



Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI

InduParts Pneumatics B.V.B.A.

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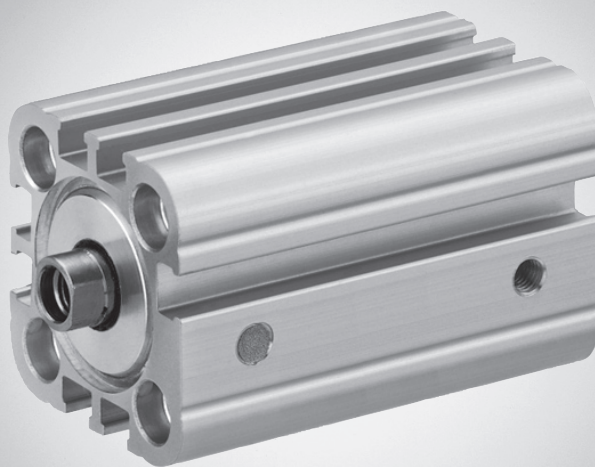
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Brochure



Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI

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accessories overview

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Piston rod cylinders → Standard cylinders

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► Overview of variants



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Configurable product	
	<p>The options listed in the following table are configurable. Note that not all variants can be combined with all options. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.</p>

Version	Data sheet of the variant	Option: piston rod extension	Option: extended piston rod thread	Option: hollow piston rod	Option: heat resistant	Option: ATEX
 internal thread		•	-	-	•	-
 external thread		•	•	-	•	-
 internal thread		•	-	-	•	-
 external thread		•	•	-	•	-
 internal thread		•	-	-	•	-
 external thread		•	•	•	•	-
 internal thread		•	-	-	•	•

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI

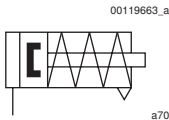
► Overview of variants

Version	Data sheet of the variant	Option: piston rod extension	Option: extended piston rod thread	Option: hollow piston rod	Option: heat resistant	Option: ATEX
 external thread		•	•	-	•	•
 internal thread		•	-	-	•	•
 external thread		•	•	•	•	•
 internal thread		-	-	-	•	-

Piston rod cylinders → Standard cylinders

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



Standards	ISO 21287
Compressed air connection	internal thread
Working pressure min./max.	1.5 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
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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.


Piston Ø	[mm]	16	20	25	32	40	
Retracting piston force	[N]	12	13	25	35	43	
Extending piston force	[N]	94	151	234	387	622	
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52	
Weight	0 mm stroke	[kg]	0.061	0.101	0.126	0.237	0.309
	+10 mm stroke	[kg]	0.016	0.023	0.026	0.043	0.052
Stroke max.	[mm]	25	25	25	25	25	

Piston Ø	[mm]	50	63	80	100	
Retracting piston force	[N]	82	82	105	215	
Extending piston force	[N]	953	1565	2551	3930	
Impact energy	[J]	0.64	0.75	0.75	1	
Weight	0 mm stroke	[kg]	0.462	0.703	1.142	2.199
	+10 mm stroke	[kg]	0.07	0.087	0.116	0.168
Stroke max.	[mm]	25	25	25	25	

Piston rod cylinders → Standard cylinders

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

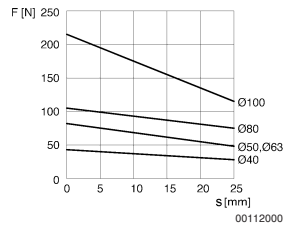
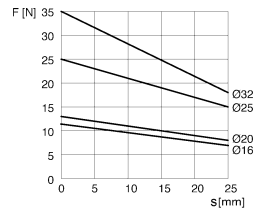
	Piston Ø Piston rod thread Ports Piston rod Ø	16	20	25	32	40
		M4 M5 8	M6 M5 10	M6 M5 10	M8 G 1/8 12	M8 G 1/8 12
	Stroke 5	R422001392	R422001393	R422001394	R422001395	R422001396
	10	R422001402	R422001403	R422001404	R422001405	R422001406
	15	R422001412	R422001413	R422001414	R422001415	R422001416
	20	R422001422	R422001423	R422001424	R422001425	R422001426
	25	R422001432	R422001433	R422001434	R422001435	R422001436
	Piston Ø Piston rod thread Ports Piston rod Ø	50 M10 G 1/8 16	63 M10 G 1/8 16	80 M12 G 1/8 20	100 M12 G 1/8 25	
	Stroke 5	R422001397	R422001398	R422001399	R422001400	
	10	R422001407	R422001408	R422001409	R422001410	
	15	R422001417	R422001418	R422001419	R422001420	
	20	R422001427	R422001428	R422001429	R422001430	
25	R422001437	R422001438	R422001439	R422001440		

Configurable product



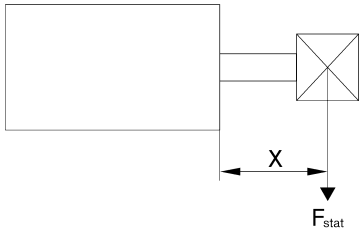
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Retracting piston force

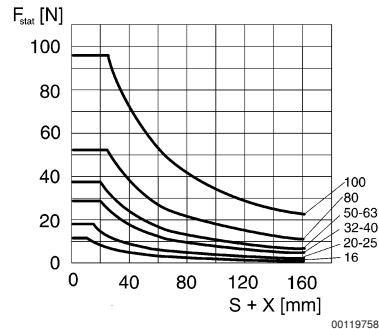


F = spring return force, s = return stroke

Maximum permissible lateral force, Static



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F_{stat.} = static lateral force

S = stroke

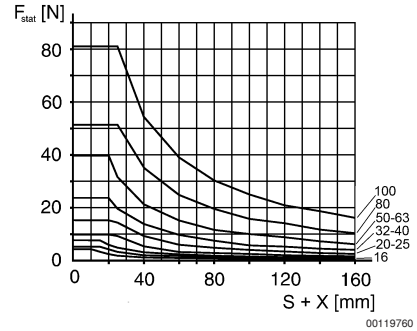
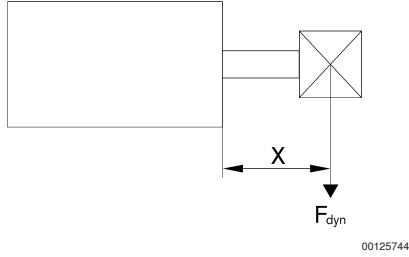
X = spacing between force application point and cylinder cover

Piston rod cylinders → Standard cylinders

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

Maximum permissible lateral force, **Dynamic**

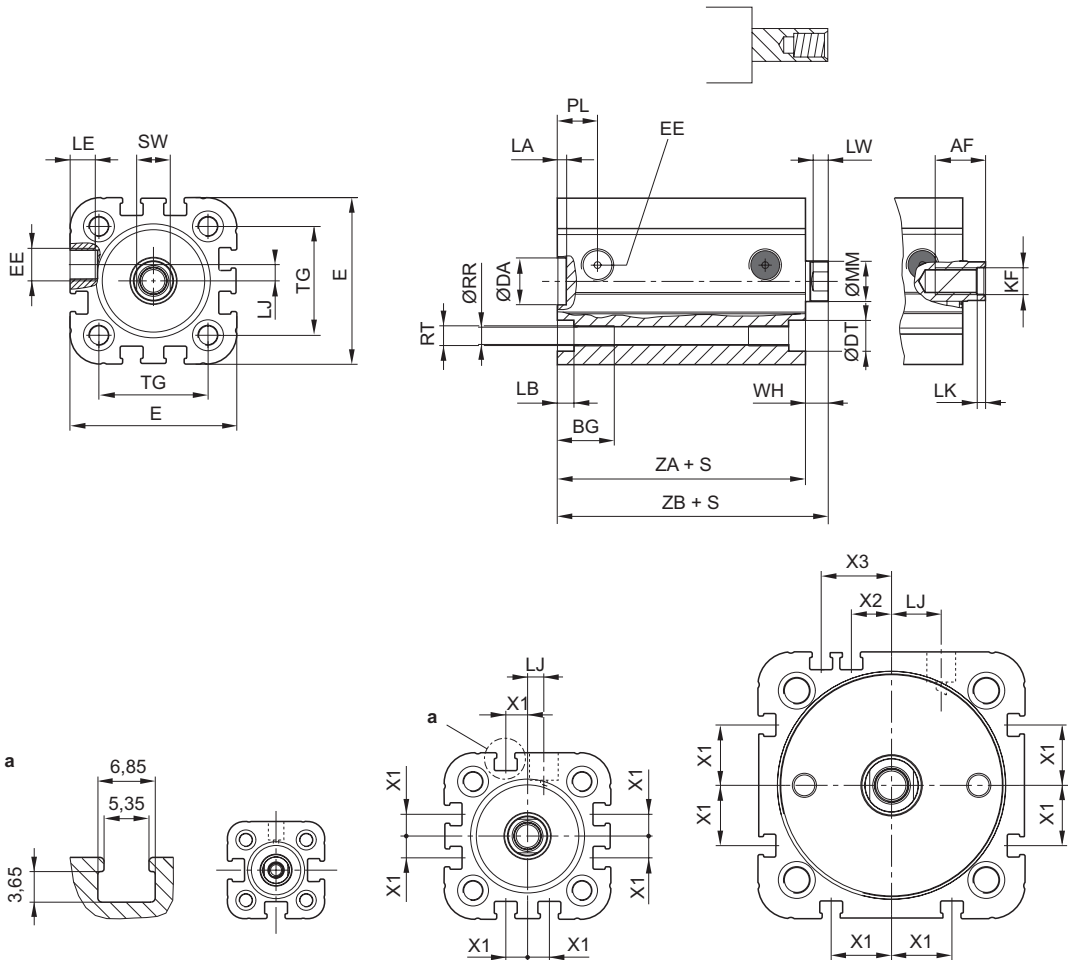


$F_{dyn.}$ = dynamic lateral force

X = spacing between force application point and cylinder cover

S = stroke

Ø 16 - 100 mm



Ø 16

Ø 20 - 40

Ø 50 - 100

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S = stroke

Piston rod cylinders → Standard cylinders

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 Ø	AF	BG	DA H11	DT	E	EE	KF	KV	LA	LB	LE	LJ	MM f8
16	10	15	10	6	29.3	M5	M4	10	2.5	3.5	4.5	0	8
20	12	15.5	12	7.5	36.3	M5	M6	13	2.5	4.5	4.5	4.5	10
25	12	15.5	12	8	40.3	M5	M6	13	2.5	4.5	4.5	4	10
32	12	17	14	9.2	50	G 1/8	M8	17	2.5	5	7.5	4.85	12
40	12	17	14	9.2	58	G 1/8	M8	17	2.5	5	7.5	9.85	12
50	16	17	18	11	68.3	G 1/8	M10	19	2.5	5	7.5	12	16
63	16	17	18	11	80	G 1/8	M10	19	2.5	5	7.5	14.8	16
80	20	20	23	15	96	G 1/8	M12	24	3	5	7.5	22	20
100	20	20	28	15	116	G 1/8	M12	24	3	5	7.5	27	25

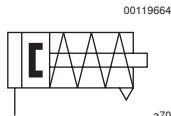
Piston Ø	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)
16	8	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1	39,7 ±0,8
20	11	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1	43,6 ±0,8
25	11	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1	44,5 ±0,9
32	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1	51,4 ±1
40	12	5.1	M6	10	38	7,4 ±0,9	11	-	-	45 ±0,1	52,4 ±1
50	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1
63	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1
80	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1

2) 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

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
 ► cushioning: elastic ► piston rod: external thread



Standards	ISO 21287
Compressed air connection	internal thread
Working pressure min./max.	1.5 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.


Piston Ø		[mm]	16	20	25	32	40
Retracting piston force		[N]	12	13	25	35	43
Extending piston force		[N]	94	151	234	387	622
Impact energy		[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.066	0.127	0.152	0.26	0.332
	+10 mm stroke	[kg]	0.016	0.023	0.026	0.043	0.052
Stroke max.		[mm]	25	25	25	25	25

Piston Ø		[mm]	50	63	80	100
Retracting piston force		[N]	82	82	105	215
Extending piston force		[N]	953	1565	2551	3930
Impact energy		[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.501	0.742	1.223	2.28
	+10 mm stroke	[kg]	0.07	0.087	0.116	0.168
Stroke max.		[mm]	25	25	25	25


Piston rod cylinders → Standard cylinders

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

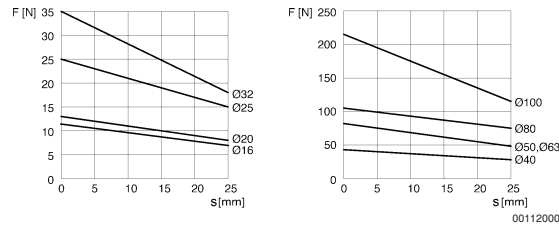
	Piston Ø Piston rod thread Ports Piston rod Ø	16	20	25	32	40
		M6x1 M5 8	M8x1,25 M5 10	M8x1,25 M5 10	M10x1,25 G 1/8 12	M10x1,25 G 1/8 12
	Stroke 5	R422001442	R422001443	R422001444	R422001445	R422001446
	10	R422001452	R422001453	R422001454	R422001455	R422001456
	15	R422001462	R422001463	R422001464	R422001465	R422001466
	20	R422001472	R422001473	R422001474	R422001475	R422001476
	25	R422001482	R422001483	R422001484	R422001485	R422001486
	Piston Ø	50	63	80	100	
	Piston rod thread	M12x1,25	M12x1,25	M16x1,5	M16x1,5	
	Ports	G 1/8	G 1/8	G 1/8	G 1/8	
	Piston rod Ø	16	16	20	25	
	Stroke 5	R422001447	R422001448	R422001449	R422001450	
10	R422001457	R422001458	R422001459	R422001460		
15	R422001467	R422001468	R422001469	R422001470		
20	R422001477	R422001478	R422001479	R422001480		
25	R422001487	R422001488	R422001489	R422001490		

Configurable product



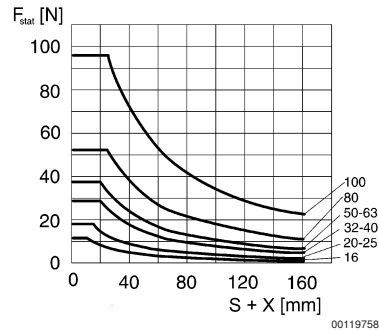
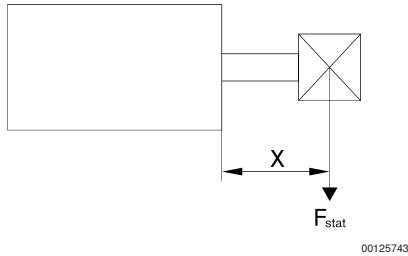
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Retracting piston force



F = spring return force, s = return stroke

Maximum permissible lateral force, Static



F stat. = static lateral force
X = spacing between force application point and cylinder cover

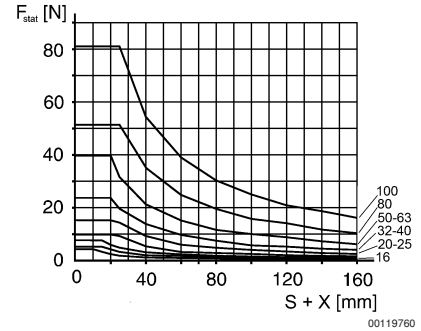
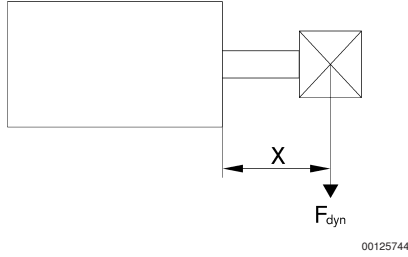
S = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

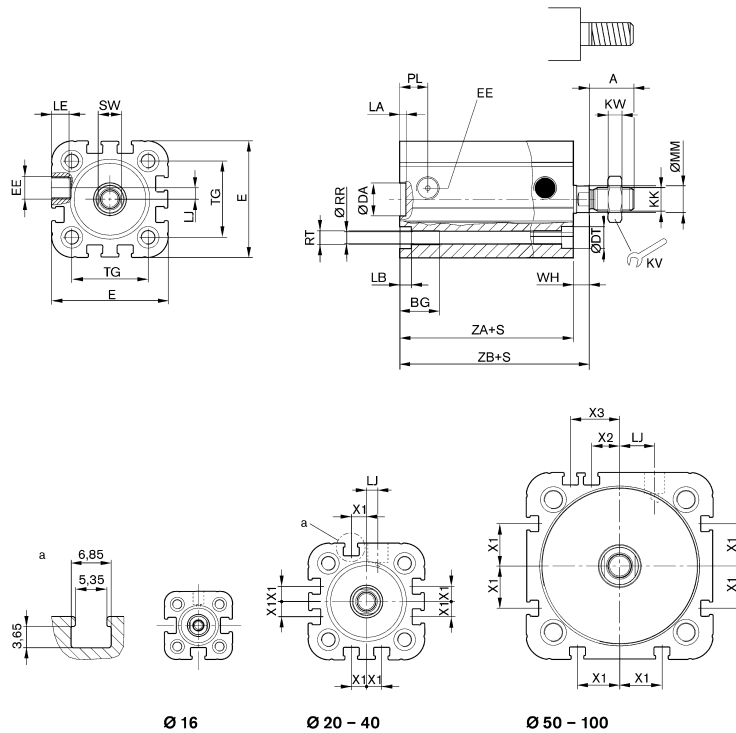
- ▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, retracted without pressure ▶ with magnetic piston
- ▶ cushioning: elastic ▶ piston rod: external thread

Maximum permissible lateral force, Dynamic



F dyn. = dynamic lateral force
 X = spacing between force application point and cylinder cover
 S = stroke

Ø 16 - 100 mm



S = stroke

Piston Ø	A 1)	BG	DA H11	DT	E	EE	KK	KV	KW	LA	LB	LE	LJ
16	12	15	10	6	29.3	M5	M6x1	10	3	2.5	3.5	4.5	0
20	16	15.5	12	7.5	36.3	M5	M8x1,25	13	4	2.5	4.5	4.5	4.5
25	16	15.5	12	8	40.3	M5	M8x1,25	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

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for detailed information Pneumatics catalog, online PDF, as of 2010-01-27, © Bosch Rexroth AG, subject to change

Piston rod cylinders → Standard cylinders

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 Ø	A 1)	BG	DA H11	DT	E	EE	KK	KV	KW	LA	LB	LE	LJ
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 2)	X1	X2	X3	ZA	ZB 2)
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
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

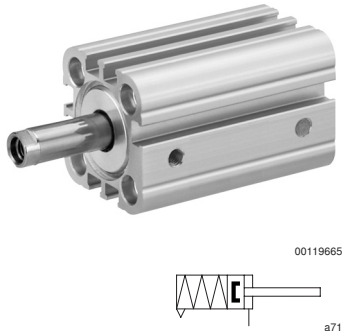
1) with cylinders with external thread extension, dimension "A" is increased by the value of the thread extension.

2) 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

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
 ► cushioning: elastic ► piston rod: internal thread



Standards	ISO 21287
Compressed air connection	internal thread
Working pressure min./max.	1.5 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
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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.


Piston Ø		[mm]	16	20	25	32	40
Retracting piston force		[N]	79	124	191	329	517
Extending piston force		[N]	12	13	25	35	43
Impact energy		[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	[kg]	0.061	0.101	0.126	0.237	0.309
	+10 mm stroke	[kg]	0.016	0.023	0.026	0.043	0.052
Stroke max.		[mm]	25	25	25	25	25

Piston Ø		[mm]	50	63	80	100
Retracting piston force		[N]	789	1396	2292	3671
Extending piston force		[N]	82	82	105	215
Impact energy		[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	[kg]	0.462	0.703	1.142	2.199
	+10 mm stroke	[kg]	0.07	0.087	0.116	0.168
Stroke max.		[mm]	25	25	25	25


Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

- ▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, extended without pressure ▶ with magnetic piston
- ▶ cushioning: elastic ▶ piston rod: internal thread

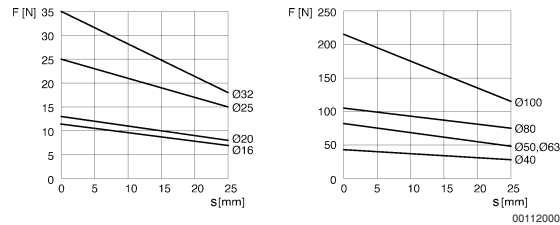
	Piston Ø Piston rod thread Ports Piston rod Ø	16	20	25	32	40
		M4 M5 8	M6 M5 10	M6 M5 10	M8 G 1/8 12	M8 G 1/8 12
	Stroke 5 10 15 20 25	R422001492	R422001493	R422001494	R422001495	R422001496
		R422001502	R422001503	R422001504	R422001505	R422001506
		R422001512	R422001513	R422001514	R422001515	R422001516
		R422001522	R422001523	R422001524	R422001525	R422001526
		R422001532	R422001533	R422001534	R422001535	R422001536
	Piston Ø Piston rod thread Ports Piston rod Ø	50	63	80	100	
		M10	M10	M12	M12	
		G 1/8	G 1/8	G 1/8	G 1/8	
		16	16	20	25	
		16	16	20	25	
	Stroke 5 10 15 20 25	R422001497	R422001498	R422001499	R422001500	
		R422001507	R422001508	R422001509	R422001510	
		R422001517	R422001518	R422001519	R422001520	
		R422001527	R422001528	R422001529	R422001530	
		R422001537	R422001538	R422001539	R422001540	

Configurable product



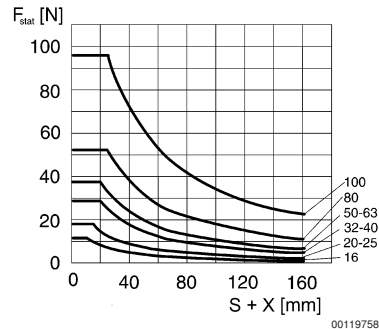
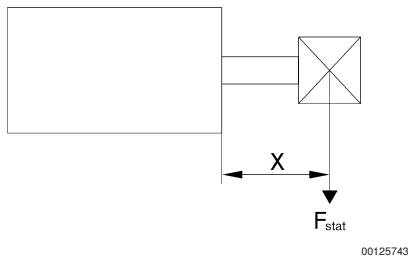
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Extending piston force



F = spring return force, s = stroke

Maximum permissible lateral force, Static



F stat. = static lateral force
X = spacing between force application point and cylinder cover

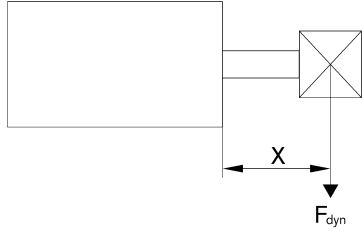
S = stroke

Piston rod cylinders → Standard cylinders

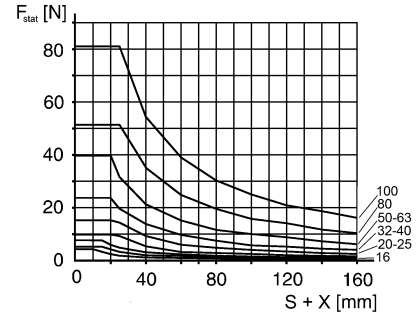
Compact cylinder, ISO 21287, Series CCI

- ▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, extended without pressure ▶ with magnetic piston
- ▶ cushioning: elastic ▶ piston rod: internal thread

Maximum permissible lateral force, Dynamic



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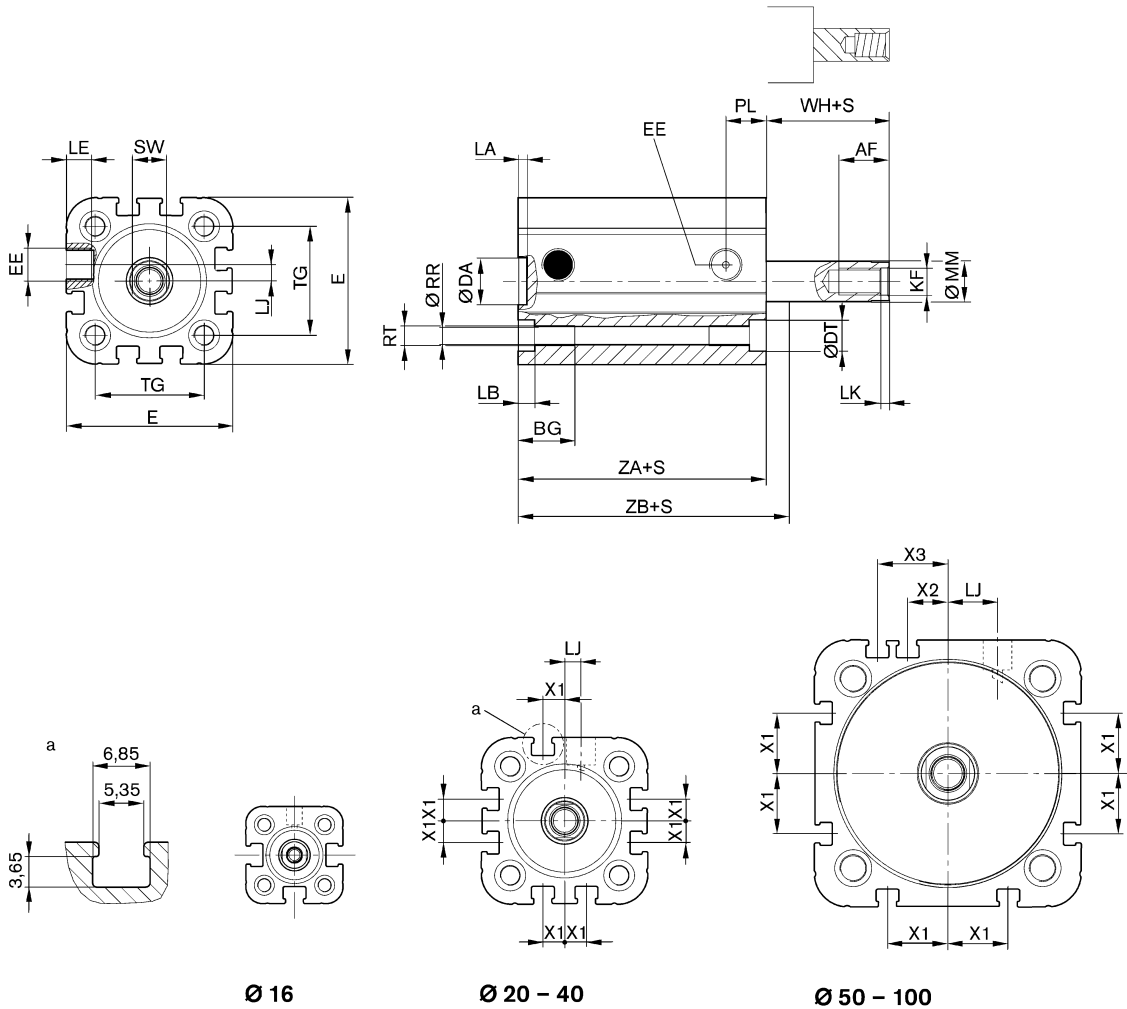
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F_{dyn.} = dynamic lateral force

X = spacing between force application point and cylinder cover

S = stroke

Ø 16 - 100 mm



00119658

S = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
 ► cushioning: elastic ► piston rod: internal thread

Piston Ø	AF	BG	DA H11	DT	E	EE	KF	LA	LB	LE	LJ	LK	MM f8
16	10	15	10	6	29.3	M5	M4	2.5	3.5	4.5	0	1.6	8
20	12	15.5	12	7.5	36.3	M5	M6	2.5	4.5	4.5	4.5	2.5	10
25	12	15.5	12	8	40.3	M5	M6	2.5	4.5	4.5	4	2.5	10
32	12	17	14	9.2	50	G 1/8	M8	2.5	5	7.5	4.85	2.5	12
40	12	17	14	9.2	58	G 1/8	M8	2.5	5	7.5	9.85	2.5	12
50	16	17	18	11	68.3	G 1/8	M10	2.5	5	7.5	12	3.5	16
63	16	17	18	11	80	G 1/8	M10	2.5	5	7.5	14.8	3.5	16
80	20	20	23	15	96	G 1/8	M12	3	5	7.5	22	3.5	20
100	20	20	28	15	116	G 1/8	M12	3	5	7.5	27	3.5	25

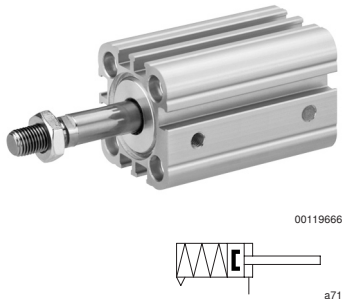
Piston Ø	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)
16	8	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1	39,7 ±0,8
20	11	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1	43,6 ±0,8
25	11	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1	44,5 ±0,9
32	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1	51,4 ±1
40	12	5.1	M6	10	38	7,4 ±0,9	11	-	-	45 ±0,1	52,4 ±1
50	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1
63	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1
80	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1

2) 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

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
 ► cushioning: elastic ► piston rod: external thread



Standards	ISO 21287
Compressed air connection	internal thread
Working pressure min./max.	1.5 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Piston Ø	[mm]	16	20	25	32	40	
Retracting piston force	[N]	79	124	191	329	517	
Extending piston force	[N]	12	13	25	35	43	
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52	
Weight	0 mm stroke	[kg]	0.066	0.127	0.152	0.26	0.332
	+10 mm stroke	[kg]	0.016	0.023	0.026	0.043	0.052
Stroke max.	[mm]	25	25	25	25	25	


Piston Ø	[mm]	50	63	80	100	
Retracting piston force	[N]	789	1396	2292	3671	
Extending piston force	[N]	82	82	105	215	
Impact energy	[J]	0.64	0.75	0.75	1	
Weight	0 mm stroke	[kg]	0.501	0.742	1.223	2.28
	+10 mm stroke	[kg]	0.07	0.087	0.116	0.168
Stroke max.	[mm]	25	25	25	25	

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, extended without pressure ▶ with magnetic piston

▶ cushioning: elastic ▶ piston rod: external thread

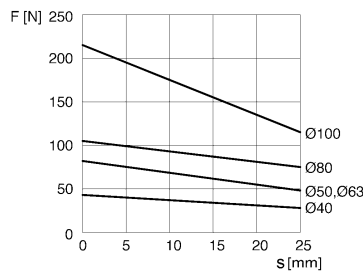
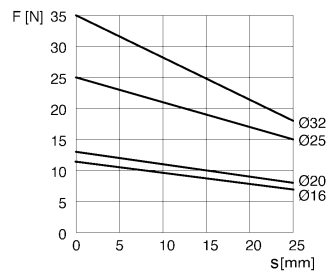
	Piston Ø Piston rod thread Ports Piston rod Ø	16	20	25	32	40
		M6x1 M5 8	M8x1,25 M5 10	M8x1,25 M5 10	M10x1,25 G 1/8 12	M10x1,25 G 1/8 12
	Stroke 5	R422001542	R422001543	R422001544	R422001545	R422001546
	10	R422001552	R422001553	R422001554	R422001555	R422001556
	15	R422001562	R422001563	R422001564	R422001565	R422001566
	20	R422001572	R422001573	R422001574	R422001575	R422001576
	25	R422001582	R422001583	R422001584	R422001585	R422001586
	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	R422001547	R422001548	R422001549	R422001550	
	10	R422001557	R422001558	R422001559	R422001560	
	15	R422001567	R422001568	R422001569	R422001570	
	20	R422001577	R422001578	R422001579	R422001580	
25	R422001587	R422001588	R422001589	R422001590		

Configurable product



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Extending piston force



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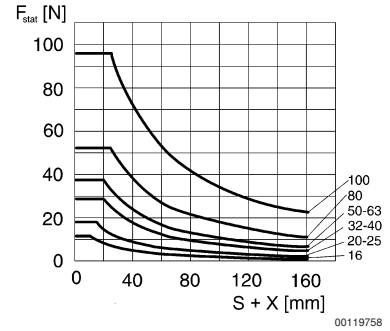
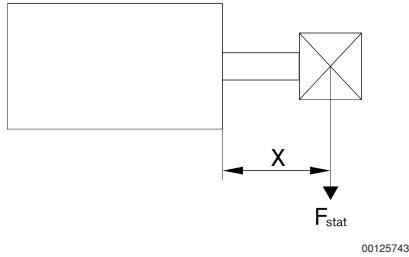
F = spring return force, s = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

- ▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, extended without pressure ▶ with magnetic piston
- ▶ cushioning: elastic ▶ piston rod: external thread

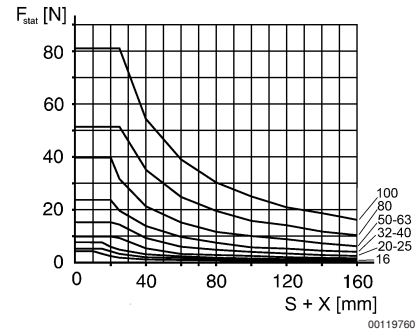
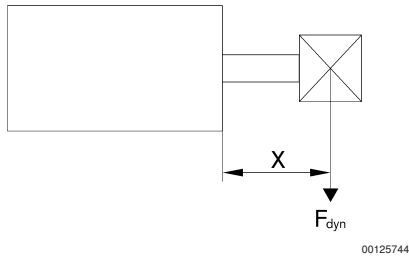
Maximum permissible lateral force, Static



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

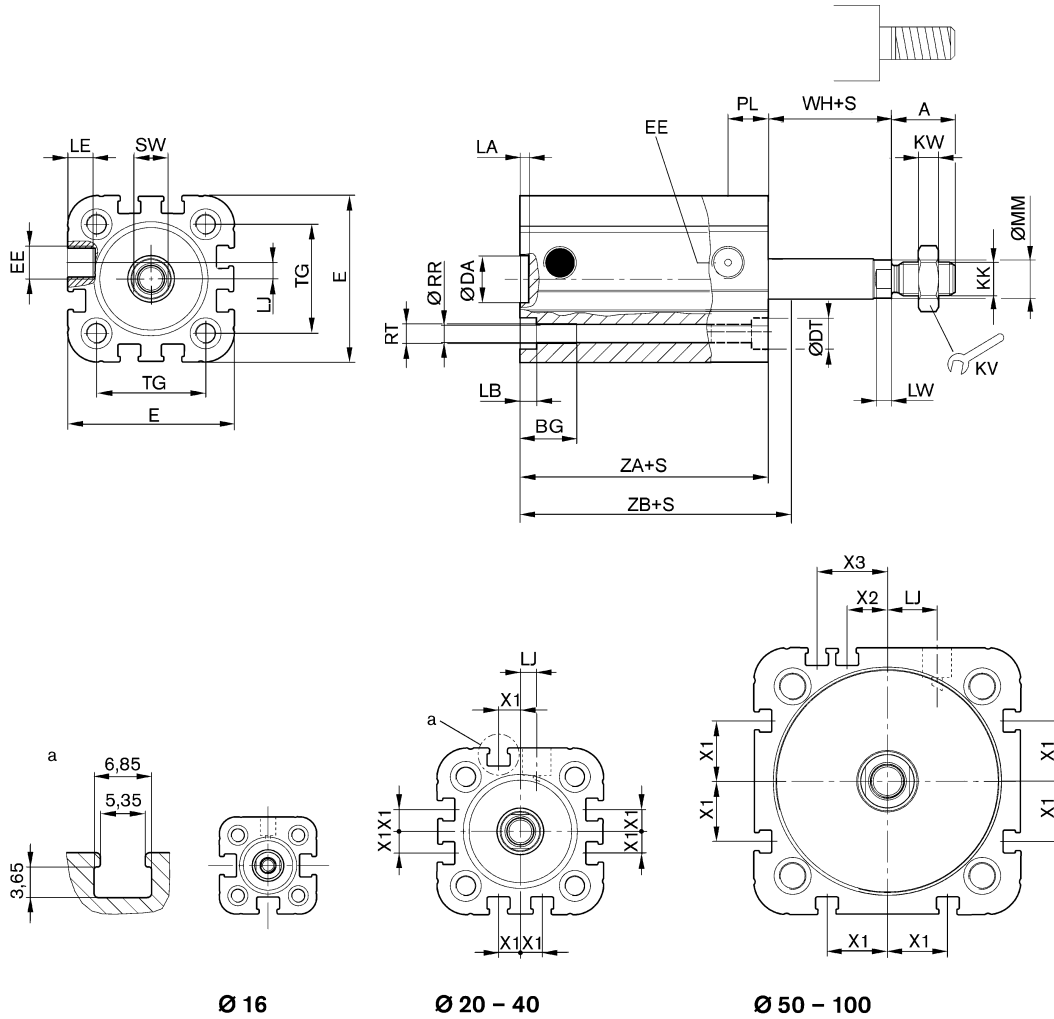
S = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

- Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, extended without pressure ► with magnetic piston
 ► cushioning: elastic ► piston rod: external thread

Ø 16 - 100 mm



Ø 16

Ø 20 - 40

Ø 50 - 100

00132002

S = stroke

Piston Ø	A 2)	BG	DA H11	DT	E	EE	KK	KV	KW	LA	LB	LE	LJ
16	12	15	10	6	29.3	M5	M6x1	10	3	2.5	3.5	4.5	0
20	16	15.5	12	7.5	36.3	M5	M8x1,25	13	4	2.5	4.5	4.5	4.5
25	16	15.5	12	8	40.3	M5	M8x1,25	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	LW	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA
16	4	8	8	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1
20	4	10	11	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1
25	4	10	11	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1
32	4.5	12	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, extended without pressure ▶ with magnetic piston

▶ cushioning: elastic ▶ piston rod: external thread

Piston Ø	LW	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA
40	4.5	12	12	5.1	M6	10	38	7,4 ±0,9	11	–	–	45 ±0,1
50	6	16	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1
63	6	16	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1
80	7	20	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1
100	7	25	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1

Piston Ø	ZB 2)											
16	39,7 ±0,8											
20	43,6 ±0,8											
25	44,5 ±0,9											
32	51,4 ±1											
40	52,4 ±1											
50	53,6 ±1											
63	57,4 ±1											
80	64,4 ±1											
100	76,7 ±1											

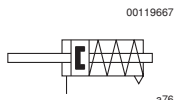
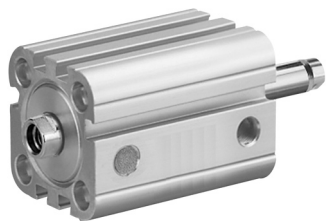
1) with cylinders with external thread extension, dimension "A" is increased by the value of the thread extension.

2) 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

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► Single-acting, retracted without pressure ► with magnetic piston
 ► cushioning: elastic ► piston rod: through, internal thread



Standards	ISO 21287
Compressed air connection	internal thread
Working pressure min./max.	1.5 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
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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.


Piston Ø	[mm]	16	20	25	32	40	
Retracting piston force	[N]	12	13	25	35	43	
Extending piston force	[N]	79	124	191	329	517	
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52	
Weight	0 mm stroke	[kg]	0.066	0.109	0.131	0.25	0.325
	+10 mm stroke	[kg]	0.02	0.029	0.032	0.052	0.06
Stroke max.	[mm]	25	25	25	25	25	

Piston Ø	[mm]	50	63	80	100	
Retracting piston force	[N]	82	82	105	215	
Extending piston force	[N]	789	1396	2292	3671	
Impact energy	[J]	0.64	0.75	0.75	1	
Weight	0 mm stroke	[kg]	0.486	0.732	1.21	2.324
	+10 mm stroke	[kg]	0.087	0.103	0.14	0.206
Stroke max.	[mm]	25	25	25	25	

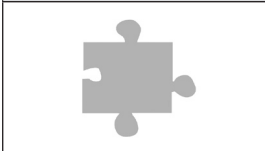
Piston rod cylinders → Standard cylinders

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: through, internal thread

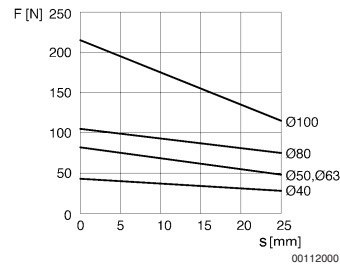
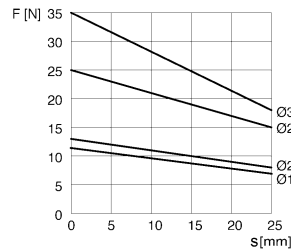
	Piston Ø Piston rod thread Ports Piston rod Ø	16 M4 M5 8	20 M6 M5 10	25 M6 M5 10	32 M8 G 1/8 12	40 M8 G 1/8 12	
	Stroke 5	R422001592	R422001593	R422001594	R422001595	R422001596	
	10	R422001602	R422001603	R422001604	R422001605	R422001606	
	15	R422001612	R422001613	R422001614	R422001615	R422001616	
	20	R422001622	R422001623	R422001624	R422001625	R422001626	
	25	R422001632	R422001633	R422001634	R422001635	R422001636	
	Piston Ø Piston rod thread Ports Piston rod Ø	50 M10 G 1/8 16	63 M10 G 1/8 16	80 M12 G 1/8 20	100 M12 G 1/8 25		
	Stroke 5	R422001597	R422001598	R422001599	R422001600		
	10	R422001607	R422001608	R422001609	R422001610		
	15	R422001617	R422001618	R422001619	R422001620		
	20	R422001627	R422001628	R422001629	R422001630		
	25	R422001637	R422001638	R422001639	R422001640		

Configurable product



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Retracting piston force



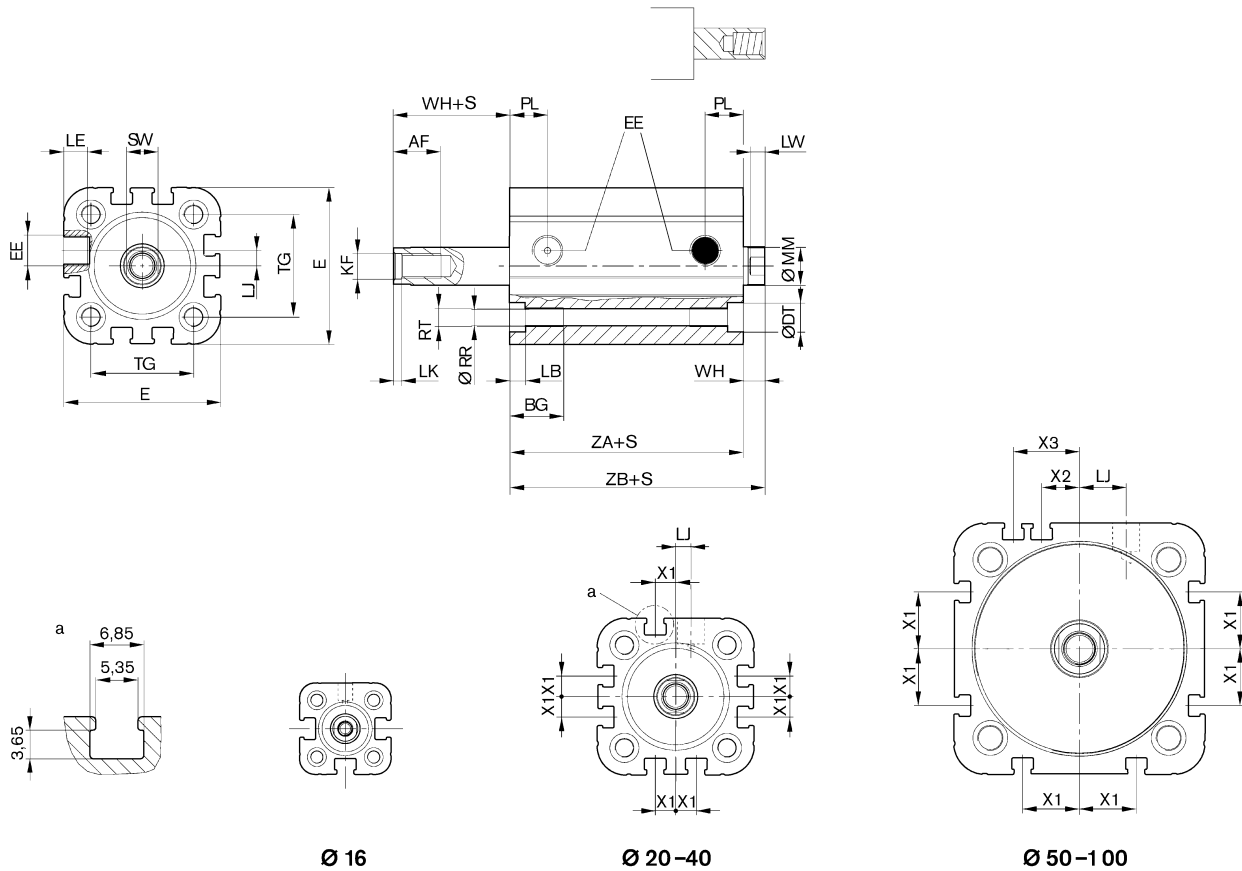
F = spring return force, s = return stroke

Piston rod cylinders → Standard cylinders

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: through, internal thread

Ø 16 - 100 mm



S = stroke

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Piston Ø	AF	BG	DT	E	EE	KF	LB	LE	LJ	LK	LW	MM f8	PL
16	10	15	6	29.3	M5	M4	3.5	4.5	-	1.6	4	8	8
20	12	15.5	7.5	36.3	M5	M6	4.5	4.5	4.5	2.5	4	10	11
25	12	15.5	8	40.3	M5	M6	4.5	4.5	4	2.5	4	10	11
32	12	17	9.2	50	G 1/8	M8	5	7.5	4.85	2.5	4.5	12	12
40	12	17	9.2	58	G 1/8	M8	5	7.5	9.85	2.5	4.5	12	12
50	16 3)	17	11	68.3	G 1/8	M10	5	7.5	12	3.5	6	16	12
63	16 3)	17	11	80	G 1/8	M10	5	7.5	14.8	3.5	6	16	12
80	20 4)	20	15	96	G 1/8	M12	5	7.5	22	3.5	7	20	14
100	20 4)	20	15	116	G 1/8	M12	5	7.5	27	3.5	7	25	16.5

Piston Ø	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)		
16	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1	39,7 ±0,8		
20	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1	43,6 ±0,8		
25	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1	44,5 ±0,9		
32	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1	51,4 ±1		
40	5.1	M6	10	38	7,4 ±0,9	11	-	-	45 ±0,1	52,4 ±1		
50	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1		

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

3) Stroke < 5 mm: AF= 11 mm

4) Stroke < 5 mm: AF= 15 mm

Piston rod cylinders → Standard cylinders

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: through, internal thread

Piston Ø	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)		
63	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1		
80	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1		
100	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1		

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

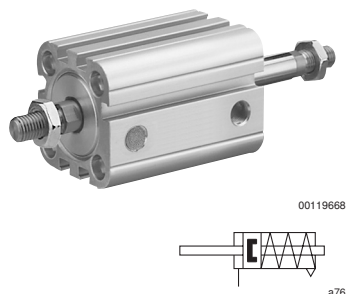
3) Stroke < 5 mm: AF= 11 mm

4) Stroke < 5 mm: AF= 15 mm

Piston rod cylinders → Standard cylinders

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: through, external thread



Standards	ISO 21287
Compressed air connection	internal thread
Working pressure min./max.	1.5 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 piston rod	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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.


Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	12	13	25	35	43
Extending piston force	[N]	79	124	191	329	517
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	0.074	0.147	0.169	0.297	0.372
	+10 mm stroke	0.02	0.029	0.032	0.052	0.06
Stroke max.	[mm]	25	25	25	25	25

Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	82	82	105	215
Extending piston force	[N]	789	1396	2292	3671
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	0.566	0.811	1.359	2.474
	+10 mm stroke	0.087	0.103	0.14	0.206
Stroke max.	[mm]	25	25	25	25


Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

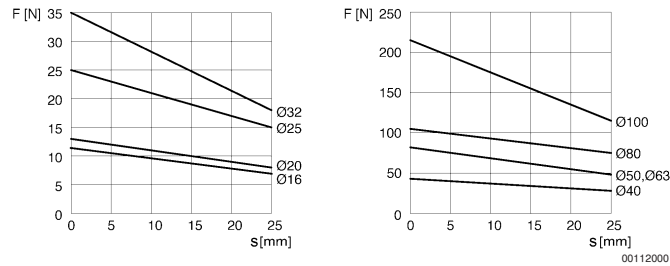
- ▶ Ø 16 - 100 mm ▶ Ports: M5 - G 1/8 ▶ Single-acting, retracted without pressure ▶ with magnetic piston
- ▶ cushioning: elastic ▶ piston rod: through, external thread

	Piston Ø Piston rod thread Ports Piston rod Ø	16 M6x1 M5 8	20 M8x1,25 M5 10	25 M8x1,25 M5 10	32 M10x1,25 G 1/8 12	40 M10x1,25 G 1/8 12	
	Stroke 5	R422001642	R422001643	R422001644	R422001645	R422001646	
	10	R422001652	R422001653	R422001654	R422001655	R422001656	
	15	R422001662	R422001663	R422001664	R422001665	R422001666	
	20	R422001672	R422001673	R422001674	R422001675	R422001676	
	25	R422001682	R422001683	R422001684	R422001685	R422001686	
	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	R422001647	R422001648	R422001649	R422001650		
	10	R422001657	R422001658	R422001659	R422001660		
	15	R422001667	R422001668	R422001669	R422001670		
	20	R422001677	R422001678	R422001679	R422001680		
	25	R422001687	R422001688	R422001689	R422001690		

Configurable product

	<p>This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.</p>
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Retracting piston force



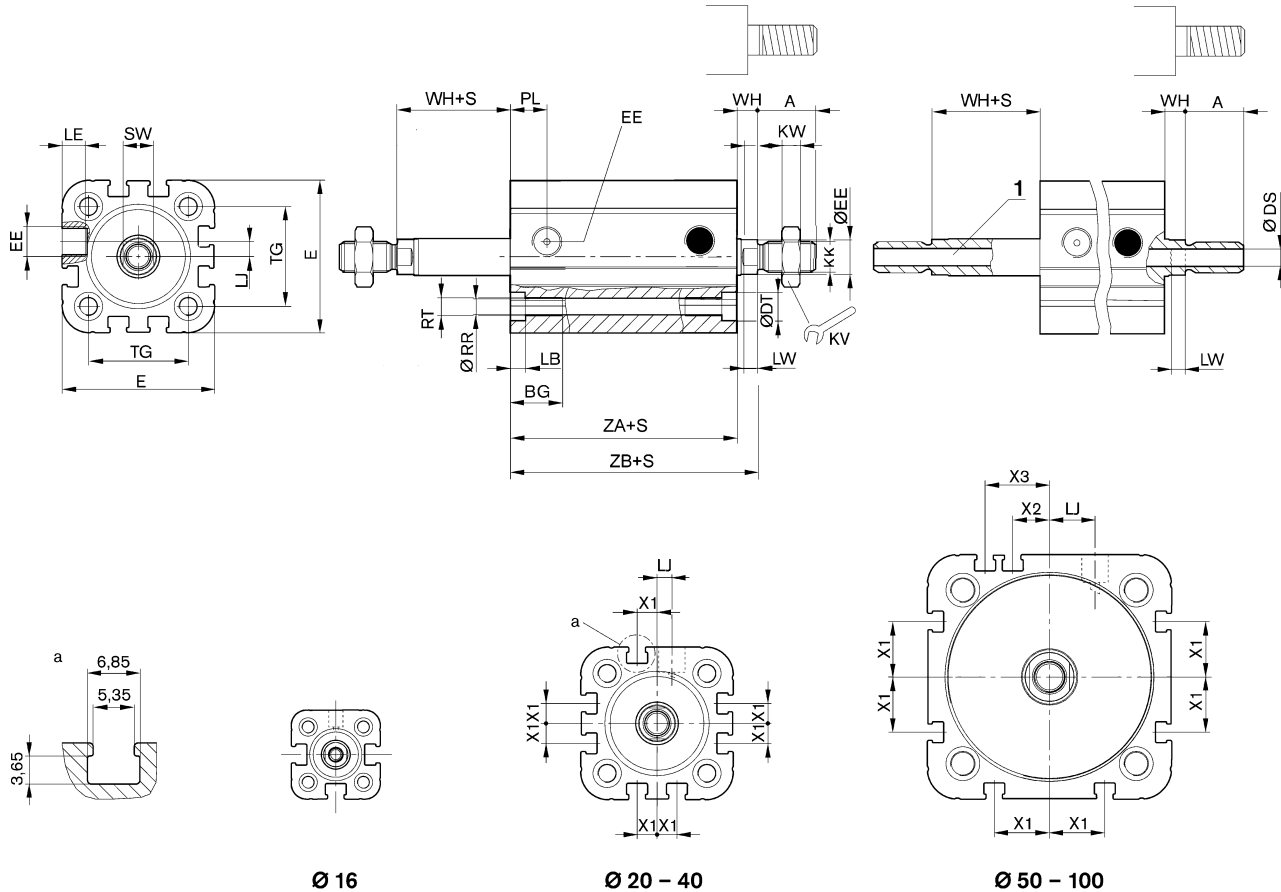
F = spring return force, s = return stroke

Piston rod cylinders → Standard cylinders

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: through, external thread

Ø 16 - 100 mm



1) Hollow piston rod (to be generated by Internet configurator)
 S = stroke

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Piston Ø	A 1)	AF	BG	Ø DS	DT	E	EE	KK 4)	KV	KW	LB	LE
16	12	10	15	2	6	29.3	M5	M6x1 / M5	10	3	3.5	4.5
20	16	12	15.5	3.8	7.5	36.3	M5	M8x1,25 / G 1/8	13	4	4.5	4.5
25	16	12	15.5	3.8	8	40.3	M5	M8x1,25 / G 1/8	13	4	4.5	4.5
32	19	12	17	4.5	9.2	50	G 1/8	M10x1,25 / G 1/8	17	5	5	7.5
40	19	12	17	4.5	9.2	58	G 1/8	M10x1,25 / G 1/8	17	5	5	7.5
50	22	16 3)	17	6	11	68.3	G 1/8	M12x1,25 / G 1/4	19	6	5	7.5
63	22	16 3)	17	6	11	80	G 1/8	M12x1,25 / G 1/4	19	6	5	7.5
80	28	20 5)	20	8	15	96	G 1/8	M16x1,5 / M16x1,5	24	8	5	7.5
100	28	20 5)	20	8	15	116	G 1/8	M16x1,5 / M16x1,5	24	8	5	7.5

Piston Ø	LJ	LW	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA
16	0	4	8	8	3.3	M4	7	18	4,8 ±0,9	–	–	–	34,9 ±0,1
20	4.5	4	10	11	4.2	M5	8	22	6,3 ±0,9	4.2	–	–	37,3 ±0,1
25	4	4	10	11	4.2	M5	8	26	5,6 ±0,9	4.5	–	–	39 ±0,1
32	4.85	4.5	12	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	–	–	44 ±0,1
40	9.85	4.5	12	12	5.1	M6	10	38	7,4 ±0,9	11	–	–	45 ±0,1
50	12	6	16	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1
63	14.8	6	16	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for detailed information
 Pneumatics catalog, online PDF, as of 2010-01-27, © Bosch Rexroth AG, subject to change

Piston rod cylinders → Standard cylinders

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: through, external thread

Piston Ø	LJ	LW	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA
80	22	7	20	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1
100	27	7	25	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1

Piston Ø	ZB 2)												
16	39,7 ±0,8												
20	43,6 ±0,8												
25	44,5 ±0,9												
32	51,4 ±1												
40	52,4 ±1												
50	53,6 ±1												
63	57,4 ±1												
80	64,4 ±1												
100	76,7 ±1												

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

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

3) Stroke < 5 mm: AF= 11 mm

4) solid piston rod/hollow piston rod

5) Stroke < 5 mm: AF= 15 mm

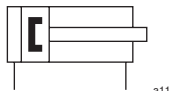
Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional



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a11

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
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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135 °C -20 °C ≤ Ta ≤ 60 °C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.


Piston Ø	[mm]	16	20	25	32	40	
Retracting piston force	[N]	91	137	216	364	560	
Extending piston force	[N]	106	164	259	422	665	
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52	
Weight	0 mm stroke	[kg]	0.059	0.099	0.123	0.233	0.303
	+10 mm stroke	[kg]	0.016	0.023	0.026	0.042	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	
Extending piston force	[N]	1035	1647	2656	4145	
Impact energy	[J]	0.64	0.75	0.75	1	
Weight	0 mm stroke	[kg]	0.448	0.689	1.114	2.153
	+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

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

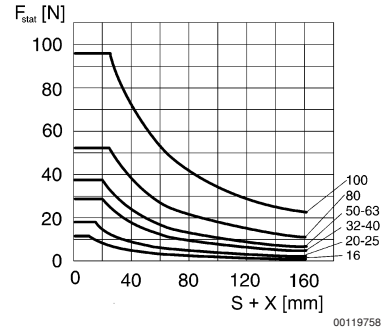
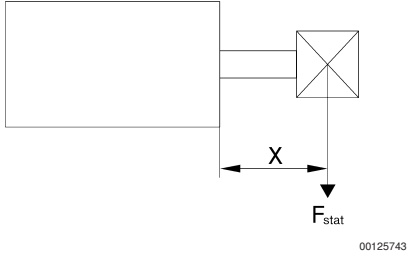
	Piston Ø Piston rod thread Ports Piston rod Ø	16 M4 M5 8	20 M6 M5 10	25 M6 M5 10	32 M8 G 1/8 12	40 M8 G 1/8 12	
	Stroke 5	R422001002	R422001003	R422001004	R422001005	R422001006	
	10	R422001012	R422001013	R422001014	R422001015	R422001016	
	15	R422001022	R422001023	R422001024	R422001025	R422001026	
	20	R422001032	R422001033	R422001034	R422001035	R422001036	
	25	R422001042	R422001043	R422001044	R422001045	R422001046	
	30	R422001052	R422001053	R422001054	R422001055	R422001056	
	40	R422001062	R422001063	R422001064	R422001065	R422001066	
	50	R422001072	R422001073	R422001074	R422001075	R422001076	
	60	R422001082	R422001083	R422001084	R422001085	R422001086	
	80	-	-	-	R422001095	R422001096	
	100	-	-	-	R422001105	R422001106	
	125	-	-	-	R422001115	R422001116	
	150	-	-	-	R422001125	R422001126	
		Piston Ø Piston rod thread Ports Piston rod Ø	50 M10 G 1/8 16	63 M10 G 1/8 16	80 M12 G 1/8 20	100 M12 G 1/8 25	
		Stroke 5	R422001007	R422001008	R422001009	R422001010	
		10	R422001017	R422001018	R422001019	R422001020	
		15	R422001027	R422001028	R422001029	R422001030	
	20	R422001037	R422001038	R422001039	R422001040		
	25	R422001047	R422001048	R422001049	R422001050		
	30	R422001057	R422001058	R422001059	R422001060		
	40	R422001067	R422001068	R422001069	R422001070		
	50	R422001077	R422001078	R422001079	R422001080		
	60	R422001087	R422001088	R422001089	R422001090		
	80	R422001097	R422001098	R422001099	R422001100		
	100	R422001107	R422001108	R422001109	R422001110		
	125	R422001117	R422001118	R422001119	R422001120		
	150	R422001127	R422001128	R422001129	R422001130		

Configurable product	
	This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

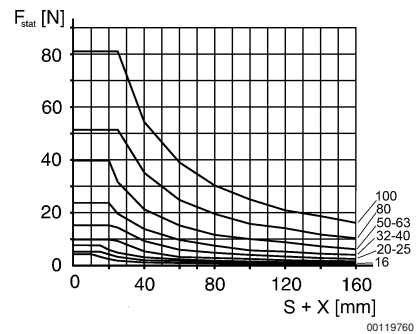
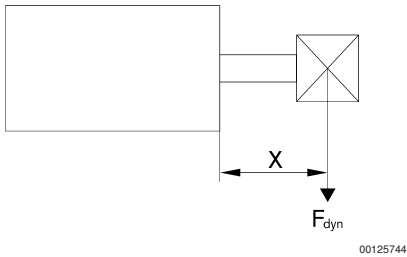
► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

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

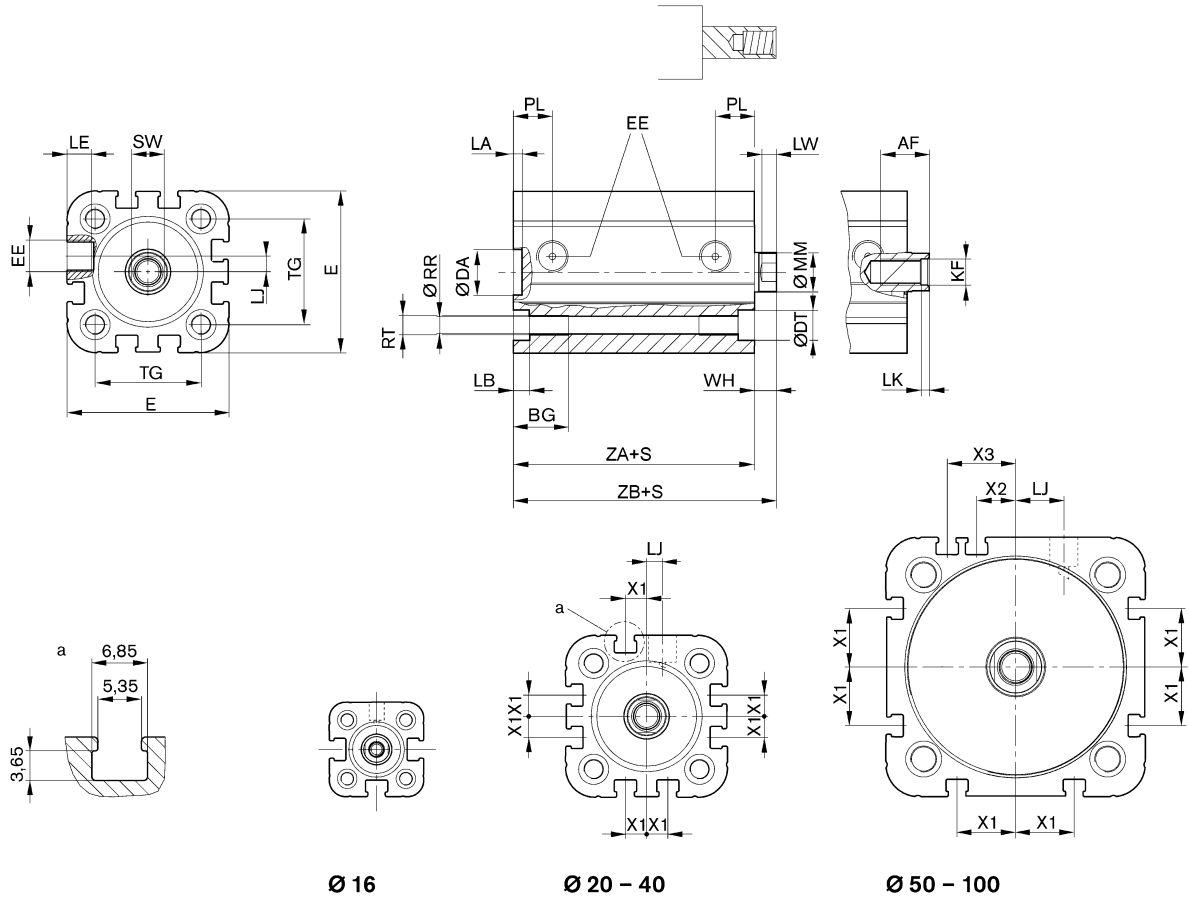
S = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

Ø 16 - 100 mm



S = stroke

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Piston Ø	AF	BG	DA H11	DT	E	EE	KF	LA	LB	LE	LJ	LK	LW
16	10	15	10	6	29.3	M5	M4	2.5	3.5	4.5	0	1.6	4
20	12	15.5	12	7.5	36.3	M5	M6	2.5	4.5	4.5	4.5	2.5	4
25	12	15.5	12	8	40.3	M5	M6	2.5	4.5	4.5	4	2.5	4
32	12	17	14	9.2	50	G 1/8	M8	2.5	5	7.5	4.85	2.5	4.5
40	12	17	14	9.2	58	G 1/8	M8	2.5	5	7.5	9.85	2.5	4.5
50	16	17	18	11	68.3	G 1/8	M10	2.5	5	7.5	12	3.5	6
63	16	17	18	11	80	G 1/8	M10	2.5	5	7.5	14.8	3.5	6
80	20	20	23	15	96	G 1/8	M12	3	5	7.5	22	3.5	7
100	20	20	28	15	116	G 1/8	M12	3	5	7.5	27	3.5	7

Piston Ø	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)
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

2) 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**

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: internal thread ► ATEX optional

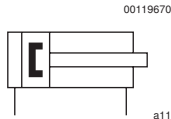
Piston Ø	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)
50	16	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1
63	16	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1
80	20	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1
100	25	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1

2) 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

► Ø 16 - 100 mm ► 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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135°C -20°C ≤ Ta ≤ 60°C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.


Piston Ø		[mm]	16	20	25	32	40
Retracting piston force		[N]	91	137	216	364	560
Extending piston force		[N]	106	164	259	422	665
Impact energy		[J]	0.11	0.15	0.2	0.4	0.52
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
Extending piston force		[N]	1035	1647	2656	4145
Impact energy		[J]	0.64	0.75	0.75	1
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

► Ø 16 - 100 mm ► 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 M6x1 M5 8	20 M8x1,25 M5 10	25 M8x1,25 M5 10	32 M10x1,25 G 1/8 12	40 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



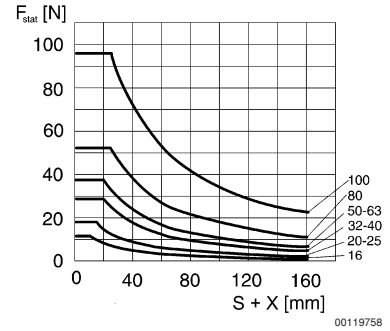
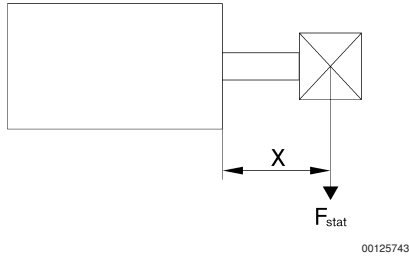
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Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: external thread ► ATEX optional

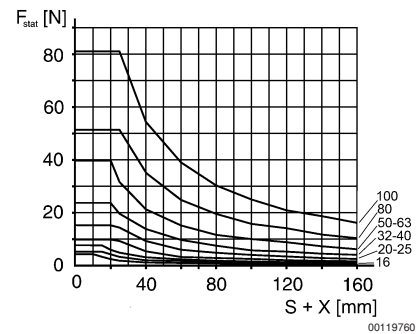
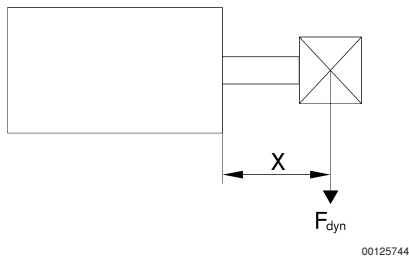
Maximum permissible lateral force, Static



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

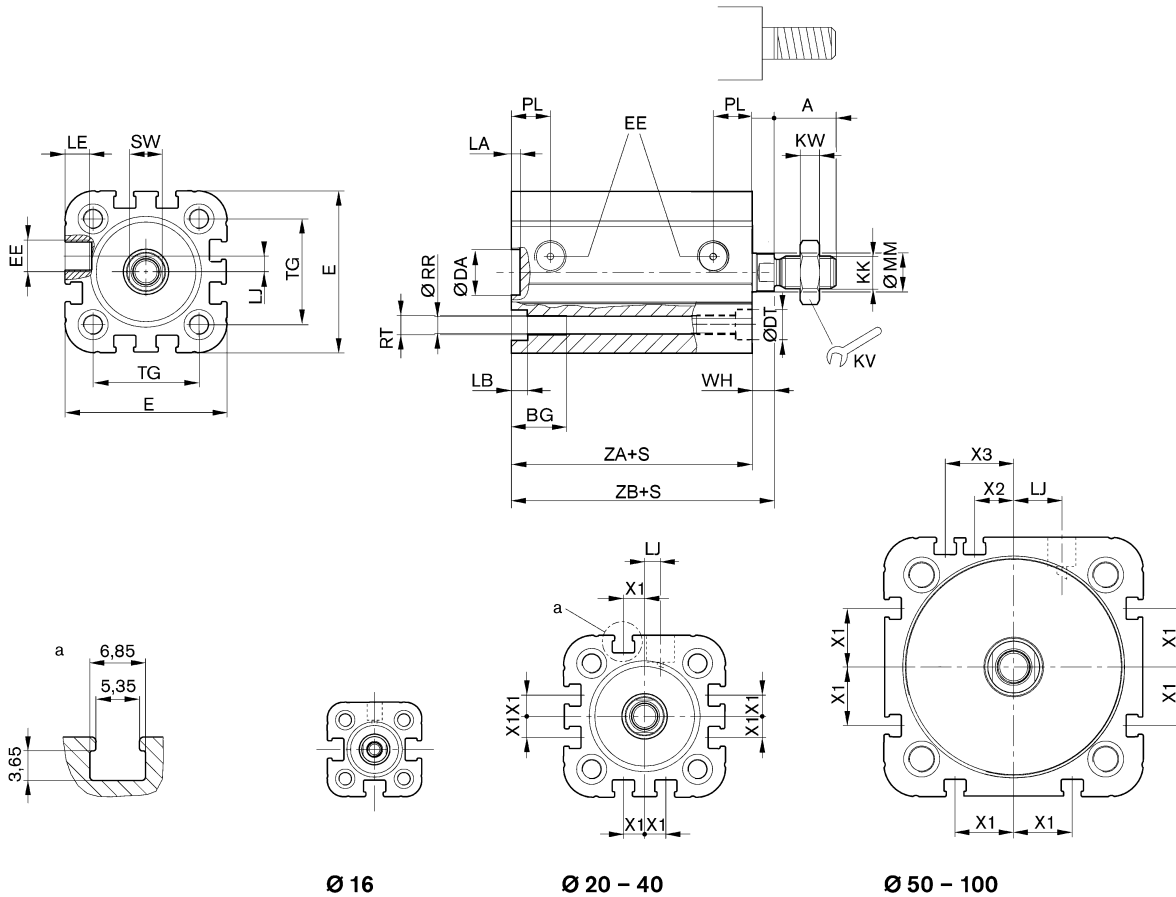
S = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► 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

S = stroke

00132003

Piston Ø	A 1)	BG	DA H11	DT	E	EE	KK	KV	KW	LA	LB	LE	LJ
16	12	15	10	6	29.3	M5	M6x1	10	3	2.5	3.5	4.5	-
20	16	15.5	12	7.5	36.3	M5	M8x1,25	13	4	2.5	4.5	4.5	4.5
25	16	15.5	12	8	40.3	M5	M8x1,25	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 2)	X1	X2	X3	ZA	ZB 2)
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

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

2) 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

► Ø 16 - 100 mm ► 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 2)	X1	X2	X3	ZA	ZB 2)
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
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

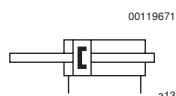
1) with cylinders with external thread extension, dimension "A" is increased by the value of the thread extension.

2) 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

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal 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
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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135 °C -20 °C ≤ Ta ≤ 60 °C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.


Piston Ø	[mm]	16	20	25	32	40	
Retracting piston force	[N]	91	137	216	364	560	
Extending piston force	[N]	91	137	216	364	560	
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52	
Weight	0 mm stroke	[kg]	0.064	0.107	0.128	0.246	0.319
	+10 mm stroke	[kg]	0.02	0.029	0.032	0.052	0.06
Stroke max.	[mm]	300	300	300	300	300	

Piston Ø	[mm]	50	63	80	100	
Retracting piston force	[N]	871	1478	2397	3886	
Extending piston force	[N]	871	1478	2397	3886	
Impact energy	[J]	0.64	0.75	0.75	1	
Weight	0 mm stroke	[kg]	0.472	0.718	1.182	2.278
	+10 mm stroke	[kg]	0.087	0.103	0.14	0.206
Stroke max.	[mm]	300	300	500	500	

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional

	Piston Ø Piston rod thread Ports Piston rod Ø	16 M4 M5 8	20 M6 M5 10	25 M6 M5 10	32 M8 G 1/8 12	40 M8 G 1/8 12	
	Stroke 5	R422001692	R422001693	R422001694	R422001695	R422001696	
	10	R422001702	R422001703	R422001704	R422001705	R422001706	
	15	R422001712	R422001713	R422001714	R422001715	R422001716	
	20	R422001722	R422001723	R422001724	R422001725	R422001726	
	25	R422001732	R422001733	R422001734	R422001735	R422001736	
	Piston Ø Piston rod thread Ports Piston rod Ø	50 M10 G 1/8 16	63 M10 G 1/8 16	80 M12 G 1/8 20	100 M12 G 1/8 25		
	Stroke 5	R422001697	R422001698	R422001699	R422001700		
	10	R422001707	R422001708	R422001709	R422001710		
	15	R422001717	R422001718	R422001719	R422001720		
	20	R422001727	R422001728	R422001729	R422001730		
	25	R422001737	R422001738	R422001739	R422001740		

Configurable product



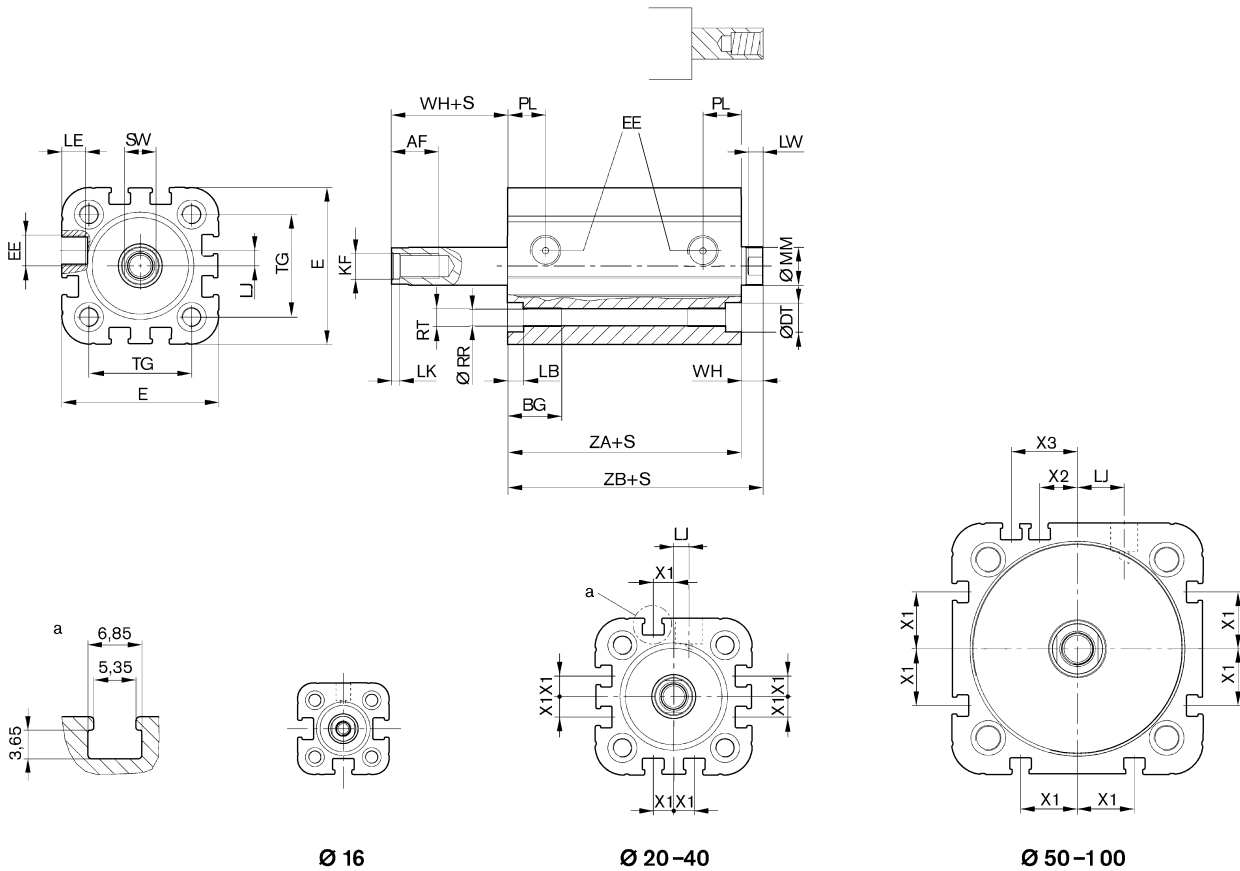
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Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional

Ø 16 - 100 mm



S = stroke

00132001

Piston Ø	AF	BG	DT	E	EE	KF	LB	LE	LJ	LK	LW	MM f8	PL
16	10	15	6	29.3	M5	M4	3.5	4.5	-	1.6	4	8	8
20	12	15.5	7.5	36.3	M5	M6	4.5	4.5	4.5	2.5	4	10	11
25	12	15.5	8	40.3	M5	M6	4.5	4.5	4	2.5	4	10	11
32	12	17	9.2	50	G 1/8	M8	5	7.5	4.85	2.5	4.5	12	12
40	12	17	9.2	58	G 1/8	M8	5	7.5	9.85	2.5	4.5	12	12
50	16 3)	17	11	68.3	G 1/8	M10	5	7.5	12	3.5	6	16	12
63	16 3)	17	11	80	G 1/8	M10	5	7.5	14.8	3.5	6	16	12
80	20 4)	20	15	96	G 1/8	M12	5	7.5	22	3.5	7	20	14
100	20 4)	20	15	116	G 1/8	M12	5	7.5	27	3.5	7	25	16.5

Piston Ø	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)		
16	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1	39,7 ±0,8		
20	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1	43,6 ±0,8		
25	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1	44,5 ±0,9		
32	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1	51,4 ±1		
40	5.1	M6	10	38	7,4 ±0,9	11	-	-	45 ±0,1	52,4 ±1		
50	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1	53,6 ±1		

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

3) Stroke < 5 mm: AF= 11 mm

4) Stroke < 5 mm: AF= 15 mm

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, internal thread ► ATEX optional

Piston Ø	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA	ZB 2)		
63	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1	57,4 ±1		
80	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1	64,4 ±1		
100	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1	76,7 ±1		

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

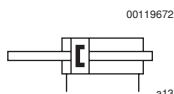
3) Stroke < 5 mm: AF= 11 mm

4) Stroke < 5 mm: AF= 15 mm

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, 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 piston rod	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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID II 2G2D c T4 T135 °C -20 °C ≤ Ta ≤ 60 °C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.


Piston Ø	[mm]	16	20	25	32	40	
Retracting piston force	[N]	91	137	216	364	560	
Extending piston force	[N]	91	137	216	364	560	
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52	
Weight	0 mm stroke	[kg]	0.072	0.145	0.166	0.293	0.366
	+10 mm stroke	[kg]	0.02	0.029	0.032	0.052	0.06
Stroke max.	[mm]	300	300	300	300	300	

Piston Ø	[mm]	50	63	80	100	
Retracting piston force	[N]	871	1478	2397	3886	
Extending piston force	[N]	871	1478	2397	3886	
Impact energy	[J]	0.64	0.75	0.75	1	
Weight	0 mm stroke	[kg]	0.552	0.797	1.331	2.428
	+10 mm stroke	[kg]	0.087	0.103	0.14	0.206
Stroke max.	[mm]	300	300	500	500	

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, external thread ► ATEX optional

	Piston Ø Piston rod thread Ports Piston rod Ø	16 M6x1 M5 8	20 M8x1,25 M5 10	25 M8x1,25 M5 10	32 M10x1,25 G 1/8 12	40 M10x1,25 G 1/8 12	
	Stroke 5	R422001742	R422001743	R422001744	R422001745	R422001746	
	10	R422001752	R422001753	R422001754	R422001755	R422001756	
	15	R422001762	R422001763	R422001764	R422001765	R422001766	
	20	R422001772	R422001773	R422001774	R422001775	R422001776	
	25	R422001782	R422001783	R422001784	R422001785	R422001786	
	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	R422001747	R422001748	R422001749	R422001750		
	10	R422001757	R422001758	R422001759	R422001760		
	15	R422001767	R422001768	R422001769	R422001770		
	20	R422001777	R422001778	R422001779	R422001780		
25	R422001787	R422001788	R422001789	R422001790			

Configurable product



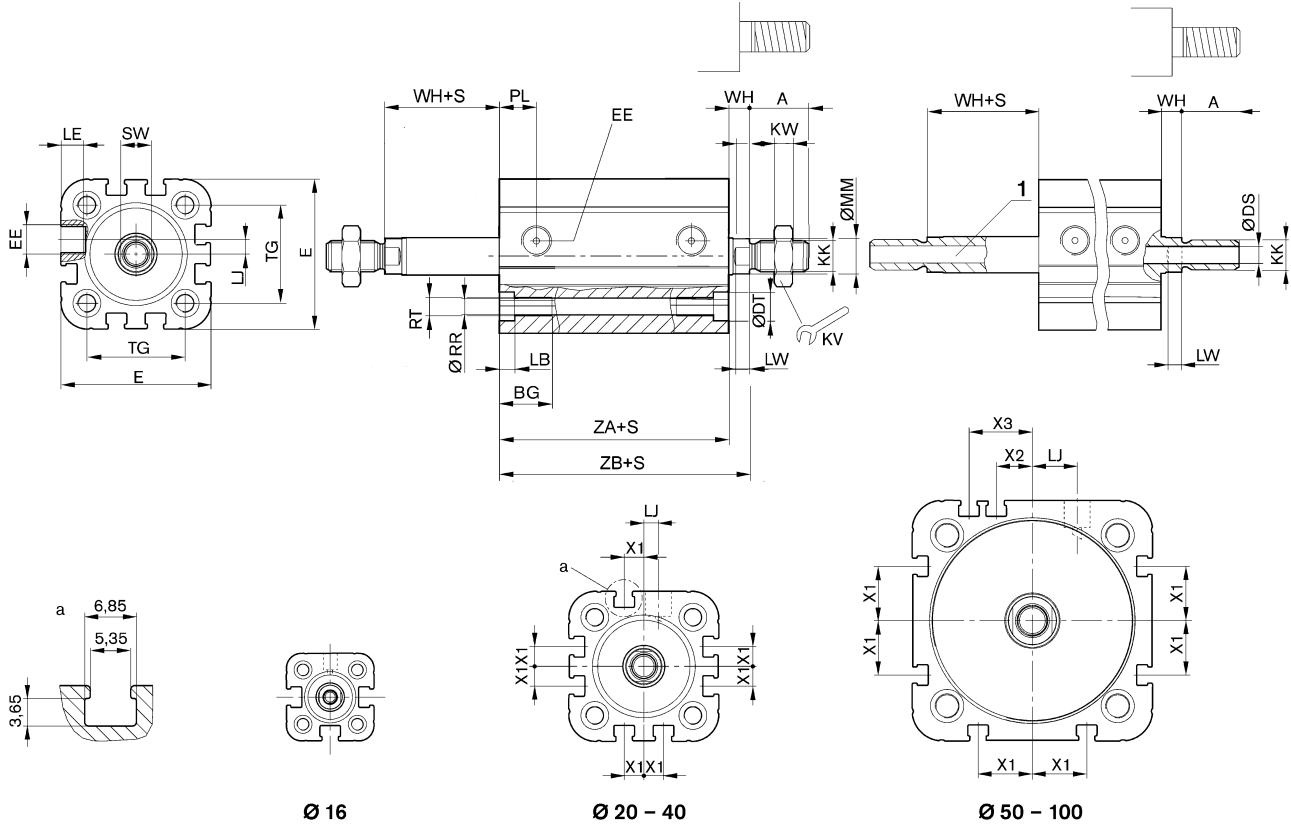
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Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod through, external thread ► ATEX optional

Ø 16 - 100 mm



Ø 16

Ø 20 - 40

Ø 50 - 100

00119661

1) Hollow piston rod (to be generated by Internet configurator)
S = stroke

Piston Ø	A 1)	BG	Ø DS	DT	E	EE	KK 4)	KV	KW	LB	LE	LJ
16	12	15	2	6	29.3	M5	M6x1 / -	10	3	3.5	4.5	0
20	16	15.5	3.8	7.5	36.3	M5	M8x1,25 / G 1/8	13	4	4.5	4.5	4.5
25	16	15.5	3.8	8	40.3	M5	M8x1,25 / G 1/8	13	4	4.5	4.5	4
32	19	17	4.5	9.2	50	G 1/8	M10x1,25 / G 1/8	17	5	5	7.5	4.85
40	19	17	4.5	9.2	58	G 1/8	M10x1,25 / G 1/8	17	5	5	7.5	9.85
50	22	17	6	11	68.3	G 1/8	M12x1,25 / G 1/4	19	6	5	7.5	12
63	22	17	6	11	80	G 1/8	M12x1,25 / G 1/4	19	6	5	7.5	14.8
80	28	20	8	15	96	G 1/8	M16x1,5 / M16x1,5	24	8	5	7.5	22
100	28	20	8	15	116	G 1/8	M16x1,5 / M16x1,5	24	8	5	7.5	27

Piston Ø	LK	LW	MM f8	PL	RR	RT 6H	SW	TG	WH 2)	X1	X2	X3	ZA
16	1.6	4	8	8	3.3	M4	7	18	4,8 ±0,9	-	-	-	34,9 ±0,1
20	2.5	4	10	11	4.2	M5	8	22	6,3 ±0,9	4.2	-	-	37,3 ±0,1
25	2.5	4	10	11	4.2	M5	8	26	5,6 ±0,9	4.5	-	-	39 ±0,1
32	2.5	4.5	12	12	5.1	M6	10	32.5	7,4 ±0,9	6.5	-	-	44 ±0,1
40	2.5	4.5	12	12	5.1	M6	10	38	7,4 ±0,9	11	-	-	45 ±0,1
50	3.5	6	16	12	6.7	M8	13	46.5	8,4 ±0,9	13	4	13	45,5 ±0,1
63	3.5	6	16	12	6.7	M8	13	56.5	8,5 ±0,9	18	12	21	49 ±0,1
80	3.5	7	20	14	8.5	M10	16	72	9,8 ±1	18	16.5	25.5	54,7 ±0,1
100	3.5	7	25	16.5	8.5	M10	21	89	9,8 ±1	20	20	29	67 ±0,1

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for detailed information
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Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: through, external thread ► ATEX optional

Piston Ø	ZB 2)												
16	39,7 ±0,8												
20	43,6 ±0,8												
25	44,5 ±0,9												
32	51,4 ±1												
40	52,4 ±1												
50	53,6 ±1												
63	57,4 ±1												
80	64,4 ±1												
100	76,7 ±1												

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

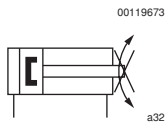
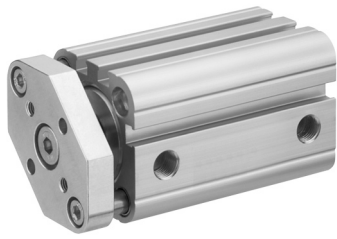
2) With cylinders with a piston rod extension, dimensions "WH" and "ZB" are increased by the value of the piston rod extension.

4) solid piston rod/hollow piston rod

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, internal thread



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
Front plate	Aluminum
Nut for piston rod	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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

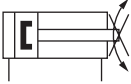
Piston Ø	[mm]	16	20	25	32	40
Retracting piston force	[N]	91	137	216	364	560
Extending piston force	[N]	106	164	259	422	665
Impact energy	[J]	0.11	0.15	0.2	0.4	0.52
Weight	0 mm stroke	0.071	0.119	0.155	0.303	0.383
	+10 mm stroke	0.019	0.026	0.03	0.05	0.06
Stroke max.	[mm]	300	300	300	300	300


Piston Ø	[mm]	50	63	80	100
Retracting piston force	[N]	871	1478	2397	3886
Extending piston force	[N]	1035	1647	2656	4145
Impact energy	[J]	0.64	0.75	0.75	1
Weight	0 mm stroke	0.626	0.907	1.462	2.641
	+10 mm stroke	0.09	0.107	0.136	0.188
Stroke max.	[mm]	300	300	500	500

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, internal thread

	Piston Ø Piston rod thread Ports Piston rod Ø	16 M4 M5 8	20 M6 M5 10	25 M6 M5 10	32 M8 G 1/8 12	40 M8 G 1/8 12	
	Stroke 5	R422001262	R422001263	R422001264	R422001265	R422001266	
	10	R422001272	R422001273	R422001274	R422001275	R422001276	
	15	R422001282	R422001283	R422001284	R422001285	R422001286	
	20	R422001292	R422001293	R422001294	R422001295	R422001296	
	25	R422001302	R422001303	R422001304	R422001305	R422001306	
	30	R422001312	R422001313	R422001314	R422001315	R422001316	
	40	R422001322	R422001323	R422001324	R422001325	R422001326	
	50	R422001332	R422001333	R422001334	R422001335	R422001336	
	60	R422001342	R422001343	R422001344	R422001345	R422001346	
	80	-	-	-	R422001355	R422001356	
	100	-	-	-	R422001365	R422001366	
	125	-	-	-	R422001375	R422001376	
	150	-	-	-	R422001385	R422001386	
		Piston Ø Piston rod thread Ports Piston rod Ø	50 M10 G 1/8 16	63 M10 G 1/8 16	80 M12 G 1/8 20	100 M12 G 1/8 25	
		Stroke 5	R422001267	R422001268	R422001269	R422001270	
		10	R422001277	R422001278	R422001279	R422001280	
		15	R422001287	R422001288	R422001289	R422001290	
		20	R422001297	R422001298	R422001299	R422001300	
		25	R422001307	R422001308	R422001309	R422001310	
		30	R422001317	R422001318	R422001319	R422001320	
		40	R422001327	R422001328	R422001329	R422001330	
		50	R422001337	R422001338	R422001339	R422001340	
		60	R422001347	R422001348	R422001349	R422001350	
		80	R422001357	R422001358	R422001359	R422001360	
		100	R422001367	R422001368	R422001369	R422001370	
	125	R422001377	R422001378	R422001379	R422001380		
	150	R422001387	R422001388	R422001389	R422001390		

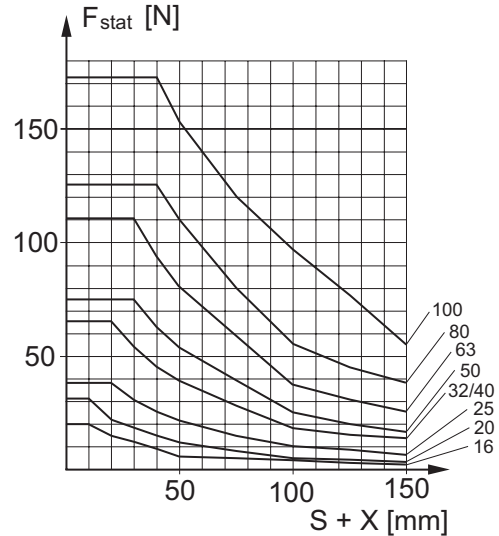
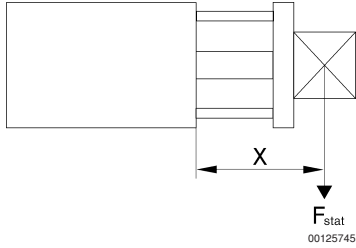
Configurable product	
	<p>This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.</p>

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, internal thread

Maximum permissible lateral force, Static

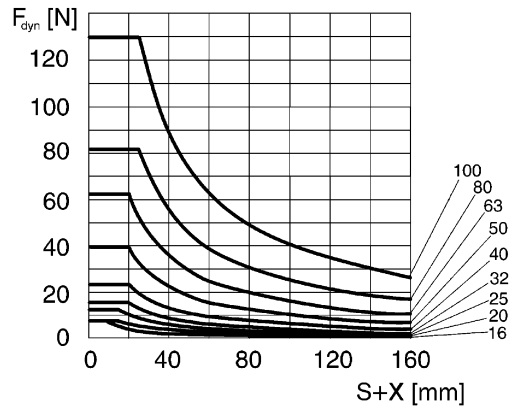
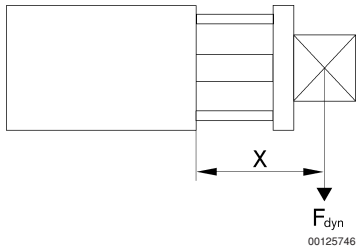


F_{stat} = static lateral force

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

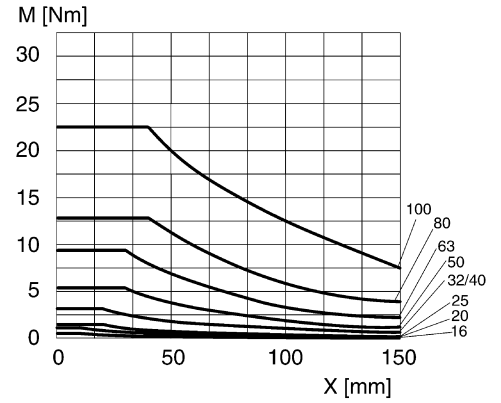
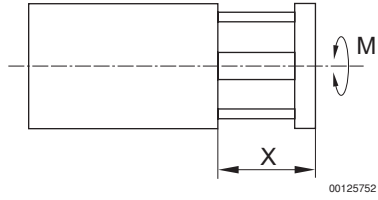
S = stroke

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, internal thread

Max. permissible torque



M = max. permissible torque

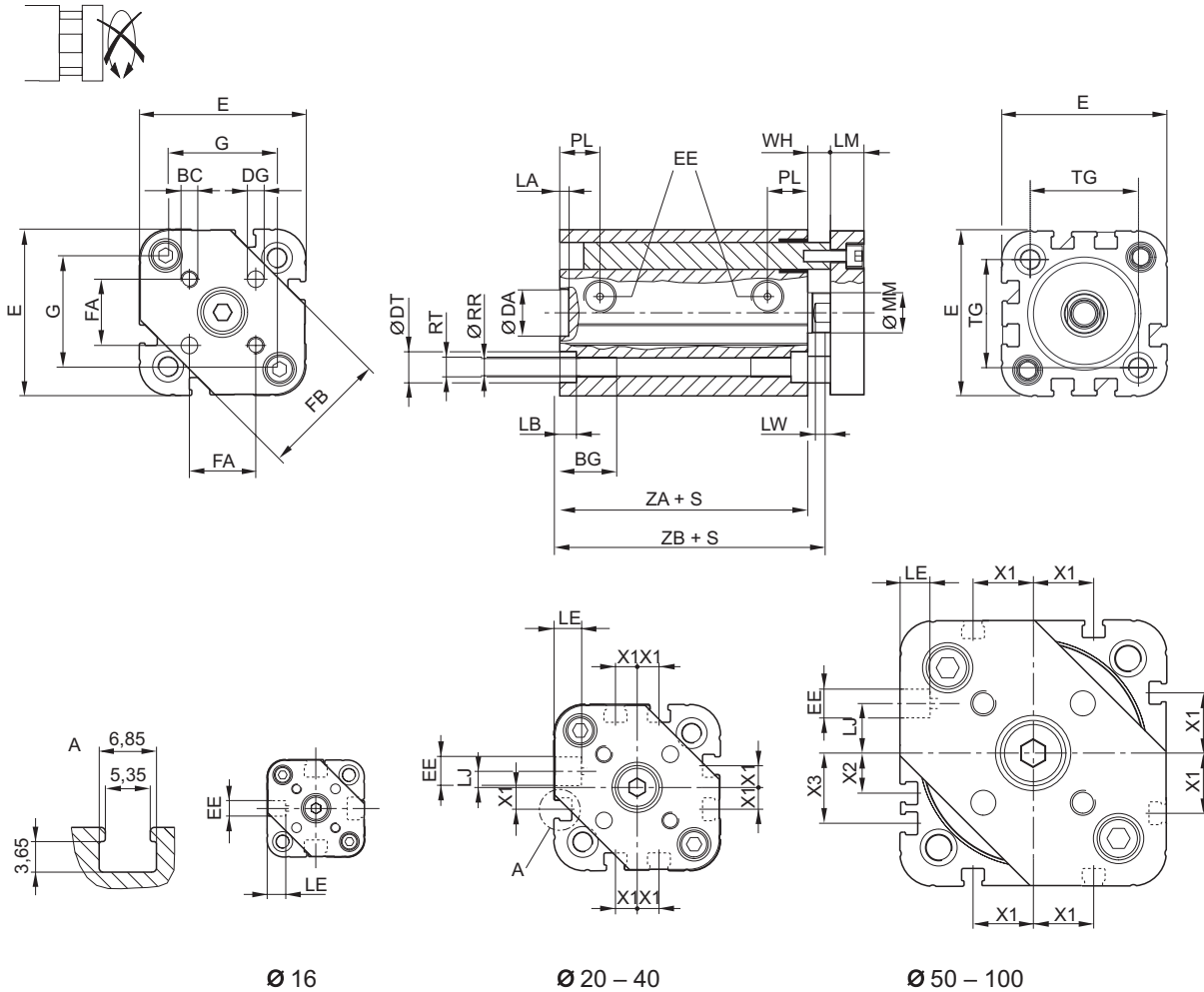
X = spacing between torque contact surface and cylinder cover

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, internal thread

Ø 16 - 100 mm



S = stroke
 G = distance between the guide rods
 TG = distance between the mounting threads

00119662

Piston Ø	BC	BG	DA H11	DG H13	DT	E	EE	FA	FB	G	LA	LB
16	M3	15	10	3	6	29.3	M5	9,9 ±0,1	20	19	2.5	3.5
20	M4	15.5	12	4	7.5	36.3	M5	12 ±0,1	24	25	2.5	4.5
25	M5	15.5	12	5	8	40.3	M5	15,6 ±0,1	30	27	2.5	4.5
32	M5	17	14	5	9.2	50	G 1/8	19,8 ±0,1	38	34	2.5	5
40	M5	17	14	5	9.2	58	G 1/8	23,3 ±0,1	44	42	2.5	5
50	M6	17	18	6	11	68.3	G 1/8	29,7 ±0,1	54	49	2.5	5
63	M6	17	18	6	11	80	G 1/8	35,4 ±0,1	62	60	2.5	5
80	M8	20	23	8	15	96	G 1/8	46 ±0,1	80	72	3	5
100	M10	20	28	10	15	116	G 1/8	56,6 ±0,1	100	92	3	5

Piston Ø	LE	LJ	LM	LW	MM f8	PL	RR	RT 6H	TG	WH	X1	X2	X3
16	4.5	-	6	4	8	8	3.3	M4	18	4,8 ±0,9	-	-	-
20	4.5	4.5	8	4	10	11	4.2	M5	22	6,3 ±0,9	4.2	-	-
25	4.5	4	8	4	10	11	4.2	M5	26	5,6 ±0,9	4.5	-	-

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for detailed information Pneumatics catalog, online PDF, as of 2010-01-27, © Bosch Rexroth AG, subject to change

Piston rod cylinders → Standard cylinders

Compact cylinder, ISO 21287, Series CCI

► Ø 16 - 100 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: elastic ► piston rod: non-rotating, with front plate, internal thread

Piston Ø	LE	LJ	LM	LW	MM f8	PL	RR	RT 6H	TG	WH	X1	X2	X3
32	7.5	4.85	10	4.5	12	12	5.1	M6	32.5	7,4 ±0,9	6.5	-	-
40	7.5	9.85	10	4.5	12	12	5.1	M6	38	7,4 ±0,9	11	-	-
50	7.5	12	12	6	16	12	6.7	M8	46.5	8,4 ±0,9	13	4	13
63	7.5	14.8	12	6	16	12	6.7	M8	56.5	8,5 ±0,9	18	12	21
80	7.5	22	14	7	20	14	8.5	M10	72	9,8 ±1	18	16.5	25.5
100	7.5	27	14	7	25	16.5	8.5	M10	89	9,8 ±1	20	20	29

Piston Ø	ZA	ZB											
16	34,9 ±0,1	39,7 ±0,8											
20	37,3 ±0,1	43,6 ±0,8											
25	39 ±0,1	44,5 ±0,9											
32	44 ±0,1	51,4 ±1											
40	45 ±0,1	52,4 ±1											
50	45,5 ±0,1	53,6 ±1											
63	49 ±0,1	57,4 ±1											
80	54,7 ±0,1	64,4 ±1											
100	67 ±0,1	76,7 ±1											

Piston rod cylinders → Standard cylinders

Compact cylinder, Series CCI

▶ Heat-resistant version



00119665

Ambient temperature min./max.	-20 °C / +120 °C
Medium temperature min./max.	-20 °C / +120 °C
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³

Materials:	
Cylinder tube	Aluminum, anodized
Front cover	Aluminum
End cover	Aluminum
Seal	Fluorocautchouc
Nut for piston rod	Steel, galvanized
Scraper	Fluorocautchouc

For additional technical data please see the relevant data sheets for the standard version.

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 air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Configurable product

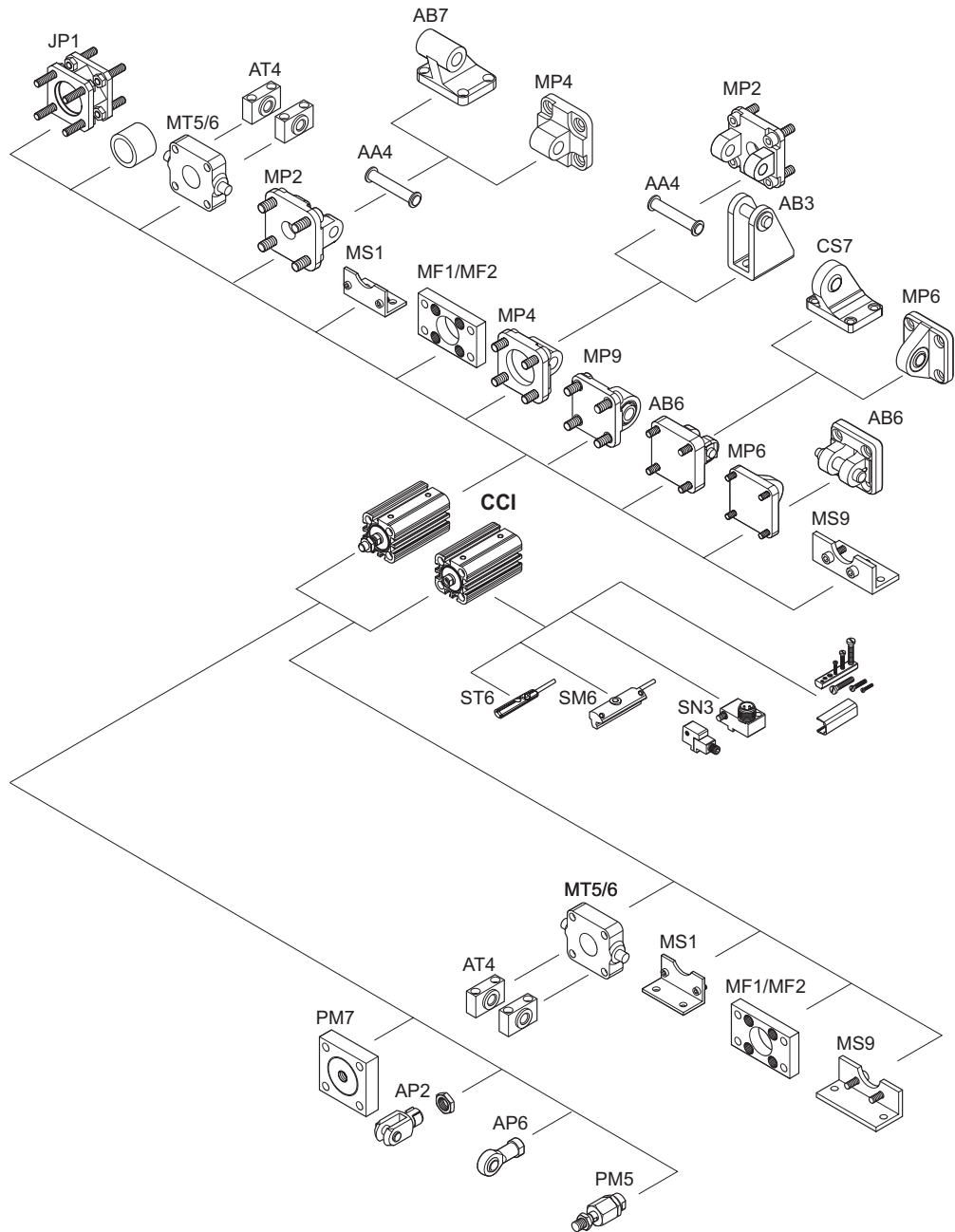
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

accessories overview

Overview drawing



00127837

NOTE:

This overview drawing is only for orientation to see 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.

Piston rod cylinders → Standard cylinders

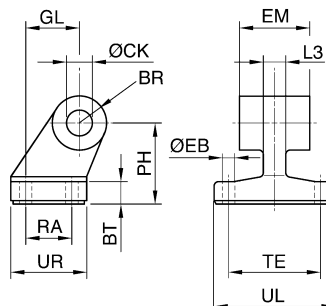
ISO 21287, Series CCI
Accessories

Bearing block AB7 with fixed bearing

► Cylinder mounting in accordance with ISO 15552



00105160



00105184

Part No.	Piston Ø	BR	BT	Ø CK H9	Ø EB H13	EM	GL JS14	L3 1)	PH JS15	RA JS14	TE JS14
1825805275	32	10	8	10	6.6	26 -0,2/-0,6	21	10	32	18	38
1825805276	40	11	10	12	6.6	28 -0,2/-0,6	24	12	36	22	41
1825805277	50	13	12	12	9	32 -0,2/-0,6	33	16	45	30	50
1825805278	63	15	12	16	9	40 -0,2/-0,6	37	16	50	35	52
1825805279	80	15	14	16	11	50 -0,2/-0,6	47	20	63	40	66
1825805280	100	19	15	20	11	60 -0,2/-0,6	55	20	71	50	76

Part No.	UL 1)	UR 1)	Material	Surface							
1825805275	51	31	Nodular graphite iron	galvanized							
1825805276	54	35	Nodular graphite iron	galvanized							
1825805277	65	45	Nodular graphite iron	galvanized							
1825805278	67	50	Nodular graphite iron	galvanized							
1825805279	86	60	Nodular graphite iron	galvanized							
1825805280	96	70	Nodular graphite iron	galvanized							

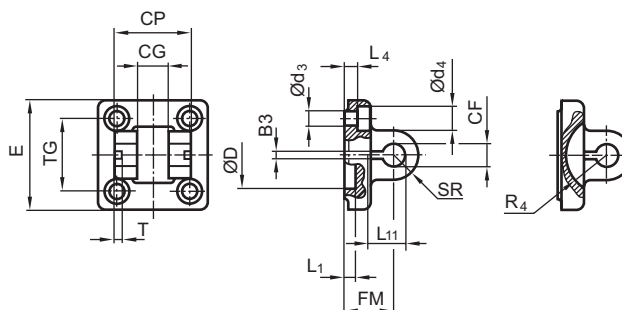
1) max.

Clevis mounting AB6

► Cylinder mounting in accordance with ISO 15552



00105816



00105819

Scope of delivery: clevis mounting incl. pivot pins and mounting screws

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Part No.	Piston Ø	B3 ±0,2	Ø CF F7	CG D10	CP d12	Ø d3	Ø d4	Ø D	E	FM ±0,2	L1 1)	L4 ±0,5
1827001593	32	3.3	10	14	34	6.6	11	30	49	22	4.5	5.5
1827001594	40	4.3	12	16	40	6.6	11	35	55	25	4.5	5.5
1827001595	50	4.3	16	21	45	9	15	40	67	27	4.5	6.5
1827002024	63	4.3	16	21	51	9	15	45	77	32	4.5	6.5
1827001597	80	4.3	20	25	65	11	18	45	97	36	4.5	10
1827001598	100	4.3	20	25	75	11	18	55	117	41	4.5	10

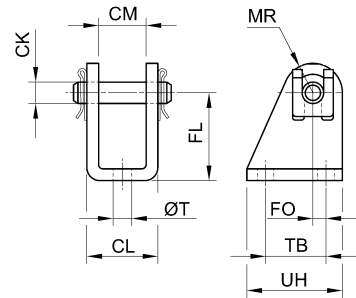
Part No.	L11 -0,5	R4	SR	T ±0,2	TG	Material					
1827001593	16.5	17	11	3	32,5 ±0,2	Aluminum					
1827001594	18	20	12	4	38 ±0,2	Aluminum					
1827001595	23	22	15	4	46,5 ±0,2	Aluminum					
1827002024	23	25	15	4	56,5 ±0,2	Aluminum					
1827001597	27	30	20	4	72 ±0,2	Aluminum					
1827001598	27	32	20	4	89 ±0,2	Aluminum					

1) Min.

Clevis mounting AB3



00105159



00106429

Scope of delivery: clevis mounting incl. pivot pins

Part No.	Piston Ø	CM	Ø CK	CL	FL	FO	MR	Ø T	TB	UH	Material
1827001446	12, 16	12,1	6	18,1	27	2,0	7	5,5	15	25	Steel
1827001445	20, 25	16,1	8	24,1	30	4,0	10	6,6	20	32	Steel
Part No.	Surface										
1827001446	galvanized										
1827001445	galvanized										

Piston rod cylinders → Standard cylinders

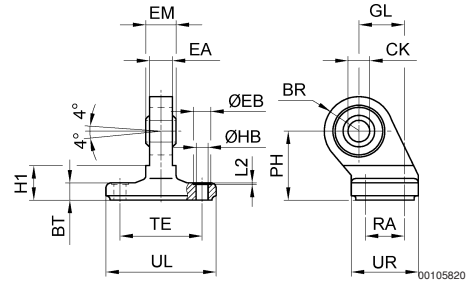
ISO 21287, Series CCI
Accessories

CS7 bearing block with ball joint and foot, angled

► Cylinder mounting in accordance with VDMA 24562 part 2



00105817



00105820

Part No.	Piston Ø	BR 1)	BT	CK H7	EA 1)	Ø EB 2)	EM -0,1	GL JS14	H1 1)	Ø HB H13	L2 1)	PH JS15
1827001784	32	16	9	10	10.5	11	14	21	16	6.6	1.6	32
1827001785	40	18	9	12	12	11	16	24	16	6.6	1.6	36
1827001786	50	21	11	16	15	15	21	33	23	9	1.6	45
1827001787	63	23	11	16	15	15	21	37	23	9	1.6	50
1827001788	80	28	12	20	18	18	25	47	32	11	2.5	63
1827001789	100	30	13	20	18	18	25	55	33	11	2.5	71

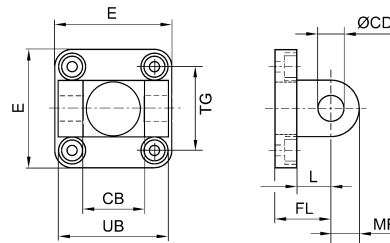
Part No.	RA JS14	TE JS14	UL 1)	UR 1)	Material	Surface						
1827001784	18	38	51	31	Nodular graphite iron	galvanized						
1827001785	22	41	54	35	Nodular graphite iron	galvanized						
1827001786	30	50	65	45	Nodular graphite iron	galvanized						
1827001787	35	52	67	50	Nodular graphite iron	galvanized						
1827001788	40	66	86	60	Nodular graphite iron	galvanized						
1827001789	50	76	96	70	Nodular graphite iron	galvanized						

1) max.

2) Min.

Clevis mounting MP2

► Cylinder mounting in accordance with ISO 15552



00130359

Scope of delivery: clevis mounting incl. mounting screws

P523_025

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

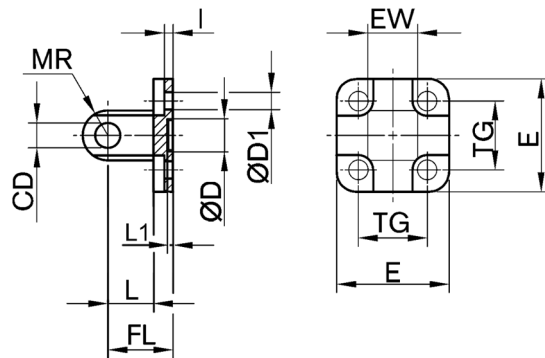
Part No.	Piston Ø	CB H14	Ø CD H9	E	FL	L 1)	MR 2)	UB h13	TG	Material
1827001289	32	26	10	49 ±1	22 ±0,2	12	10	45	32,5 ±0,2	Aluminum
1827001290	40	28	12	53 ±1	25 ±0,2	15	13	52	38 ±0,2	Aluminum
1827001291	50	32	12	63 ±1	27 ±0,2	15	13	60	46,5 ±0,2	Aluminum
1827001500	63	40	16	73 ±1	32 ±0,2	18	17	70	56,5 ±0,2	Aluminum
1827001293	80	50	16	98 ±1	36 ±0,2	20	17	90	72,0 ±0,2	Aluminum
1827001294	100	60	20	115 ±1	41 ±0,2	25	18	110	89,0 ±0,2	Aluminum

1) Min.
2) max.

Rear eye MP4 for clevis mounting MP2 and AB3



P523_024



00126403_a

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	CD H9	Ø D	Ø D1	E	EW	FL ±0,2	I ±0,5	L 1)	L1 1)	MR 2)
1825805368	16	6	10 H13	4.5	27	12 -0,2/-0,6	16	2.6	10	3	6
1827002300	20	8	12 H13	5.5	34	16 -0,2/-0,6	20	2.6	14	3	8
1827002301	25	8	12 H13	5.5	40	16 -0,2/-0,6	20	2.6	14	3	8
1827001283	32	10	30 H11	6.6	48	26 -0,2/-0,6	22	5.5	12	4.5	10
1827001284	40	12	35 H11	6.6	53	28 -0,2/-0,6	25	5.5	15	4.5	12
1827001285	50	12	40 H11	9	63	32 -0,2/-0,6	27	6.5	15	4.5	12
1827020086	63	16	45 H11	9	73	40 -0,2/-0,6	32	6.5	20	4.5	16
1827001287	80	16	45 H11	11	98	50 -0,2/-0,6	36	10	20	4.5	16
1827001288	100	20	55 H11	11	115	60 -0,2/-0,6	41	10	25	4.5	20

Part No.	TG	Material	Surface	ISO 15552	ISO 21287
1825805368	18 ±0,2	Die-cast aluminum	-	-	-
1827002300	22 ±0,4	Steel	galvanized	-	ISO 21287
1827002301	26 ±0,4	Steel	galvanized	-	ISO 21287
1827001283	32,5 ±0,2	Aluminum	-	ISO 15552	-
1827001284	38 ±0,2	Aluminum	-	ISO 15552	-
1827001285	46,5 ±0,2	Aluminum	-	ISO 15552	-
1827020086	56,5 ±0,2	Aluminum	-	ISO 15552	-
1827001287	72 ±0,2	Aluminum	-	ISO 15552	-
1827001288	89 ±0,2	Aluminum	-	ISO 15552	-

1) Min.
2) max.

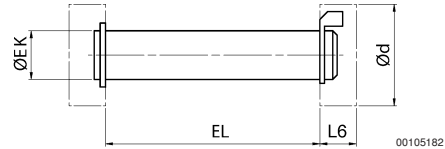
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

AA4 axle



00105158



00105182

Part No.	Piston Ø	Ø EK e8	EL	Ø d 1)	L6 1)	Material	Surface	Note		
1823120020	32	10	45,2 +2	23	9	Steel	galvanized	2)		
1823120021	40	12	52,2 +2	25	9	Steel	galvanized	2)		
1823120022	50	12	60,2 +2	25	9	Steel	galvanized	2)		
1823120023	63	16	70,2 +2	32	11	Steel	galvanized	2)		
1823120024	80	16	90,2 +2	32	11	Steel	galvanized	2)		
1823120025	100	20	110,2 +2	40	11	Steel	galvanized	2)		

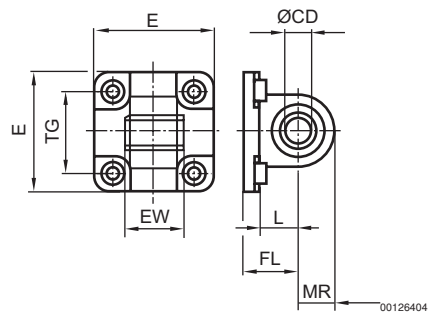
1) max.

2) Scope of delivery: pivot pins incl. circlips

Rear eye MP9 with rubber bushing



P523_026



00126404

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	CD H9	E	EW	FL	L	MR	TG ±0,2	Material	Weight [kg]
3683203000	32	10	46	25.5	22	16.5	14	32.5	Die-cast aluminum	0.1
3683204000	40	12	55	27	25	17.5	19	38	Die-cast aluminum	0.1
3683205000	50	12	62	31	27	18.5	19.5	46.5	Die-cast aluminum	0.2
3683206000	63	16	80	39.5	32	21.5	26	56.5	Die-cast aluminum	0.3
3683208000	80	16	94	49.5	36	24.5	27	72	Die-cast aluminum	0.4
3683210000	100	20	114	59.5	41	26.5	29	89	Die-cast aluminum	0.7

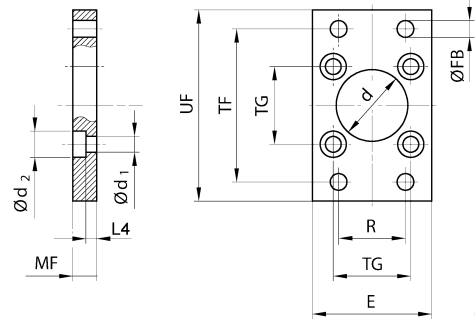
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Flange mounting MF1, MF2



00105812



00126399

Scope of delivery: flange mounting incl. mounting screws

Part No.	Piston \varnothing	$\varnothing d$ H11	$\varnothing d_1$	$\varnothing d_2$	E 1)	$\varnothing FB$	L4	MF	R	TF	TG
1821038241	16	10	4.5	8	29	6.5	5.6	10	-	43	18
1827002292	20	12	5.5	10	36	6.6	4.6	10	-	55	22
1827002293	25	12	5.5	10	40	6.6	4.6	10	-	60	26
1827001277	32	30	6.6	11	50	7	4.5	10	32	64	32,5 ±0,2
1827001278	40	35	6.6	11	55	9	4.5	10	36	72	38 ±0,2
1827001279	50	40	9	15	65	9	6	12	45	90	46,5 ±0,2
1827001499	63	45	9	15	75	9	6	12	50	100	56,5 ±0,2
1827001281	80	45	11	18	100	12	9	16	63	126	72 ±0,2
1827001282	100	55	11	18	120	14	9	16	75	150	89 ±0,2

Part No.	UF	Material	Surface	ISO 15552						
1821038241	55	Steel	galvanized	-						
1827002292	70	Steel	galvanized	-						
1827002293	76	Steel	galvanized	-						
1827001277	80	Steel	galvanized	ISO 15552						
1827001278	90	Steel	galvanized	ISO 15552						
1827001279	110	Steel	galvanized	ISO 15552						
1827001499	125	Steel	galvanized	ISO 15552						
1827001281	154	Steel	galvanized	ISO 15552						
1827001282	186	Steel	galvanized	ISO 15552						

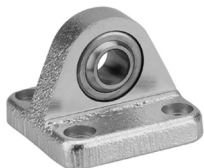
1) max.

Piston rod cylinders → Standard cylinders

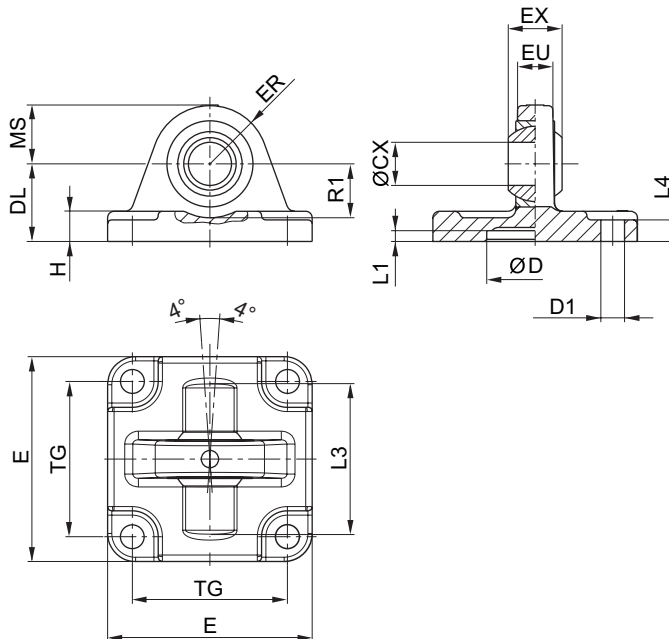
ISO 21287, Series CCI
Accessories

Rear eye with ball joint, MP6

► Cylinder mounting in accordance with ISO 15552



00105818



00126391

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	ØCX H7	ØD H11	ØD1 H13	DL ±0,2	E	EX -0,1	ER	EU	H	L1 min.	L3
1827001619	32	10	30	6.6	22	47	14	15	10.5	9	4.5	36
1827001620	40	12	35	6.6	25	53	16	18	12	9	4.5	42
1827001621	50	16	40	9	27	65	21	20	15	10.5	4.5	48
1827020087	63	16	45	9	32	75	21	23	15	10.5	4.5	55
1827001623	80	20	45	11	36	95	25	27	18	14	4.5	70
1827001624	100	20	55	11	41	115	25	30	18	15	4.5	80

Part No.	L4	MS -0,5	R1 min.	TG	Material	Weight [kg]						
1827001619	5.5	15	12	32,5 ±0,2	Aluminum	0.1						
1827001620	5.5	18	15	38 ±0,2	Aluminum	0.1						
1827001621	6.5	21	19	46,5 ±0,2	Aluminum	0.2						
1827020087	6.5	23	21	56,5 ±0,2	Aluminum	0.3						
1827001623	10	27	24	72 ±0,2	Aluminum	0.6						
1827001624	10	30	25	89 ±0,2	Aluminum	0.8						

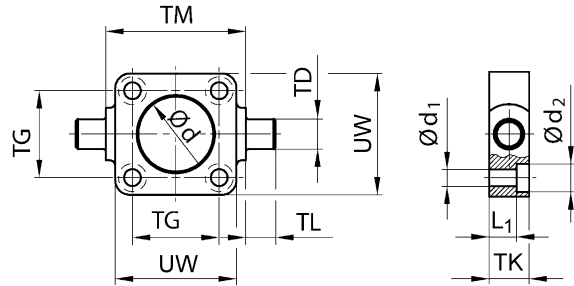
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Trunnion mounting MT5, MT6, front or rear



00128925



00126407

The delivered product may vary from that in the illustration.
Scope of delivery: trunnion mounting incl. mounting screws

Part No.	Piston Ø	Ø	Ø d H11	Ø d1	Ø d2	L1	TD	TG ±0,2	TK	TL h14	TM h14	UW
1825805360	20	20	18	5.5	10	8	12	22	14	12	38	35
1825805361	25	25	22	5.5	10	8	12	26	14	12	42	39
1827001609	32	32	30	6.6	11	7.5	12	32.5	16	12	50	48
1827001610	40	40	35	6.6	11	7.5	16	38	20	16	63	56
1827001611	50	50	40	9	15	10	16	46.5	24	16	75	65
1827002046	63	63	45	9	15	10	20	56.5	24	20	90	75
1827001613	80	80	45	11	18	16	20	72	28	20	110	100
1827001614	100	100	55	11	18	25.5	25	89	38	25	132	120

Part No.	Material	Surface										
1825805360	Nodular graphite iron	galvanized										
1825805361	Nodular graphite iron	galvanized										
1827001609	Nodular graphite iron	galvanized										
1827001610	Nodular graphite iron	galvanized										
1827001611	Nodular graphite iron	galvanized										
1827002046	Nodular graphite iron	galvanized										
1827001613	Nodular graphite iron	galvanized										
1827001614	Nodular graphite iron	galvanized										

Piston rod cylinders → Standard cylinders

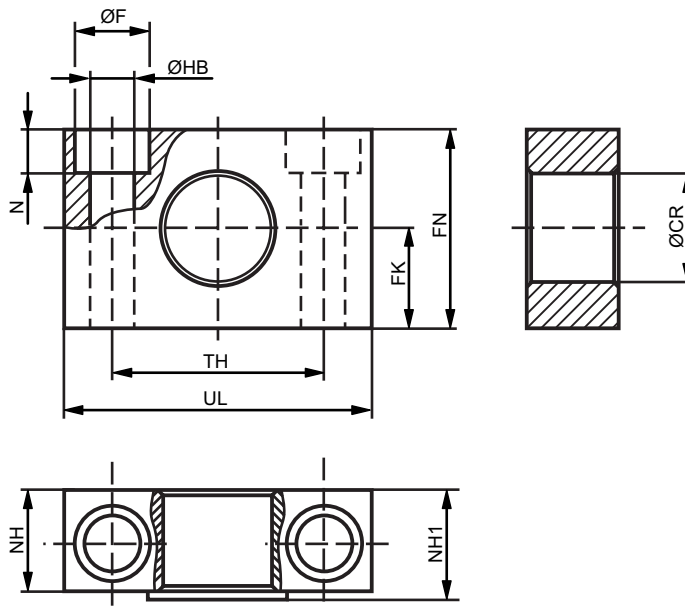
ISO 21287, Series CCI
Accessories

Bearing AT4 for trunnion mounting MT4, MT5, MT6

► Cylinder mounting in accordance with ISO 15552



00105163



00105221

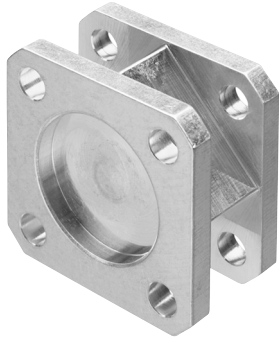
Part No.	Piston Ø	ØCR H7	ØF H13	FK ±0,1	FN	ØHB H12	N -0,4	NH	NH1	TH ±0,15	UL f8
1827001603	32	12	11	15 ±0,1	30	6.6	6.8	15	18	32 ±0,2	46
1827001604	40, 50	16	15	18 ±0,1	36	9	9	18	21	36 ±0,2	55
1827001605	63, 80	20	18	20 ±0,1	40	11	11	20	23	42 ±0,2	65
1827001606	100, 125	25	20	25 ±0,1	50	14	13	25	28.5	50 ±0,2	75

Part No.	Material	Surface	Delivery quantity [Piece]								
1827001603	Steel	galvanized	2								
1827001604	Steel	galvanized	2								
1827001605	Steel	galvanized	2								
1827001606	Steel	galvanized	2								

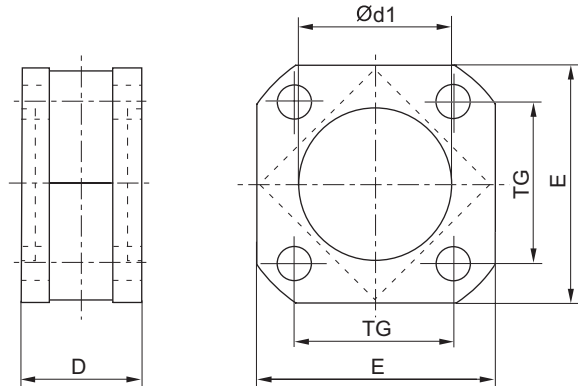
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Intermediate flange JP1 for multi-position cylinders



00135554



00135553

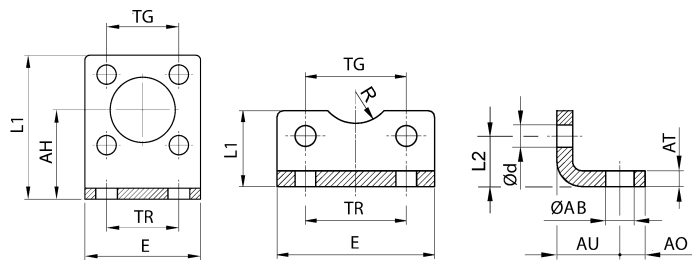
Scope of delivery: Incl. mounting screws

Part No.	Piston Ø	D	Ø d1 N7	E	TG	Material					
1827020247	32	27	30	47	32.5	Aluminum					
1827020248	40	27	35	53	38	Aluminum					
1827020249	50	32	40	65	46.5	Aluminum					
1827020250	63	28	45	75	56.5	Aluminum					
1827020251	80	38	45	95	72	Aluminum					
1827020252	100	38	55	115	89	Aluminum					

Foot mounting MS1



00105808



Ø16

00126387

Scope of delivery: 2 foot mountings incl. mounting screws

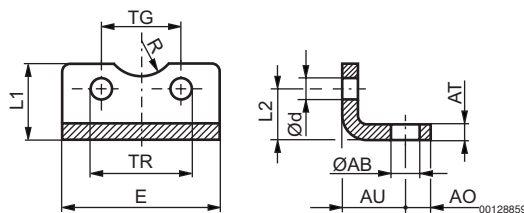
Part No.	Piston Ø	Ø AB	AO	AT	AU ±0,2	Ø d	E	L1	L2	R	TG ±0,2
1821332053	16	5.5	5	3	13	4.5	29	35.5	13	8	18
1827002284	20	6.6	6	4	16	5.4	36	22	16	10	22
1827002285	25	6.6	6	4	16	5.4	40	23	17	11	26
1827001271	32	7	11	5 ±0,5	24	6.6	48	30	15.7	15	32.5
1827001272	40	10	12	5 ±0,5	28	6.6	53	30	17	17.5	38
1827001273	50	10	13	5 ±0,5	32	10	63	30	21.7	20	46.5
1827001498	63	10	13	5 ±0,5	32	10	80	45	21.7	22.5	56.5
1827001275	80	12	19	6 ±0,75	41	11	98	60	27	22.5	72

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Part No.	Piston Ø	Ø AB	AO	AT	AU ±0,2	Ø d	E	L1	L2	R	TG ±0,2
1827001276	100	14.5	19	6 ±0,75	41	11	115	60	26.5	27.5	89
Part No.	TR	Material	Surface								
1821332053	18	Steel	galvanized								
1827002284	22	Steel	galvanized								
1827002285	26	Steel	galvanized								
1827001271	32	Steel	galvanized								
1827001272	36	Steel	galvanized								
1827001273	45	Steel	galvanized								
1827001498	50	Steel	galvanized								
1827001275	63	Steel	galvanized								
1827001276	75	Steel	galvanized								

Foot mounting MS9, long



Scope of delivery: 2 foot mountings incl. mounting screws

00131791

Part No.	Piston Ø	Ø AB H13	AO	AT	AU	Ø d	E	L1	L2	R	TG ±0,1	TR JS14
1827001018	32	7	12	5	18	6.6	79	30	15.8	15	32.5	65
1827001019	40	10	12	5	18	6.6	90	30	17	17.5	38	75
1827001020	50	10	14	5	21	9	110	35	21.7	20	46.5	90
1827020085	63	9	14	5	21	9	120	35	21.7	25	56.5	100
1827001022	80	12	13	5	27	11	153	50	27	22.5	72	128
1827001023	100	14.5	13	5	27	11	178	50	26.5	27.5	89	148
Part No.	Material	Surface										
1827001018	Steel	galvanized										
1827001019	Steel	galvanized										
1827001020	Steel	galvanized										
1827020085	Steel	galvanized										
1827001022	Steel	galvanized										
1827001023	Steel	galvanized										

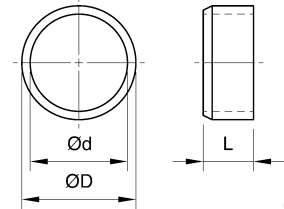
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Centering sleeve
► CCI, KPZ



00105165



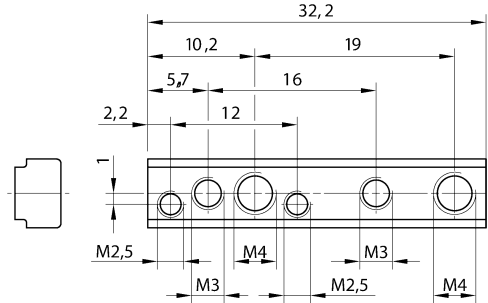
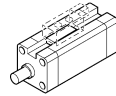
00105191

Part No.	Piston Ø	ØD	Ød	L								
1827020291	16	10	8	6								
1827020276	20, 25	12	10	6								
1827020277	32, 40	14	12	8								
1827020278	50, 63	18	16	10								
1827020279	80	23	20	10								
1827020280	100	28	25	12								

Mounting kit



00103610



00111998

Part No.	Ø	Material	Weight [kg]									
1827020275	16-100	Steel galvanized	0.02									

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

AP2 rod clevis
Steel, galvanized



00105171

Fig.1

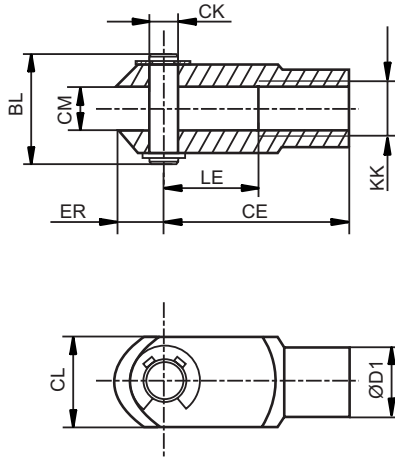
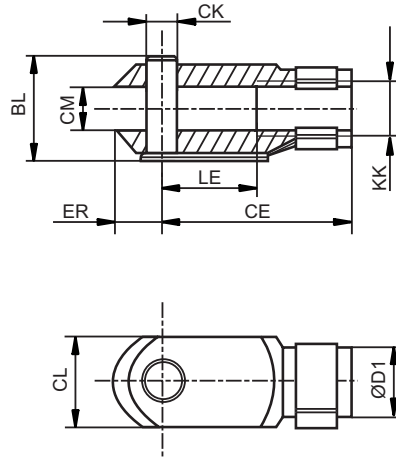


Fig. 2



00126410

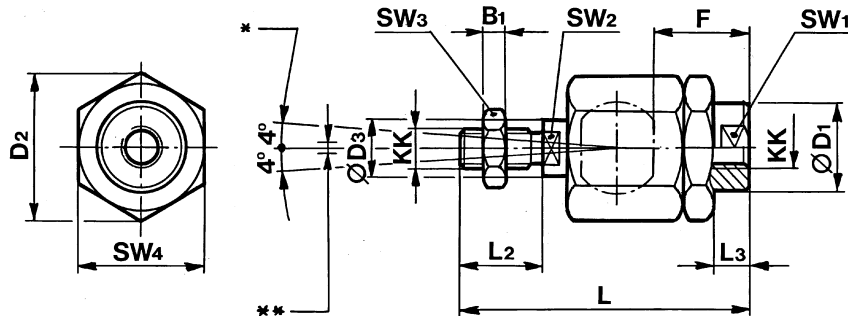
Part No.	KK	Fig.	BL	CE	ØCK e11	CL	CM	ØD1	ER	LE
1822122010	M8	2	21,5	32	8	16	8	14	10	16
1822122024	M10x1,25	2	26	40	10	20	10	18	12	20
1822122025	M12x1,25	2	31	48	12	24	12	20	14	24
1822122005	M16x1,5	2	39	64	16	32	16	26	19	32

Part No.	Material	Surface	Weight [kg]							
1822122010	Steel	galvanized	0.05							
1822122024	Steel	galvanized	0.1							
1822122025	Steel	galvanized	0.16							
1822122005	Steel	galvanized	0.4							

Flexible spherical coupling, PM5



00105169



D300_029

* angle equalization
** Radial joint from 0,5 - 2 mm

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

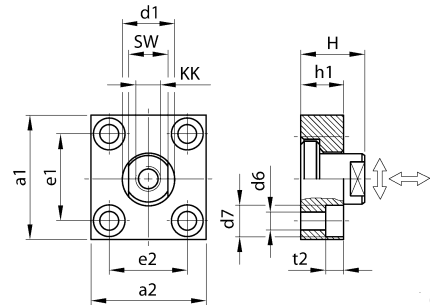
Part No.	KK	B1	Ø D1	D2	Ø D3	F	L ±2	L2	L3 ±1	SW1	SW2	SW3
1826409001	M8	4	12.5	20	8	14.5	55	15	5	10	6	13
1826409002	M10x1,25	6	21.5	34	14	23	73	20	7.5	19	12	17
1826409003	M12x1,25	7	21.5	34	14	28	77	24	13	19	12	19
1826409004	M16x1,5	8	33.5	47	22	32	108	32	9	30	19	24

Part No.	SW4	Material	Surface	Weight [kg]					
1826409001	17	Steel	galvanized	0.05					
1826409002	30	Steel	galvanized	0.21					
1826409003	30	Steel	galvanized	0.21					
1826409004	41	Steel	galvanized	0.65					

Flexible plate coupling PM7



00105170



00105194

Part No.	KK	a1	a2	d1 h11	d6 H13	d7 H13	e1 H13	e2	h1	t2	H
1827001629	M10x1,25	60	37	20	6.6	11	36 ±0,15	23 ±0,15	15	7	24
1827001630	M12x1,25	60	56	25	9	15	42 ±0,2	38 ±0,2	20	9	30
1827001631	M16x1,5	80	80	30	11	18	58 ±0,2	58 ±0,2	20	11	32

Part No.	SW	Material	Surface	Weight [kg]					
1827001629	17	Steel	galvanized	0.3					
1827001630	19	Steel	galvanized	0.4					
1827001631	24	Steel	galvanized	0.9					

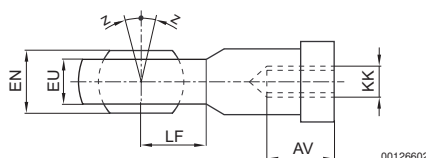
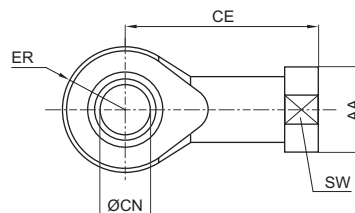
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Ball eye rod end AP6



00105172



00126602

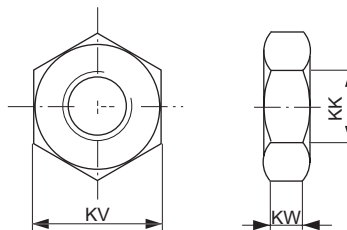
Part No.	KK	AA	AV min.	CE	Ø CN H7	EN -0,1	ER	EU max.	LF	SW	Z [°] max.
1822124002	M8	16	12	36	8	12	12	9.5	12	14	4
1822124003	M10x1,25	19	15	43	10	14	14	11.5	14	17	4
1822124004	M12x1,25	22	18	50	12	16	16	12.5	16	19	4
1822124005	M16x1,5	27	24	64	16	21	21	15.5	21	22	4

Part No.	Material	Surface	Weight [kg]
1822124002	Steel	galvanized	0.05
1822124003	Steel	galvanized	0.07
1822124004	Steel	galvanized	0.105
1822124005	Steel	galvanized	0.21

Piston rod nut MR9



00105168



00105192

Part No.	KK	KV	KW	Material	Surface	Weight [kg]
1823300033	M6	10	3.2	Steel	galvanized	0.004
1823300034	M8	13	4	Steel	galvanized	0.005
1823300020	M10x1,25	17	6	Steel	galvanized	0.01
1823300021	M12x1,25	19	7	Steel	galvanized	0.012
1823300030	M16x1,5	24	8	Steel	galvanized	0.017

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Sensor, Series ST6

▶ 6 mm groove ▶ with cable ▶ without wire end ferrule, tin-plated



Ambient temperature min./max.	-25°C / +70°C
Protection class according to EN 60529:2000	IP 65IP 67
Switching point precision [mm]	±0,1
Switching capacity	3 W / 3 VA
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Materials:

Housing	Polyamide
Cable	Polyurethane

	Type of contact	Cable length L	DC operating voltage min./max.	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	[A]	
	Reed	3	10 / 30	10 / 30	0,13	0,13	0830100629
		5					0830100630
	electronic PNP	3	10 / 30	-	0.1	0.1	0830100631
		5					0830100632
	electronic NPN	3	10 / 30	-	0.1	-	0830100633
		5					0830100634

Part No.	Voltage drop U at I _{max}	Protective resistor for reed	Max. switching frequency	Operating current, not switched	Operating current, switched	LED	Note
	[V]	[Ω]	[kHz]	[mA]	[mA]		
0830100629 0830100630	I*Rs	15	< 0,3	-	< 10	Yellow	1)
0830100631 0830100632	≤ 2,5	-	< 1,0	< 20	< 30	Yellow	2)
0830100633 0830100634	≤ 2,5	-	< 1,0	< 20	< 30	Yellow	2)

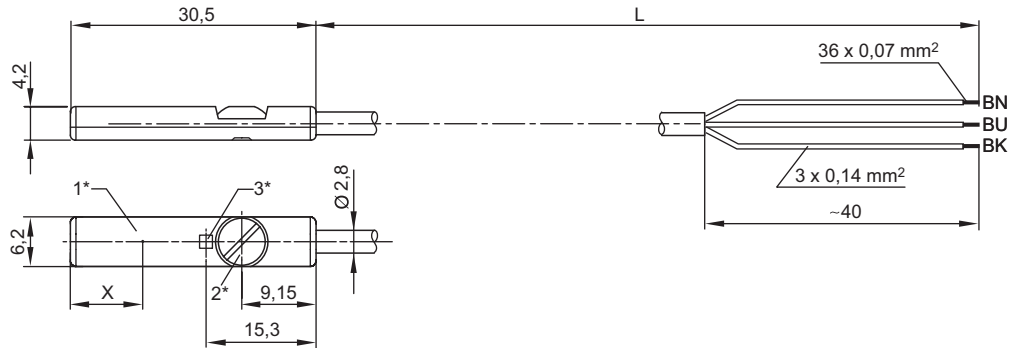
1) short circuit protected

2) short circuit resistant; short circuit protected
interfaces: without wire end ferrule, tin-plated
UL (Underwriters Laboratories)

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Dimensions



00111942_b

1* = switching point 2* = clamping screw 3* = LED
 L = cable length
 BN = brown, BK = black, BU = blue
 X = electronic: 6 mm, Reed: 10 mm

Sensor, Series ST6

► 6 mm groove ► with cable ► Plug, M8, 3-pin, with knurled screw



00112027_5

Certificates
 Ambient temperature min./max.
 Protection class according to EN 60529:2000
 Switching point precision [mm]
 Switching capacity
 LED status display
 Vibration resistance
 Shock resistance

UL (Underwriters Laboratories)
 See table below
 IP 65IP 67
 ±0,1
 3 W / 3 VA
 Yellow
 10 - 55 Hz, 1 mm
 30 g / 11 ms

Materials:
 Housing

Polyamide

	Type of contact	Cable length L	DC operating voltage min./max.	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	[A]	
	Reed	0.3	10 / 30	10 / 30	0,13	0,13	R412004761
		0.3					0830100434
		0.5					0830100436
	electronic PNP	0.3	10 / 30	-	0,1	0,1	0830100435
		0.3					R412004762
		0.5					0830100437
	electronic NPN	0.3	10 / 30	-	0,1	-	0830100431
	Reed	0.3	10 / 30	10 / 30	0,13	0,1	R412007840

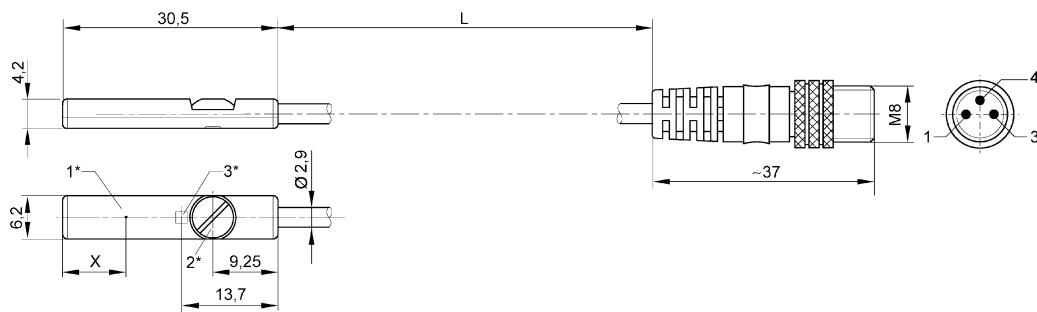
Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Part No.	Voltage drop U at I _{max}	Ambient temperature min./max.	Protective resistor for reed	Max. switching frequency	Operating current, not switched	Operating current, switched	Material Cable
	[V]		[Ω]	[kHz]	[mA]	[mA]	
R412004761	I*Rs	-25 °C / +75 °C	15	≤ 0,3	-	< 10	Polyvinyl chloride
0830100434		-25 °C / +70 °C		< 0,3			Polyurethane
0830100436		-25 °C / +70 °C		< 0,3			Polyurethane
0830100435	≤ 2,5	-25 °C / +70 °C	-	< 1,0	< 20	< 30	Polyurethane
R412004762							Polyvinyl chloride
0830100437							Polyurethane
0830100431	≤ 2,5	-25 °C / +70 °C	-	< 1,0	< 20	< 30	Polyurethane
R412007840	I*Rs	-25 °C / +75 °C	15	≤ 0,3	-	< 10	Polyvinyl chloride
Part No.	Note						
R412004761 0830100434 0830100436	1)						
0830100435 R412004762 0830100437	2)						
0830100431	2)						
R412007840	1); 3)						

- 1) short circuit protected
- 2) short circuit resistant; short circuit protected
- 3) Combination: slotted and hexagon socket interfaces: Plug; M8; 3-pin; with knurled screw

Dimensions



1* = switching point 2* = clamping screw 3* = LED
 L = cable length
 X = electronic: 6 mm, Reed: 10 mm
 Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

00111942_d

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Sensor, Series ST6

▶ 6 mm groove ▶ with cable ▶ Plug, M8, 3-pin



00112027_3

Certificates	UL (Underwriters Laboratories)
Ambient temperature min./max.	-25 °C / +70 °C
Protection class according to EN 60529:2000	IP 65IP 67
Switching point precision [mm]	±0,1
Switching capacity	3 W / 3 VA
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Materials:	
Housing	Polyamide
Cable	Polyurethane

	Type of contact	Cable length L	DC operating voltage min./max.	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	[A]	
	Reed	0.3	10 / 30	10 / 30	0,13	0,13	0830100488
	electronic PNP	0.3	10 / 30	-	0.1	0.1	0830100489
	electronic NPN	0.3	10 / 30	-	0.1	-	0830100430
Part No.	Voltage drop U at I _{max}	Protective resistor for reed	Max. switching frequency	Operating current, not switched	Operating current, switched	Note	
	[V]	[Ω]	[kHz]	[mA]	[mA]		
0830100488	I*Rs	15	< 0,3	-	< 10	1)	
0830100489	≤ 2,5	-	< 1,0	< 20	< 30	2)	
0830100430	≤ 2,5	-	< 1,0	< 20	< 30	2)	

1) short circuit protected

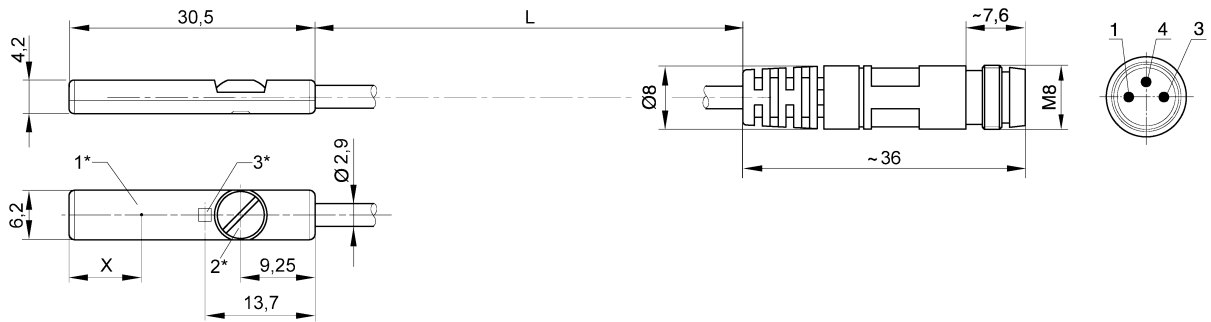
2) short circuit resistant; short circuit protected

interfaces: Plug; M8; 3-pin

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Dimensions



1* = switching point 2* = clamping screw 3* = LED
 L = cable length
 X = electronic: 6 mm, Reed: 10 mm
 Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

00111942_a

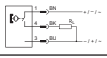
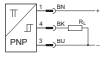
Sensor, Series ST6

► 6 mm groove ► with cable ► Plug, M12, 3-pin, with knurled screw



00112027_4

Certificates	UL (Underwriters Laboratories)
Ambient temperature min./max.	-25°C / +70°C
Protection class according to EN 60529:2000	IP 65IP 67
Switching point precision [mm]	±0,1
Switching capacity	3 W / 3 VA
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Materials:	
Housing	Polyamide
Cable	Polyurethane

	Type of contact	Cable length L	DC operating voltage min./max.	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	[A]	
	Reed	0.3	10 / 30	10 / 30	0,13	0,13	0830100432
	electronic PNP	0.3	10 / 30	-	0.1	-	0830100433

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI

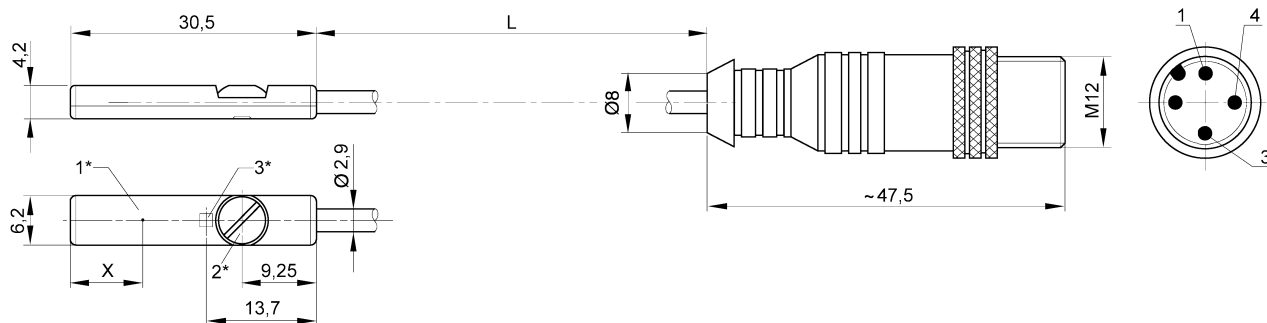
Accessories

Part No.	Voltage drop U at I _{max}	Protective resistor for reed	Max. switching frequency	Operating current, not switched	Operating current, switched	Note
	[V]	[Ω]	[kHz]	[mA]	[mA]	
0830100432	1*Rs	15	< 0,3	-	< 10	1)
0830100433	≤ 2,5	-	< 1,0	< 20	< 30	2)

1) short circuit protected

2) short circuit resistant; short circuit protected
interfaces: Plug; M12; 3-pin; with knurled screw

Dimensions



1* = switching point 2* = clamping screw 3* = LED

L = cable length

X = PNP: 6 mm, reed: 10 mm

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

00111942_c

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Sensors, Series SM6

► 6 mm groove ► with cable ► without wire end ferrule, tin-plated ► Distance measuring sensor



00133722

Ambient temperature min./max.	-20°C / +70°C
Protection class according to EN 60529:	IP 67
Output signal	1x current and 1x voltage
Nominal current, actuated state mA	< 20
Nominal current, idle state mA	< 20
sampling interval	0,5 ms
Resolution	0,05 mm
Repetitive precision	0.1 mm
Linearity	0,3 mm
Max. stroke speed	3 m/s
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Materials:

Housing	Polyamide, fiber-glass reinforced
Cable	Polyurethane

	Cable length L	Measurement range max.	DC operating voltage min./max.	Voltage signal	Current signal	Part No.
	[m]	[mm]	[V]	[V]	[mA]	
	2	32	15 / 30	0 - 10 V DC	4 - 20 mA	R412010141
		64				R412010143
		96				R412010262
		128				R412010264

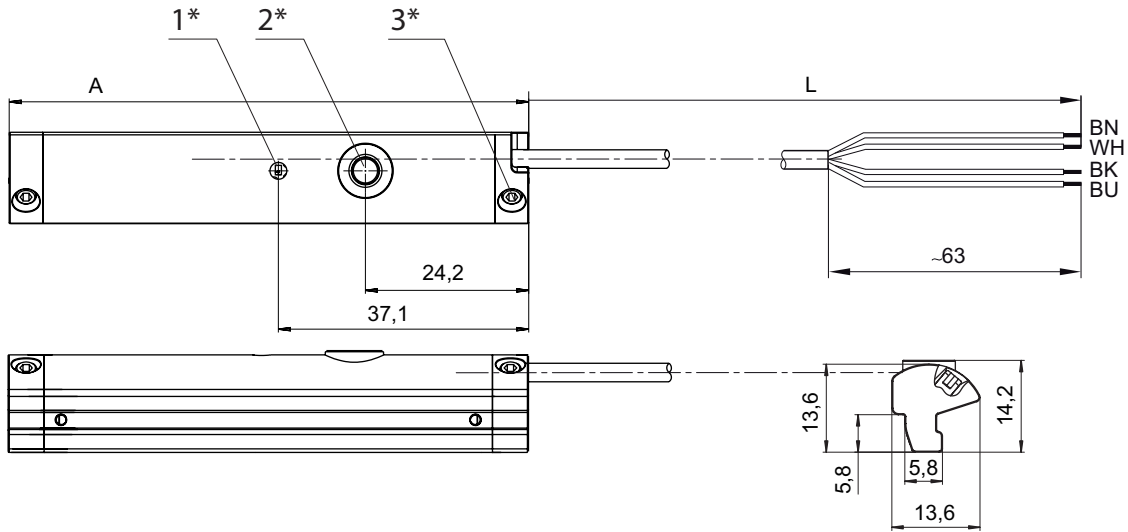
interfaces: without wire end ferrule, tin-plated
short circuit resistant; short circuit protected; Overload protection

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI

Accessories

Dimensions



00133787

1* = LED 2* = teach-in button 3* = M3x11 threaded pin

L = cable length

(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black

Pin assignment: 1 = (+), 2 = (OUT 1) 3 = (GND), 4 = (OUT 2), EN 60947-5-7

Part No.	A											
R412010141	45											
R412010143	77											
R412010262	45											
R412010264	141											

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Sensors, Series SM6

► 6 mm groove ► with cable ► Plug, M8x1, 4-pin, with knurled screw ► Distance measuring sensor



Ambient temperature min./max.	-20°C / +70°C
Protection class according to EN 60529:	IP 67
Output signal	1x current and 1x voltage
Nominal current, actuated state mA	< 20
Nominal current, idle state mA	< 20
sampling interval	0,5 ms
Resolution	0,05 mm
Repetitive precision	0.1 mm
Linearity	0,3 mm
Max. stroke speed	3 m/s
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Materials:

Housing	Polyamide, fiber-glass reinforced
Cable	Polyurethane

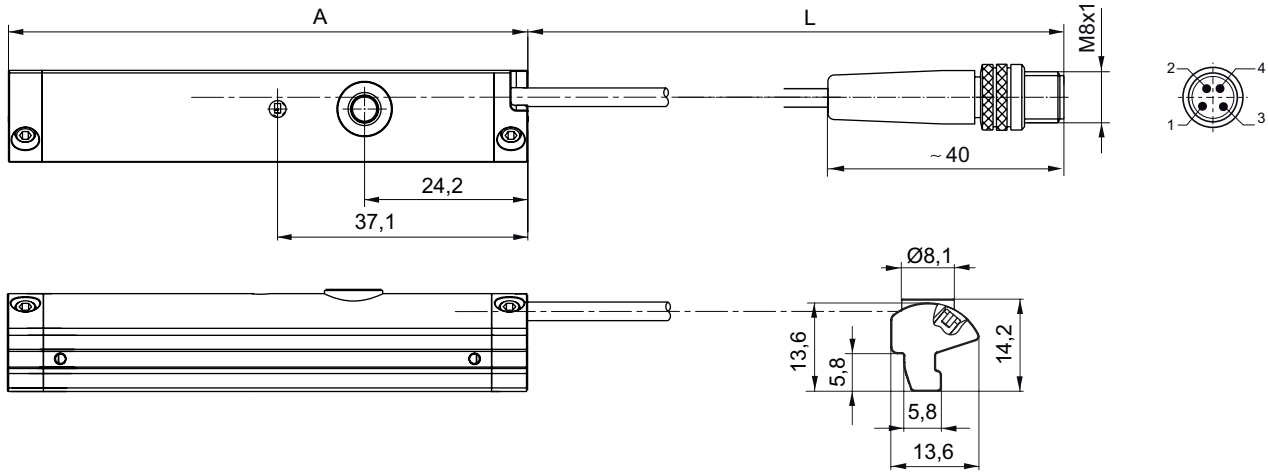
	Cable length L	Measurement range max.	DC operating voltage min./max.	Voltage signal	Current signal	Part No.
	[m]	[mm]	[V]	[V]	[mA]	
	0.3	32	15 / 30	0 - 10 V DC	4 - 20 mA	R412010142
		64				R412010144
		96				R412010263
		128				R412010265

interfaces: Plug; M8x1; 4-pin; with knurled screw
short circuit resistant; short circuit protected; Overload protection

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Dimensions



00133788

1* = LED 2* = teach-in button 3* = M3x11 threaded pin

L = cable length

Pin assignment: 1 = (+), 2 = (OUT 1) 3 = (GND), 4 = (OUT 2), EN 60947-5-7

Part No.	A											
R412010142	45											
R412010144	77											
R412010263	45											
R412010265	141											

Sensor, Series SN3

► Plug, M12, 3-pin ► welding-proof



00118461

Ambient temperature min./max.

-25°C / +70°C

Protection class according to EN 60529:2000

IP 67

Switching point precision [mm]

±0,1

Nominal current, actuated state mA

≤ 10

Nominal current, idle state mA

≤ 5

LED status display

Yellow

Vibration resistance

55 Hz, 1 mm

Shock resistance

30 g / 11 ms

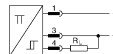
Materials:

Housing

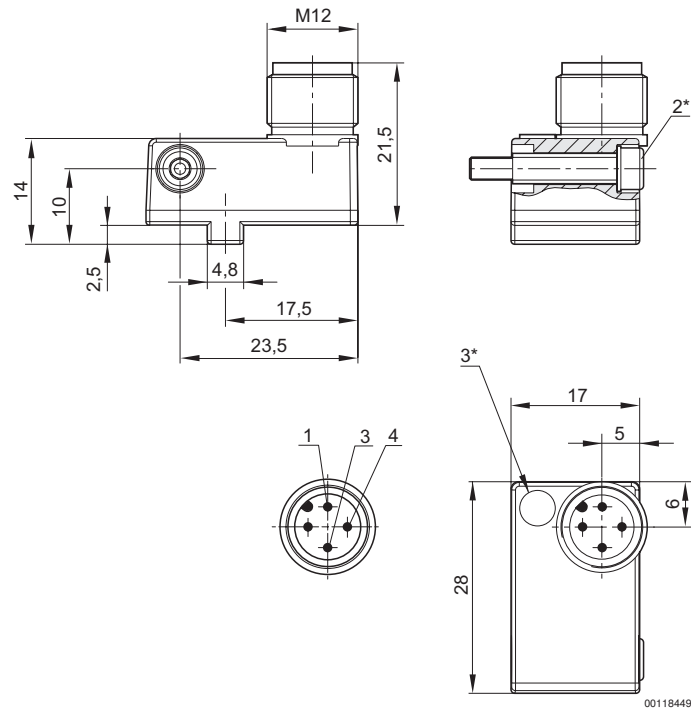
Polyamide

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

	Type of contact	DC operating voltage min./max. [V]	DC switching current, max. [A]	Voltage drop U at I _{max} [V]	Max. switching frequency [kHz]	Part No.
	electronic PNP	10 / 30	0,2	≤ 1,8	0,02	0830100438

interfaces: Plug; M12; 3-pin
short circuit resistant; short circuit protected

Dimensions


2* = clamping screw

3* = LED

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

Piston rod cylinders → Standard cylinders

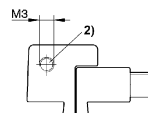
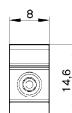
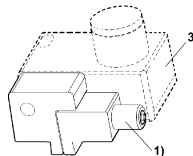
ISO 21287, Series CCI
Accessories

Sensor mounting

► for Sensor Series SN3 ► to mount on cylinder series PRA, series KPZ, series GPC, series CCI, series KHZ



00112453



00122794

1) Clamping screw 2) Mounting screw for sensor 3) Sensor

Part No.	1)	MA1 [Nm]	Material	Weight [kg]					
1827020386	M3x25	1,8 +0,4	Aluminum	0.007					

Connecting cable, Series CN1

► Socket, M8, 3-pin ► without wire end ferrule, tin-plated, 3-pin



00107009

Ambient temperature min./max.
Protection class according to EN 60529-40 °C / +85 °C
IP 65Materials:
Cable sheath

Polyurethane

Technical Remarks

- The specified protection class is valid only in assembled and tested state.

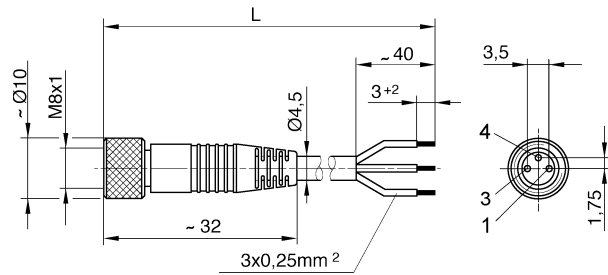
	Electrical interface		Number of plug options	Max. current	Number of wires	Cable length	Part No.
	[Port 1]	[Port 2]	[for port 1]	[A]		[m]	
	Socket, M8, 3-pin	without wire end ferrule, tin-plated, 3-pin	1 position	4	3	3	1834484166
						5	1834484168
						10	1834484247
						3	1834484167
						5	1834484169
						10	1834484248
					15	1834484249	
Part No.	Cable exit		Weight		Note		
				[kg]			
1834484166		straight 180°		0.091			Fig. 1
1834484168		straight 180°		0.145			Fig. 1

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Part No.	Cable exit	Weight	Note
1834484247	straight 180°	0.33	Fig. 1
1834484167	angled 90°	0.092	Fig. 2
1834484169	angled 90°	0.141	Fig. 2
1834484248	angled 90°	0.276	Fig. 2
1834484249	angled 90°	0.431	Fig. 2

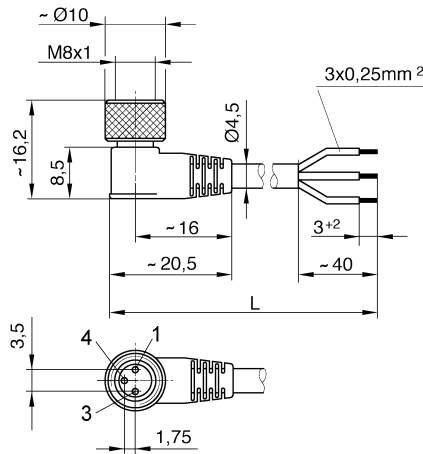
Fig. 1



00105612_a

(1) BN=brown (3) BU=blue (4) BK=black
L = length

Fig. 2



00105612_b

(1) BN=brown (3) BU=blue (4) BK=black
L = length

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

M8x1 socket (female)

► Socket, M8x1, 3-pin



00136663

Ambient temperature min./max.

-40 °C / +85 °C

Protection class according to EN 60529:

IP 65

Materials:

Housing

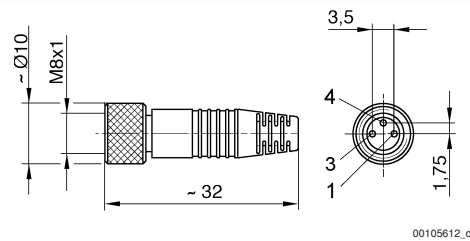
Polyamide

Technical Remarks

- The specified protection class is valid only in assembled and tested state.

	Operating voltage		Max. current [A]	Contact assign- ment	Cable exit	suitable cable-Ø min./max [mm]	Part No.
	DC	AC					
	[V]	[V]					
	75	60	4	3	straight 180°	-- / 4.5	1834484173
					angled 90°		1834484174
Part No.	number of plug options 1		Housing color		Weight	Note	
					[kg]		
1834484173 1834484174	1 position		Black		0.008	Fig. 1 Fig. 2	

Fig. 1

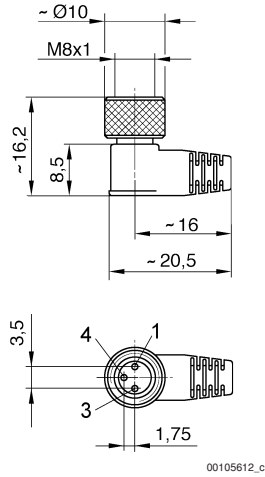


00105612_d

Piston rod cylinders → Standard cylinders

ISO 21287, Series CCI
Accessories

Fig. 2

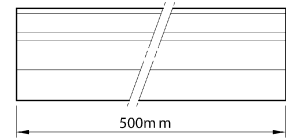
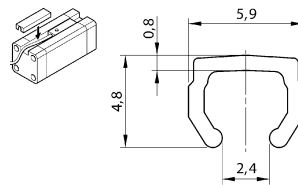


00105612_c

Groove lock profile



00105175



00111999

Part No.	Ø	Material										
1821321009	16-100	Acrylonitrile butadiene styrene										

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