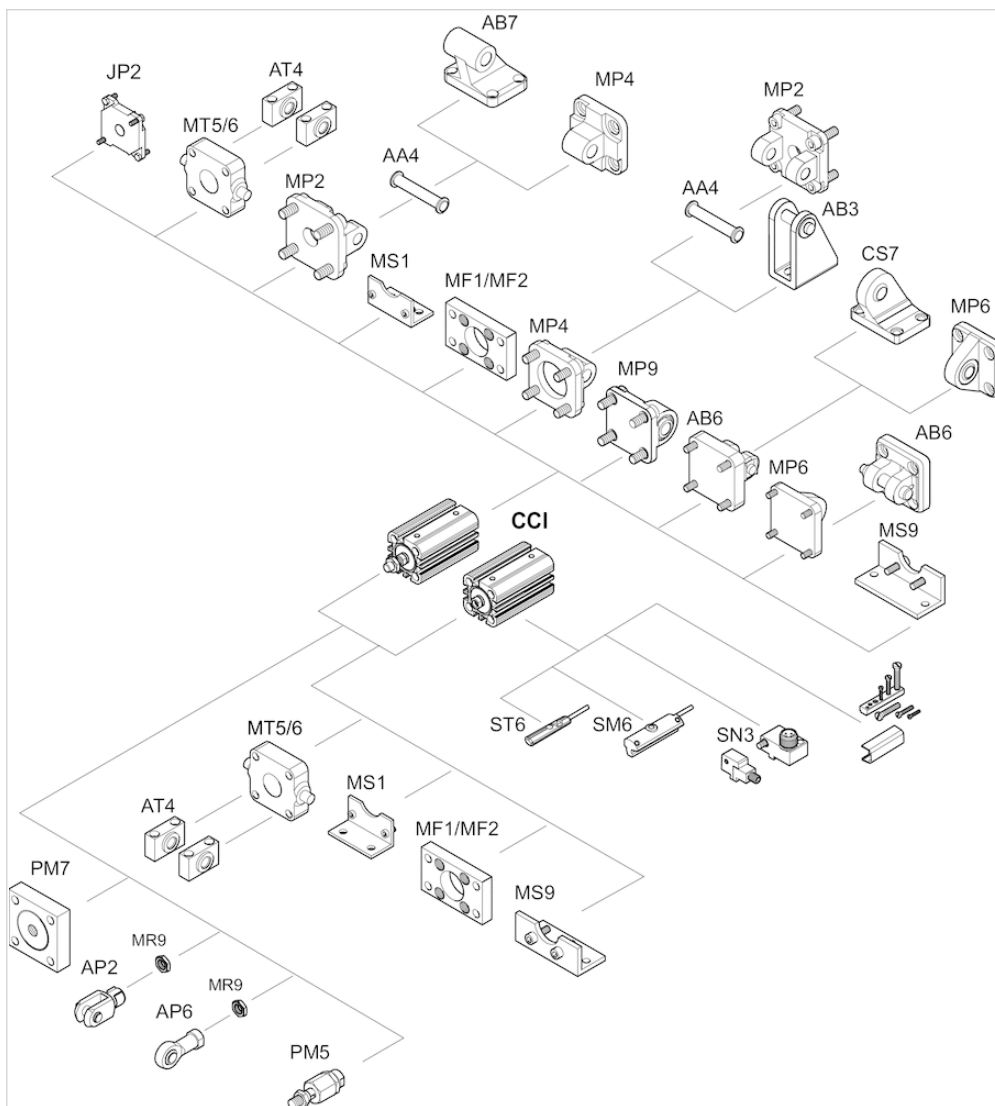
Extracting piston force



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.