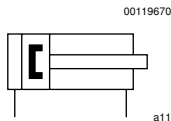


Piston rod cylinders ▶ Standard cylinders

Compact cylinder ISO 21287, Series CCI

- ▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread
- ▶ ATEX optional



Standards	ISO 21287
Compressed air connection	Internal thread
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	50 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Pressure for determining piston forces	6 bar

Materials:	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Aluminum
End cover	Aluminum
Seal	Polyurethane
Nut for cylinder mounting	Steel, galvanized
Scraper	Polyurethane

Technical Remarks


- 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, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID: II 2G c IIB T4 II 2D c IP65 T125 °C X
- The operating temperature range for ATEX-certified cylinders is -20 °C ... 50 °C.

Piston Ø		[mm]	16	20	25	32	40
Retracting piston force		[N]	91	137	216	364	560
Extracting piston force		[N]	106	164	259	422	665
Impact energy		[J]	0.15	0.2	0.3	0.5	0.7
Weight	0 mm stroke	[kg]	0.064	0.125	0.149	0.256	0.326
	+10 mm stroke	[kg]	0.016	0.023	0.026	0.043	0.052
Stroke max.		[mm]	300	300	300	300	300

Piston Ø		[mm]	50	63	80	100
Retracting piston force		[N]	871	1478	2397	3886
Extracting piston force		[N]	1035	1647	2656	4145
Impact energy		[J]	1	1.3	1.8	2.5
Weight	0 mm stroke	[kg]	0.487	0.728	1.195	2.234
	+10 mm stroke	[kg]	0.07	0.087	0.116	0.168
Stroke max.		[mm]	300	300	500	500

Piston rod cylinders ▶ Standard cylinders
Compact cylinder ISO 21287, Series CCI

- ▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread
▶ ATEX optional

	Piston Ø Piston rod thread Ports Piston rod Ø	16	20	25	32	40	
		M6x1 M5 8	M8x1,25 M5 10	M8x1,25 M5 10	M10x1,25 G 1/8 12	M10x1,25 G 1/8 12	
	Stroke 5	R422001132	R422001133	R422001134	R422001135	R422001136	
	10	R422001142	R422001143	R422001144	R422001145	R422001146	
	15	R422001152	R422001153	R422001154	R422001155	R422001156	
	20	R422001162	R422001163	R422001164	R422001165	R422001166	
	25	R422001172	R422001173	R422001174	R422001175	R422001176	
	30	R422001182	R422001183	R422001184	R422001185	R422001186	
	40	R422001192	R422001193	R422001194	R422001195	R422001196	
	50	R422001202	R422001203	R422001204	R422001205	R422001206	
	60	R422001212	R422001213	R422001214	R422001215	R422001216	
	80	-	-	-	R422001225	R422001226	
	100	-	-	-	R422001235	R422001236	
	125	-	-	-	R422001245	R422001246	
	150	-	-	-	R422001255	R422001256	
		Piston Ø Piston rod thread Ports Piston rod Ø	50 M12x1,25 G 1/8 16	63 M12x1,25 G 1/8 16	80 M16x1,5 G 1/8 20	100 M16x1,5 G 1/8 25	
		Stroke 5	R422001137	R422001138	R422001139	R422001140	
		10	R422001147	R422001148	R422001149	R422001150	
	15	R422001157	R422001158	R422001159	R422001160		
	20	R422001167	R422001168	R422001169	R422001170		
	25	R422001177	R422001178	R422001179	R422001180		
	30	R422001187	R422001188	R422001189	R422001190		
	40	R422001197	R422001198	R422001199	R422001200		
	50	R422001207	R422001208	R422001209	R422001210		
	60	R422001217	R422001218	R422001219	R422001220		
	80	R422001227	R422001228	R422001229	R422001230		
	100	R422001237	R422001238	R422001239	R422001240		
	125	R422001247	R422001248	R422001249	R422001250		
	150	R422001257	R422001258	R422001259	R422001260		

Configurable product

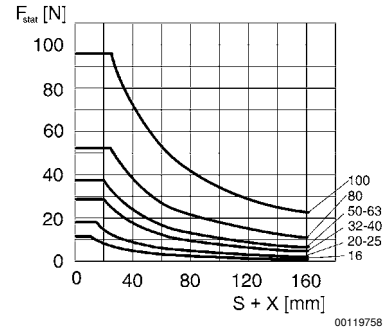
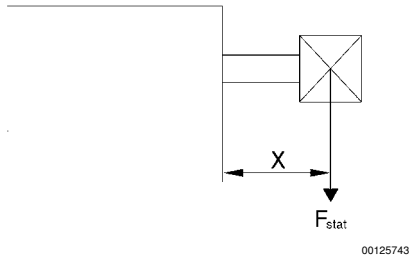

This product is configurable. Please use our Internet configurator at <http://www.aventics.com> or contact the nearest AVENTICS sales office.

Piston rod cylinders ▶ Standard cylinders

Compact cylinder ISO 21287, Series CCI

- ▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread
- ▶ ATEX optional

Maximum permissible lateral force, Static

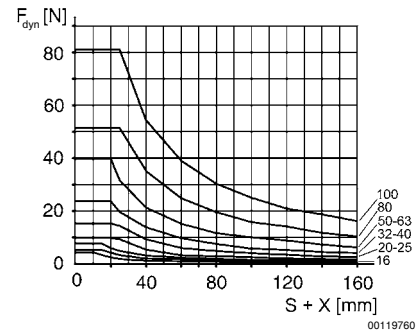
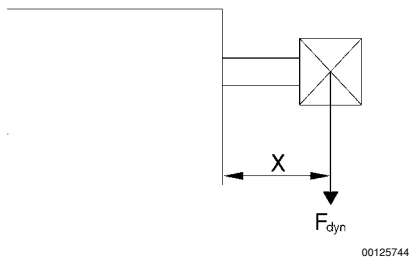


F_{stat} = static lateral force

X = spacing between force application point and cylinder cover

S = stroke

Maximum permissible lateral force, Dynamic



F_{dyn} = dynamic lateral force

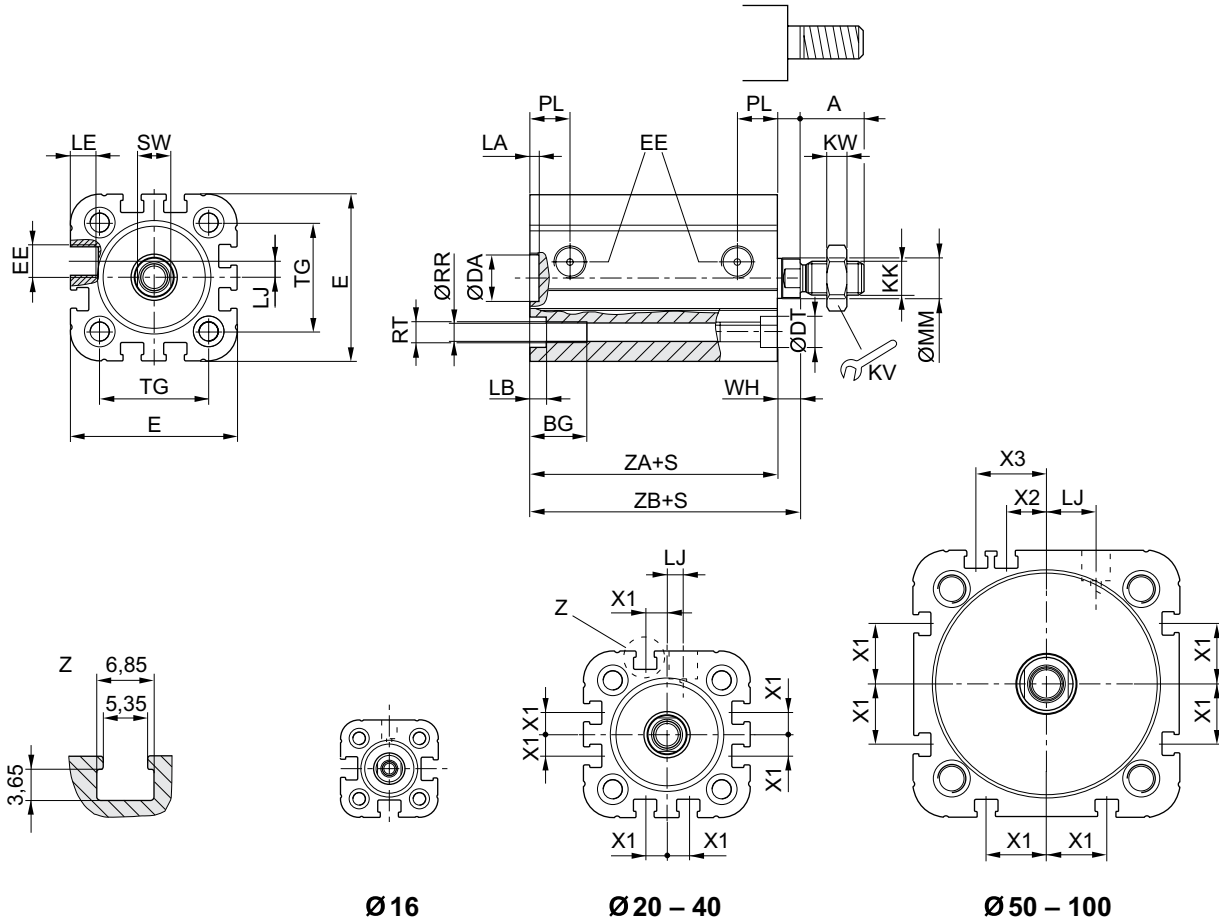
X = spacing between force application point and cylinder cover

S = stroke

Compact cylinder ISO 21287, Series CCI

- ▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread
- ▶ ATEX optional

Ø 16 - 100 mm



Ø 16

Ø 20 - 40

Ø 50 - 100

00132003

S = stroke

Piston Ø	A *)	BG	DA H11	DT	E	EE	KK	KV	KW	LA	LB	LE	LJ
16	12	15	10	6	29.3	M5	M6	10	3	2.5	3.5	4.5	-
20	16	15.5	12	7.5	36.3	M5	M8	13	4	2.5	4.5	4.5	4.5
25	16	15.5	12	8	40.3	M5	M8	13	4	2.5	4.5	4.5	4
32	19	17	14	9.2	50	G 1/8	M10x1,25	17	5	2.5	5	7.5	4.85
40	19	17	14	9.2	58	G 1/8	M10x1,25	17	5	2.5	5	7.5	9.85
50	22	17	18	11	68.3	G 1/8	M12x1,25	19	6	2.5	5	7.5	12
63	22	17	18	11	80	G 1/8	M12x1,25	19	6	2.5	5	7.5	14.8
80	28	20	23	15	96	G 1/8	M16x1,5	24	8	3	5	7.5	22
100	28	20	28	15	116	G 1/8	M16x1,5	24	8	3	5	7.5	27

Piston Ø	MM f8	PL	RR	RT 6H	SW	TG	WH 1)	X1	X2	X3	ZA	ZB 1)
16	8	8	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1	39,7 ±0,8
20	10	11	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1	43,6 ±0,8
25	10	11	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1	44,5 ±0,9
32	12	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1	51,4 ±1
40	12	12	5.1	M6	10	38	7,4 ±0,9	11	-	-	45 ±0,1	52,4 ±1
50	16	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1

* With cylinders with external thread extension, dimension "A" is increased by the value of the thread extension.

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

Piston rod cylinders ▶ Standard cylinders
Compact cylinder ISO 21287, Series CCI

- ▶ Ports: M5 - G 1/8 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: elastic ▶ Piston rod: external thread
 ▶ ATEX optional

Piston Ø	MM f8	PL	RR	RT 6H	SW	TG	WH 1)	X1	X2	X3	ZA	ZB 1)
63	16	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1
80	20	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100	25	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1

* With cylinders with external thread extension, dimension "A" is increased by the value of the thread extension.

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