

Compact cylinder ISO 21287, Series CCI

- ISO 21287
- 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

Compressed air connection

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Max. particle size

Oil content of compressed air

Pressure for determining piston forces

ISO 21287

Internal thread

1,5 ... 10 bar

-20 ... 80 °C

-20 ... 80 °C

Compressed air

50 µm

0 ... 5 mg/m³

6.3 bar



Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	16 mm M4 M5 8 mm	20 mm M6 M5 10 mm	25 mm M6 M5 10 mm	32 mm M8 G 1/8 12 mm	40 mm M8 G 1/8 12 mm	50 mm M10 G 1/8 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 Piston rod thread Ports Piston rod Ø	63 mm M10 G 1/8 16 mm	80 mm M12 G 1/8 20 mm	100 mm M12 G 1/8 25 mm
Stroke 5	R422001598	R422001599	R422001600
10	R422001608	R422001609	R422001610
15	R422001618	R422001619	R422001620

Piston Ø Piston rod thread Ports Piston rod Ø	63 mm M10 G 1/8 16 mm	80 mm M12 G 1/8 20 mm	100 mm M12 G 1/8 25 mm
20	R422001628	R422001629	R422001630
25	R422001638	R422001639	R422001640

Technical data

Piston Ø	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
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	2,32 kg
Weight +10 mm stroke	0,14 kg	0,206 kg
Stroke max.	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).

With cylinders with a piston rod extension, dimensions "WH" and "ZB" are increased by the value of the piston rod extension.

Piston Ø 50/63, stroke 5 mm: AF= 11 mm

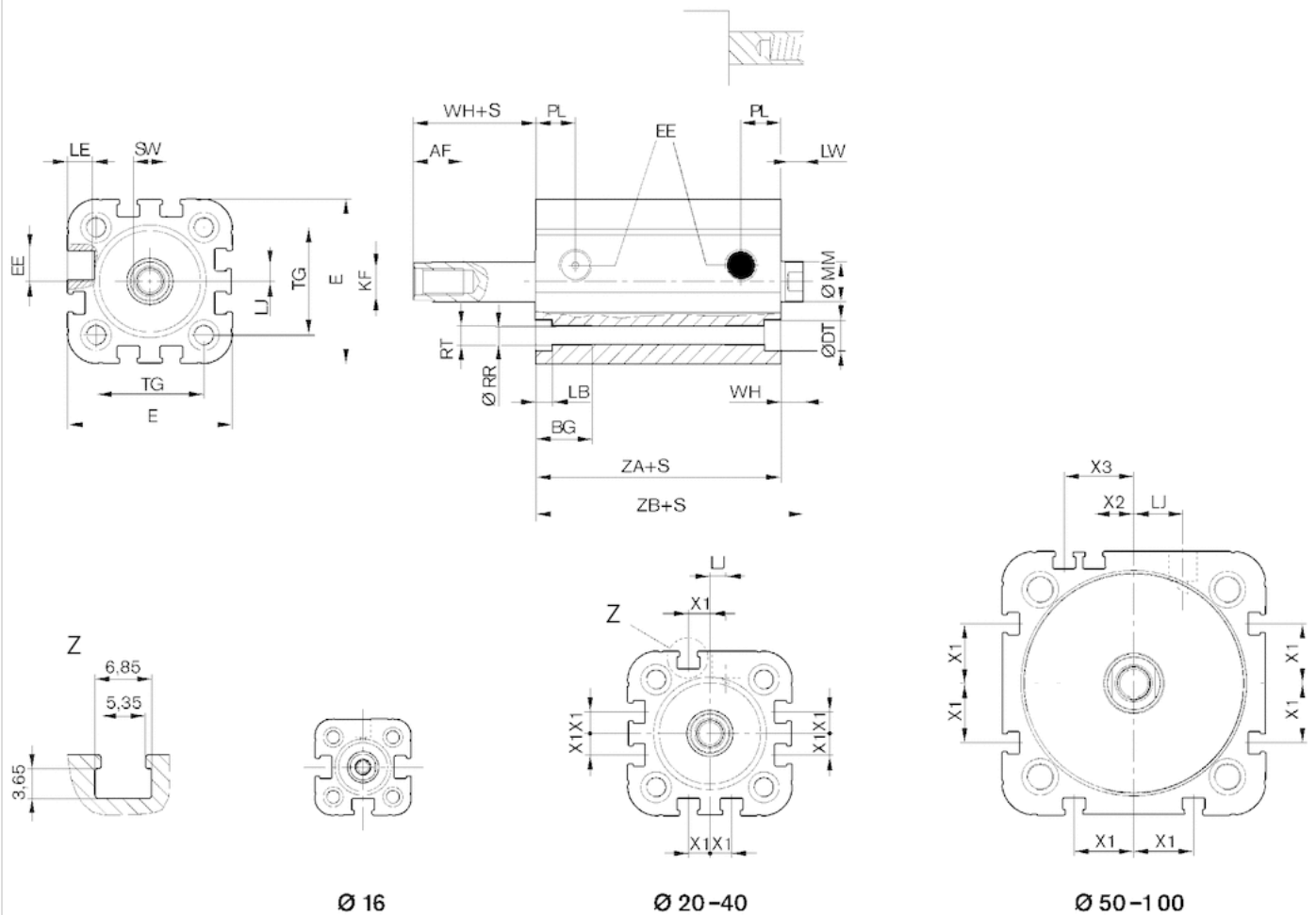
Piston Ø 80/100, stroke 5 mm: AF= 15 mm

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

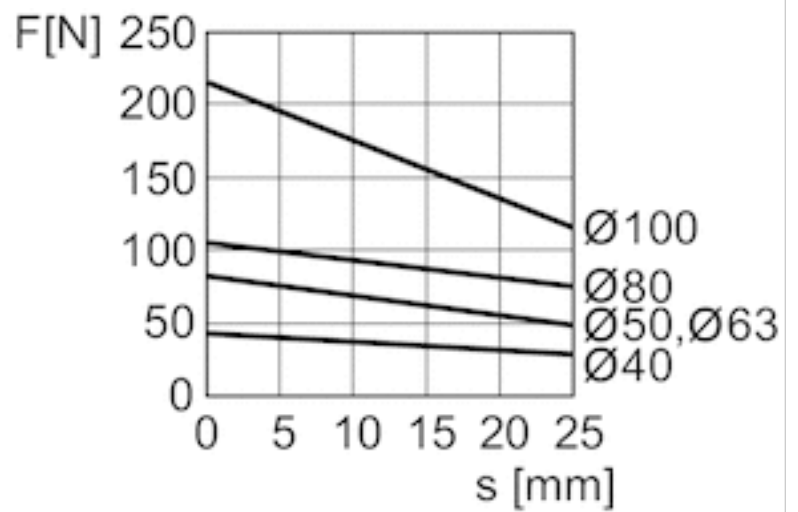
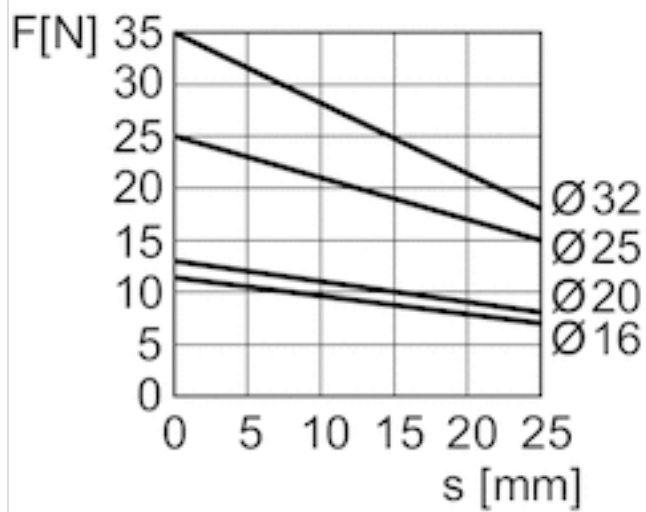
Piston Ø	AF	BG	DT	E	EE	KF	LB	LE	LJ	LW	MM f8	PL	RR	RT 6H	SW	TG	WH
16 mm	10	15	6	29.3	M5	M4	3.5	4.5	—	4	8	8	3.3	M4	7	18	4,8 ±0,9
20 mm	12	15.5	7.5	36.3	M5	M6	4.5	4.5	4.5	4	10	10	4.2	M5	8	22	5,6 ±0,9
25 mm	12	15.5	8	40.3	M5	M6	4.5	4.5	4	4	10	10	4.2	M5	8	26	5,6 ±0,9
32 mm	12	17	8.6	50	G 1/8	M8	5	7.5	4.85	4.5	12	12	5.1	M6	10	32.5	7,4 ±0,9
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
50 mm	16	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

Piston Ø	AF	BG	DT	E	EE	KF	LB	LE	LJ	LW	MM f8	PL	RR	RT 6H	SW	TG	WH
63 mm	16	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
80 mm	20	20	15	96	G 1/8	M12	5	7.5	22	7	20	14	8.5	M10	16	72	9,8 ±1
100 mm	20	20	15	116	G 1/8	M12	5	7.5	27	7	25	16.5	8.5	M10	21	89	9,8 ±1

Piston Ø	X1	X2	X3	ZA	ZB
16 mm	–	–	–	34,9 ±0,1	39,7 ±0,8
20 mm	4.2	–	–	37,3 ±0,1	43,6 ±0,8
25 mm	4.5	–	–	39 ±0,1	44,5 ±0,9
32 mm	6.5	–	–	44 ±0,1	51,4 ±1
40 mm	11	–	–	45 ±0,1	52,4 ±1
50 mm	13	4	13	45,5 ±0,1	53,6 ±1
63 mm	18	12	21	49 ±0,1	57,4 ±1
80 mm	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100 mm	20	20	29	67 ±0,1	76,7 ±1

Diagrams

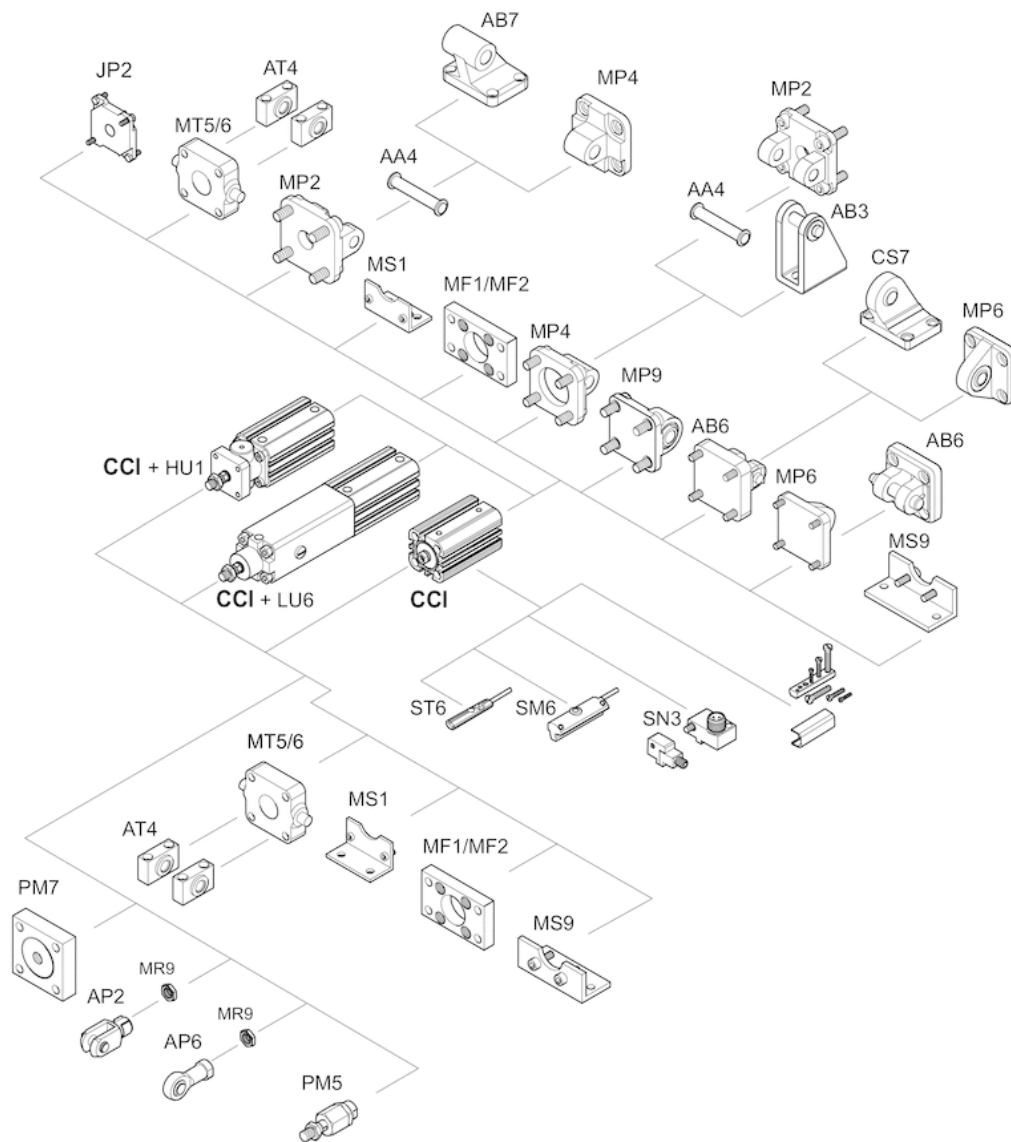
Extracting piston force



F = spring return force, s = return stroke

Accessories overview

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.

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: [Emerson.com/Aventics](https://emerson.com/aventics)

Your local contact: [Emerson.com/contactus](https://emerson.com/contactus)



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR_Automation

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that the products are subject to a natural process of wear and aging.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. © 2020 Emerson Electric Co. All rights reserved.
2020-12



CONSIDER IT SOLVED™