Bearing block, Series AB7-HD

- Suitable for robust mechanical engineering applications, with fixed bearing
- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

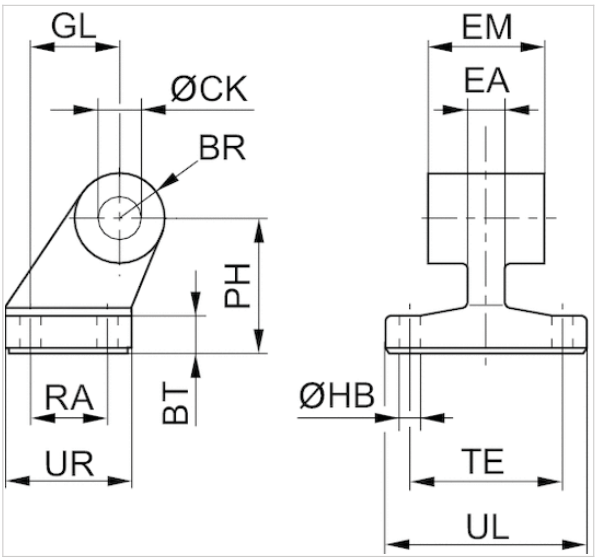
Technical data

Part No.	Piston Ø	Swivel bearing Ø
1825805282	160 mm	30 mm
1825805283	200 mm	30 mm
1825805284	250 mm	40 mm
5239013422	320 mm	45 mm

Technical information

Material	
Material	Nodular graphite iron
	galvanized
Screws	galvanized steel

Dimensions



Dimensions

Part No.	Piston Ø	BR	BT	Ø CK H9	Ø HB H13	EM	GL JS14	EA 1)	PH JS15
1825805282	160 mm	31.5	25	30	14	90 –0,5/–1,5	97	36	115
1825805283	200 mm	31.5	30	30	18	90 –0,5/–1,5	105	40	135
1825805284	250 mm	40	35	40	22	110 –0,5/–1,5	128	45	165
5239013422	320 mm	45	40	45	26	120 –0,5/–1,5	150	55	200

RA JS14	TE JS14	UL 1)	UR 1)
88	118	156	126
90	122	162	130
110	150	200	160
122	170	234	186

1) Max.

Bearing block, Series CS7

- With ball joint and foot
- Cylinder mounting in accordance with VDMA 24562 part 2
- Suitable piston Ø 160 200 250 320 mm

Standards VDMA 24562 part 2

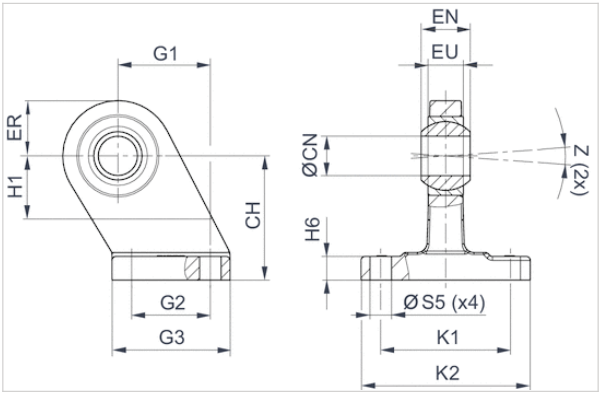
Technical data

Part No.	Piston Ø	Swivel bearing Ø
1827001791	160 mm	35 mm
1827001792	200 mm	35 mm
1827001793	250 mm	40 mm
5239013442	320 mm	40 mm

Technical information

Material	
Material	Nodular graphite iron
	galvanized

Dimensions



Dimensions

Part No.	Piston Ø	CH JS15	ØCN H7	EU 1)	EN -1,0	ER 1)	G1 JS14	G2 JS14	G3 1)	H1 2)
1827001791	160 mm	115	35	28	43	44	97	88	126	45
1827001792	200 mm	135	35	28	43	47	105	90	130	45
1827001793	250 mm	165	40	33	49	53	128	110	160	50
5239013442	320 mm	200	50	45	60	63	150	122	186	60

H6	K1 JS14	K2 1)	ØS5 H13	Z 2)
22 ±1,5	118	156	14	4°
27 ±2	122	162	18	4°
31 ±2	150	200	22	4°
36 ±2	170	234	26	4°

1) Max.

2) Min.

Clevis mounting, Series AB6

- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

Technical data

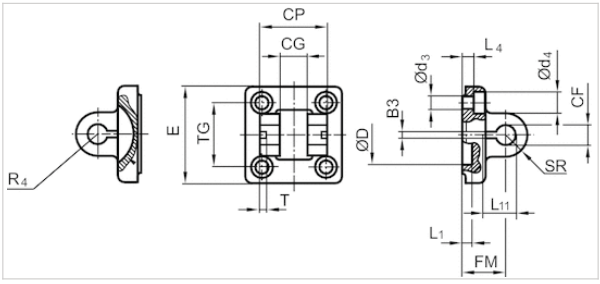
Part No.	Piston Ø	Swivel bearing Ø
1827001600	160 mm	35 mm
1827001601	200 mm	35 mm
1827001602	250 mm	40 mm
5239013432	320 mm	50 mm

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

Technical information

Material	
Material	Nodular graphite iron
	galvanized
Screws	Steel
	galvanized

Dimensions



Dimensions

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)
1827001600	160 mm	6.3	35	43	122	18	26	65	180	55	10
1827001601	200 mm	6.3	35	43	122	18	26	75	220	60	10
1827001602	250 mm	8.3	40	49	125	22	33	90	280	70	12
5239013432	320 mm	8.3	50	60	150	26	36	110	340	80	11

L4 ±0,5	L11 –0,5	R4	SR	T ±0,2	TG
10	45	46	32.5	6	140 ±0,3
11	45	49	32.5	6	175 ±0,3
11	53	55	40	8	220 ±0,3
15	69	65	50	8	270 ±0,3

1) Min.

Clevis mounting MP2-HD

- Suitable for robust mechanical engineering applications
- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

Technical data

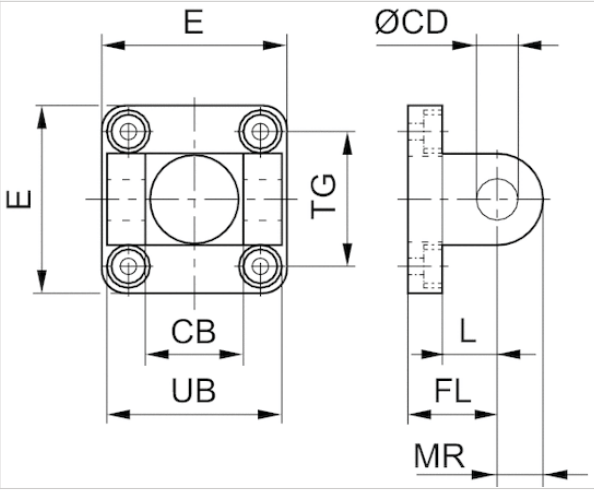
Part No.	Piston Ø	Swivel bearing Ø
1827004863	160 mm	30 mm
1827004864	200 mm	30 mm
1827004865	250 mm	40 mm
5239813402	320 mm	45 mm

Scope of delivery: clevis mounting incl. mounting screws

Technical information

Material	
Material	Nodular graphite iron
	galvanized
Screws	Steel
	galvanized

Dimensions



Dimensions

Part No.	Piston Ø	CB H14	Ø CD H9	E	FL ±0.2	L 1)	MR 2)	UB h13	TG
1827004863	160 mm	90	30	177	55	35	31	170	140 ±0.3
1827004864	200 mm	90	30	216	60	35	31	170	175 ±0.3
1827004865	250 mm	110	40	276	70	45	41	200	220 ±0.3
5239813402	320 mm	120	45	350	80	50	45	220	270 ±0.3

1) Min.

2) Max.

Rear eye, Series MP4-HD

- Suitable for robust mechanical engineering applications, for clevis mounting MP2 and AB3
- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

Technical data

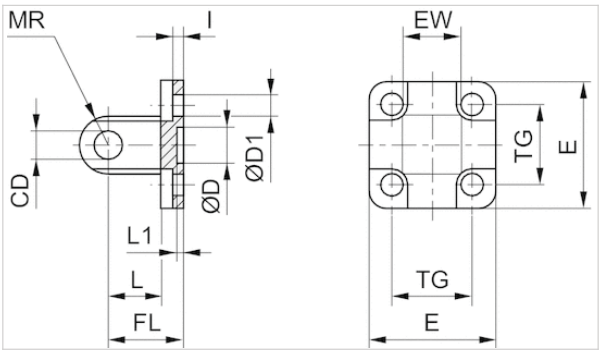
Part No.	Piston Ø	Swivel bearing Ø
1827004867	160 mm	30 mm
1827004868	200 mm	30 mm
1827004869	250 mm	40 mm
5239813412	320 mm	45 mm

Scope of delivery: clevis incl. mounting screws

Technical information

Material	
Material	Nodular graphite iron
	galvanized
Screws	Steel
	galvanized

Dimensions



Dimensions

Part No.	Piston Ø	CD H9	Ø D	Ø D1	E	EW	FL ±0,2	I ±0,5	L 1)	L1 1)
1827004867	160 mm	30	65 H11	18	180	90 –0,5/–1,2	55	10	35	7
1827004868	200 mm	30	75 H11	18	220	90 –0,5/–1,2	60	11	35	7
1827004869	250 mm	40	90 H11	22	280	110 –0,5/–1,2	70	11	45	11
5239813412	320 mm	45	110 H11	26	350	120 –0,5/–1,2	80	15	50	11

MR 2)	TG
31	140 ±0,3
31	175 ±0,3
41	220 ±0,3
45	270 ±0,3

1) Min.

2) Max.

Rear eye, Series MP6

- With ball joint and foot
- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards	ISO 15552
Weight	See table below

Technical data

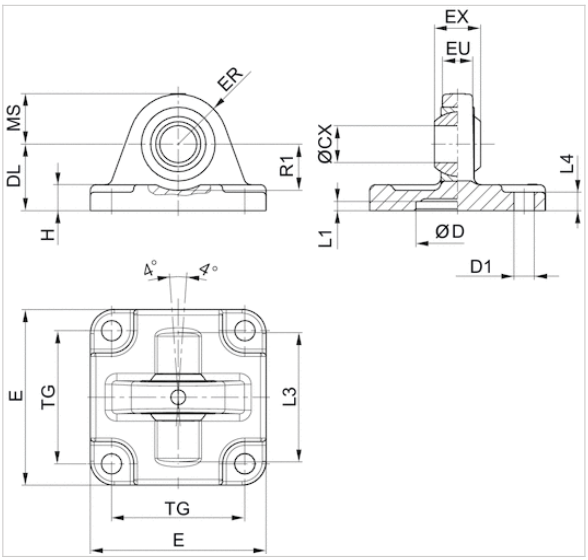
Part No.	Piston Ø	Swivel bearing Ø	Bearing material, inner ring	Bearing material, outer ring	Weight
1827001626	160 mm	35 mm	Stainless steel	Brass with PTFE coating	5,6 kg
1827001627	200 mm	35 mm	Stainless steel	Brass with PTFE coating	8,5 kg
1827001628	250 mm	40 mm	Stainless steel	Brass with PTFE coating	14,5 kg
5239013452	320 mm	50 mm	Stainless steel	Brass with PTFE coating	24,6 kg

Scope of delivery: clevis incl. mounting screws

Technical information

Material	
Material	Nodular graphite iron (galvanized)
Screws	galvanized steel

Dimensions



Dimensions

Part No.	Piston Ø	ØCX H7	ØD H11	ØD1 H13	DL ±0,2	E	EX –0,1	ER	EU	H	L1 1)	L3	L4
1827001626	160 mm	35	65	18	55	176	43	44	30	17	7	130	10
1827001627	200 mm	35	75	18	60	216	43	47	30	19.5	7	130	11
1827001628	250 mm	40	90	22	70	275	49	53	35	22	11	–	11
5239013452	320 mm	50	110	26	80	340	60	63	45	27	11	180	15

MS -0,5	R1 1)	TG
44	39	140 ±0,3
47	41	175 ±0,3
53	45	220 ±0,3
63	55	270 ±0,3

1) Min.

Trunnion mounting, front or rear, Series MT5, MT6

- Suitable piston Ø 160 200 250 mm

Weight

See table below

The delivered product may vary from that in the illustration.

Technical data

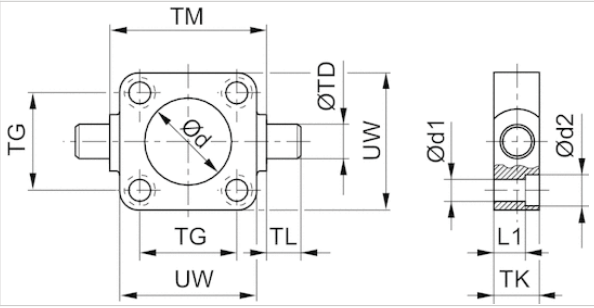
Part No.	Piston Ø	For series	Weight
1827001616	160 mm	ITS TRB	5,5 kg
1827001617	200 mm	ITS TRB	9,7 kg
1827001618	250 mm	ITS TRB	15,7 kg

Scope of delivery: trunnion mounting incl. mounting screws

Technical information

Material	
Material	Nodular graphite iron
	galvanized
Screws	Steel
	galvanized

Dimensions



Dimensions

Part No.	Piston Ø	Ø d H11	Ø d1	Ø d2	L1	TD e9	TG ±0,2	TK	TL h14	TM h14	UW
1827001616	160 mm	65	18	26	38	32	140	50	32	200	184
1827001617	200 mm	75	18	26	40	32	175	60	32	250	224
1827001618	250 mm	90	22	33	57	40	220	70	40	320	286

Eye brackets

- Suitable piston Ø 160 200 250 320 mm

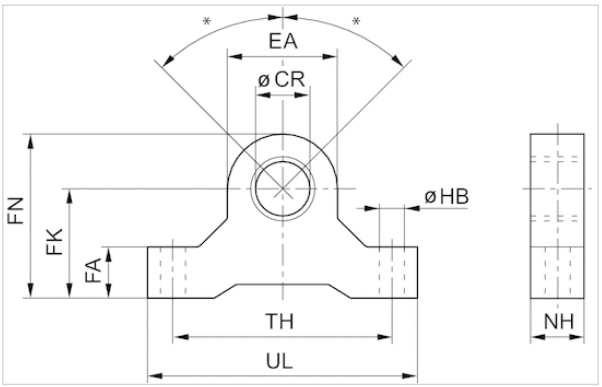
Technical data

Part No.	Piston Ø	Swivel bearing Ø	Scope of delivery
3671216000	160 200 mm	32 mm	2 piece
3671220000	250 320 mm	35 mm	2 piece

Technical information

Material	
Material	Aluminum

Dimensions



* Max. pendulum movement for cylinders with rear eye MP6 with ball joint: ±45°

Dimensions

Part No.	Ø CR H8	EA	FA	FK ±0,1	FN	HB	NH	TH	UL
3671216000	32	66	32	70	103	17	32	140	172
3671220000	35	66	32	70	103	17	32	140	172

Bearing brackets MT4, MT5, MT6, Series AT4

- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

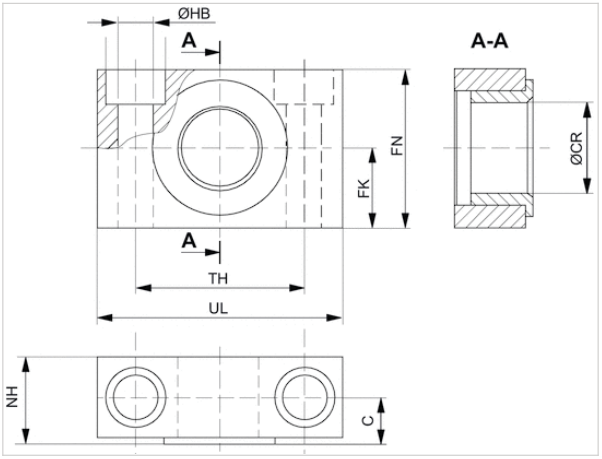
Technical data

Part No.	Piston Ø	Swivel bearing Ø	For series	Scope of delivery
1827001607	160 200 mm	32 mm	ITS	2 piece
R412018908	250 mm	40 mm	ITS	2 piece
R412018903	320 mm	40 mm	ITS	2 piece

Technical information

Material	
Material	Steel
	galvanized
Guide bushing	Sintered bronze

Dimensions



Dimensions

Part No.	Piston Ø	UL	NH	TH	C	CR H9	HB H13	FN	FK	Plain bearing
1827001607	160 200 mm	92	40	60 ±0,3	22.5	32	18	60	30 ±0,2	Sintered bronze
R412018908	250 mm	140	50	90	27.5	40	22	70	35	Sintered bronze
R412018903	320 mm	150	60	100	32.5	50	26	80	40	Sintered bronze

Flange mounting, Series MF1, MF2

- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

Technical data

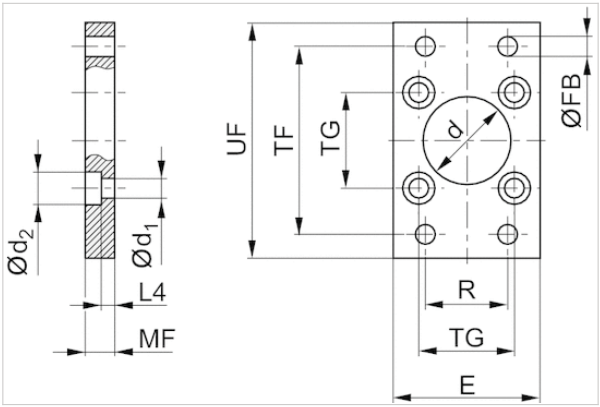
Part No.	Piston Ø	Swivel bearing Ø
1827001460	160 mm	65 mm
1827001461	200 mm	75 mm
1827001462	250 mm	90 mm
5239016012	320 mm	110 mm

Scope of delivery: flange mounting incl. mounting screws

Technical information

Material	
Material	Steel
	galvanized
Screws	Steel
	galvanized

Dimensions



Dimensions

Part No.	Piston Ø	Ød H11	Ød1	Ød2	E 1)	ØFB	L4	MF	R	TF	TG	UF
1827001460	160 mm	65	18	26	180	18	9.5	20	115	230	140 ±0,3	275
1827001461	200 mm	75	18	26	220	22	12.5	25	135	270	175 ±0,3	312
1827001462	250 mm	90	22	33	280	26	10.5	25	165	330	220 ±0,3	380

1) Max.

Foot mounting, Series MS1

- to mount on cylinder PRA, TRB, CCL-IS/-IC, CCI, KPZ, 167, CVI, ITS
- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards ISO 15552

Technical data

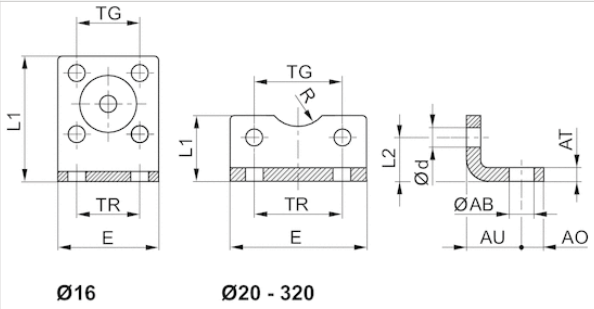
Part No.	Piston Ø
1827001457	160 mm
1827001458	200 mm
1827001459	250 mm
5239010502	320 mm

Scope of delivery: 2 foot mountings incl. mounting screws

Technical information

Material	
Material	Steel
	galvanized
Screws	Steel
	galvanized

Dimensions



Dimensions

Part No.	Piston Ø	ØAB	AO	AT	AU ±0,2	Ød	E	L1	L2	R	TG	TR
1827001457	160 mm	18.5	23	10 ±1,0	60	17.5	185	100	45	32.5	140 ±0,3	115
1827001458	200 mm	24	26	12 ±1,0	70	17.5	220	120	47.5	37.5	175 ±0,3	135
1827001459	250 mm	28	33	20 ±1,0	75	22	280	135	55	45	220 ±0,3	165
5239010502	320 mm	35	45	23 ±1,0	85	26	350	200	65	55	270 ±0,3	200

Bolts, AA4

- Cylinder mounting in accordance with ISO 15552
- Suitable piston Ø 160 200 250 320 mm

Standards	ISO 15552
Weight	See table below

Technical data

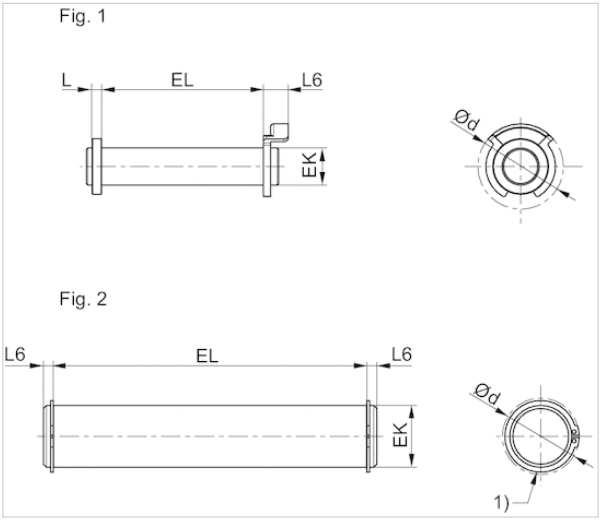
Part No.	Piston Ø	Weight	Fig.
5237000092	160 200 mm	0,99 kg	Fig. 2
5239000092	250 mm	2,12 kg	Fig. 2
5239010092	320 mm	3,01 kg	Fig. 2

Scope of delivery: pivot pins incl. circlips

Technical information

Material	
Material	Steel
	galvanized

Dimensions



1) circlip DIN 471

Dimensions

Part No.	Piston Ø	Ø d 1)	EK e8	EL	L 1)	L6 1)	Fig.
5237000092	160 200 mm	40.5	30	172 +0,5	-	4.25	Fig. 2
5239000092	250 mm	52.6	40	202 +0,5	-	6.75	Fig. 2
5239010092	320 mm	59.1	45	222 +0,5	-	7.25	Fig. 2

1) Max.

Nut for piston rod, Series MR9

Weight See table below

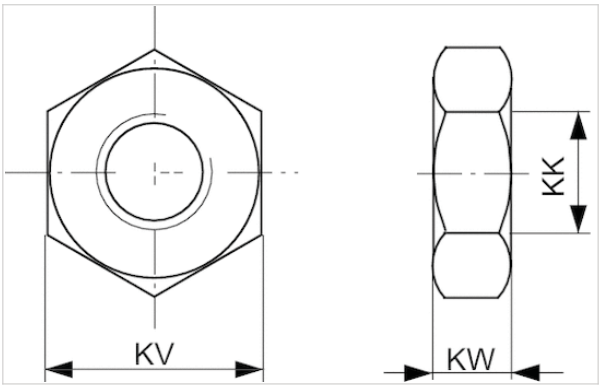
Technical data

Part No.	Suitable piston rod thread	Weight
8103190414	M36x2	0,175 kg
8103190424	M42x2	0,37 kg
8103190434	M48x2	0,4 kg

Technical information

Material	
	Steel
	galvanized

Dimensions



Dimensions

Part No.	KK	KV	KW
8103190414	M36x2	50	16
8103190424	M42x2	60	21
8103190434	M48x2	65	25

Rod clevis, Series AP2

- to mount on cylinder PRA, TRB, CCI, MNI, ICM, KPZ, KHZ, 167, CVI, RPC, RDC, ITS

Weight See table below

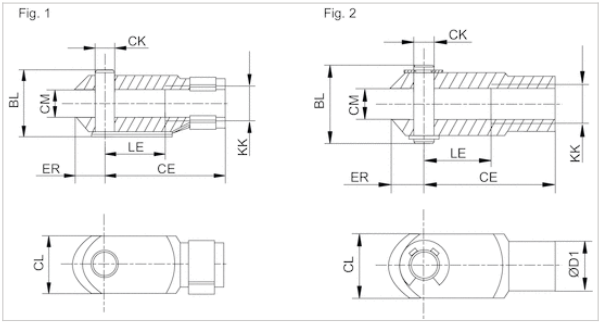
Technical data

Part No.	Suitable piston rod thread	for	Weight	Fig.
1827001471	M36x2	ITS	3,5 kg	Fig. 2
1827001472	M42x2	ITS	6,6 kg	Fig. 2
8958019332	M48x2	ITS	9,7 kg	Fig. 1

Technical information

Material	
	Steel
	galvanized

Dimensions



Dimensions

Part No.	KK	BL	CE	ØCK e11	CL	CM	ØD1	ER	LE	Fig.
1827001471	M36x2	80	144	35	70	35	60	57	72	Fig. 2
1827001472	M42x2	98	168	40	85	40	70	64	84	Fig. 2
8958019332	M48x2	122	192	50	96	50	82	73	96	Fig. 1

Ball eye rod end with flange, Series AP6

- to mount on cylinder PRA, TRB, CCI, SSI, MNI, RPC, KPZ, 167, CVI, RDC, 102, ITS

Weight See table below

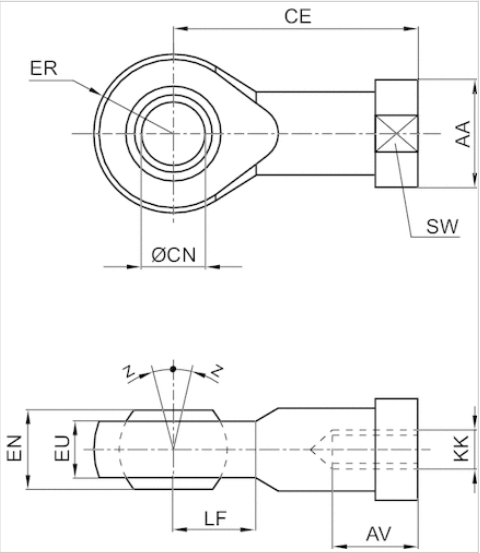
Technical data

Part No.	Suitable piston rod thread	for	Swivel bearing Ø	Weight
1822124008	M36x2	ITS	35 mm	2 kg
1822124009	M42x2	ITS	40 mm	3,4 kg
8958208842	M48x2	ITS	50 mm	5,2 kg

Technical information

Material	
	Steel
	galvanized

Dimensions



Dimensions

Part No.	KK	AA	AV min.	CE	Ø CN H7	EN –0,1	ER	EU max.	LF	SW	Z [°] max.
1822124008	M36x2	60	56	125	35	43	40	32	40	50	4
1822124009	M42x2	69	60	142	40	49	45.5	37	45	55	4
8958208842	M48x2	75	65	160	50	60	58	45	60	65	6

Flexible spherical coupling, Series PM5

- to mount on cylinder PRA, TRB, CCL-IS/-IC, CCI, SSI, MNI, KPZ, KHZ, 167, CVI, RPC, RDC, ITS

Weight See table below

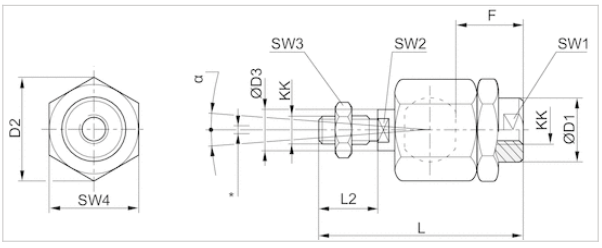
Technical data

Part No.	Suitable piston rod thread	for	Weight
1826409007	M36x2	ITS	5,4 kg
R412007729	M42x2	ITS	8,76 kg

Technical information

Material	
	Steel
	galvanized

Dimensions



* Radial joint

Dimensions

Part No.	KK	Ø D1	D2	Ø D3	F	L ±2	L2	SW1	SW2	SW3	SW4	α [°]	1)	2)
1826409007	M36x2	80	80	38	86	241	72	50	36	55	75	8	0.05-0.2	0-2
R412007729	M42x2	64	98	42	96	271	82	60	36	65	85	8	0.05-0.2	0-2

1) Axial play

2) Radial play

Flexible plate coupling, Series PM7

- to mount on cylinder PRA, TRB, CCL-IS/-IC, CCI, SSI, KPZ, 167, CVI, RPC, ITS

Weight 3,4 kg

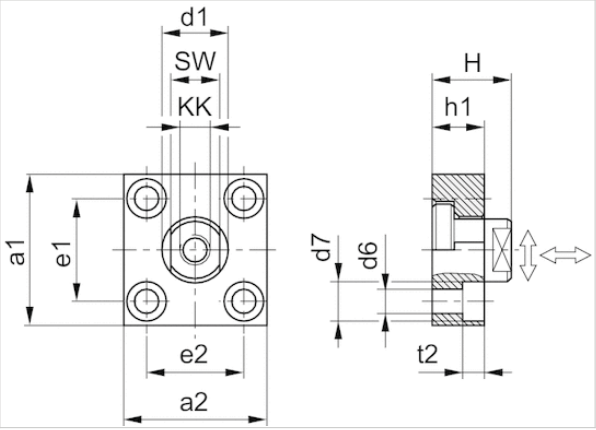
Technical data

Part No.	Suitable piston rod thread	for
1827001634	M36x2	ITS

Technical information

Material	
	Steel
	galvanized

Dimensions



Dimensions

Part No.	a1	a2	d1 h11	d6 H13	d7 H13	e1 H13	e2	h1	t2	H	SW
1827001634	125	125	60	18	26	90 ±0,3	90 ±0,3	30	17	55	50

Tightening torque for the coupling pin Ma ± 5%	Axial play min./max.	Radial play min./max.
1080 Nm	0,4 0,95 mm	2,8 3,4 mm

Modular sealing system

- Ø 160 mm ... 320 mm
- For series ITS

Working pressure min./max.	1,5 ... 10 bar
Ambient temperature min./max.	See table below
Medium	Compressed air
Oil content of compressed air	0 ... 5 mg/m³

Technical data

Part No.	Piston Ø	Piston rod seal	Scraper
R412018749	160 200 mm	Acrylonitrile butadiene rubber	Acrylonitrile butadiene rubber
R412018750	160 200 mm	Polyurethane	Brass
R412018751	160 200 mm	Fluorocaoutchouc	Fluorocaoutchouc
R412018752	160 200 mm	Fluorocaoutchouc	Brass
R412022884	160 200 mm	Polytetrafluorethylene	Polytetrafluorethylene
R412018753	250 mm	Acrylonitrile butadiene rubber	Acrylonitrile butadiene rubber
R412018754	250 mm	Polyurethane	Brass
R412018755	250 mm	Fluorocaoutchouc	Fluorocaoutchouc
R412018756	250 mm	Fluorocaoutchouc	Brass
R412022885	250 mm	Polytetrafluorethylene	Polytetrafluorethylene
R412018757	320 mm	Acrylonitrile butadiene rubber	Acrylonitrile butadiene rubber
R412018758	320 mm	Polyurethane	Brass
R412018759	320 mm	Fluorocaoutchouc	Fluorocaoutchouc
R412018760	320 mm	Fluorocaoutchouc	Brass
R412022886	320 mm	Polytetrafluorethylene	Polytetrafluorethylene

Part No.	Ambient temperature min./max.
R412018749	-20 ... 80 °C
R412018750	-40 ... 80 °C
R412018751	-10 ... 150 °C
R412018752	-10 ... 150 °C
R412022884	-20 ... 150 °C
R412018753	-20 ... 80 °C
R412018754	-40 ... 80 °C
R412018755	-10 ... 150 °C
R412018756	-10 ... 150 °C
R412022885	-20 ... 150 °C
R412018757	-20 ... 80 °C

Part No.	Ambient temperature min./max.
R412018758	-40 ... 80 °C
R412018759	-10 ... 150 °C
R412018760	-10 ... 150 °C
R412022886	-20 ... 150 °C

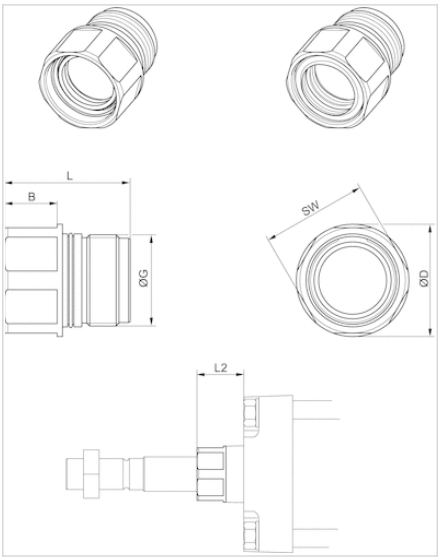
Application area Chemical industry Sugar production Steel construction Automotive industry Woodworking industry

Technical information

Material	
Housing	Aluminum, anodized

Dimensions

Dimensions

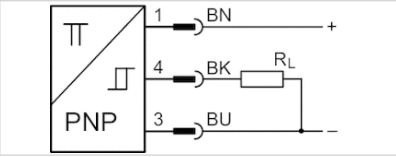


Dimensions

Ø	B	ØD	G	L	L2	SW
160, 200	30	64	M52x3	71.5	56	60
250	31.5	88	M70x4	85.5	67	80
320	37	108	M85x4	97	76	95

Sensor, Series ST6

- 6 mm T-slot
- with cable
- open cable ends, 3-pin
- ATEX
- UL certification, ATEX
- electronic PNP
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR



Certificates	ATEX CE declaration of conformity cULus RoHS
ATEX class G	II 3G Ex nA IIC T4 Gc X
ATEX class D	II 3D Ex tc IIIC T135°C Dc X
Ambient temperature min./max.	-20 ... 50 °C
Protection class	IP67
Switching point precision	±0,1 mT
Quiescent current (without load)	10 mA
Min./max. DC operating voltage	10 ... 30 V DC
Switching logic	NO (make contact)
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	for	Type of contact	Cable length L
R412022854	PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	3 m
R412022856	PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	5 m

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022854	≤ 2,5 V	0,1 A
R412022856	≤ 2,5 V	0,1 A

Part No.	Max. switching frequency
R412022854	1000 Hz
R412022856	1000 Hz

Part No.	Version
R412022854	short circuit resistant Protected against polarity reversal

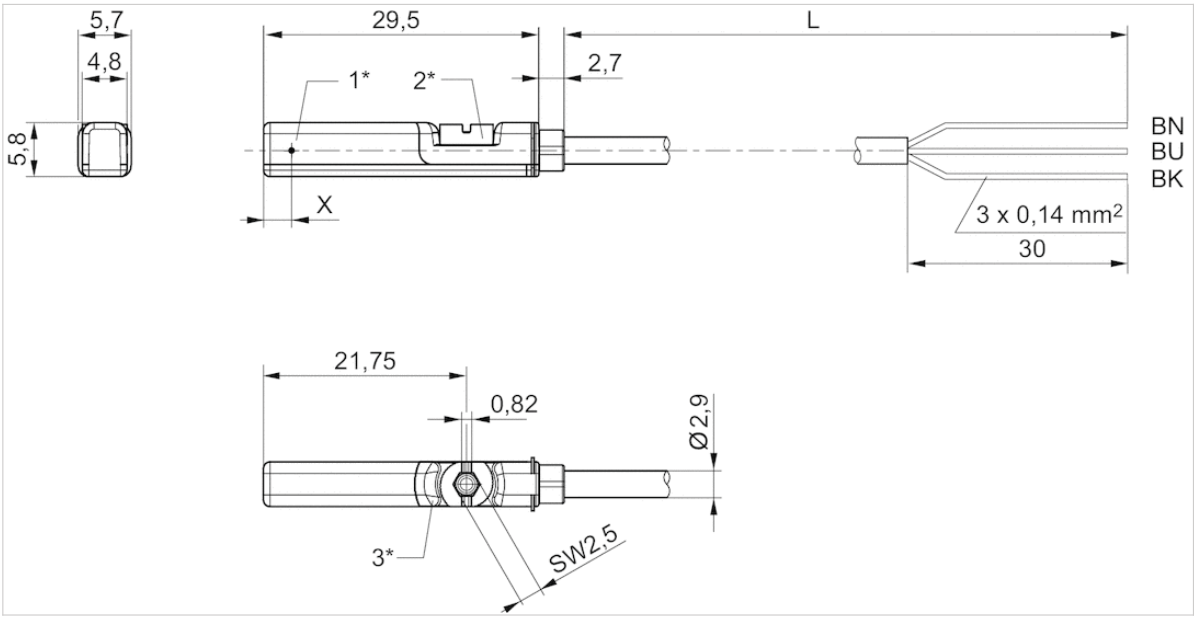
Part No.	Version
R412022856	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Fig. 2



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN = brown, BK = black, BU = blue
X = electronic: 11.6 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- open cable ends, 2-pin open cable ends, 3-pin
- UL certification
- Reed electronic PNP electronic NPN
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR

Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65, IP67, IP69K
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	See table below
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.		for	Type of contact	Cable length L
R412022866		PRA PRE CCI KPZ SSI GPC CVI	Reed	3 m
R412027170		PRA PRE CCI KPZ SSI GPC CVI	Reed	5 m
R412022869		PRA PRE CCI KPZ SSI GPC CVI	Reed	3 m
R412022870		PRA PRE CCI KPZ SSI GPC CVI	Reed	5 m
R412022871		PRA PRE CCI KPZ SSI GPC CVI	Reed	10 m
R412022853		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	3 m
R412022855		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	5 m
R412022857		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	10 m
R412022849		PRA PRE CCI KPZ SSI GPC CVI	electronic NPN	3 m
R412022850		PRA PRE CCI KPZ SSI GPC CVI	electronic NPN	5 m

Part No.	Min./max. DC operating voltage	Min./max. AC operating voltage
R412022866	10 ... 230 V DC	10 ... 230 V AC
R412027170	10 ... 230 V DC	10 ... 230 V AC
R412022869	10 ... 30 V DC	10 ... 30 V AC
R412022870	10 ... 30 V DC	10 ... 30 V AC
R412022871	10 ... 30 V DC	10 ... 30 V AC
R412022853	10 ... 30 V DC	-
R412022855	10 ... 30 V DC	-
R412022857	10 ... 30 V DC	-
R412022849	10 ... 30 V DC	-
R412022850	10 ... 30 V DC	-

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022866	≤ 3,5 V	0,13 A
R412027170	≤ 3,5 V	0,13 A
R412022869	I*Rs	0,3 A
R412022870	≤ 0,1 V	0,3 A
R412022871	I*Rs	0,3 A
R412022853	≤ 2,5 V	0,13 A
R412022855	≤ 2,5 V	0,13 A
R412022857	≤ 2,5 V	0,13 A
R412022849	≤ 2,5 V	0,13 A
R412022850	≤ 2,5 V	0,13 A

Part No.	AC switching current, max.	Switching capacity
R412022866	0,13 A	Reed, 2-pin: max. 10 W
R412027170	0,13 A	Reed, 2-pin: max. 10 W
R412022869	0,5 A	Reed, 3-pin: max. 6 W
R412022870	0,5 A	Reed, 3-pin: max. 6 W
R412022871	0,5 A	Reed, 3-pin: max. 6 W
R412022853	-	-
R412022855	-	-
R412022857	-	-
R412022849	-	-
R412022850	-	-

Part No.	Max. switching frequency	Operating current, not switched
R412022866	400 Hz	-
R412027170	400 Hz	-
R412022869	400 Hz	-
R412022870	400 Hz	-
R412022871	400 Hz	-
R412022853	1000 Hz	8 mA
R412022855	1000 Hz	8 mA
R412022857	1000 Hz	8 mA
R412022849	1000 Hz	8 mA
R412022850	1000 Hz	8 mA

Part No.	Operating current, switched
R412022866	-
R412027170	-
R412022869	-
R412022870	-
R412022871	-
R412022853	30 mA
R412022855	30 mA
R412022857	30 mA

Part No.	Operating current, switched
R412022849	30 mA
R412022850	30 mA

Part No.	Version	Fig.	
R412022866	Protected against polarity reversal	Fig. 1	1)
R412027170	Protected against polarity reversal	Fig. 1	1)
R412022869	Protected against polarity reversal	Fig. 2	2)
R412022870	Protected against polarity reversal	Fig. 2	2)
R412022871	Protected against polarity reversal	Fig. 2	2)
R412022853	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022855	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022857	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022849	short circuit resistant Protected against polarity reversal	Fig. 2	3)
R412022850	short circuit resistant Protected against polarity reversal	Fig. 2	3)

1) open cable ends, 2-pin, The product of operating voltage and continuous current must not exceed the maximum switching capacity.
2) open cable ends, 3-pin, The product of operating voltage and continuous current must not exceed the maximum switching capacity.
3) open cable ends, 3-pin

Technical information

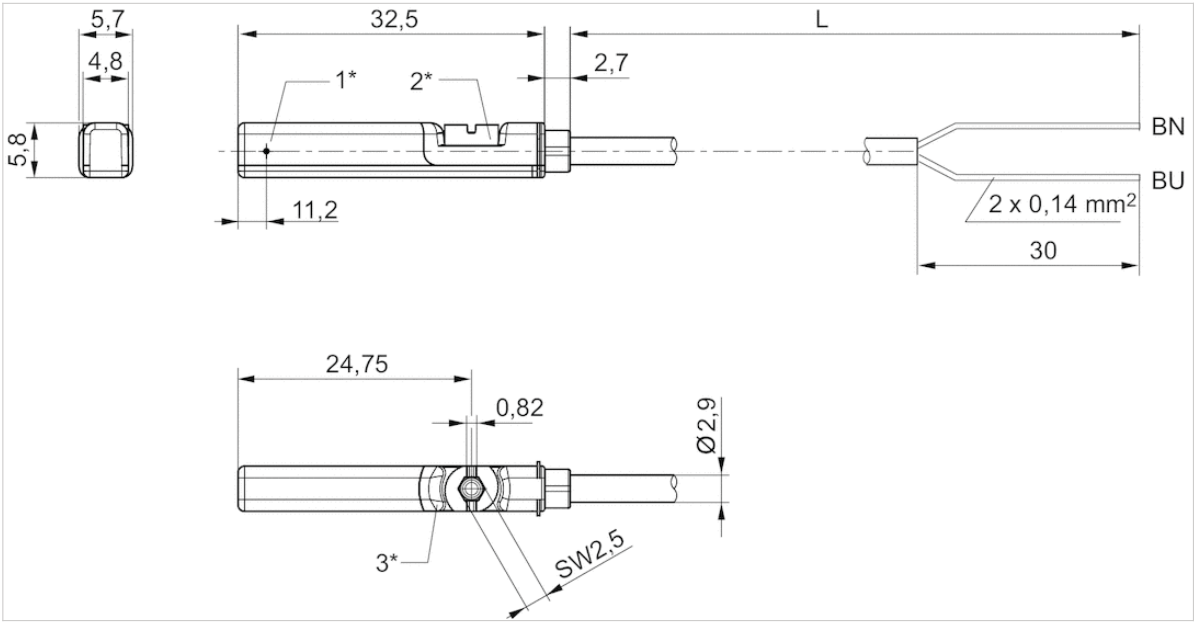
No cULus certification for 230 V variant.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

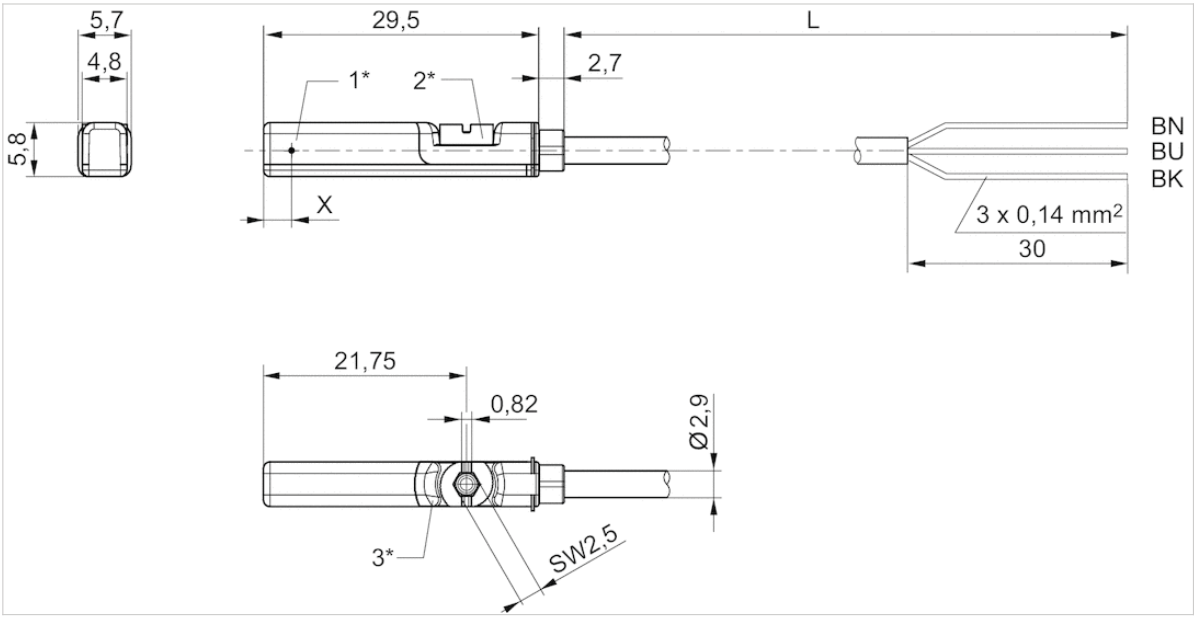
Dimensions

Fig. 1



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN=brown, BU=blue

Fig. 2



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length

BN = brown, BK = black, BU = blue
X = electronic: 11.6 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin Plug, M8, 2-pin
- UL certification
- Reed electronic PNP electronic NPN
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR

Certificates	CE declaration of conformity cULus RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.		for	Type of contact	Cable length L
R412022868		PRA PRE CCI KPZ SSI GPC CVI	Reed	0,3 m
R412027172		PRA PRE CCI KPZ SSI GPC CVI	Reed	0,3 m
R412022872		PRA PRE CCI KPZ SSI GPC CVI	Reed	0,3 m
R412022858		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	0,3 m
R412022851		PRA PRE CCI KPZ SSI GPC CVI	electronic NPN	0,3 m

Part No.	Min./max. AC operating voltage	Voltage drop U at Imax
R412022868	10 ... 30 V AC	≤ 3,5 V
R412027172	10 ... 30 V AC	≤ 3,5 V
R412022872	10 ... 30 V AC	≤ 0,1 V
R412022858	-	≤ 2,5 V
R412022851	-	≤ 2,5 V

Part No.	DC switching current, max.	AC switching current, max.
R412022868	0,13 A	0,13 A
R412027172	0,13 A	0,13 A
R412022872	0,3 A	0,5 A
R412022858	0,13 A	-
R412022851	0,13 A	-

Part No.	Switching capacity	Max. switching frequency
R412022868	Reed, 2-pin: max. 10 W	400 Hz
R412027172	Reed, 2-pin: max. 10 W	400 Hz
R412022872	Reed, 3-pin: max. 6 W	400 Hz
R412022858	-	1000 Hz
R412022851	-	1000 Hz

Part No.	Operating current, not switched	Operating current, switched
R412022868	-	-
R412027172	-	-
R412022872	-	-
R412022858	8 mA	30 mA
R412022851	8 mA	30 mA

Part No.	Version	
R412022868	Protected against polarity reversal	1)
R412027172	Protected against polarity reversal	1)
R412022872	Protected against polarity reversal	1)
R412022858	short circuit resistant Protected against polarity reversal	-
R412022851	short circuit resistant Protected against polarity reversal	-

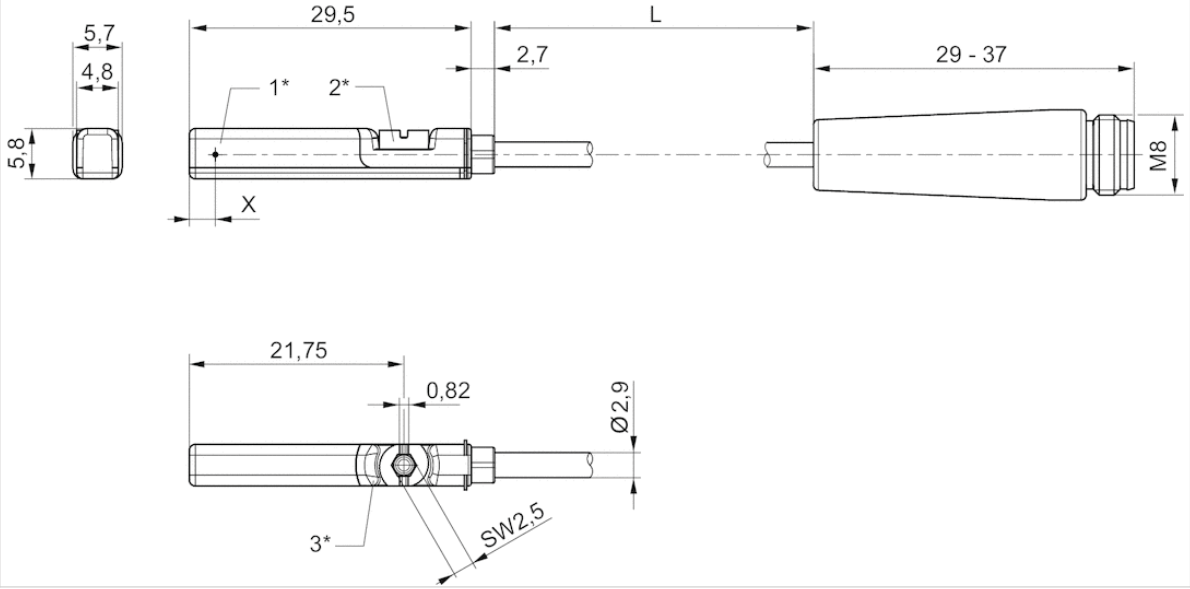
1) The product of operating voltage and continuous current must not exceed the maximum switching capacity.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

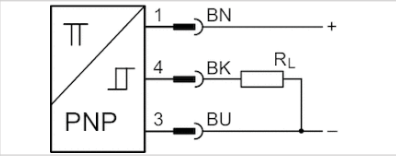
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M12, 3-pin, with knurled screw
- ATEX
- UL certification, ATEX
- electronic PNP
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR



Certificates	ATEX CE declaration of conformity cULus RoHS
ATEX class G	II 3G Ex nA IIC T4 Gc X
ATEX class D	II 3D Ex tc IIIC T135°C Dc X
Ambient temperature min./max.	-20 ... 50 °C
Protection class	IP67
Switching point precision	±0,1 mT
Quiescent current (without load)	10 mA
Min./max. DC operating voltage	10 ... 30 V DC
Switching logic	NO (make contact)
LED status display	Yellow Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	for	Type of contact	Cable length L
R412022864	PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	0,3 m

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022864	≤ 2,5 V	0,1 A

Part No.	Max. switching frequency
R412022864	1000 Hz

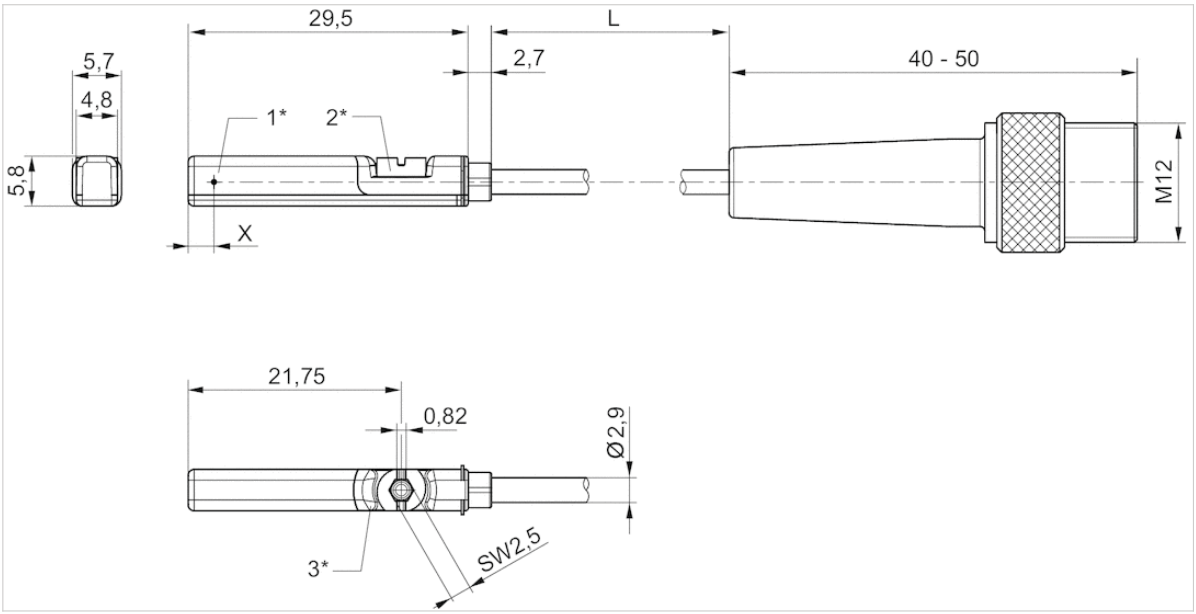
Part No.	Version
R412022864	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

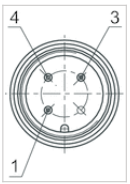
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = PNP: 11,6 mm, reed: 8,3 mm

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M12, 2-pin, with knurled screw Plug, M12, 4-pin, with knurled screw
- UL certification
- Reed electronic PNP
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR

Certificates	CE declaration of conformity cULus RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	See table below
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.		for	Type of contact	Cable length L
R412027171		PRA PRE CCI KPZ SSI GPC CVI	Reed	0,3 m
R412022876		PRA PRE CCI KPZ SSI GPC CVI	Reed	0,3 m
R412022879		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	0,1 m
R412022863		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	0,3 m
R412022877		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	3 m
R412022878		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	5 m

Part No.	Min./max. AC operating voltage	Voltage drop U at Imax
R412027171	10 ... 30 V AC	≤ 3,5 V
R412022876	10 ... 30 V AC	≤ 0,1 V
R412022879	-	≤ 2,5 V
R412022863	-	≤ 2,5 V
R412022877	-	≤ 2,5 V
R412022878	-	≤ 2,5 V

Part No.	DC switching current, max.	AC switching current, max.
R412027171	0,13 A	0,13 A
R412022876	0,3 A	0,5 A
R412022879	0,13 A	-

Part No.	DC switching current, max.	AC switching current, max.
R412022863	0,13 A	-
R412022877	0,13 A	-
R412022878	0,13 A	-

Part No.	Switching capacity	Max. switching frequency
R412027171	Reed, 2-pin: max. 10 W	400 Hz
R412022876	Reed, 3-pin: max. 6 W	400 Hz
R412022879	-	1000 Hz
R412022863	-	1000 Hz
R412022877	-	1000 Hz
R412022878	-	1000 Hz

Part No.	Operating current, not switched	Operating current, switched	Protection class
R412027171	-	-	IP65, IP67
R412022876	-	-	IP65, IP67
R412022879	8 mA	30 mA	IP65, IP67
R412022863	8 mA	30 mA	IP65, IP67, IP69K
R412022877	8 mA	30 mA	IP65, IP67
R412022878	8 mA	30 mA	IP65, IP67

Part No.	Version	
R412027171	Protected against polarity reversal	1)
R412022876	Protected against polarity reversal	1)
R412022879	short circuit resistant Protected against polarity reversal	-
R412022863	short circuit resistant Protected against polarity reversal	-
R412022877	short circuit resistant Protected against polarity reversal	-
R412022878	short circuit resistant Protected against polarity reversal	-

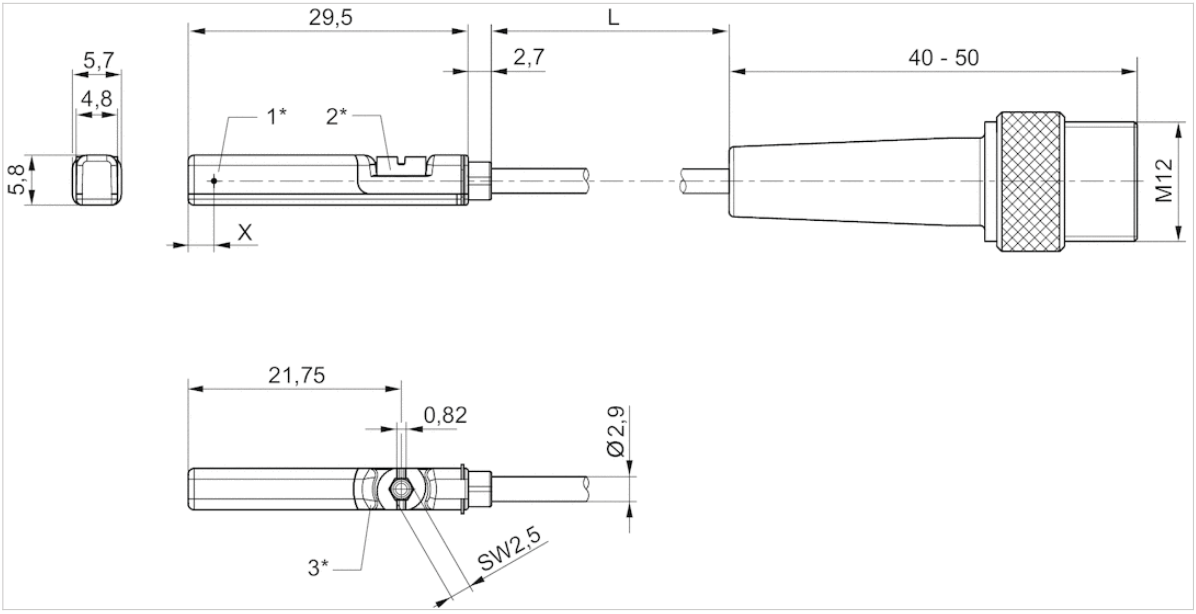
1) The product of operating voltage and continuous current must not exceed the maximum switching capacity.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

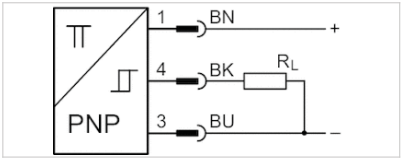
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = PNP: 11,6 mm, reed: 8,3 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- ATEX
- UL certification, ATEX
- electronic PNP
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR



Certificates	ATEX CE declaration of conformity cULus RoHS
ATEX class G	II 3G Ex nA IIC T4 Gc X
ATEX class D	II 3D Ex tc IIIC T135°C Dc X
Ambient temperature min./max.	-20 ... 50 °C
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Quiescent current (without load)	10 mA
Min./max. DC operating voltage	10 ... 30 V DC
Switching logic	NO (make contact)
LED status display	Yellow Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	for	Type of contact	Cable length L
R412022860	PRA PRE CCI KPZ SSI GPC CVI	electronic PNP	0,3 m

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022860	≤ 2,5 V	0,1 A

Part No.	Max. switching frequency
R412022860	1000 Hz

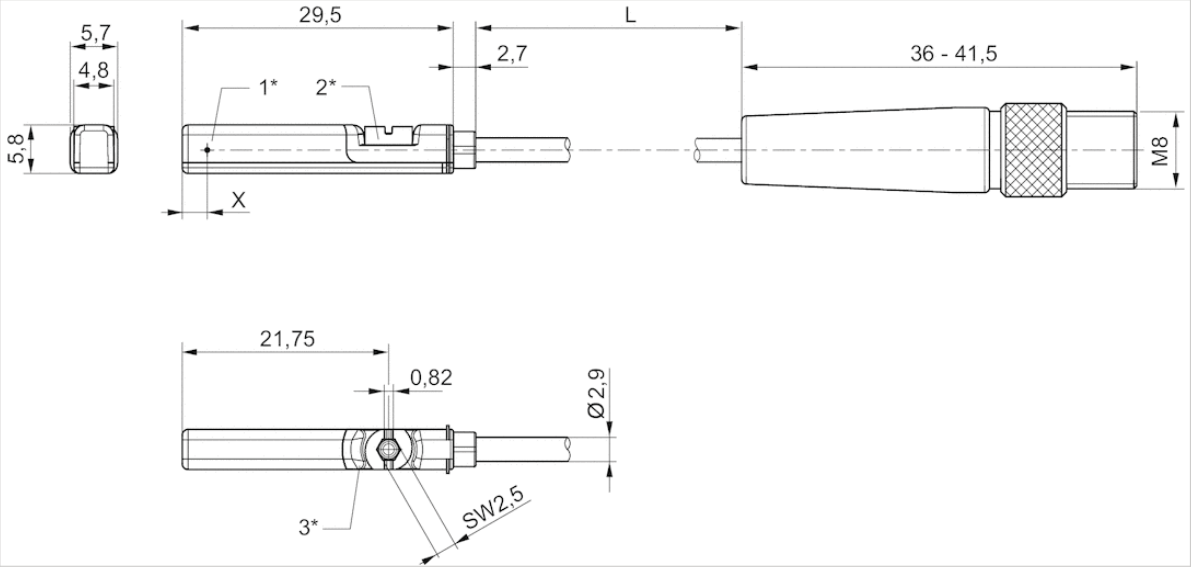
Part No.	Version
R412022860	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

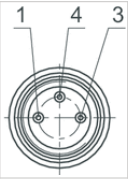
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- UL certification
- Reed electronic PNP electronic NPN
- Direct mounting for series PRA PRE CCI KPZ SSI GPC CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, ICM, KHZ, TRR

Certificates	CE declaration of conformity cULus RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Nominal current, actuated state	30 mA
Quiescent current (without load)	8 mA
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	See table below
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.		for	Type of contact
R412022873		PRA PRE CCI KPZ SSI GPC CVI	Reed
R412022875		PRA PRE CCI KPZ SSI GPC CVI	Reed
R412022874		PRA PRE CCI KPZ SSI GPC CVI	Reed
R412022859		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP
R412022862		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP
R412022861		PRA PRE CCI KPZ SSI GPC CVI	electronic PNP
R412022852		PRA PRE CCI KPZ SSI GPC CVI	electronic NPN

Part No.	Cable sheath	Cable length L	Min./max. AC operating voltage
R412022873	Polyurethane	0,3 m	10 ... 30 V AC
R412022875	Polyvinyl chloride	0,3 m	10 ... 30 V AC
R412022874	Polyurethane	0,5 m	10 ... 30 V AC
R412022859	Polyurethane	0,3 m	-
R412022862	Polyvinyl chloride	0,3 m	-
R412022861	Polyurethane	0,5 m	-
R412022852	Polyurethane	0,3 m	-

Part No.	Voltage drop U at Imax	DC switching current, max.

Part No.	Voltage drop U at Imax	DC switching current, max.
R412022873	I*Rs	0,3 A
R412022875	I*Rs	0,3 A
R412022874	I*Rs	0,3 A
R412022859	≤ 2,5 V	0,13 A
R412022862	≤ 2,5 V	0,13 A
R412022861	≤ 2,5 V	0,13 A
R412022852	≤ 2,5 V	0,13 A

Part No.	AC switching current, max.	Max. switching frequency
R412022873	0,5 A	400 Hz
R412022875	0,5 A	400 Hz
R412022874	0,5 A	400 Hz
R412022859	-	1000 Hz
R412022862	-	1000 Hz
R412022861	-	1000 Hz
R412022852	-	1000 Hz

Part No.	Operating current, not switched	Operating current, switched
R412022873	-	-
R412022875	-	-
R412022874	-	-
R412022859	8 mA	30 mA
R412022862	8 mA	30 mA
R412022861	8 mA	30 mA
R412022852	8 mA	30 mA

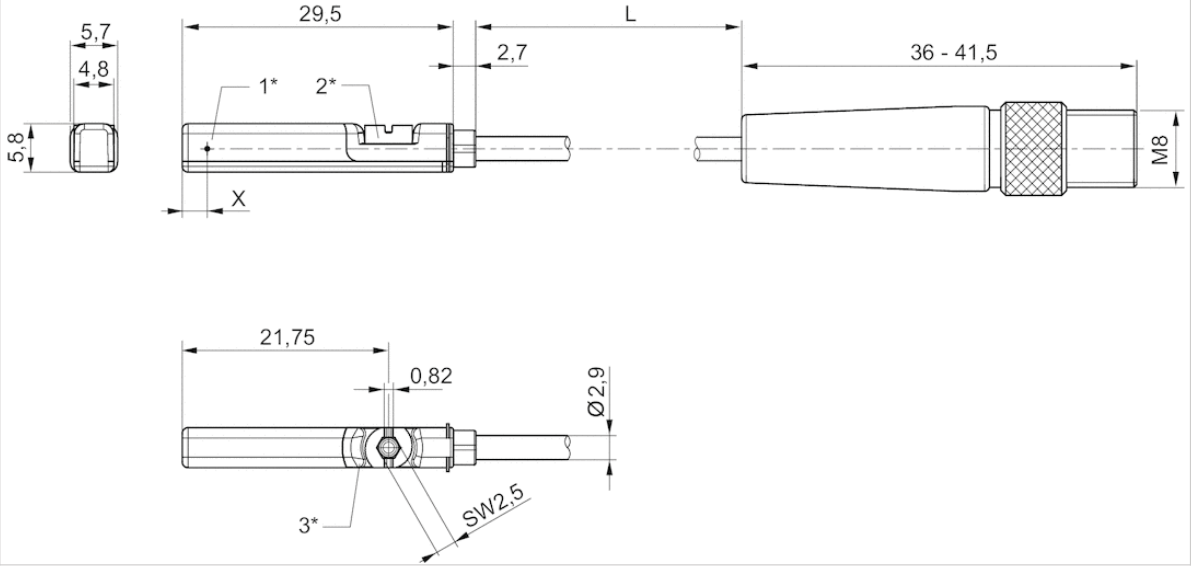
Part No.	Version
R412022873	Protected against polarity reversal
R412022875	Protected against polarity reversal
R412022874	Protected against polarity reversal
R412022859	short circuit resistant Protected against polarity reversal
R412022862	short circuit resistant Protected against polarity reversal
R412022861	short circuit resistant Protected against polarity reversal
R412022852	short circuit resistant Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane Polyvinyl chloride
Locking screw	Stainless steel

Dimensions

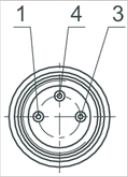
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
X = electronic: 11,6 mm, Reed: 8,3 mm

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensors, Series SM6-AL

- with cable
- Plug, M8x1, 4-pin
- with distance measuring sensor, measurement range 107 - 1007 mm
- IO-Link
- Analog
- Indirect mounting for series PRA, ITS, RTC, CVI

Certificates	cULus
Ambient temperature min./max.	-20 ... 70 °C
Protection class	IP65, IP67
Output signal	0 - 10 V DC, 4 - 20 mA
Quiescent current (without load)	35 mA
Current signal	4 ... 20 mA
Maximum load (analog current output)	500 Ω
Residual ripple	≤ 10 %
sampling interval	1,15 ms
Resolution max. measuring range	typ. 0,03 % FSR
Repetitive precision max. measuring range	typ. 0,06 % FSR
Linearity deviation	0,5 mm
Sampling speed Partial stroke	1,5 m/s
Sampling speed Full stroke	3 m/s
Display	2 LED
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Technical data

Part No.	Type of contact	Cable length L	max. measuring range	Overall length Sensor A
R412010880	Analog	0,3 m	107 mm	109 mm
R412010881	Analog	0,3 m	143 mm	145 mm
R412010882	Analog	0,3 m	179 mm	181 mm
R412010883	Analog	0,3 m	215 mm	217 mm
R412010884	Analog	0,3 m	251 mm	253 mm
R412010885	Analog	0,3 m	287 mm	289 mm
R412010886	Analog	0,3 m	323 mm	325 mm
R412010887	Analog	0,3 m	359 mm	361 mm
R412010888	Analog	0,3 m	395 mm	397 mm
R412010889	Analog	0,3 m	431 mm	433 mm
R412010890	Analog	0,3 m	467 mm	469 mm
R412010891	Analog	0,3 m	503 mm	505 mm
R412010892	Analog	0,3 m	539 mm	541 mm
R412010893	Analog	0,3 m	575 mm	577 mm
R412010894	Analog	0,3 m	611 mm	613 mm
R412010895	Analog	0,3 m	647 mm	649 mm
R412010896	Analog	0,3 m	683 mm	685 mm
R412010897	Analog	0,3 m	719 mm	721 mm

Part No.	Type of contact	Cable length L	max. measuring range	Overall length Sensor A
R412010898	Analog	0,3 m	755 mm	757 mm
R412010899	Analog	0,3 m	791 mm	793 mm
R412010900	Analog	0,3 m	827 mm	829 mm
R412010901	Analog	0,3 m	863 mm	865 mm
R412010902	Analog	0,3 m	899 mm	901 mm
R412010903	Analog	0,3 m	935 mm	937 mm
R412010904	Analog	0,3 m	971 mm	973 mm
R412010905	Analog	0,3 m	1007 mm	1009 mm

Part No.	Incl. number of sensor clamp pairs	Current signal
R412010880	2 piece	4 ... 20 mA
R412010881	2 piece	4 ... 20 mA
R412010882	2 piece	4 ... 20 mA
R412010883	2 piece	4 ... 20 mA
R412010884	2 piece	4 ... 20 mA
R412010885	3 piece	4 ... 20 mA
R412010886	3 piece	4 ... 20 mA
R412010887	3 piece	4 ... 20 mA
R412010888	3 piece	4 ... 20 mA
R412010889	3 piece	4 ... 20 mA
R412010890	4 piece	4 ... 20 mA
R412010891	4 piece	4 ... 20 mA
R412010892	4 piece	4 ... 20 mA
R412010893	4 piece	4 ... 20 mA
R412010894	4 piece	4 ... 20 mA
R412010895	4 piece	4 ... 20 mA
R412010896	5 piece	4 ... 20 mA
R412010897	5 piece	4 ... 20 mA
R412010898	5 piece	4 ... 20 mA
R412010899	5 piece	4 ... 20 mA
R412010900	6 piece	4 ... 20 mA
R412010901	6 piece	4 ... 20 mA
R412010902	6 piece	4 ... 20 mA
R412010903	6 piece	4 ... 20 mA
R412010904	6 piece	4 ... 20 mA
R412010905	6 piece	4 ... 20 mA

Part No.	Version
R412010880	short circuit resistant Protected against polarity reversal Overload protection
R412010881	short circuit resistant Protected against polarity reversal Overload protection
R412010882	short circuit resistant Protected against polarity reversal Overload protection
R412010883	short circuit resistant Protected against polarity reversal Overload protection
R412010884	short circuit resistant Protected against polarity reversal Overload protection
R412010885	short circuit resistant Protected against polarity reversal Overload protection
R412010886	short circuit resistant Protected against polarity reversal Overload protection

Part No.	Version
R412010887	short circuit resistant Protected against polarity reversal Overload protection
R412010888	short circuit resistant Protected against polarity reversal Overload protection
R412010889	short circuit resistant Protected against polarity reversal Overload protection
R412010890	short circuit resistant Protected against polarity reversal Overload protection
R412010891	short circuit resistant Protected against polarity reversal Overload protection
R412010892	short circuit resistant Protected against polarity reversal Overload protection
R412010893	short circuit resistant Protected against polarity reversal Overload protection
R412010894	short circuit resistant Protected against polarity reversal Overload protection
R412010895	short circuit resistant Protected against polarity reversal Overload protection
R412010896	short circuit resistant Protected against polarity reversal Overload protection
R412010897	short circuit resistant Protected against polarity reversal Overload protection
R412010898	short circuit resistant Protected against polarity reversal Overload protection
R412010899	short circuit resistant Protected against polarity reversal Overload protection
R412010900	short circuit resistant Protected against polarity reversal Overload protection
R412010901	short circuit resistant Protected against polarity reversal Overload protection
R412010902	short circuit resistant Protected against polarity reversal Overload protection
R412010903	short circuit resistant Protected against polarity reversal Overload protection
R412010904	short circuit resistant Protected against polarity reversal Overload protection
R412010905	short circuit resistant Protected against polarity reversal Overload protection

Technical information

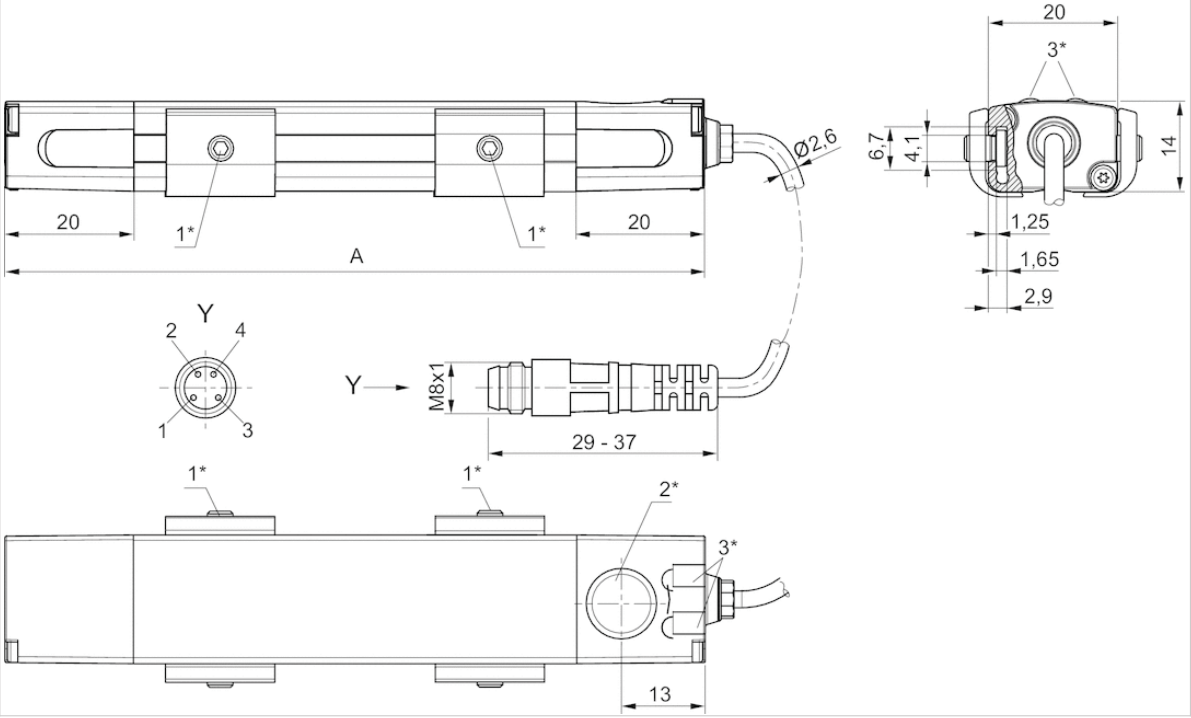
Holders for cylinder series PRA are included in the scope of delivery. For cylinder series ITS, please order the appropriate holders separately.
FSR: Full Scale Range, max. measurement range
The IO-Link device description (IODD) for the SM6-AL distance measuring sensor is available for download in the Media Centre.

Technical information

Material	
Housing	Aluminum
Cable sheath	Polyurethane
End caps	Polyamide

Dimensions

Dimensions



1* = threaded pin M3x11 2* = teach area 3* = LED
A = sensor length
Pin assignment: 1 = (+), 2 = (OUT 1) 3 = (GND), 4 = (OUT 2/IO-Link), EN 60947-5-7
LED 1: yellow = measuring operation, red = error
LED 2: green = voltage signal, blue = current signal

Sensor, Series SN2

- with cable
- without wire end ferrule, tin-plated, 2-pin without wire end ferrule, tin-plated, 3-pin
- Heat resistant
- Reed electronic PNP
- Indirect mounting for series TRB, PRA, ITS, MNI, CSL-RD, ICM, RPC, TRR, FLT, CVI

Ambient temperature min./max.	See table below
Protection class	IP67
Switching point precision	±0,1 mT
Nominal current, actuated state	15 mA
Quiescent current (without load)	10 mA
Min./max. DC operating voltage	See table below
Min./max. AC operating voltage	See table below
LED status display	See table below

Technical data

Part No.		Type of contact	Cable sheath	Cable length L
0830100315		Reed	Polyvinyl chloride	3 m
0830100365		Reed	Polyvinyl chloride	3 m
0830100368		Reed	Polyvinyl chloride	3 m
0830100370		Reed	Polyurethane	3 m
0830100316		Reed	-	3 m
0830100373		Reed	-	3 m
0830100367		Reed	Polyurethane	3 m
0830100317		Reed	Thermoplastic elastomer	3 m
0830100366		Reed	Polyvinyl chloride	5 m
0830100369		Reed	Polyvinyl chloride	5 m
0830100327		Reed	Polyvinyl chloride	7 m
0830100325		Reed	Polyvinyl chloride	10 m
0830100326		Reed	Thermoplastic elastomer	11 m
R412004848		Reed	Polyvinyl chloride	20 m
0830100371		Reed	Polyvinyl chloride	3 m
0830100372		Reed	Polyvinyl chloride	5 m
0830100375		electronic PNP	Polyvinyl chloride	3 m
0830100378		electronic PNP	Thermoplastic elastomer	3 m
0830100377		electronic PNP	Polyurethane	3 m
0830100376		electronic PNP	Polyvinyl chloride	5 m

Part No.	Min./max. DC operating voltage	Min./max. AC operating voltage
0830100315	0 ... 60 V DC	0 ... 240 V AC
0830100365	12 ... 60 V DC	12 ... 240 V AC
0830100368	12 ... 60 V DC	12 ... 240 V AC
0830100370	12 ... 60 V DC	12 ... 240 V AC
0830100316	0 ... 60 V DC	0 ... 240 V AC
0830100373	0 ... 60 V DC	0 ... 240 V AC
0830100367	12 ... 60 V DC	12 ... 240 V AC
0830100317	12 ... 60 V DC	12 ... 240 V AC
0830100366	12 ... 60 V DC	12 ... 240 V AC
0830100369	12 ... 60 V DC	12 ... 240 V AC
0830100327	12 ... 60 V DC	12 ... 240 V AC
0830100325	12 ... 60 V DC	12 ... 240 V AC
0830100326	12 ... 60 V DC	12 ... 240 V AC
R412004848	12 ... 60 V DC	12 ... 240 V AC
0830100371	12 ... 42 V DC	12 ... 42 V AC
0830100372	12 ... 42 V DC	12 ... 42 V AC
0830100375	10 ... 30 V DC	10 ... 30 V AC
0830100378	10 ... 30 V DC	-
0830100377	10 ... 30 V DC	10 ... 30 V AC
0830100376	10 ... 30 V DC	10 ... 30 V AC

Part No.	Voltage drop U at Imax	DC switching current, max.
0830100315	Rs*Imax.	0,13 A
0830100365	2,1 V + I*Rs	0,13 A
0830100368	2,1 V + I*Rs	0,3 A
0830100370	2,1 V + I*Rs	0,3 A
0830100316	Rs*Imax.	0,13 A
0830100373	Rs*Imax.	0,13 A
0830100367	2,1 V + I*Rs	0,13 A
0830100317	2,1 V + I*Rs	0,12 A
0830100366	2,1 V + I*Rs	0,13 A
0830100369	2,1 V + I*Rs	0,3 A
0830100327	2,1 V + I*Rs	0,3 A
0830100325	2,1 V + I*Rs	0,13 A
0830100326	2,1 V + I*Rs	0,12 A
R412004848	2,1 V + I*Rs	0,13 A
0830100371	I*Rs	0,13 A
0830100372	I*Rs	0,13 A
0830100375	≤ 2,0 V	0,13 A
0830100378	2,1 V + I*Rs	0,12 A
0830100377	≤ 2,0 V	0,13 A
0830100376	≤ 2,0 V	0,13 A

Part No.	AC switching current, max.	Ambient temperature min./max.	Switching capacity
0830100315	0,13 A	-20 ... 80 °C	10 W / 10 VA
0830100365	0,13 A	-20 ... 80 °C	10 W / 10 VA
0830100368	0,5 A	-20 ... 80 °C	10 W / 10 VA
0830100370	0,5 A	-20 ... 80 °C	10 W / 10 VA
0830100316	-	-20 ... 80 °C	10 W / 10 VA
0830100373	-	-20 ... 80 °C	10 W / 10 VA
0830100367	0,13 A	-20 ... 80 °C	10 W / 10 VA
0830100317	0,12 A	-20 ... 120 °C	10 W / 10 VA
0830100366	0,13 A	-20 ... 80 °C	10 W / 10 VA
0830100369	0,5 A	-20 ... 80 °C	10 W / 10 VA
0830100327	0,5 A	-20 ... 80 °C	10 W / 10 VA
0830100325	0,13 A	-20 ... 80 °C	10 W / 10 VA
0830100326	0,12 A	-20 ... 120 °C	10 W / 10 VA
R412004848	0,13 A	-20 ... 80 °C	10 W / 10 VA
0830100371	0,13 A	-20 ... 80 °C	5,5 W / 5,5 VA
0830100372	0,13 A	-20 ... 80 °C	5,5 W / 5,5 VA
0830100375	-	-10 ... 70 °C	-
0830100378	-	-20 ... 120 °C	10 W / 10 VA
0830100377	-	-10 ... 70 °C	-
0830100376	-	-10 ... 70 °C	-

Part No.	Protective resistor for reed	Vibration resistance	Shock resistance
0830100315	27 Ω	-	-

Part No.	Protective resistor for reed	Vibration resistance	Shock resistance
0830100365	27 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100368	1,3 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100370	1,3 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100316	1,3 Ω	-	-
0830100373	100 Ω	-	-
0830100367	27 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100317	27 Ω	30 g (50 - 1000 Hz)	100 g / 11 ms
0830100366	27 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100369	1,3 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100327	1,3 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100325	27 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100326	27 Ω	30 g (50 - 1000 Hz)	100 g / 11 ms
R412004848	27 Ω	30 g (50 - 1000 Hz)	50 g / 11 ms
0830100371	27 Ω	30 g (50 - 1000 Hz)	100 g / 11 ms
0830100372	27 Ω	30 g (50 - 1000 Hz)	100 g / 11 ms
0830100375	-	-	-
0830100378	27 Ω	30 g (50 - 1000 Hz)	100 g / 11 ms
0830100377	-	-	-
0830100376	-	-	-

Part No.	Max. switching frequency	Operating current, not switched
0830100315	300 Hz	-
0830100365	-	-
0830100368	-	-
0830100370	-	-
0830100316	300 Hz	-
0830100373	300 Hz	-
0830100367	-	-
0830100317	-	-
0830100366	-	-
0830100369	-	-
0830100327	-	-
0830100325	-	-
0830100326	-	-
R412004848	-	-
0830100371	-	-
0830100372	-	-
0830100375	2000 Hz	10 mA
0830100378	-	-
0830100377	2000 Hz	10 mA
0830100376	2000 Hz	10 mA

Part No.	Operating current, switched	Material Housing	LED status display
0830100315	-	Polyamide	-
0830100365	-	Polyamide	Yellow

Part No.	Operating current, switched	Material Housing	LED status display
0830100368	-	Polyamide	Yellow
0830100370	-	Polyamide	Yellow
0830100316	-	Polyamide	-
0830100373	-	Polyamide	-
0830100367	-	Polyamide	Yellow
0830100317	-	Polyamide	-
0830100366	-	Polyamide	Yellow
0830100369	-	Polyamide	Yellow
0830100327	-	Polyamide	Yellow
0830100325	-	Polyamide	Yellow
0830100326	-	Polyamide	-
R412004848	-	epoxy resin	Yellow
0830100371	-	Polyamide	Yellow
0830100372	-	Polyamide	Yellow
0830100375	15 mA	Polyamide	Yellow
0830100378	-	Polyamide	-
0830100377	15 mA	Polyamide	Yellow
0830100376	15 mA	Polyamide	Yellow

Part No.	Version	
0830100315	Protected against polarity reversal	1)
0830100365	Protected against polarity reversal	1)
0830100368	Protected against polarity reversal	1)
0830100370	Protected against polarity reversal	1)
0830100316	Protected against polarity reversal	1)
0830100373	Protected against polarity reversal	1)
0830100367	Protected against polarity reversal	1)
0830100317	Protected against polarity reversal	1)
0830100366	Protected against polarity reversal	1)
0830100369	Protected against polarity reversal	1)
0830100327	Protected against polarity reversal	1)
0830100325	Protected against polarity reversal	1)
0830100326	Protected against polarity reversal	1)
R412004848	Protected against polarity reversal	1)
0830100371	Protected against polarity reversal	1)
0830100372	Protected against polarity reversal	1)
0830100375	short circuit resistant Protected against polarity reversal	2)
0830100378	Protected against polarity reversal	2)
0830100377	short circuit resistant Protected against polarity reversal	2)
0830100376	short circuit resistant Protected against polarity reversal	2)

1) without wire end ferrule, tin-plated, 2-pin

2) without wire end ferrule, tin-plated, 3-pin

Technical information

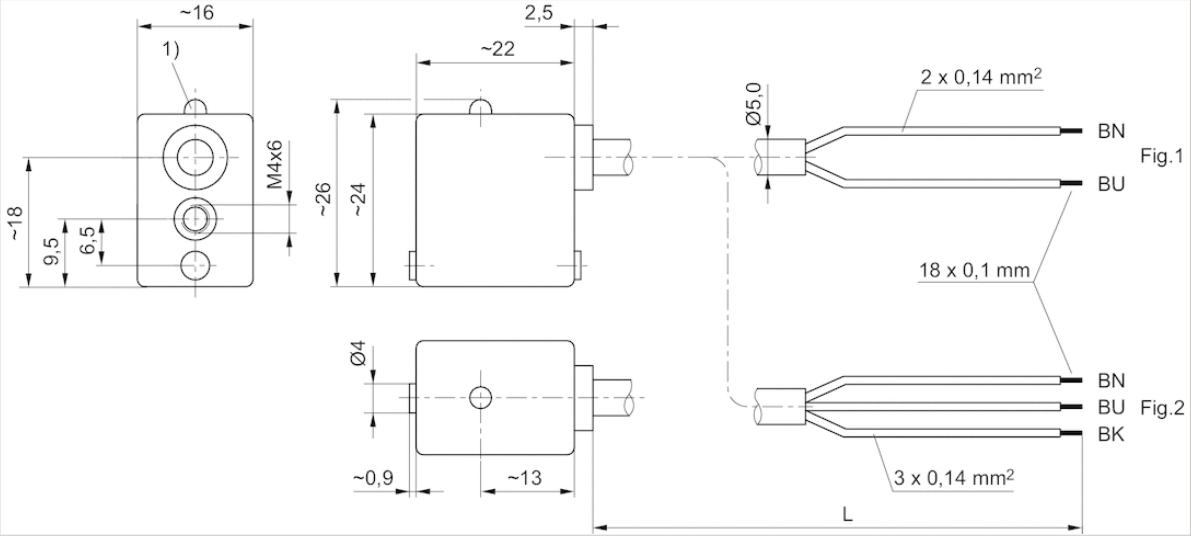
If reed sensors are used, we recommend using a short-circuit protective device (SCPD).

Technical information

Material	
Housing	Polyamide epoxy resin
Cable sheath	Polyvinyl chloride Polyurethane Thermoplastic elastomer

Dimensions

Dimensions



1) LED
L = cable length
BN = brown, BK = black, BU = blue

Sensor, Series SN2

- Plug, M8, 2-pin Plug, M8, 3-pin Plug, M8, 4-pin
- Reed 2-Wire Reed 3-Wire Reed 3-Wire, with pulse stretching Reed 4-Wire electronic PNP
- With stretched impulse
- With stretched impulse
- Reed electronic PNP
- Indirect mounting for series TRB, PRA, ITS, MNI, CSL-RD, ICM, RPC, TRR, FLT, CVI

Ambient temperature min./max.	See table below
Protection class	IP67
Switching point precision	±0,1 mT
Nominal current, actuated state	15 mA
Quiescent current (without load)	10 mA
Min./max. DC operating voltage	See table below
Min./max. AC operating voltage	See table below
LED status display	See table below

Technical data

Part No.		Type of contact	Min./max. DC operating voltage
0830100465		Reed	12 ... 36 V DC
0830100468		Reed	12 ... 36 V DC
R412004299		Reed	12 ... 36 V DC
0830100466		Reed	12 ... 36 V DC
0830100469		Reed	12 ... 36 V DC
R412004820		Reed	12 ... 36 V DC
0830100472		Reed	12 ... 36 V DC
0830100467		Reed	12 ... 36 V DC
0830100480		electronic PNP	10 ... 30 V DC
R412004800		electronic PNP	10 ... 30 V DC

Part No.	Min./max. AC operating voltage	Voltage drop U at Imax
0830100465	12 ... 30 V AC	2,1 V + I*Rs
0830100468	12 ... 30 V AC	2,1 V + I*Rs
R412004299	12 ... 30 V AC	2,1 V + I*Rs
0830100466	12 ... 30 V AC	2,1 V + I*Rs
0830100469	12 ... 30 V AC	≤ 0,5 V
R412004820	12 ... 30 V AC	I*Rs
0830100472	12 ... 30 V AC	≤ 1,5 V
0830100467	12 ... 30 V AC	≤ 3,5 V
0830100480	12 ... 30 V AC	≤ 2,0 V
R412004800	-	≤ 2,0 V

Part No.	DC switching current, max.	AC switching current, max.
0830100465	0,13 A	0,13 A
0830100468	0,3 A	0,5 A
R412004299	0,13 A	0,13 A
0830100466	0,13 A	0,13 A
0830100469	0,13 A	0,13 A
R412004820	0,13 A	0,13 A
0830100472	0,2 A	0,13 A
0830100467	0,13 A	0,13 A
0830100480	0,13 A	-
R412004800	0,13 A	-

Part No.	Function	Ambient temperature min./max.
0830100465	Reed 2-Wire	-20 ... 80 °C
0830100468	Reed 2-Wire	-20 ... 80 °C
R412004299	Reed 3-Wire	-20 ... 80 °C
0830100466	Reed 3-Wire	-20 ... 80 °C
0830100469	Reed 3-Wire	-20 ... 80 °C

Part No.	Function	Ambient temperature min./max.
R412004820	Reed 3-Wire	-20 ... 80 °C
0830100472	Reed 3-Wire, with pulse stretching	-20 ... 70 °C
0830100467	Reed 4-Wire	-20 ... 80 °C
0830100480	electronic PNP	-10 ... 70 °C
R412004800	electronic PNP	-10 ... 70 °C

Part No.	Switching capacity	Protective resistor for reed	Vibration resistance
0830100465	10 W / 10 VA	27 Ω	30 g (50 - 2000 Hz)
0830100468	10 W / 10 VA	1,3 Ω	30 g (50 - 2000 Hz)
R412004299	10 W / 10 VA	27 Ω	30 g (50 - 2000 Hz)
0830100466	10 W / 10 VA	100 Ω	30 g (50 - 2000 Hz)
0830100469	5,5 W / 5,5 VA	27 Ω	30 g (50 - 1000 Hz)
R412004820	10 W / 10 VA	27 Ω	30 g (50 - 2000 Hz)
0830100472	5 W / 5 VA	-	35 g (50 - 2000 Hz)
0830100467	10 W / 10 VA	27 Ω	35 g (50 - 2000 Hz)
0830100480	-	-	-
R412004800	-	-	-

Part No.	Shock resistance	Max. switching frequency	Operating current, not switched
0830100465	100 g / 11 ms	-	-
0830100468	100 g / 11 ms	-	-
R412004299	100 g / 11 ms	-	-
0830100466	100 g / 11 ms	-	-
0830100469	100 g / 11 ms	-	-
R412004820	100 g / 11 ms	-	-
0830100472	50 g / 11 ms	-	-
0830100467	50 g / 11 ms	-	-
0830100480	-	2000 Hz	10 mA
R412004800	-	2000 Hz	10 mA

Part No.	Operating current, switched	Material Housing	LED status display
0830100465	-	Polyamide	Yellow
0830100468	-	Polyamide	Yellow
R412004299	-	Polyamide	Yellow
0830100466	-	Polyamide	Yellow
0830100469	-	Polyamide	Yellow
R412004820	-	epoxy resin	Yellow
0830100472	-	-	Red
0830100467	-	epoxy resin	Red
0830100480	15 mA	Polyamide	Yellow
R412004800	15 mA	epoxy resin	Yellow

Part No.	Version
0830100465	Protected against polarity reversal
0830100468	Protected against polarity reversal
R412004299	Protected against polarity reversal
0830100466	Protected against polarity reversal
0830100469	Protected against polarity reversal
R412004820	Protected against polarity reversal
0830100472	Protected against polarity reversal
0830100467	Protected against polarity reversal
0830100480	short circuit resistant Protected against polarity reversal
R412004800	short circuit resistant Protected against polarity reversal

1) Plug M8, 2-pin
2) Plug M8, 3-pin
3) Plug M8, 4-pin

Technical information

If reed sensors are used, we recommend using a short-circuit protective device (SCPD).

Technical information

Material	
Housing	Polyamide epoxy resin

Dimensions

Fig. 1

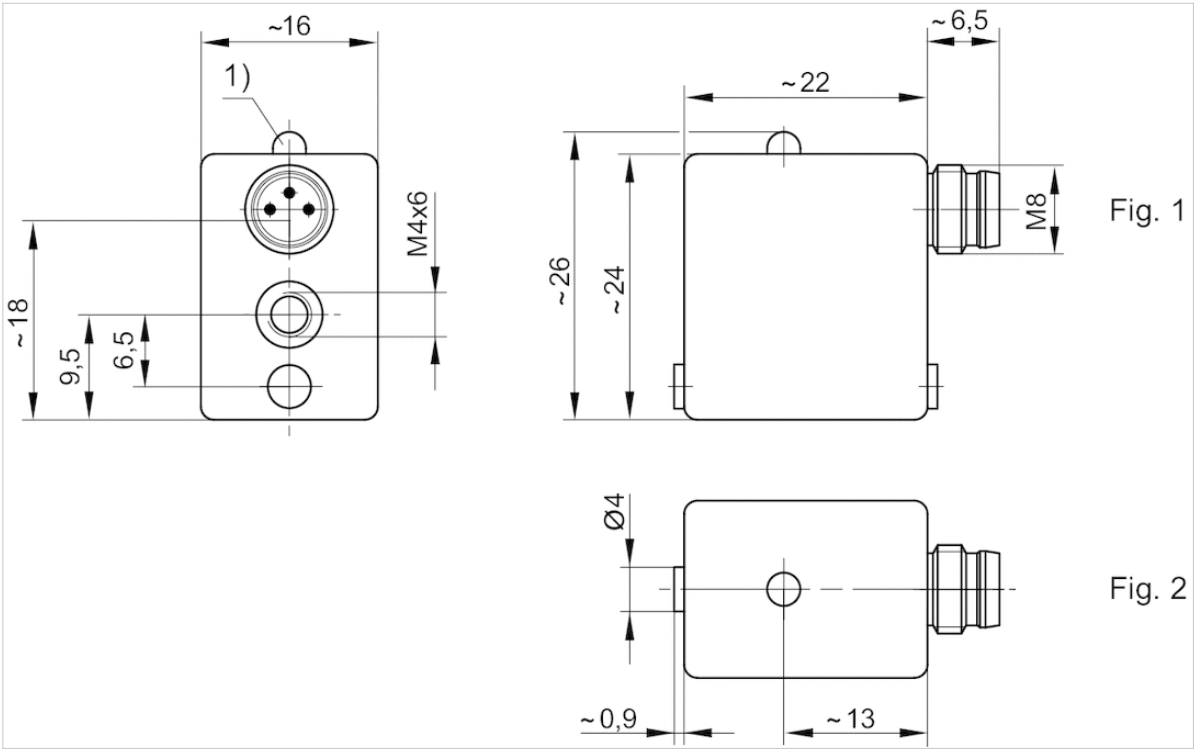
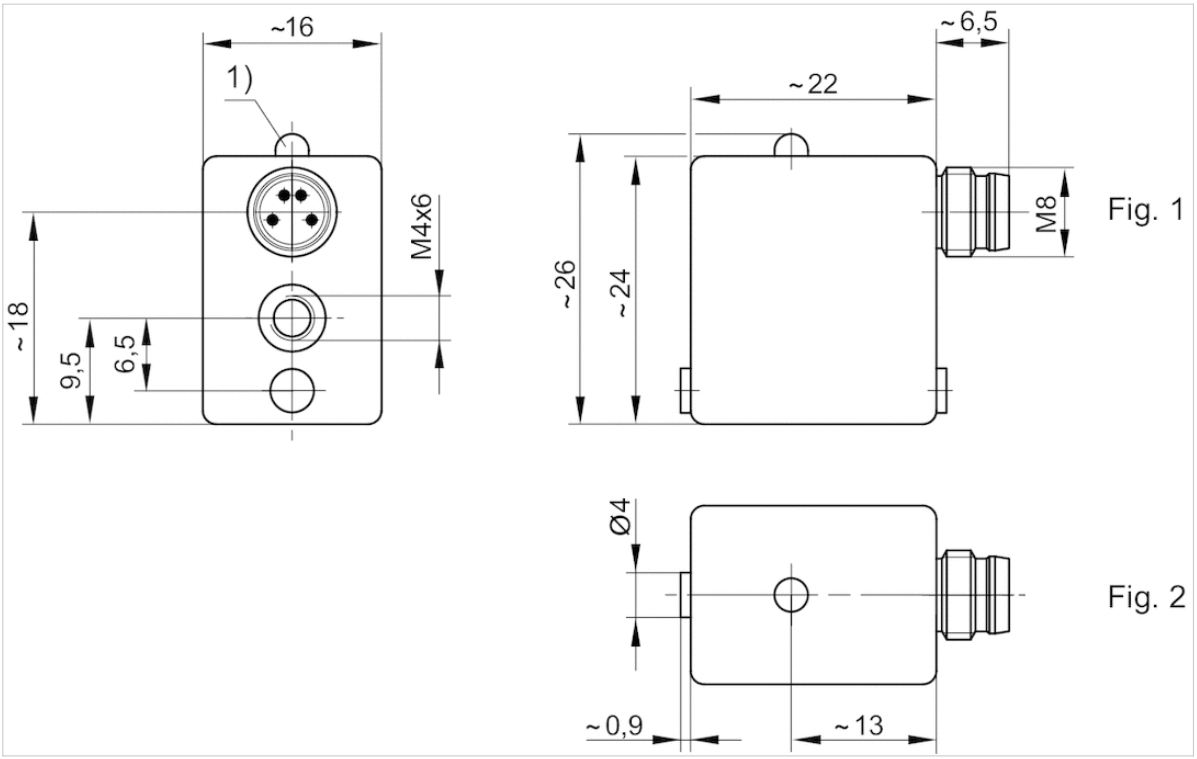


Fig. 1

Fig. 2

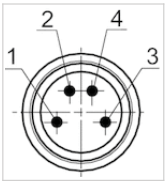
1) LED
M8: combination plug can be combined with valve plug connectors Ø6.5 mm and M8.
Pin assignments: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

Fig. 2



1) LED
M8: combination plug can be combined with valve plug connectors Ø6.5 mm and M8.

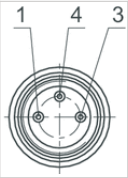
Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)
			EN 60947-5-2:1998

Pin assignments

Pin assignments

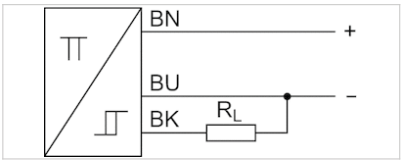


Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series SN5-X

- 3-pin
- welding-proof
- With stretched impulse
- Sensor responds to ferromagnetic material., welding-proof, With stretched impulse
- electronic PNP
- Indirect mounting for series TRB, ITS

Ambient temperature min./max.	-10 ... 70 °C
Protection class	IP65
Nominal current, actuated state	25 mA
Quiescent current (without load)	14 mA
LED status display	See table below
Weight	0,05 kg



Technical data

Part No.	Type of contact	Voltage drop U at Imax	LED status display
0830100500	electronic PNP	≤ 2,0 V	Red
0830100502	electronic PNP	≤ 2,0 V	Red Green

Part No.	Version	Switch signal	welding-proof
0830100500	Protected against polarity reversal	With stretched impulse	welding-proof
0830100502	Protected against polarity reversal	With stretched impulse	welding-proof

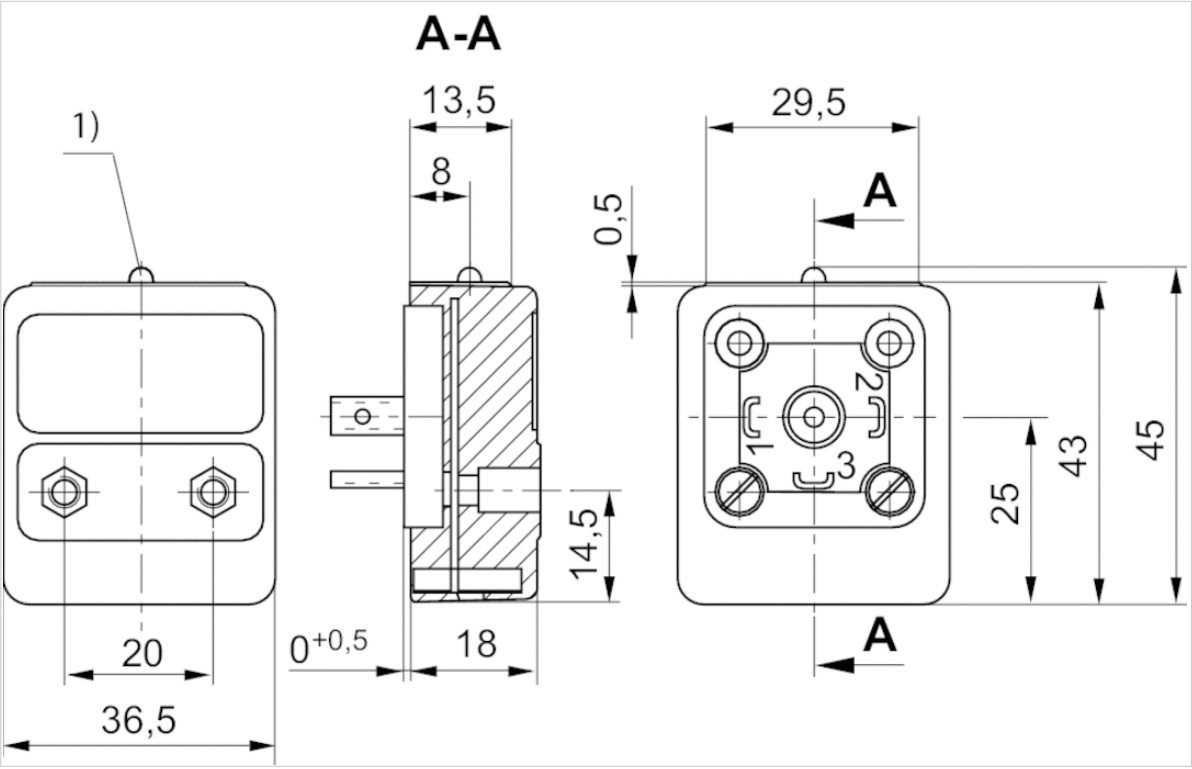
Technical information

Sensor responds to ferromagnetic material.

Technical information

Material	
Housing	epoxy resin

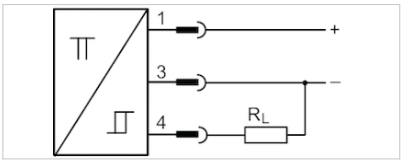
Dimensions



1) LED

Sensor, Series SN5-X

- Socket, M12, 3-pin
- With stretched impulse Time delay
- Sensor responds to ferromagnetic material., Time delay, With stretched impulse
- electronic PNP
- Indirect mounting for series TRB, ITS



Ambient temperature min./max.	-10 ... 70 °C
Protection class	IP67
Switching point precision	±0,1 mT
Nominal current, actuated state	25 mA
Quiescent current (without load)	14 mA
Min./max. DC operating voltage	15 ... 30 V DC
Display	LED
LED status display	See table below

Technical data

Part No.	Type of contact	Voltage drop U at Imax	DC switching current, max.
0830100525	electronic PNP	≤ 2,0 V	0,2 A
0830100534	electronic PNP	≤ 2,0 V	0,2 A

Part No.	LED status display	Version
0830100525	Yellow	Protected against polarity reversal
0830100534	Yellow Green	short circuit resistant Protected against polarity reversal

Part No.	Switch signal	
0830100525	With stretched impulse	-
0830100534	Time delay	1)

1) Delivery incl. protective cap 1823317014

Technical information

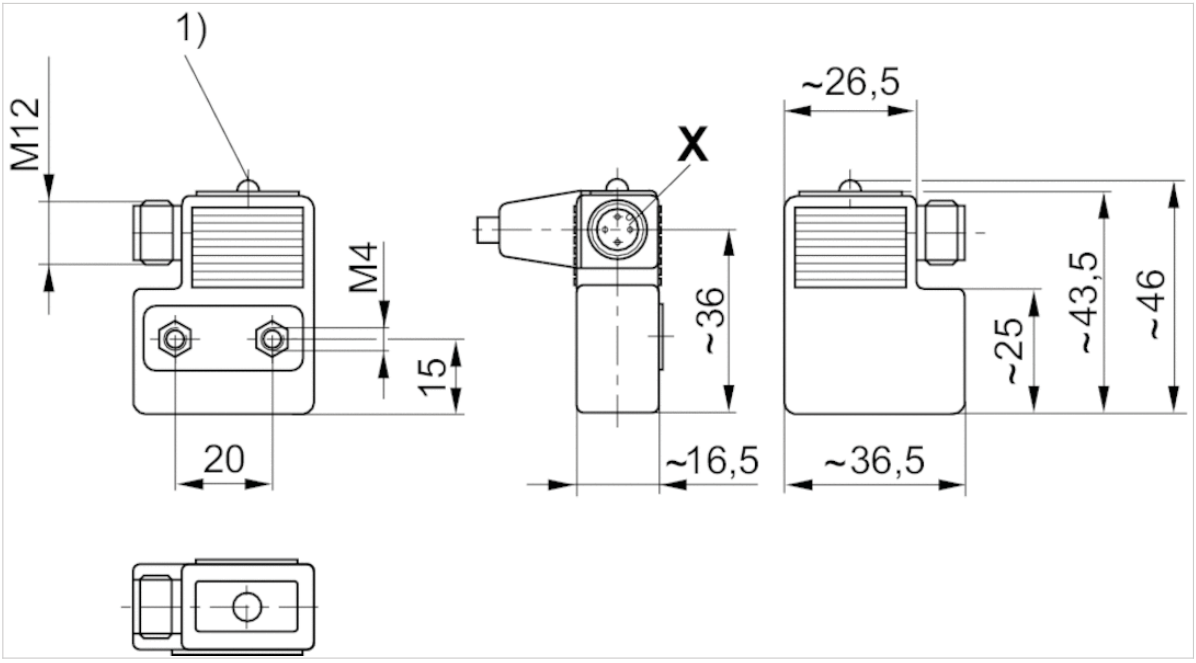
Sensor responds to ferromagnetic material.

Technical information

Material	
Housing	epoxy resin

Dimensions

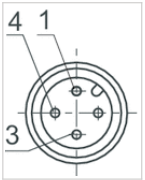
Dimensions



1) LED

Pin assignments

Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series SN6

- Plug, Form B, industry, 2-pin
- Reed
- Indirect mounting for series TRB, ITS, 523

Ambient temperature min./max.	-25 ... 75 °C
Protection class	IP65
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 250 V DC
Min./max. AC operating voltage	10 ... 250 V AC
LED status display	See table below
Vibration resistance	35 g (50 - 2000 Hz)
Shock resistance	50 g / 11 ms

Technical data

Part No.		Type of contact	DC switching current, max.
8940410602		Reed	3 A
8940410612		Reed	0,5 A

Part No.	AC switching current, max.	Switching capacity	LED status display
8940410602	3 A	60 W / 60 VA	-
8940410612	0,5 A	50 W / 50 VA	Yellow

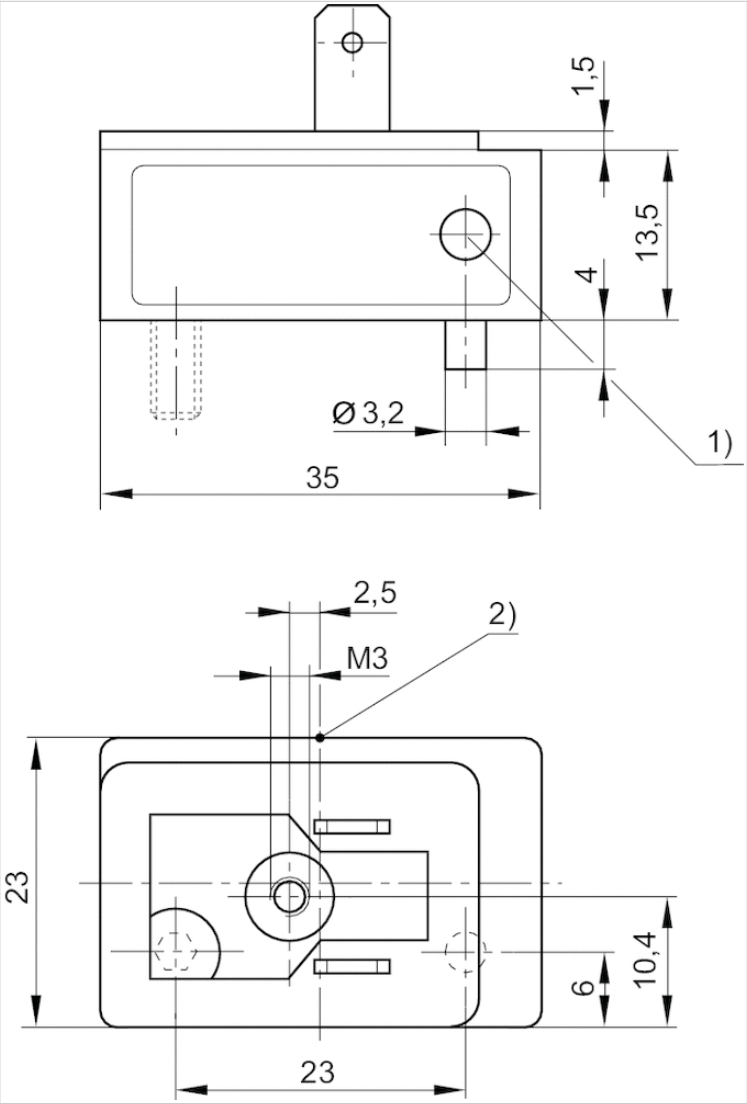
Part No.	Version
8940410602	-
8940410612	Protected against polarity reversal

Technical information

Material	
Housing	Polyester amide

Dimensions

Dimensions

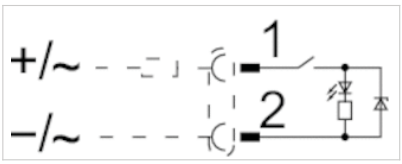


1) LED
2) Switching point

Sensor, Series SN6

- Plug, Form B, industry, 2-pin
- ATEX
- Reed
- Indirect mounting for series TRB, ITS

Certificates	ATEX
ATEX class G	II 3G Ex nC nA IIC T4 Gc
ATEX class D	II 3D Ex tc IIIB/IIIC T125°C Dc
Ambient temperature min./max.	-10 ... 50 °C
Protection class	IP65
Switching point precision	±0,1 mT
Min./max. DC operating voltage	21,6 ... 26,4 V DC
Min./max. AC operating voltage	210 ... 240 V AC
LED status display	Yellow



Technical data

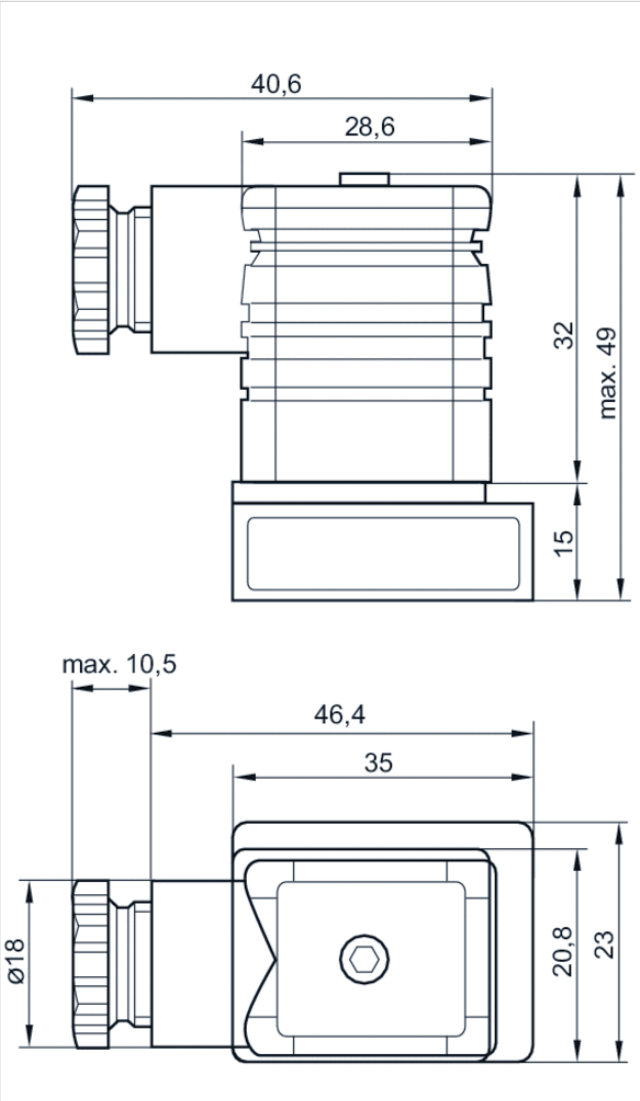
Part No.	Type of contact	DC switching current, max.	AC switching current, max.
R412000823	Reed	0,1 A	0,1 A

Part No.	Version
R412000823	Protected against polarity reversal

Technical information

Material	
Housing	Polyester amide

Dimensions



Sensor, Series SN6

- with cable
- without wire end ferrule, tin-plated, 2-pin
- heat resistant up to 120 °C
- Reed
- Indirect mounting for series TRB, ITS

Ambient temperature min./max.	See table below
Protection class	IP67, IP65
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 250 V DC
Min./max. AC operating voltage	10 ... 250 V AC
LED status display	Yellow
Vibration resistance	35 g (50 - 2000 Hz)
Shock resistance	50 g / 11 ms

Technical data

Part No.		Type of contact	Cable length L	DC switching current, max.
8940412022		Reed	2,5 m	0,5 A
8940412032		Reed	6 m	0,5 A
8940411902		Reed	2,5 m	3 A

Part No.	AC switching current, max.	Ambient temperature min./max.	Switching capacity
8940412022	0,5 A	-25 ... 75 °C	50 W / 50 VA
8940412032	0,5 A	-25 ... 75 °C	50 W / 50 VA
8940411902	3 A	-20 ... 120 °C	60 W / 60 VA

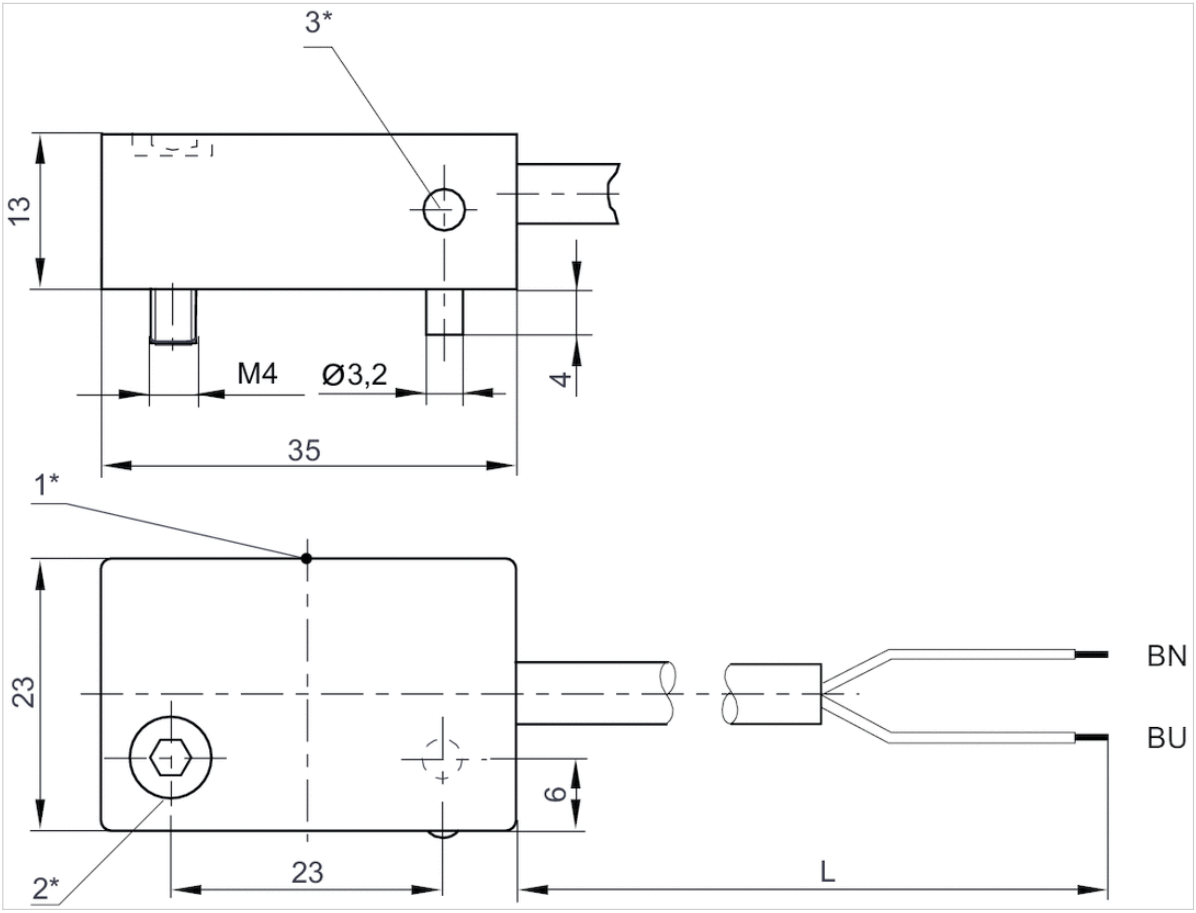
Part No.	Version
8940412022	Protected against polarity reversal
8940412032	Protected against polarity reversal
8940411902	Protected against polarity reversal

Technical information

Material	
Housing	Polyester amide
Cable sheath	Polyvinyl chloride

Dimensions

Dimensions



1* = switching point 2* = clamping screw 3* = LED
L = cable length
BN=brown, BU=blue

Series CAT

- Measuring instrument for adjusting the pneumatic cushioning
- for MNI CSL-RD CCL-IS ICS RPC PRA/TRB ITS

Certificates	CE declaration of conformity
Ambient temperature min./max.	0 ... 40 °C
Measurement range Min.	0,2 m/s
Measurement range Max.	2 m/s
LED status display	Green Yellow Red
Protection class	IP50
Weight	0,12 kg

Technical data

Part No.	for series
R412026160	MNI CSL-RD CCL-IS ICS RPC PRA/TRB ITS

Scope of delivery: 1 measuring instrument, 2 fastening strips, 1 power pack 3.7 V, 1 USB charging cable, Operating instructions, QR code notice, 1 case with foam inlay

Technical information

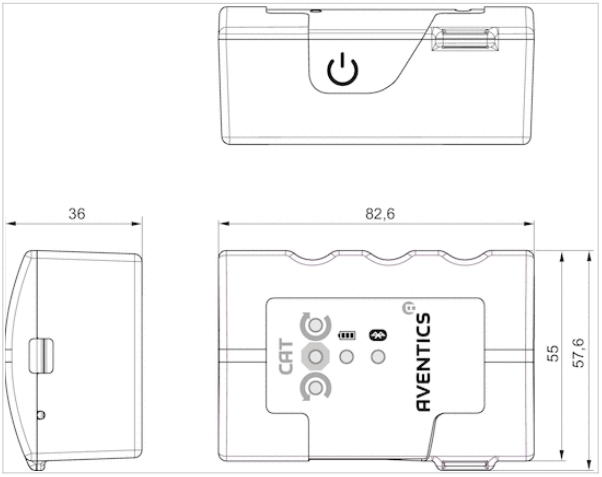
The CAT measuring instrument uses Bluetooth radio technology for wireless connection with the "Aventics" app, which is available free of charge in the Android/Play Store and/or the IOS/App Store.

Technical information

Material	
Housing	Luran S

Dimensions

Dimensions



Sensor mounting, Series CB1

- for series ST6 SN2 SN6 SN1 SM6 SM6-AL
- to mount on cylinder C12P, ITS

Weight — See table below

Technical data

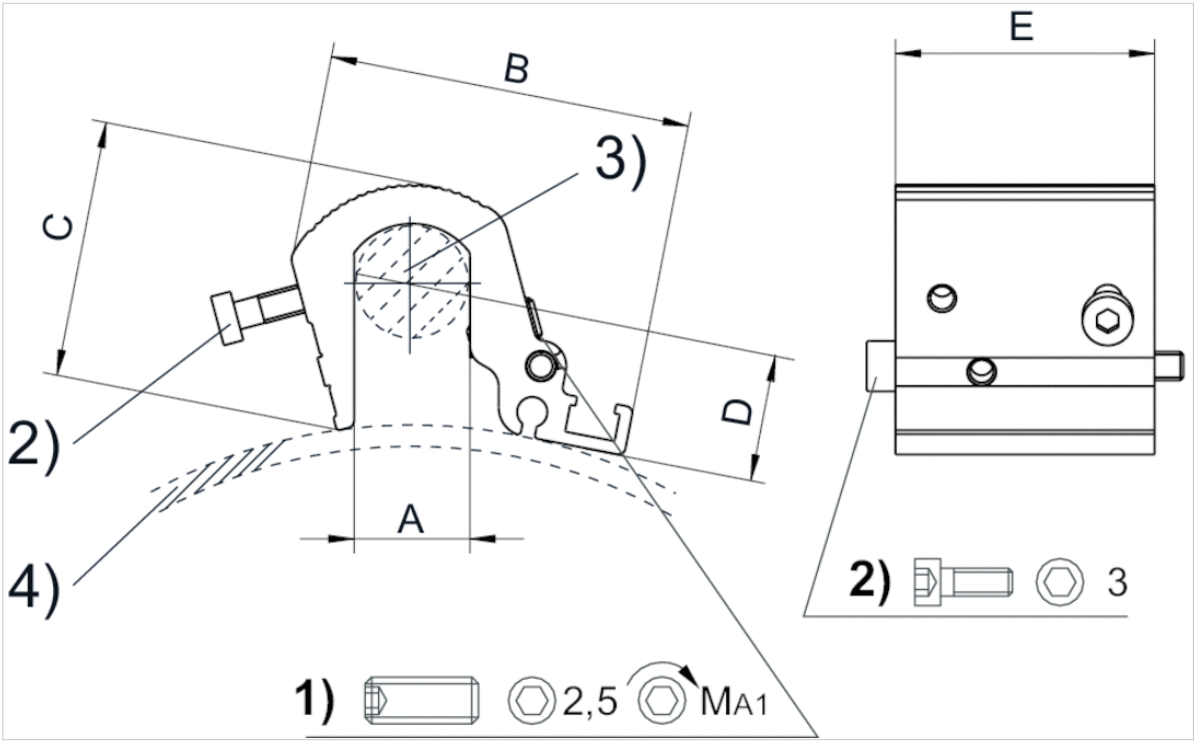
Part No.	Cylinders Ø min.	Cylinders Ø max.	for series	Weight
R412017979	160 mm	200 mm	ST6 SN2 SN6 SN1 SM6 SM6-AL	0,058 kg
R412017980	250 mm	320 mm	ST6 SN2 SN6 SN1 SM6 SM6-AL	0,073 kg

Scope of delivery: Incl. mounting screws

Technical information

Material	
	Aluminum

Dimensions



1) Clamping threaded pin 2) Mounting screws for sensor 3) Tie rod 4) Cylinder profile

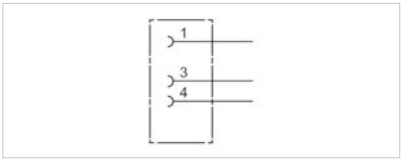
Dimensions

Part No.	Cylinders Ø	A	B	C	D	E	MA1 [Nm]
R412017979	200 mm	16	51	36	6.8	36	2
R412017980	320 mm	24	56	44.5	6.8	36	2

Scope of delivery: Incl. mounting screws

Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded



Connection type	Soldering
Ambient temperature min./max.	-25 ... 80 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0,009 kg

Technical data

Part No.	Max. current	suitable cable-Ø min./max
1834484173	4 A	3,5 mm

Technical information

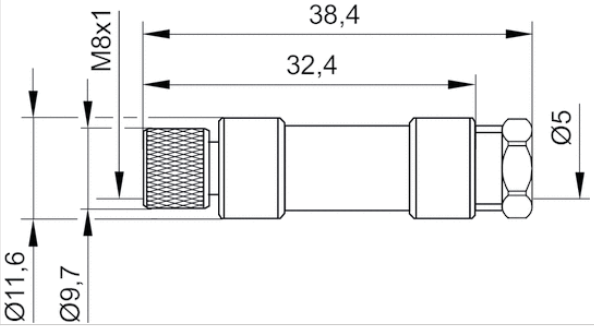
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

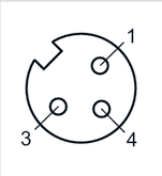
Dimensions

Dimensions



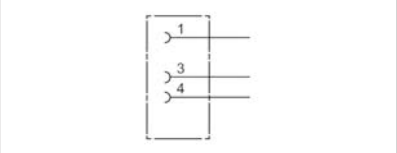
Pin assignments

Pin assignment socket



Round plug connector, Series CON-RD

- Socket, M8x1, 3-pin, A-coded, angled, 90°
- UL (Underwriters Laboratories)
- unshielded



Connection type	Soldering
Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0,01 kg

Technical data

Part No.	Max. current	Contact assignment	suitable cable-Ø min./max
1834484174	4 A	3	3,5 / 5 mm

Technical information

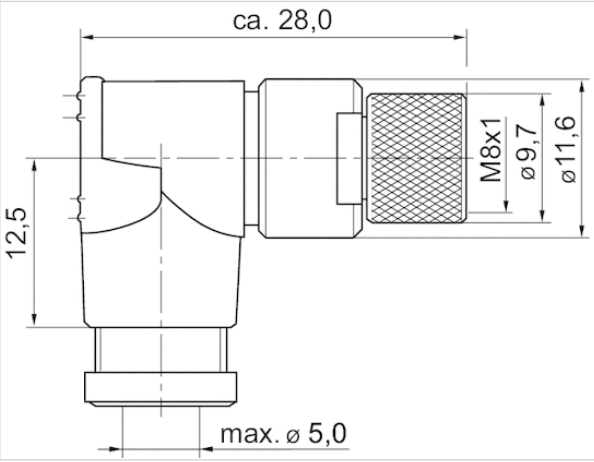
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

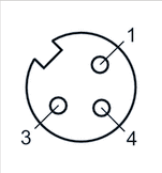
Dimensions

Dimensions



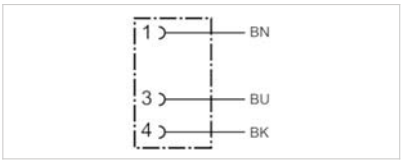
Pin assignments

Pin assignment socket



Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



Ambient temperature min./max.	-25 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0,24 mm²
Weight	See table below

Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification	Weight
1834484166	4 A	3	4,5 mm	3 m	UL (Underwriters Laboratories)	0,087 kg
1834484168	4 A	3	4,5 mm	5 m	UL (Underwriters Laboratories)	0,141 kg
1834484247	4 A	3	4,5 mm	10 m	UL (Underwriters Laboratories)	0,277 kg

Technical information

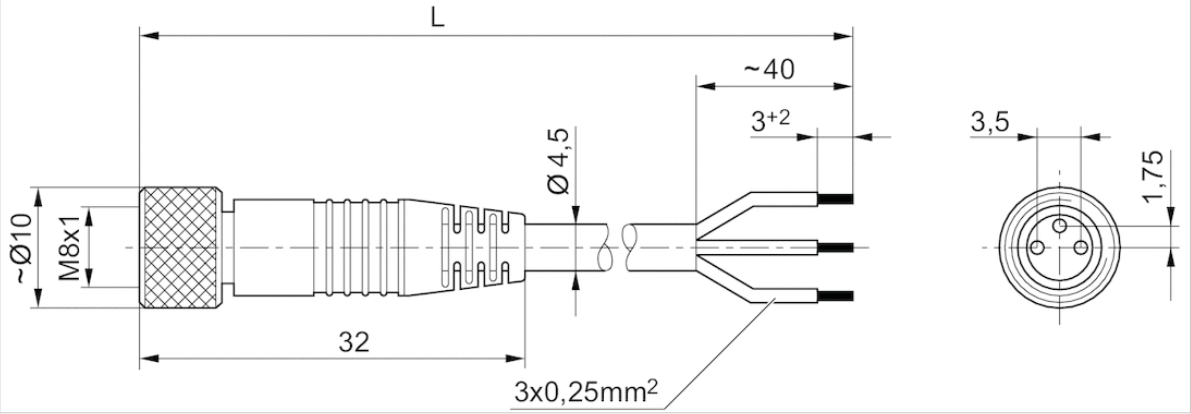
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

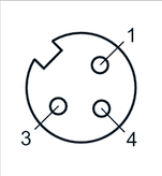
Dimensions



L = length

Pin assignments

Pin assignment socket

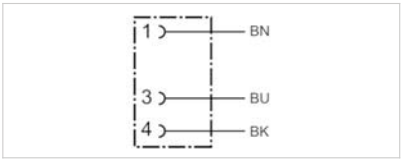


(1) BN=brown
(3) BU=blue
(4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded

Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0,24 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484167	4 A	3	4,5 mm	3 m	0,087 kg
1834484169	4 A	3	4,5 mm	5 m	0,139 kg
1834484248	4 A	3	4,5 mm	10 m	0,279 kg

Technical information

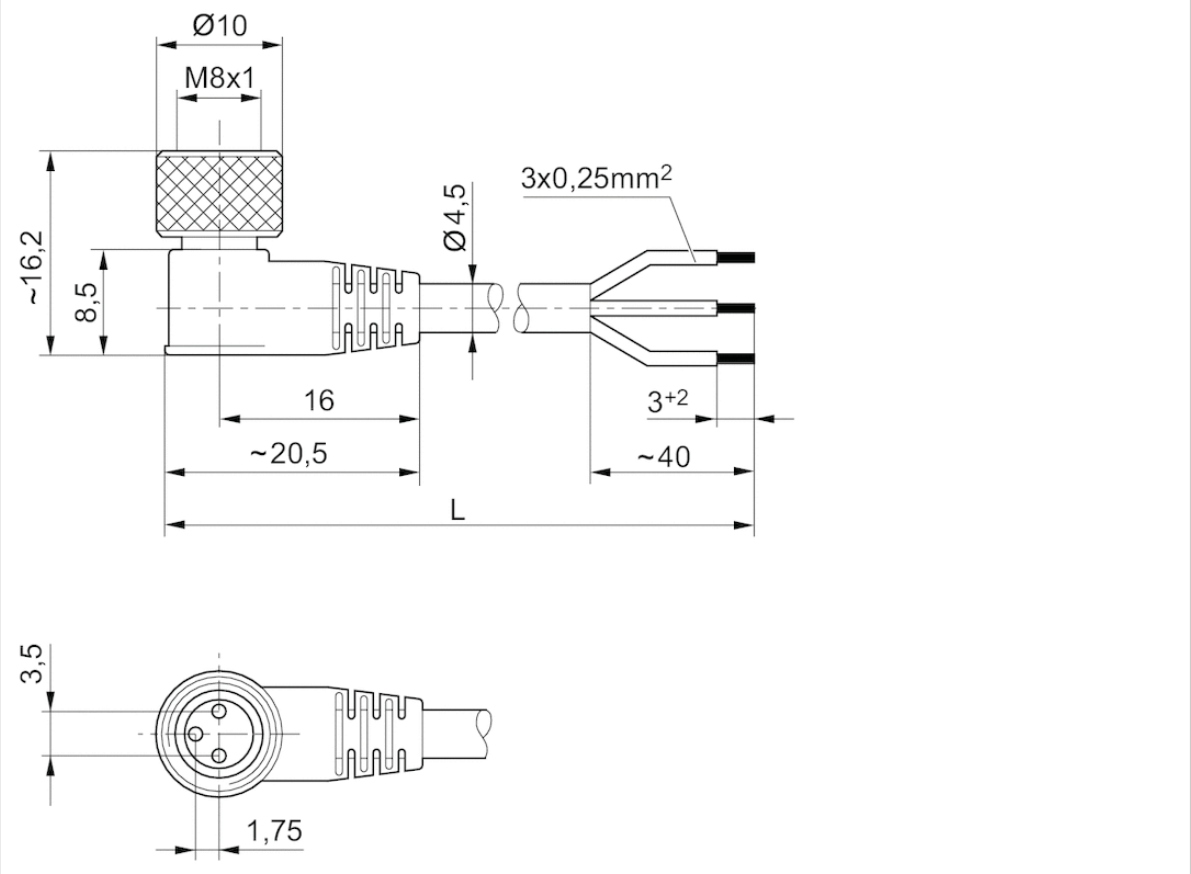
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

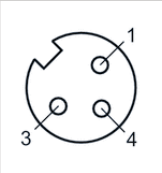
Dimensions



L = length

Pin assignments

Pin assignment socket



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

Compressed air tubing, Series TU1-S-PUR

- suitable for dynamic laying
- Ø 14-16 mm
- Polyester polyurethane
- Max. working pressure at 20 °C 10 bar

Max. working pressure at 20 °C	10 bar
Ambient temperature min./max.	-30 ... 80 °C
Weight	See table below

Technical data

Part No.	external	Wall thickness	Color	Length	Bending radius min.	Weight per meter
	-Ø			Delivery unit	At 20 °C	
R412004778	14 mm	2 mm	Black	25 m	55 mm	0,092 kg
R412004780	16 mm	2,5 mm	Black	25 m	65 mm	0,129 kg
R412004781	16 mm	2,5 mm	Black	100 m	65 mm	0,129 kg
R412004779	14 mm	2 mm	Black	100 m	55 mm	0,092 kg

price / m

Technical information

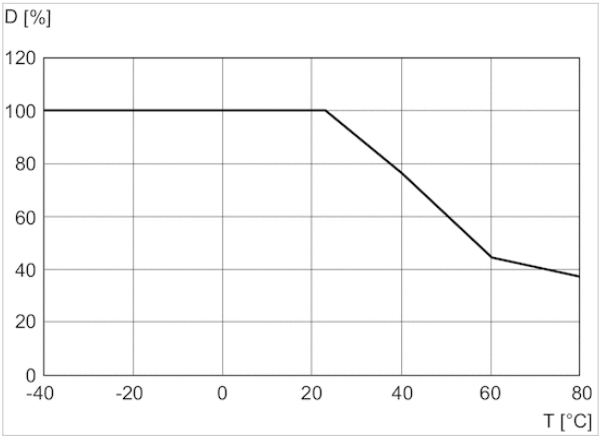
External calibrated
Suitable for dynamic laying
Halogen-free

Technical information

Material	
Material	Polyester polyurethane

Diagrams

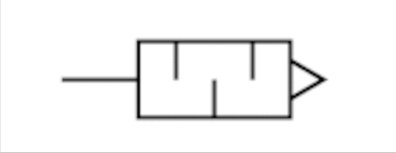
Pressure-Temperature-Diagram



D = pressure resistance
T = temperature

Silencers, series SI1

- Sintered bronze



Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-25 ... 80 °C
Medium	Compressed air
Sound pressure level	See table below
Weight	See table below
Comment	Flow characteristic curves can be found under “Diagrams”.

Technical data

Part No.	Compressed air connection	Sound pressure level	Flow	Delivery unit	Weight
			Qn		
1827000004	G 3/4	92 dB	8394 l/min	1 piece	0,13 kg
1827000005	G 1	102 dB	12848 l/min	1 piece	0,18 kg

Weight per piece

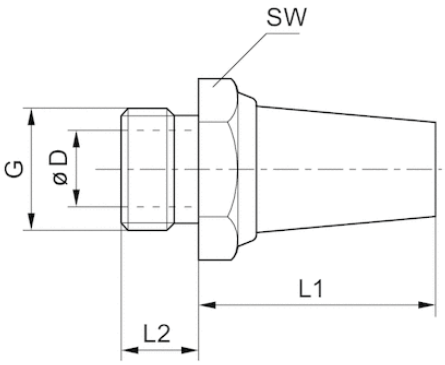
Nominal flow Qn at p1 = 6 bar (absolute) freely discharged. Sound pressure level measured at 6 bar against atmosphere at 1 m distance.

Technical information

Material	
Silencers	Sintered bronze
Thread	Brass

Dimensions

Dimensions

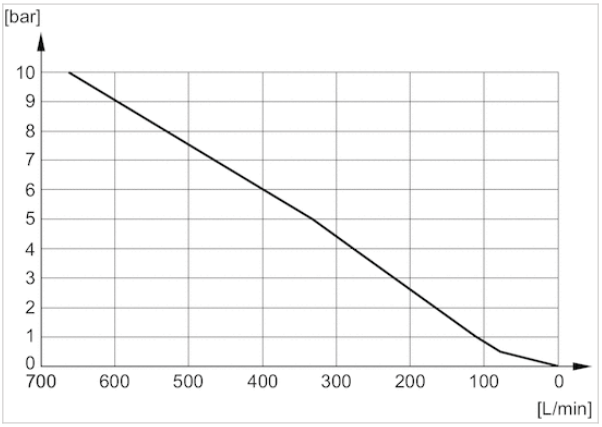


Dimensions

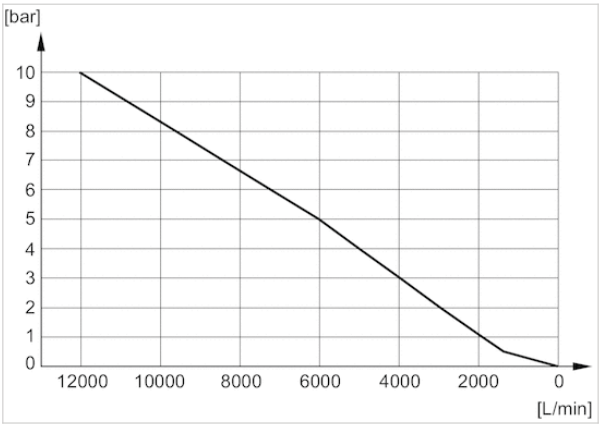
Part No.	Port G	SW	Ø D	L1	L2
1827000004	G 3/4	32	19	66	14
1827000005	G 1	41	25	66	16

Diagrams

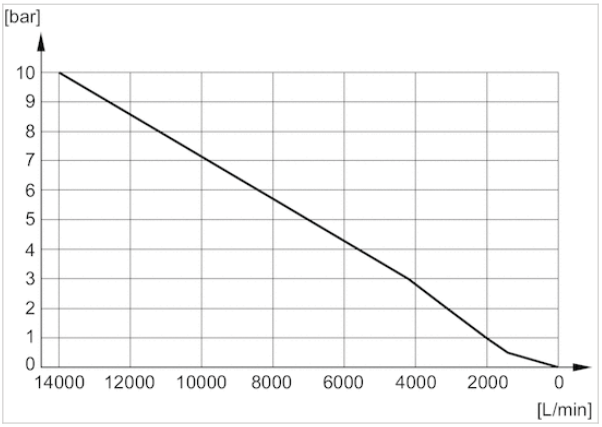
Flow diagram 1827000006



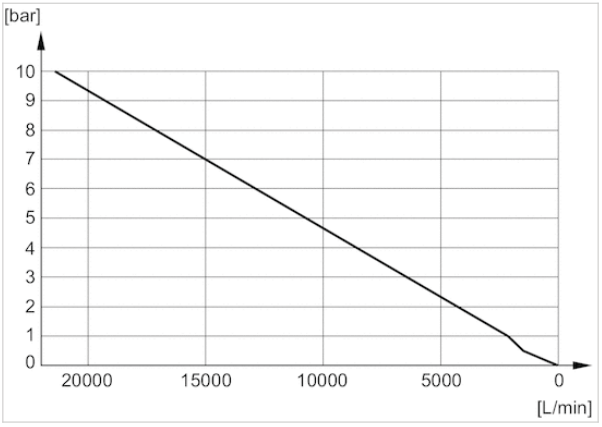
Flow diagram 1827000003



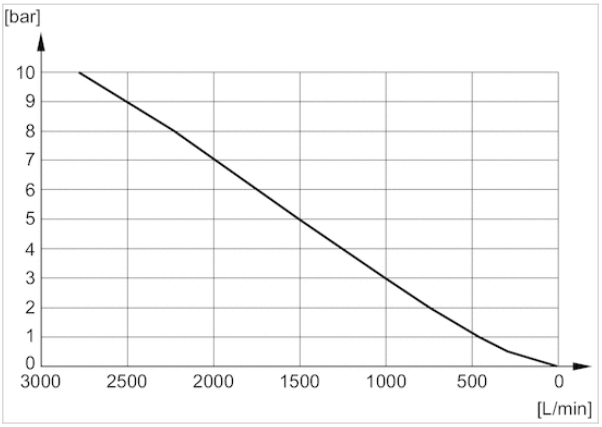
Flow diagram 1827000004



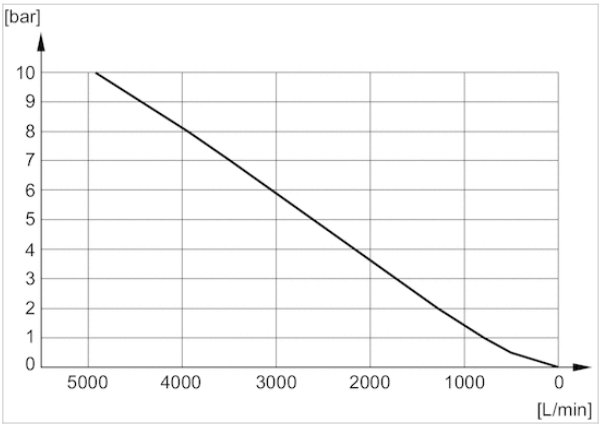
Flow diagram 1827000005



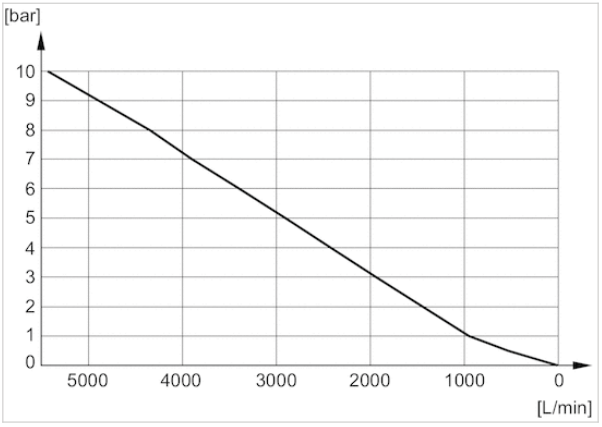
Flow diagram 5324001110



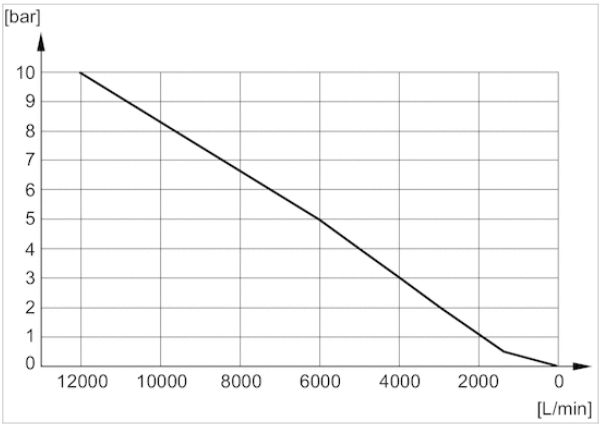
Flow diagram 5324001170



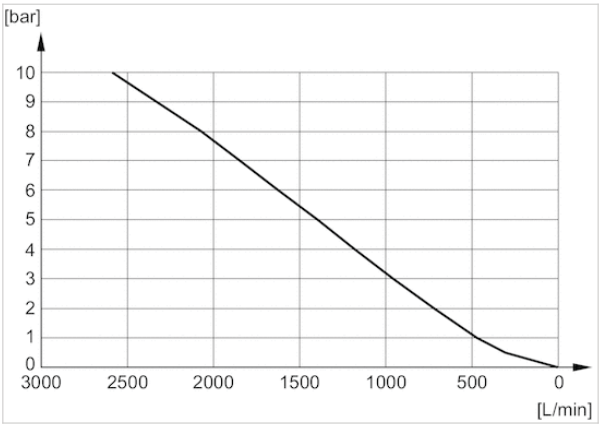
Flow diagram 5324001120



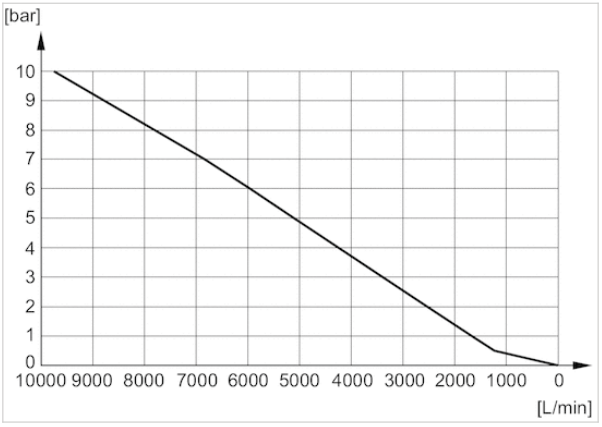
Flow diagram 5324001140



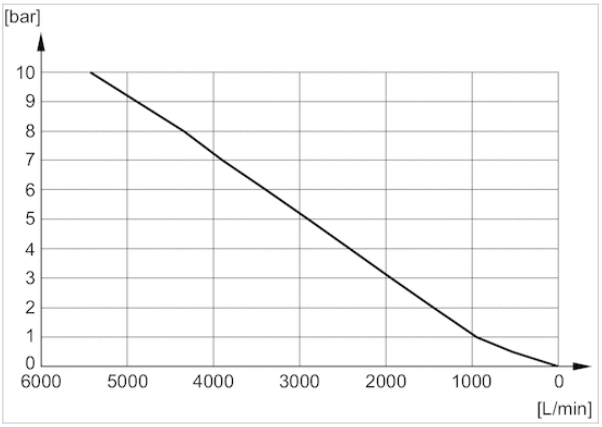
Flow diagram 1827000000



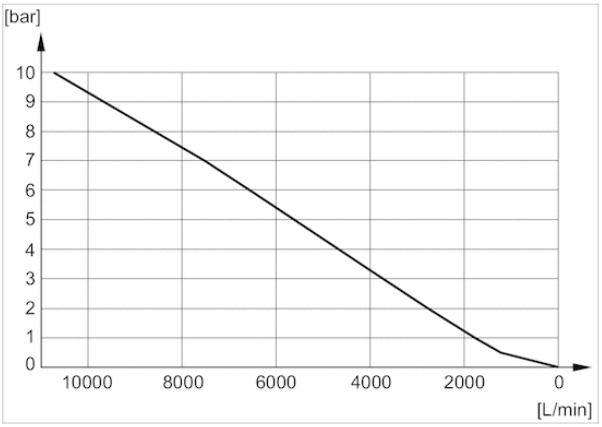
Flow diagram R412004817



Flow diagram 1827000001



Flow diagram 1827000002



Compressed air tubing, Series TU1-S-PAM

- suitable for dynamic laying
- Ø 14-16 mm
- Polyamide
- Max. working pressure at 20 °C 10-15 bar

Max. working pressure at 20 °C	See table below
Ambient temperature min./max.	-40 ... 80 °C
Weight	See table below

Technical data

Part No.	external -Ø	Wall thickness	Color	Length Delivery unit	Bending radius min. At 20 °C	Weight per meter
R412009927	14 mm	1,25 mm	Blue	25 m	90 mm	0,052 kg
1820712104	14 mm	1,5 mm	Natural	25 m	90 mm	0,052 kg
R412009936	14 mm	1,25 mm	Black	50 m	90 mm	0,052 kg
R412009929	16 mm	1,35 mm	Blue	25 m	100 mm	0,065 kg
R412009930	16 mm	1,35 mm	Blue	50 m	100 mm	0,065 kg

Part No.	Max. working pressure at 20 °C
R412009927	11 bar
1820712104	15 bar
R412009936	11 bar
R412009929	10 bar
R412009930	10 bar

price / m

Technical information

External calibrated
Halogen-free
Excellent hydrolysis characteristics
Suitable for dynamic laying
Excellent UV resistance
Resistant to microbes

Technical information

Material	
Material	Polyamide

Reducing nipple

- External thread
- G 1
- Internal thread
- G 3/8 G 1/2 G 3/4
- FPT-S-RDZ

Working pressure min./max.	0 ... 60 bar
Ambient temperature min./max.	-20 ... 70 °C

Technical data

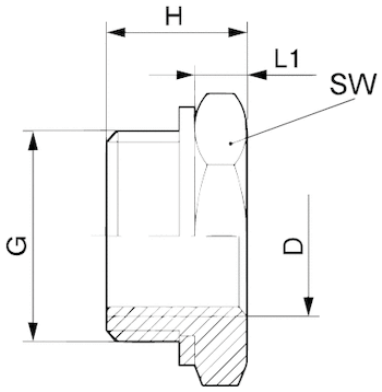
Part No.	Port G	Port D	Delivery unit
1823391303	G 1	G 3/8	2 piece
1823391304	G 1	G 1/2	2 piece
1823391285	G 1	G 3/4	2 piece

Technical information

Material	
Material	Brass, nickel-plated
Seal	Polyvinyl chloride, hard

Dimensions

Dimensions



Dimensions

Part No.	Port D	Port G	H	L1	SW
1823391303	G 3/8	G 1	23	8	41
1823391304	G 1/2	G 1	23	8	41
1823391285	G 3/4	G 1	23	8	41

Straight fitting

- G 3/4

Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-20 ... 150 °C

Technical data

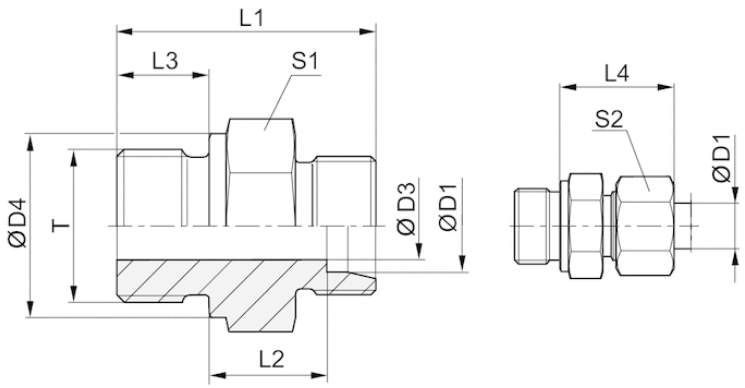
Part No.	Port G
8938028550	G 3/4
8938028560	G 3/4

Technical information

Material	
Material	Steel

Dimensions

Dimensions



Dimensions

Part No.	Port G	ØD1	ØD3	ØD4	L1	L2	L3	L4	S1	S2	T
8938028550	G 3/4	18	15	32	38	14,5	16	30	32	32	G3/4
8938028560	G 3/4	22	18	32	40	16,5	16	33	32	36	G3/4

Banjo connection

- G 3/4 G 1

Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-20 ... 150 °C

Technical data

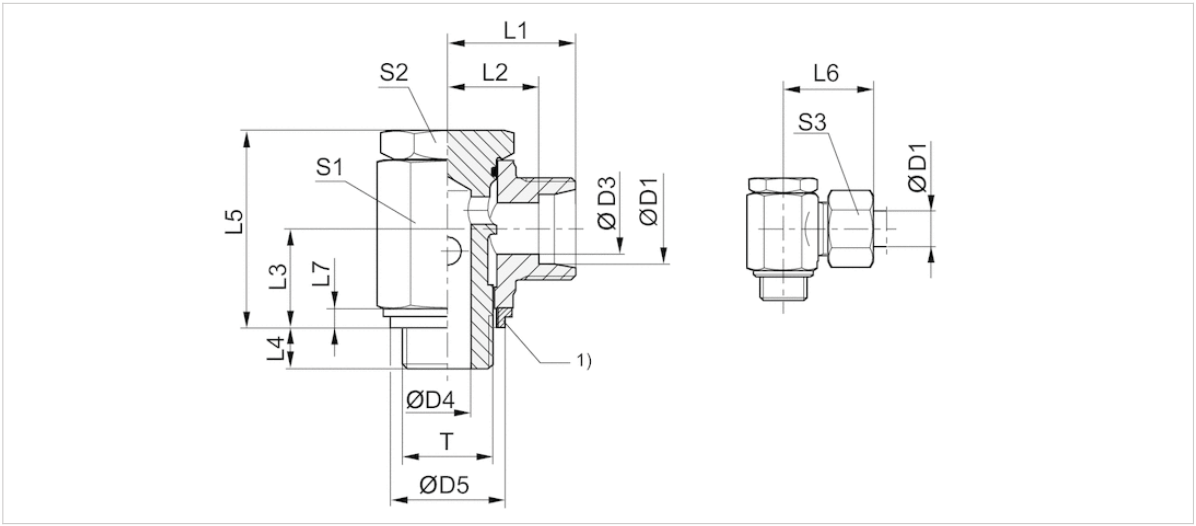
Part No.	Port G
8939013760	G 3/4
R415004988	G 1

Technical information

Material	
Material	Steel

Dimensions

Dimensions



1) Sealing edge ring

Dimensions

Part No.	Port G	ØD1	ØD3	ØD4	ØD5	L1	L2	L3	L4	L5	L6	L7	S1	S2	S3	T
8939013760	G 3/4	22	19	18	32	33	25,5	24	13	49	42	3,5	36	32	36	G3/4
R415004988	G 1	28	24	22	39	39	31,5	32	18	64	48	-	50	22	41	G1