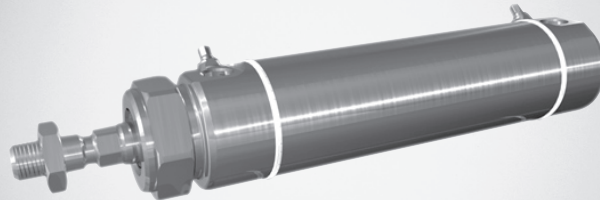


Piston rod cylinders → Round cylinders

Series ICS-D1

Brochure





Piston rod cylinders → Round cylinders

Series ICS-D1

	Round cylinder, Series ICS-D1 ▶ Overview of variants	4
 	Round cylinder, Series ICS-D1 ▶ Heat-resistant version	5
 	Round cylinder, Series ICS-D1-M00 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof	6
 	Round cylinder, Series ICS-D1-MR3 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ cylinder outer thread with mounting nut	8
 	Round cylinder, Series ICS-D1-MP4 ▶ Ø 32 - 63 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with rear end cover bushing	10
 	Round cylinder, Series ICS-D1-MP5 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with rear eye with spherical bearing	12
 	Round cylinder, Series ICS-D1-MT1 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with mounting bolts in front end cover MT1	14
 	Round cylinder, Series ICS-D1-MT2 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with mounting bolts in rear end cover MT2	17
 	Round cylinder, Series ICS-D1-MH1 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with mounting holes position front	20
 	Round cylinder, Series ICS-D1-MH2 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with mounting holes position rear	22
 	Round cylinder, Series ICS-D1-MX6 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ with rear end cover with threaded holes	24
 	Round cylinder, Series ICS-D1 ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof ▶ Piston rod: through	26

Accessories**Cylinder mountings**









	Bearing blocks	28
	Mounting bolts	28

Piston rod mountings

	Piston rod nut MR9	30
---	--------------------	-----------

Piston rod cylinders → Round cylinders

Series ICS-D1

	Rod clevis AP2 ▶ Stainless steel	30
	Ball eye rod end AP6	31
Sensors and sensor mountings, accessories		
	Sensor, Series ST8 ▶ 8 mm groove ▶ with cable ▶ without wire end ferrule, tin-plated	32
	Sensor, Series ST8 ▶ 8 mm groove ▶ with cable ▶ Plug, M8, 3-pin	32
	Sensor, Series ST8 ▶ 8 mm groove ▶ with cable ▶ Plug, M12, 3-pin, with knurled screw	33
	Sensor mounting ▶ clamping piece ▶ for Sensor Series ST8 ▶ to mount on cylinder Series CPC, ICS-D1, ICS-D2	35
	Clamping ring ▶ to mount on cylinder Series CPC, ICS-D1, ICS-D2	35
	Connecting cable, Series CN2 ▶ Socket, M8, 3-pin ▶ open cable ends, 3-pin	36
	M8x1 socket (female), Series CN2 ▶ Socket, M8x1, 3-pin	37

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1

► Overview of variants



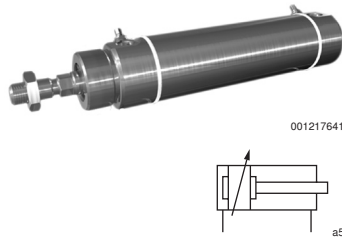
001217641

Version	Data sheet of the variant	Series	Option: heat resistant (without magnetic piston)	Option: through piston rod
		ICS-D1-M00	✓	✓
		ICS-D1-MR3	✓	✓
		ICS-D1-MP4	✓	-
		ICS-D1-MP5	✓	-
		ICS-D1-MT1	✓	✓
		ICS-D1-MT2	✓	✓
		ICS-D1-MH1	✓	✓
		ICS-D1-MH2	✓	✓
		ICS-D1-MX6	✓	-
		ICS-D1	✓	-

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1

► Heat-resistant version



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-20 °C / +120 °C
Medium temperature min./max.	-20 °C / +120 °C
Medium	Compressed air
Max. particle size	50 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³

Materials:

Cylinder tube	Stainless steel, acid-proof, AISI 316
Piston rod	Stainless steel, acid-proof, AISI 316
Front cover	Stainless steel, acid-proof, AISI 316
End cover	Stainless steel, acid-proof, AISI 316
Internal seal	Fluorocautchouc
External seal	Polytetrafluorethylene (FDA conform)
Nut for cylinder mounting	Stainless steel, acid-proof, AISI 316
Nut for piston rod	Stainless steel, acid-proof, AISI 316
Scraper	Polytetrafluorethylene

Lubricant

Heat resistant and suitable for use in food processing (NSF-H1 certified)

Product with laser-etched label.

Technical data on the standard version can be found in the other data sheets!

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

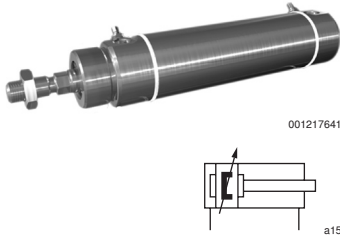


This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-M00

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product



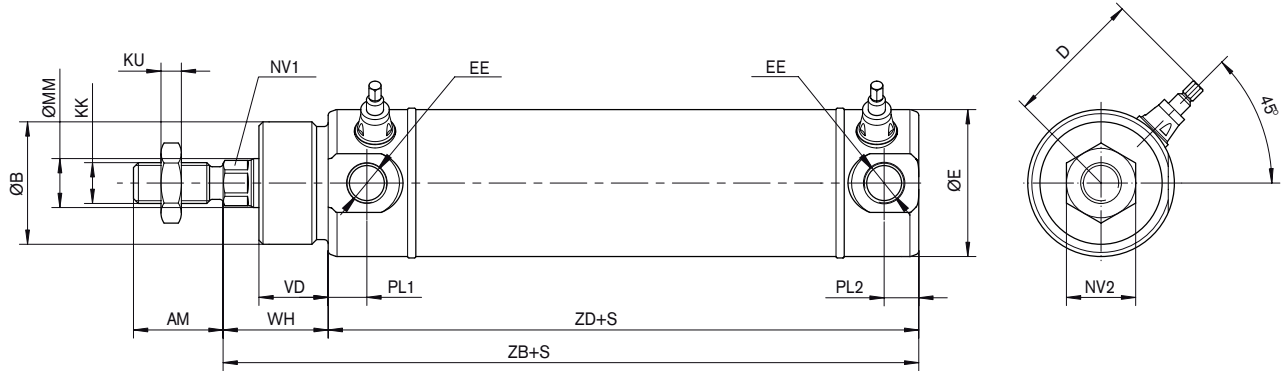
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-M00

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof

basic version, M00, Piston Ø 32 - 100



00120500

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	PL2	VD
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	8.5	17
40	24	35	38	44	G 1/4	M12x1,25	6	16	13	18	11	11	25
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	12	25
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	13.5	30
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	14	30
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	19	30

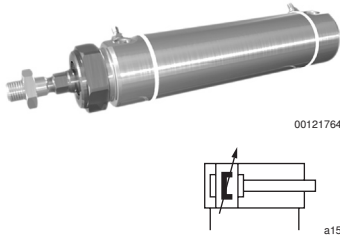
Ø	WH	ZB	ZD										
32	26	121	95										
40	35	143	108										
50	35	150	115										
63	40	165	125										
80	42	184	142										
100	42	198	156										

1) max.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MR3

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► cylinder outer thread with mounting nut



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for cylinder mounting	Stainless steel, acid-proof
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product

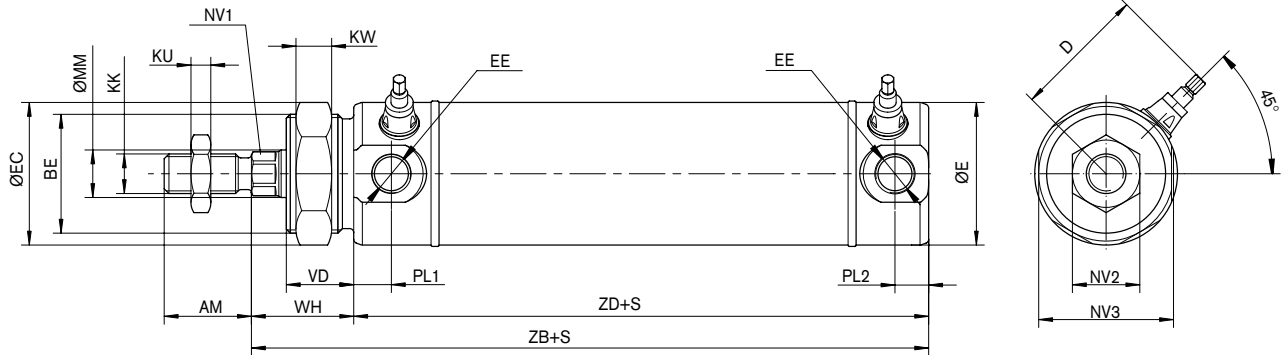
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MR3

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ cylinder outer thread with mounting nut

Threaded neck with nut, MR3, Piston Ø 32 - 100



00120496

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	BE	D 1)	Ø E	EC	EE	KK	KU	KW	MM g8	NV1	NV2	NV3
32	22	M30x1,5	34	36	36	G 1/8	M10x1,25	5	10	12	10	17	34
40	24	M35x1,5	38	44	45	G 1/4	M12x1,25	6	10	16	13	18	42
50	32	M40x1,5	50	54	52	G 1/4	M16x1,5	8	10	20	17	24	48
63	32	M45x1,5	57	68	58	G 3/8	M16x1,5	8	12	20	17	24	54
80	40	M55x1,5	70.5	86	80	G 3/8	M20x1,5	10	13	25	22	30	72
100	40	M65x1,5	80.5	106	90	G 1/2	M20x1,5	10	15	25	22	30	85

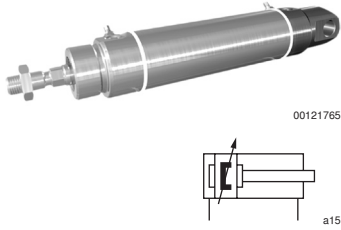
Ø	PL1	PL2	VD	WH	ZB	ZD							
32	9.5	8.5	17	26	121	95							
40	11	11	25	35	143	108							
50	12	12	25	35	150	115							
63	14	13.5	30	40	165	125							
80	14	14	30	42	184	142							
100	20	19	30	42	198	156							

1) max.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MP4

► Ø 32 - 63 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with rear end cover bushing



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene
Guide bushing	Plastic

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63
Retracting piston force	[N]	435	665	1039	1766
Extending piston force	[N]	507	792	1237	1964
Cushioning length	[mm]	11.5	14	17	16
Cushioning energy	[J]	2.4	4.5	7.5	13.5
Weight	0 mm stroke	0.6	1.2	1.7	3
	+10 mm stroke	0.025	0.036	0.05	0.065
Stroke max.	[mm]	480	600	750	945

Configurable product

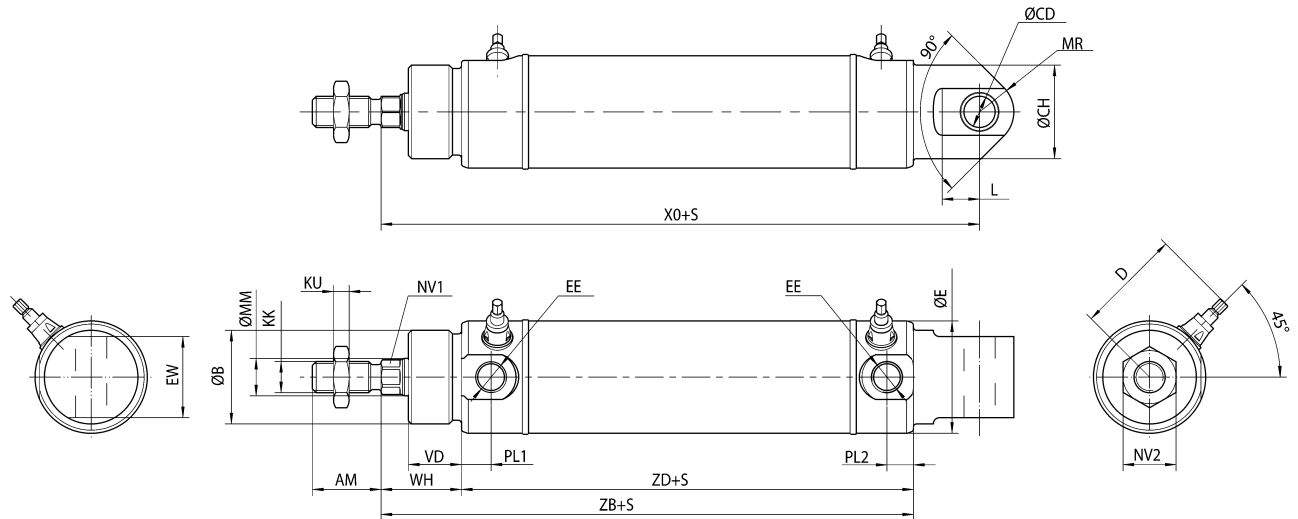
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MP4

- ▶ Ø 32 - 63 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with rear end cover bushing

Rear end cover bushing (ISO 6431), MP4, Piston Ø 32 - 63



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	Ø CD H10	Ø CH	D 1)	Ø E	EE	EW	KK	KU	L 2)	MM g8	MR
32	22	30	10	30	34	36	G 1/8	26	M10x1,25	5	13	12	11
40	24	35	12	33	38	44	G 1/4	28	M12x1,25	6	12	16	13
50	32	40	12	36	50	54	G 1/4	32	M16x1,5	8	13	20	13
63	32	45	16	45	57	68	G 3/8	40	M16x1,5	8	15	20	17

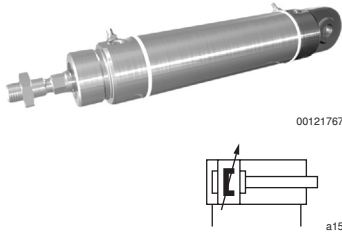
Ø	NV1	NV2	PL1	PL2	VD	WH	XO	ZB	ZD				
32	10	17	9.5	8.5	17	26	142 ±1,3	121	95				
40	13	18	11	11	25	35	160 ±1,3	143	108				
50	17	24	12	12	25	35	170 ±1,3	150	115				
63	17	24	14	13.5	30	40	190 ±1,6	165	125				

- 1) max.
- 2) min.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MP5

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with rear eye with spherical bearing



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene
Spherical bearing	Stainless steel, acid-proof

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product

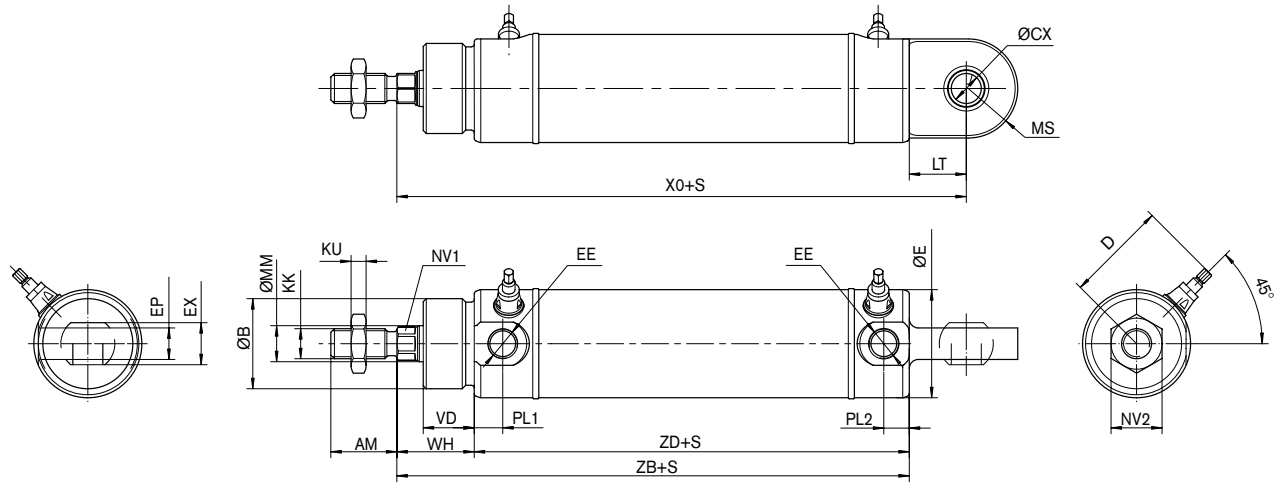
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MP5

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with rear eye with spherical bearing

Rear eye with spherical bearing, MP5, Piston Ø 32 - 100



00120497

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	Ø CX H7	D 1)	Ø E	EE	EP	EX	KK	KU	LT	MM g8	MS
32	22	30	10	34	36	G 1/8	10.5	14	M10x1,25	5	21	12	16.5
40	24	35	12	38	44	G 1/4	12	16	M12x1,25	6	17	16	19
50	32	40	12	50	54	G 1/4	12	16	M16x1,5	8	20.5	20	24.5
63	32	45	16	57	68	G 3/8	15	21	M16x1,5	8	25.5	20	30
80	40	55	16	70.5	86	G 3/8	15	21	M20x1,5	10	26.5	25	35
100	40	65	20	80.5	106	G 1/2	18	25	M20x1,5	10	32	25	35

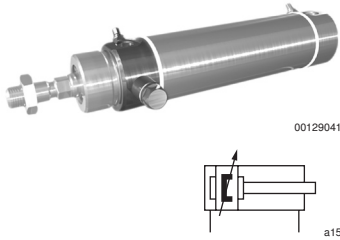
Ø	NV1	NV2	PL1	PL2	VD	WH	XO	ZB	ZD				
32	10	17	9.5	8.5	17	26	142 ±1,3	121	95				
40	13	18	11	11	25	35	160 ±1,3	143	108				
50	17	24	12	12	25	35	170 ±1,3	150	115				
63	17	24	14	13.5	30	40	190 ±1,6	165	125				
80	22	30	14	14	30	42	210 ±1,6	184	142				
100	22	30	20	19	30	42	230 ±1,6	198	156				

1) max.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MT1

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with mounting bolts in front end cover MT1



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Mounting bolts	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product

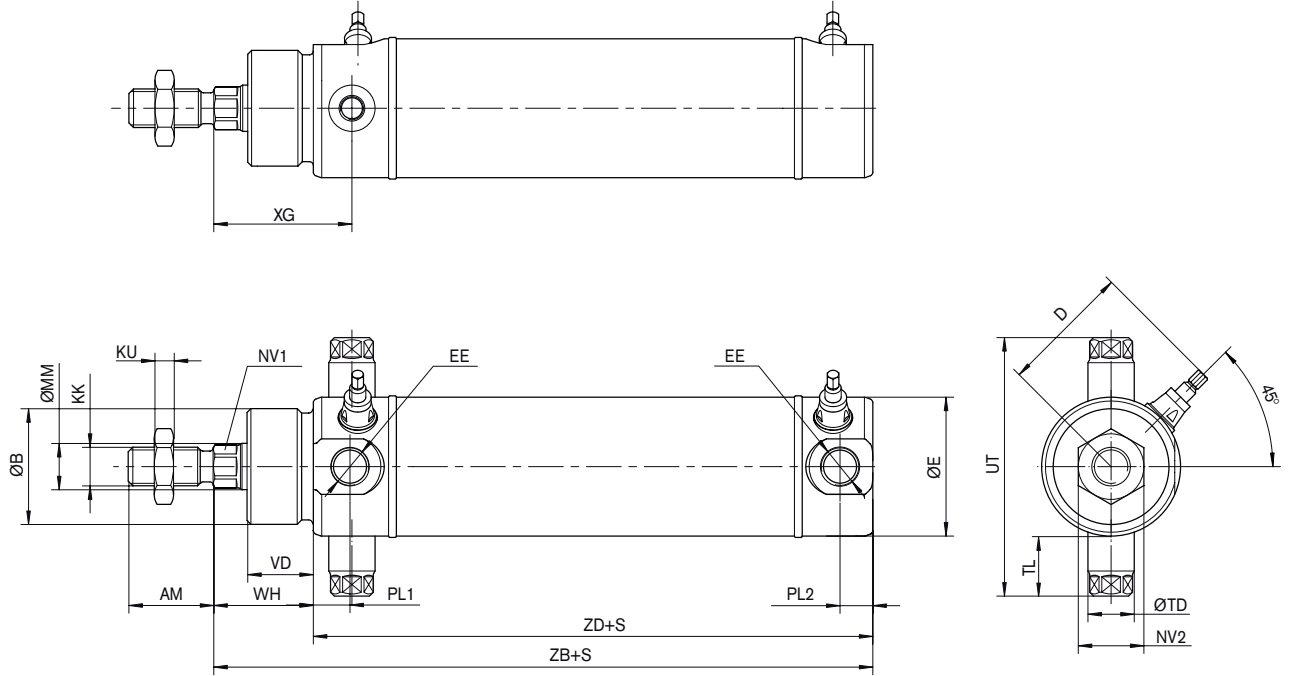
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MT1

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with mounting bolts in front end cover MT1

Mounting bolts in front end cover MT1, Piston Ø 32 - 100



00129048

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	PL2	Ø TD h9
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	8.5	12
40	24	35	38	44	G 1/4	M12x1,25	6	16	13	18	11	11	12
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	12	16
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	13.5	16
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	14	16
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	19	20

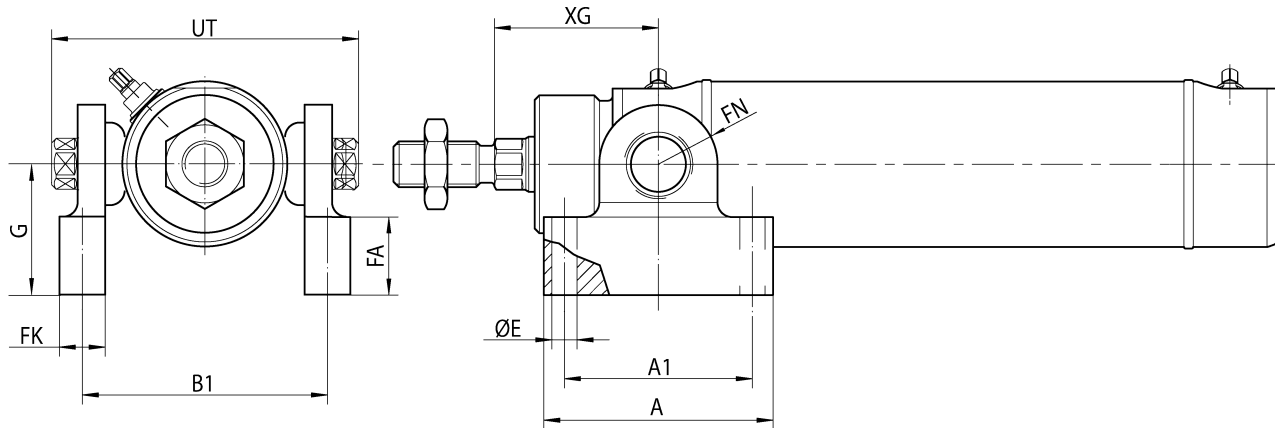
Ø	TL	UT	VD	WH	XG	ZB	ZD						
32	17	67	17	26	36	121	95						
40	17	74	25	35	47.5	143	108						
50	20	89	25	35	49.5	150	115						
63	24	109	30	40	55.5	165	125						
80	27	132	30	42	62	184	142						
100	32	164	30	42	63	198	156						

1) max.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MT1

- Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with mounting bolts in front end cover MT1

Mounting bolts with bearing blocks in front end cover F12

00129050

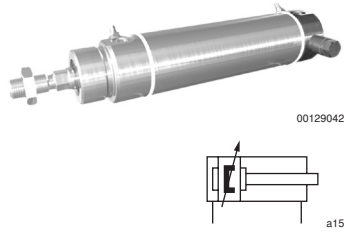
Ø	A	A1	B1	Ø E	FA	FK	FN	G	XG	UT				
32	50	41	53.5	5.5	17	10	13	28.5	36	67				
40	55	46	58.5	5.5	17	10	15.5	38	47.5	74				
50	64	53	71.5	6.5	18.5	12	17.5	38	49.5	89				
63	66	56	89.5	6.5	18.5	12	19	46.5	55.5	109				
80	82	72	106.5	6.5	18.5	12	26	50.5	62	132				
100	108	88	127	9	22	16	26	65	63	164				

Max. continuous temperature 85 °C (185 °F). Peak temperature of 150 °C (300 °F). Higher temperatures on request.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MT2

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with mounting bolts in rear end cover MT2



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	1 mg/m ³ - 0 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:

Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Mounting bolts	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100			
Retracting piston force	[N]	4639			
Extending piston force	[N]	4948			
Cushioning length	[mm]	22			
Cushioning energy	[J]	88			
Weight	0 mm stroke	[kg]	7.7		
	+10 mm stroke	[kg]	0.135		
Stroke max.	[mm]	1500			

Configurable product

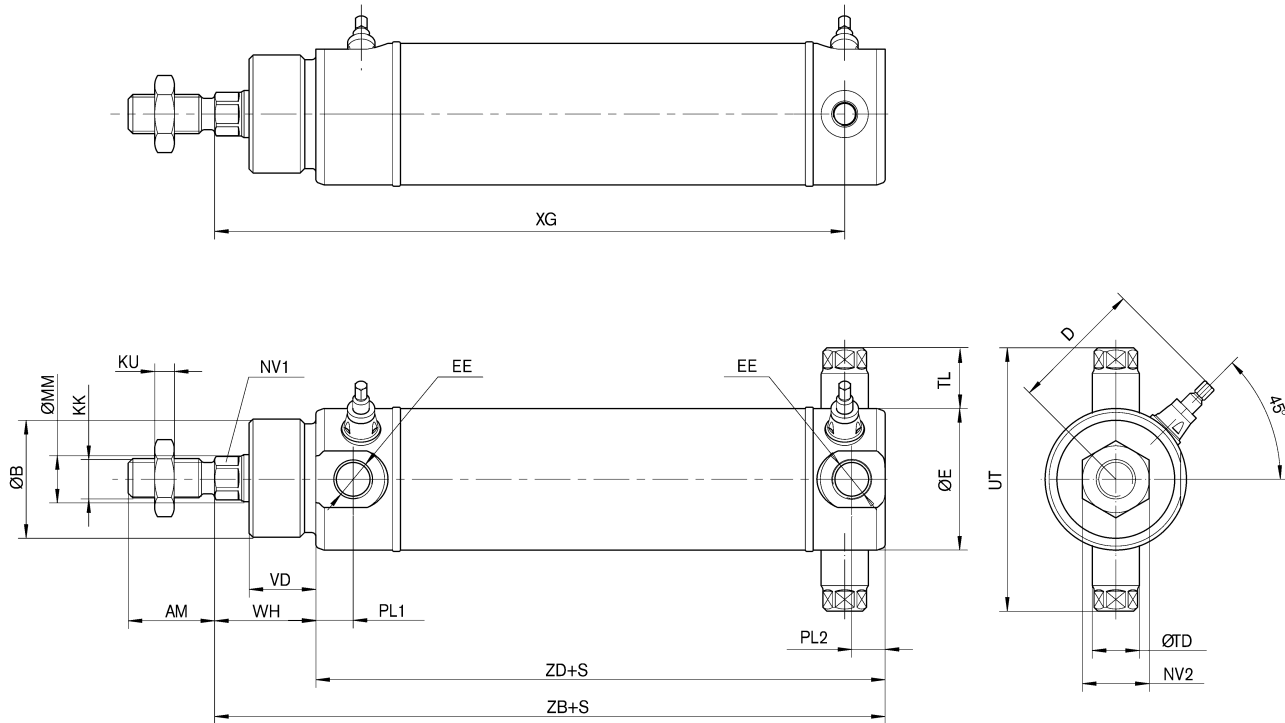
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MT2

- Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with mounting bolts in rear end cover MT2

Mounting bolts in rear end cover MT2, Piston Ø 32 - 100



00129049

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	PL2	Ø TD h9
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	8.5	12
40	24	35	38	44	G 1/4	M12x1,25	6	16	13	18	11	11	12
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	12	16
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	13.5	16
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	14	16
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	19	20

Ø	TL	UT	VD	WH	XG	ZB	ZD						
32	17	67	17	26	110.5	121	95						
40	17	74	25	35	129	143	108						
50	20	89	25	35	134.5	150	115						
63	24	109	30	40	149.5	165	125						
80	27	132	30	42	164	184	142						
100	32	164	30	42	177	198	156						

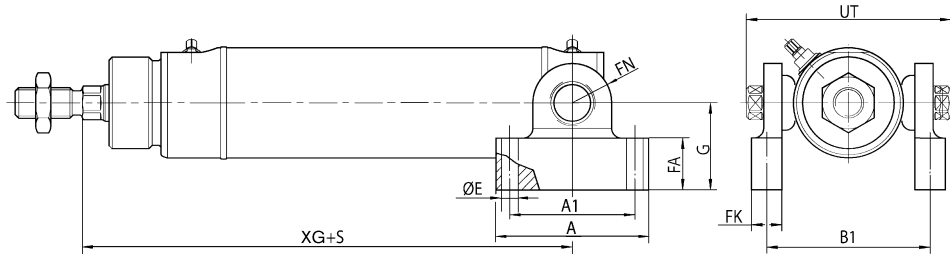
1) max.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MT2

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with mounting bolts in rear end cover MT2

Mounting bolts with bearing blocks in rear end cover R12



00129051

S = stroke

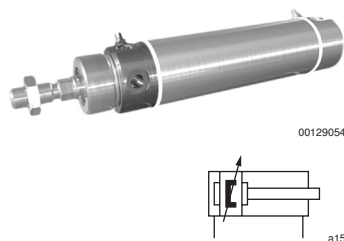
Ø	A	A1	B1	Ø E	FA	FK	FN	G	XG	UT				
32	50	41	53.5	5.5	17	10	13	28.5	110.5	67				
40	55	46	58.5	5.5	17	10	15.5	38	129	74				
50	64	53	71.5	6.5	18.5	12	17.5	38	134.5	89				
63	66	56	89.5	6.5	18.5	12	19	46.5	149.5	109				
80	82	72	106.5	6.5	18.5	12	26	50.5	164	132				
100	108	88	127	9	22	16	26	65	177	164				

Max. continuous temperature 85 °C (185 °F). Peak temperature of 150 °C (300 °F). Higher temperatures on request.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MH1

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with mounting holes position front



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product

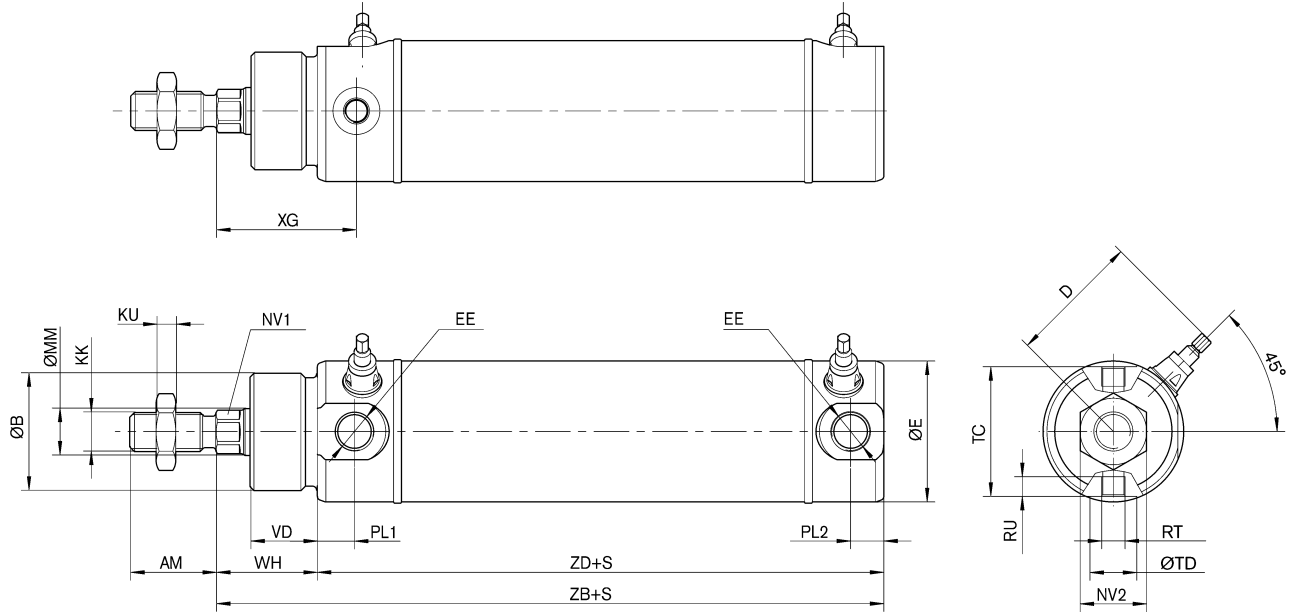
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MH1

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with mounting holes position front

Threaded holes in front end cover MH1, Piston Ø 32 - 100



S = stroke, tolerance Ø 32-50 mm = +2/-0, Ø 63-100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	PL2	RT
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	8.5	M6x0,5
40	24	35	38	44	G 1/4	M12x1,25	6	16	13	18	11	11	M6x0,5
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	12	M8x0,75
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	13.5	M10x1
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	14	M12x1
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	19	M16x1,5

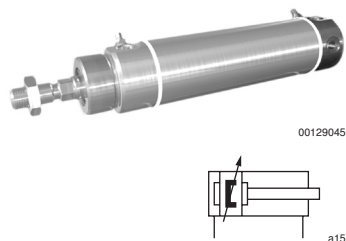
Ø	RU 2)	TC	Ø TD h9	VD	WH	XG	ZB	ZD					
32	5	33	12	17	26	36	121	95					
40	6	40	12	25	35	47.5	143	108					
50	7.5	49	16	25	35	49.5	150	115					
63	12.5	61	16	30	40	55.5	165	125					
80	16	78	16	30	42	62	184	142					
100	16	100	20	30	42	63	198	156					

1) max.
2) min.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MH2

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with mounting holes position rear



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product

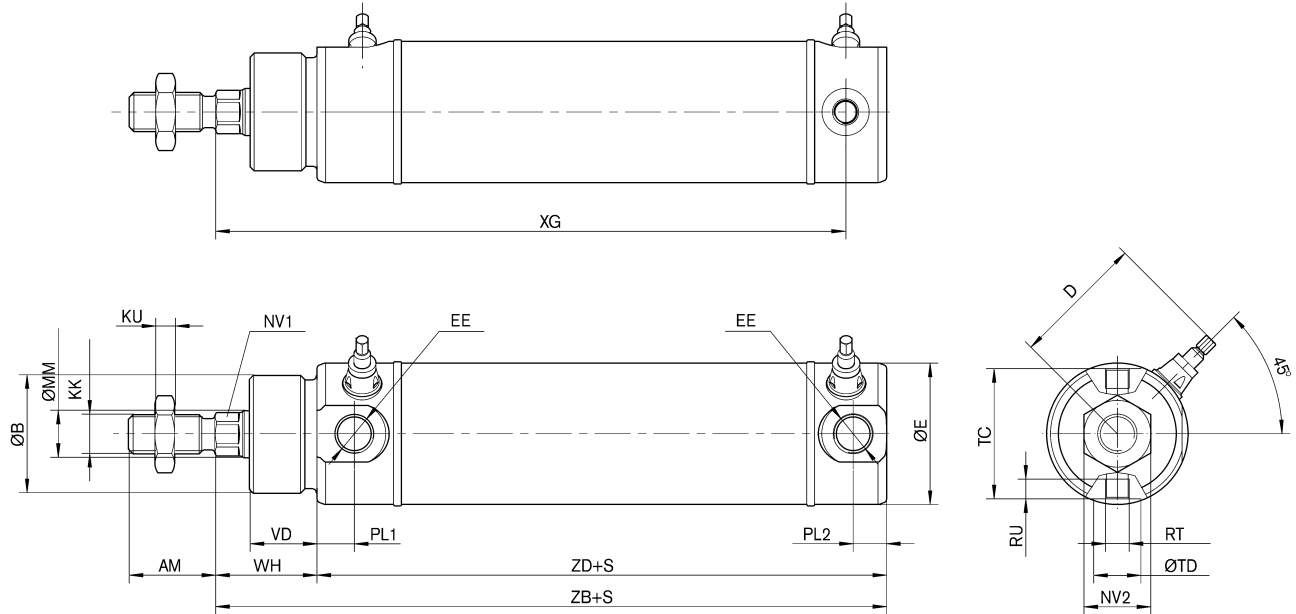
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MH2

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with mounting holes position rear

Threaded holes in rear end cover MH2, Piston Ø 32 - 100



S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	PL2	RT
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	8.5	M6x0,5
40	24	35	38	44	G 1/4	M12x1,25	6	16	13	18	11	11	M6x0,5
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	12	M8x0,75
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	13.5	M10x1
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	14	M12x1
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	19	M16x1,5

Ø	RU 2)	TC	Ø TD h9	VD	WH	XG	ZB	ZD					
32	5	33	12	17	26	110.5	121	95					
40	6	40	12	25	35	129	143	108					
50	7.5	49	16	25	35	134.5	150	115					
63	12.5	61	16	30	40	149.5	165	125					
80	16	78	16	30	42	164	184	142					
100	16	100	20	30	42	177	198	156					

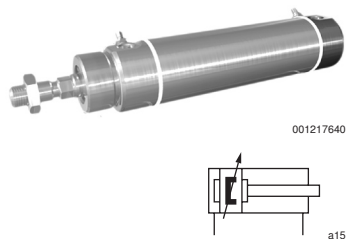
1) max.

2) min.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MX6

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► with rear end cover with threaded holes



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	507	792	1237	1964	3167	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.6	1.2	1.7	3	4
	+10 mm stroke	[kg]	0.025	0.036	0.05	0.065	0.1
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4948				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	7.7			
	+10 mm stroke	[kg]	0.135			
Stroke max.	[mm]	1500				

Configurable product

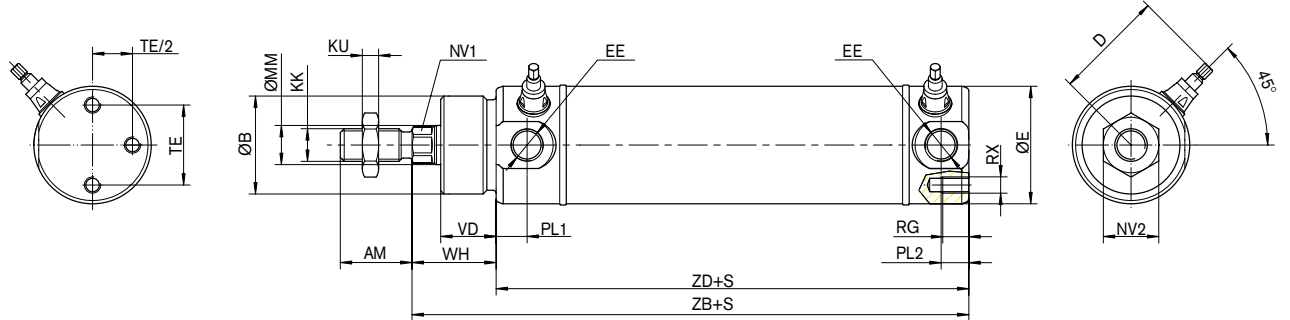
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1-MX6

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ with rear end cover with threaded holes

Rear eye with threaded holes, MX6, Piston Ø 32 - 100



00120495

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nuts in accordance with ISO 4035; DIN 439.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	PL2	RG
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	8.5	8
40	24	35	38	44	G 1/4	M12x1,25	6	16	13	18	11	11	10
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	12	10
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	13.5	12
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	14	12
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	19	16

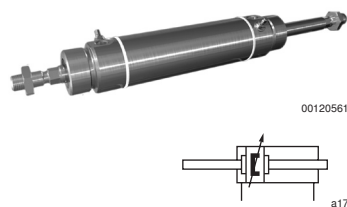
Ø	RX	TE	VD	WH	ZB	ZD							
32	M5	24.5	17	26	121	95							
40	M6	30	25	35	143	108							
50	M6	39	25	35	150	115							
63	M8	49	30	40	165	125							
80	M8	65	30	42	184	142							
100	M10	85	30	42	198	156							

1) max.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1

► Ø 32 - 100 mm ► double-acting ► with magnetic piston ► cushioning: pneumatically, adjustable ► acid-proof
 ► Piston rod: through



Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
Cylinder tube	Stainless steel, acid-proof
Piston rod	Stainless steel, acid-proof
Front cover	Stainless steel, acid-proof
End cover	Stainless steel, acid-proof
Seal	Acrylonitrile Butadiene Rubber
Nut for piston rod	Stainless steel, acid-proof
Scraper	Polyethylene

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“.
- Clamping piece for magnetic field sensor necessary
- Configuration with food lubricants according to NSF H1 for the food industry is possible

Piston Ø	[mm]	32	40	50	63	80	
Retracting piston force	[N]	435	665	1039	1766	2857	
Extending piston force	[N]	435	665	1039	1766	2857	
Cushioning length	[mm]	11.5	14	17	16	19	
Cushioning energy	[J]	2.4	4.5	7.5	13.5	54	
Weight	0 mm stroke	[kg]	0.7	1.4	2	3.5	4.7
	+10 mm stroke	[kg]	0.038	0.06	0.075	0.1	0.14
Stroke max.	[mm]	480	600	750	945	1200	

Piston Ø	[mm]	100				
Retracting piston force	[N]	4639				
Extending piston force	[N]	4639				
Cushioning length	[mm]	22				
Cushioning energy	[J]	88				
Weight	0 mm stroke	[kg]	9			
	+10 mm stroke	[kg]	0.17			
Stroke max.	[mm]	1500				

Configurable product



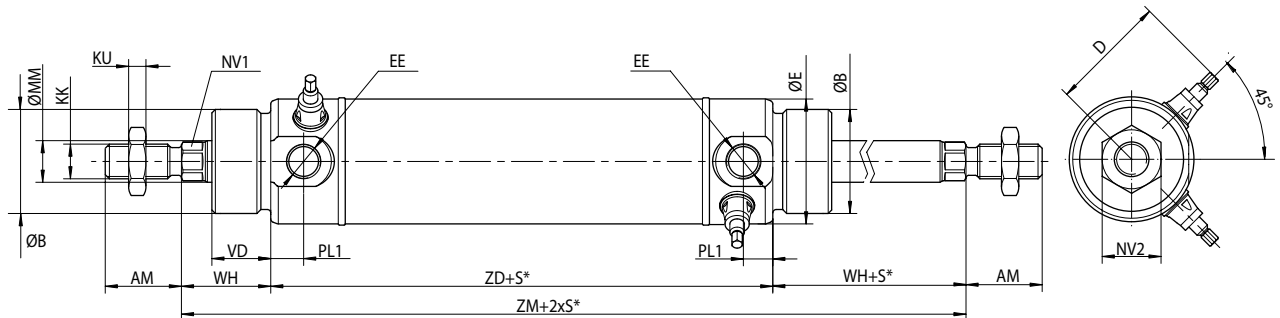
This product is configurable. Please use our Internet configurator at www.boschrexroth.com/pneumatics or contact the nearest Bosch Rexroth sales office.

Piston rod cylinders → Round cylinders

Round cylinder, Series ICS-D1

- ▶ Ø 32 - 100 mm ▶ double-acting ▶ with magnetic piston ▶ cushioning: pneumatically, adjustable ▶ acid-proof
- ▶ Piston rod: through

basic version, M00, with through piston rod, Ø 32 - 100 mm



00120501

S = stroke, tolerance Ø 32–50 mm = +2/-0, Ø 63–100 mm = +2.5/-0. The cylinder is supplied with piston rod nut in accordance with ISO 4035; DIN 439. For other dimensions, see basic version.

Ø	AM	Ø B e11	D 1)	Ø E	EE	KK	KU	MM g8	NV1	NV2	PL1	VD	WH
32	22	30	34	36	G 1/8	M10x1,25	5	12	10	17	9.5	17	26
40	24	35	40	44	G 1/4	M12x1,25	6	16	13	18	11	25	35
50	32	40	50	54	G 1/4	M16x1,5	8	20	17	24	12	25	35
63	32	45	57	68	G 3/8	M16x1,5	8	20	17	24	14	30	40
80	40	55	70.5	86	G 3/8	M20x1,5	10	25	22	30	14	30	42
100	40	65	80.5	106	G 1/2	M20x1,5	10	25	22	30	20	30	42
Ø	ZD	ZM											
32	96	148											
40	107	177											
50	115	185											
63	125	205											
80	142	226											
100	156	240											

1) max.

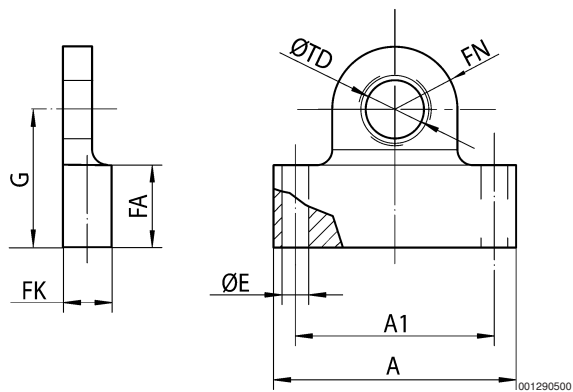
Piston rod cylinders → Round cylinders

Series ICS-D1
Accessories

Bearing blocks



P299_219

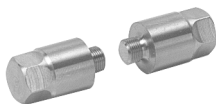


Part No.	Piston Ø	A	A1	Ø E	FA	FK	FN	G	Ø TD h9	Material
2992112030	32	50	41	5.5	17	10	13	28.5	12	Stainless steel, acid-proof
2992112040	40	55	46	5.5	17	10	15.5	38	12	Stainless steel, acid-proof
2992112050	50	64	53	6.5	18.5	12	17.5	38	16	Stainless steel, acid-proof
2992112060	63	66	56	6.5	18.5	12	19	46.5	16	Stainless steel, acid-proof
2992112080	80	82	72	6.5	18.5	12	26	50.5	16	Stainless steel, acid-proof
2992112100	100	108	88	9	22	16	26	65	20	Stainless steel, acid-proof

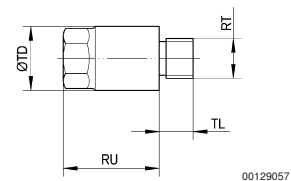
Delivered in pairs

Max. continuous temperature 85 °C (185 °F). Peak temperature of 150 °C (300 °F). Higher temperatures on request.

Mounting bolts



P299_220



Piston rod cylinders → Round cylinders
**Series ICS-D1
Accessories**

Part No.	Piston Ø	RT	RU	Ø TD h9	TL	Material					
2992113030	32	M6x0,5	5	12	17	Stainless steel, acid-proof					
2992113040	40	M6x0,5	6	12	17	Stainless steel, acid-proof					
2992113050	50	M8x0,75	7.5	16	20	Stainless steel, acid-proof					
2992113060	63	M10x1	8.5	16	24	Stainless steel, acid-proof					
2992113080	80	M12x1	16	16	27	Stainless steel, acid-proof					
2992113100	100	M16x1,5	16	20	32	Stainless steel, acid-proof					

Delivered in pairs

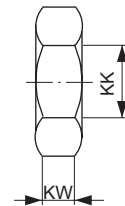
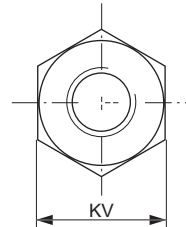
Piston rod cylinders → Round cylinders

Series ICS-D1
Accessories

Piston rod nut MR9



00105168



00105192

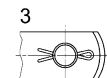
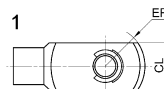
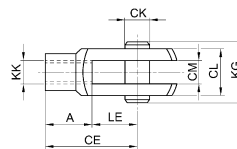
Part No.	KK	KV	KW	Material	Weight [kg]				
2990600303	M10x1,25	17	5	Stainless steel, acid-proof	0.01				
2990600304	M12x1,25	19	6	Stainless steel, acid-proof	0.02				
2990600305	M16x1,5	24	8	Stainless steel, acid-proof	0.03				
2990600308	M20x1,5	30	10	Stainless steel, acid-proof	0.05				

Rod clevis AP2

► Stainless steel



P300_006



00126601

Part No.	KK	Fig.	A	CE	CK e8	CL	CM B12	ER	KG	LE
2990600503	M10x1,25	2	20	40	10	20	10	12	26	20
2990600504	M12x1,25	2	24	48	12	24	12	14	31	24
2990600505	M16x1,5	2	32	64	16	32	16	19	39	32
2990600508	M20x1,5	2	40	80	20	40	20	20	49	40

Part No.	Material	Weight [kg]							
2990600503	Stainless steel, acid-proof	0.1							
2990600504	Stainless steel, acid-proof	0.2							
2990600505	Stainless steel, acid-proof	0.4							
2990600508	Stainless steel, acid-proof	0.7							

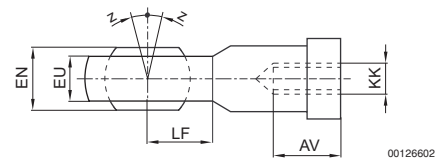
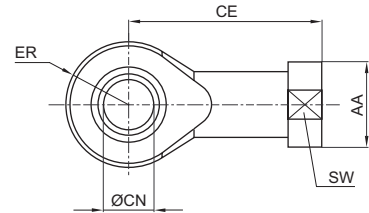
Piston rod cylinders → Round cylinders

Series ICS-D1
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.
2990690903	M10x1,25	19	20	43	10	14	14	10.5	14	17	7
2990690904	M12x1,25	22	22	50	12	16	16	12	16	19	7
2990690905	M16x1,5	27	28	64	16	21	21	15	21	22	8
2990690908	M20x1,5	34	33	77	20	25	25	18	25	32	8

Part No.	Material	Weight [kg]									
2990690903	Stainless steel, acid-proof	0.1									
2990690904	Stainless steel, acid-proof	0.12									
2990690905	Stainless steel, acid-proof	0.23									
2990690908	Stainless steel, acid-proof	0.42									

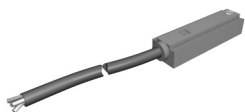
Piston rod cylinders → Round cylinders

Series ICS-D1

Accessories

Sensor, Series ST8

► 8 mm groove ► with cable ► without wire end ferrule, tin-plated



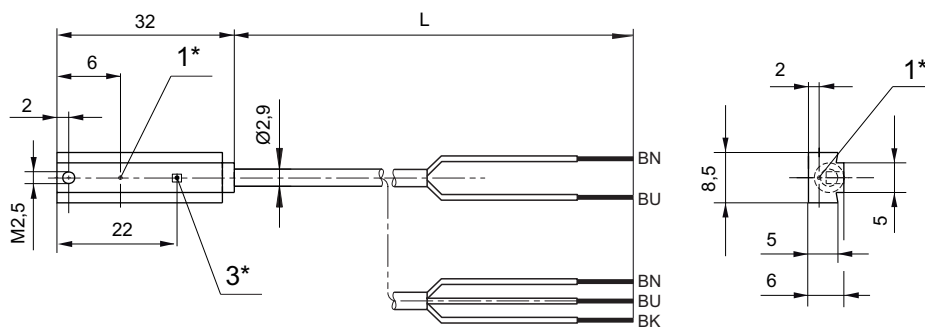
P322_194_2

Ambient temperature min./max.	-25 °C / +75 °C
Protection class according to EN 60529:2000	IP 65, IP 67
Switching point precision [mm]	±0,1
Vibration resistance	10 - 55 Hz, 1,5 mm

Type of contact	Cable length L	DC operating voltage min./max.	DC switching current, max.	Voltage drop U at I _{max}	Shock resistance Max.	Part No.
	[m]	[V]	[A]	[V]		
electronic PNP	2.5	10 / 30	0,15	≤ 2,0	30 g	2750131110
	10					2750151110
Part No.						Material Cable
2750131110 2750151110						Polyvinyl chloride

interfaces: without wire end ferrule, tin-plated
 Material Housing: Polyamide
 short circuit resistant; Protected against polarity reversal

Dimensions



00134180

1* = switching point
 3* = LED
 L = cable length
 BN = brown, BK = black, BU = blue

Sensor, Series ST8

► 8 mm groove ► with cable ► Plug, M8, 3-pin



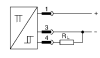
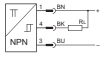
P322_194_11

Ambient temperature min./max.	-25 °C / +75 °C
Protection class according to EN 60529:2000	IP 65, IP 67
Switching point precision [mm]	±0,1
Vibration resistance	10 - 55 Hz, 1,5 mm
Shock resistance	30 g

Part numbers in boldface are available from the central warehouse in Germany. See the online catalog shopping basket for details.
 Pneumatics catalog "Expertise in the Food & Beverage Industry", 2010-10-29, Bosch Rexroth AG, subject to change.

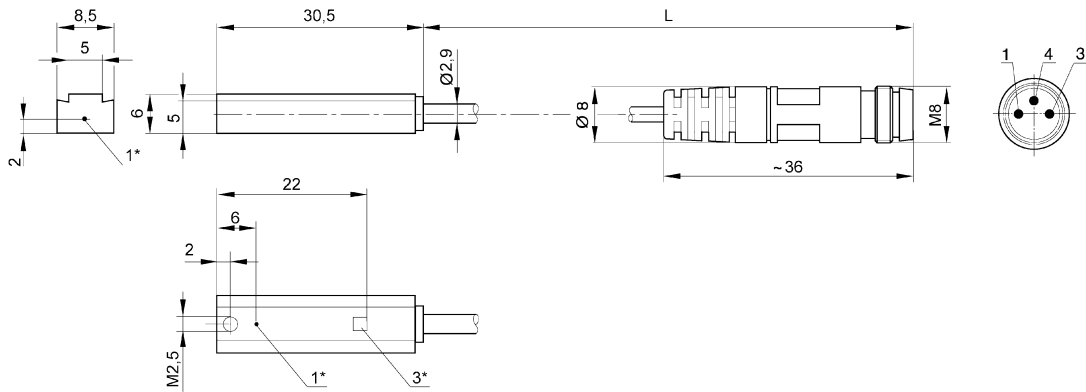
Piston rod cylinders → Round cylinders

Series ICS-D1
Accessories

	Type of contact	Cable length L	DC operating voltage min./max.	DC switching current, max.	Voltage drop U at I _{max}	Material Cable	Part No.
		[m]	[V]	[A]	[V]		
	electronic PNP	0.3	10 / 30	0,15	≤ 2,0	Polyurethane	2750111120 2750123120
	electronic NPN	0.3	10 / 30	0,15	≤ 2,0	Polyurethane	2750111220
Part No.							Note
2750111120							-
2750123120							1)
2750111220							-

1) in accordance with EN 50082-2
 interfaces: Plug; M8; 3-pin
 Material Housing: Polyamide
 short circuit resistant; Protected against polarity reversal

Dimensions

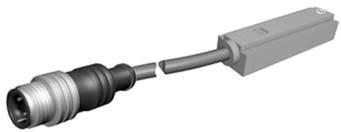


d322_178_b

1* = switching point
 3* = LED
 L = cable length
 Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

Sensor, Series ST8

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




P322_194_12

Ambient temperature min./max.	-25 °C / +75 °C
Protection class according to EN 60529:2000	IP 65, IP 67
Switching point precision [mm]	±0,1
Vibration resistance	10 - 55 Hz, 1,5 mm
Shock resistance	30 g

Piston rod cylinders → Round cylinders

Series ICS-D1

Accessories

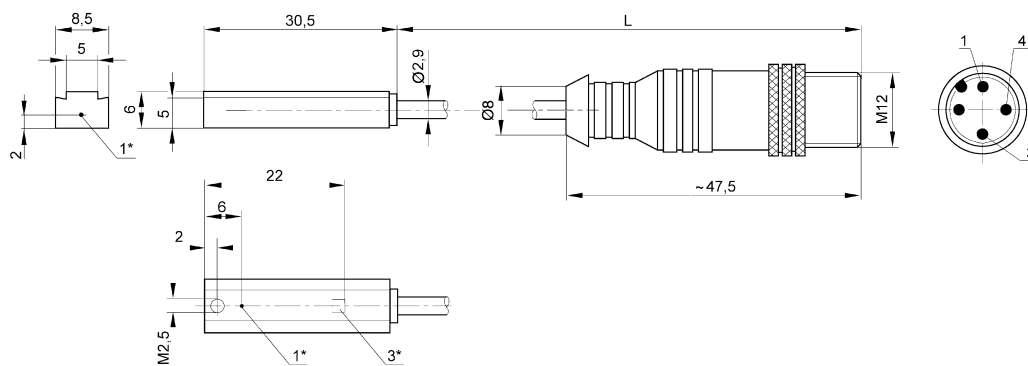
	Type of contact	Cable length L	DC operating voltage min./max.	DC switching current, max.	Voltage drop U at I _{max}	Material Cable	Part No.
		[m]	[V]	[A]	[V]		
	electronic PNP	0.3	10 / 30	0,15	≤ 2,0	Polyurethane	2750121120

interfaces: Plug; M12; 3-pin; with knurled screw

Material Housing: Polyamide

short circuit resistant; Protected against polarity reversal

Dimensions



d322_178_c

1* = switching point

3* = LED

L = cable length

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

Piston rod cylinders → Round cylinders

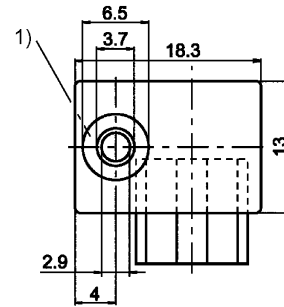
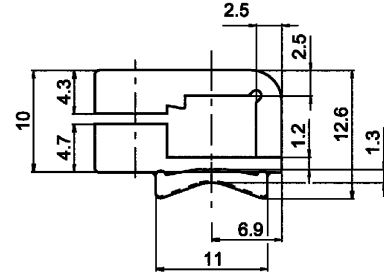
Series ICS-D1
Accessories

Sensor mounting

► clamping piece ► for Sensor Series ST8 ► to mount on cylinder Series CPC, ICS-D1, ICS-D2



P522_353



D522_353

1) Mounting screw for sensor

Part No.	Cylinders Ø [mm]	Material	Weight [kg]						
5226603532	32 - 80	Polyarylamide	0.01						

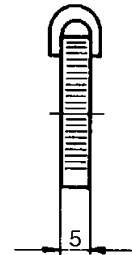
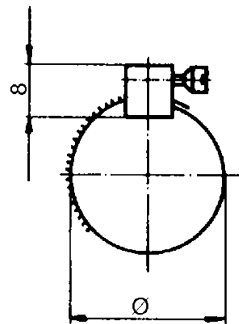
In combination with clamping ring 89351186X2

Clamping ring

► to mount on cylinder Series CPC, ICS-D1, ICS-D2



P893_860



D893_860

Part No.	Cylinders Ø [mm]	Material	Weight [kg]						
8935118622	28 - 39	Stainless steel	0.005						
8935118632	38 - 49	Stainless steel	0.005						
8935118642	48 - 59	Stainless steel	0.006						

Part numbers in boldface are available from the central warehouse in Germany. See the online catalog shopping basket for details. Pneumatics catalog "Expertise in the Food & Beverage Industry", 2010-10-29, Bosch Rexroth AG, subject to change.

Piston rod cylinders → Round cylinders

Series ICS-D1

Accessories

Part No.	Cylinders Ø [mm]	Material	Weight [kg]						
8935118652	58 - 69	Stainless steel	0.006						
8935118662	78 - 89	Stainless steel	0.007						
8935118672	98 - 109	Stainless steel	0.007						

Connecting cable, Series CN2

► Socket, M8, 3-pin ► open cable ends, 3-pin



00107009

Ambient temperature min./max.

-40 °C / +85 °C

Protection class according to EN 60529

IP 65

Materials:

Cable sheath

Polyurethane

Technical Remarks

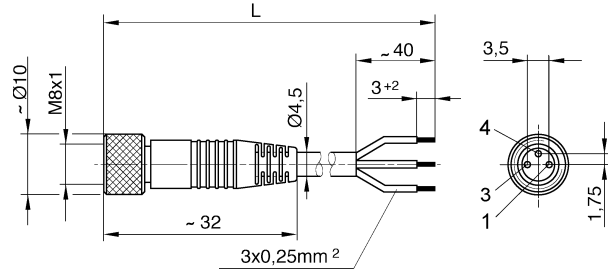
- The specified protection class is valid only in assembled and tested state.

	Electrical interface		Max. current	Number of wires	Wire cross-section	Cable exit	Part No.
	[Port 1]	[Port 2]	[A]		[mm ²]		
	Socket, M8, 3-pin	open cable ends, 3-pin	4	3	0.24	straight 180°	1834484166
						straight 180°	1834484168
						straight 180°	1834484247
						angled 90°	1834484167
						angled 90°	1834484169
						angled 90°	1834484248
						angled 90°	1834484249
Part No.	Cable length L		Weight		Fig.		
	[m]		[kg]				
1834484166	3		0.091		Fig. 1		
1834484168	5		0.145		Fig. 1		
1834484247	10		0.33		Fig. 1		
1834484167	3		0.092		Fig. 2		
1834484169	5		0.141		Fig. 2		
1834484248	10		0.276		Fig. 2		
1834484249	15		0.431		Fig. 2		

Piston rod cylinders → Round cylinders

Series ICS-D1
Accessories

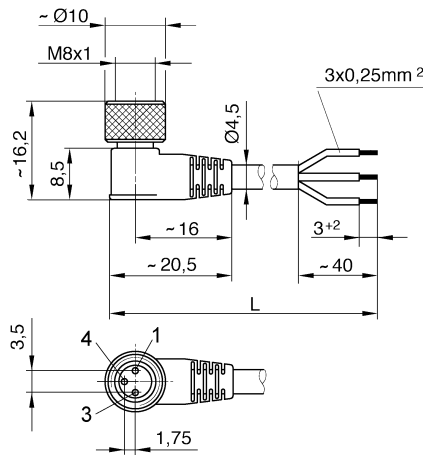
Fig. 1



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

M8x1 socket (female), Series CN2

► Socket, M8x1, 3-pin



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

Technical Remarks

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

Piston rod cylinders → Round cylinders

Series ICS-D1
Accessories

	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		Fig.
					[kg]		
1834484173 1834484174	1 position		Black		0.008		Fig. 1 Fig. 2

Housing: Polyamide

Fig. 1

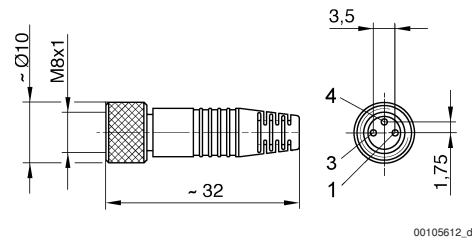
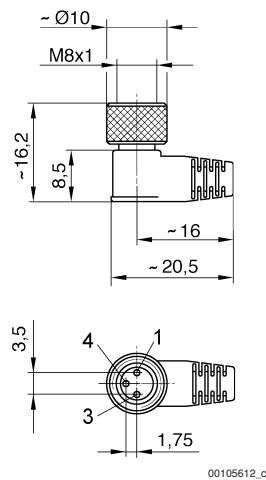


Fig. 2



Bosch Rexroth AG
Pneumatics
Ulmer Straße 4
D - 30880 Laatzen
Phone +49 511 2136-0
Fax +49 511 2136-2 69
sales-pneumatics@boschrexroth.de
www.boschrexroth.com/pneumatics

Your contact:

Canada

Bosch Rexroth Canada Corp.
3426 Mainway Drive
Burlington, Ontario L7M 1A8
Tel. +1 905 335-5511
Fax +1 905 335-4184

Australia

Bosch Rexroth Pty. Ltd.
3 Valediction Road
Kings Park NSW 2148
Sydney
Tel. +61 2 9831-7788
Fax +61 2 9831-5553

U.S.A.

Bosch Rexroth Corp.
1953 Mercer Road
Lexington, KY 40511-1021
Kentucky
Tel. +1 859 254-8031
Fax +1 859 254-4188

Great Britain

Bosch Rexroth Ltd.
Broadway Lane
South Cerney
Cirencester, GL7 5UH
Gloucestershire
Tel. +44 1285 86-3000
Fax +44 1285 86-3003

further contacts:
www.boschrexroth.com/addresses

The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

© This document, as well as the data, specifications and other informations set forth in it, are the exclusive property of Bosch Rexroth AG. Without their consent it may not be reproduced or given to third parties.

Subject to modifications.

Online-PDF
30-10-2010