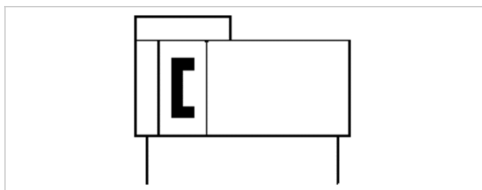


Guided slide unit, Series GSU

- Ø 0.63-0.984 inch
- Ports M5, G 1/8
- double-acting
- with magnetic piston
- mini ball rail guide, ball rail guide
- Cushioning hydraulic, non-adjustable
- Easy2Combine capable
- adjustable end stops



Working pressure min./max.	See table below
Ambient temperature min./max.	32 ... 140 °F
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Pressure for determining piston forces	91.35 psi
Weight	See table below



Technical data

Piston Ø	0.63 inch	0.984 inch
Stroke 7.87	R402000986	R402000995
11.81	R402000987	R402000996
15.75	R402000988	R402000997
19.68	R402000989	R402000998
23.62	R402000990	R402000999
27.56	R402000991	R402001000
31.5	R402000992	R402001001
35.43	R402000993	R402001002
39.37	R402000994	R402001003

Stroke length adjustable and end stops can be mounted over the entire stroke.

Technical data

Piston Ø	0.63 inch	0.984 inch
Piston force	28.55 lbf	69.46 lbf

Piston Ø	0.63 inch	0.984 inch
Cushioning length	0.39 inch	0.49 inch
Cushioning energy	1.7 in.lbs	2.43 in.lbs
Speed max.	4.92 ft/s	4.92 ft/s
Stroke max.	39.37 inch	39.37 inch

Technical information

The pressure dew point must be at least 27 °F under ambient and medium temperature and may not exceed 5.4 °F .

The oil content of compressed air must remain constant during the life cycle.

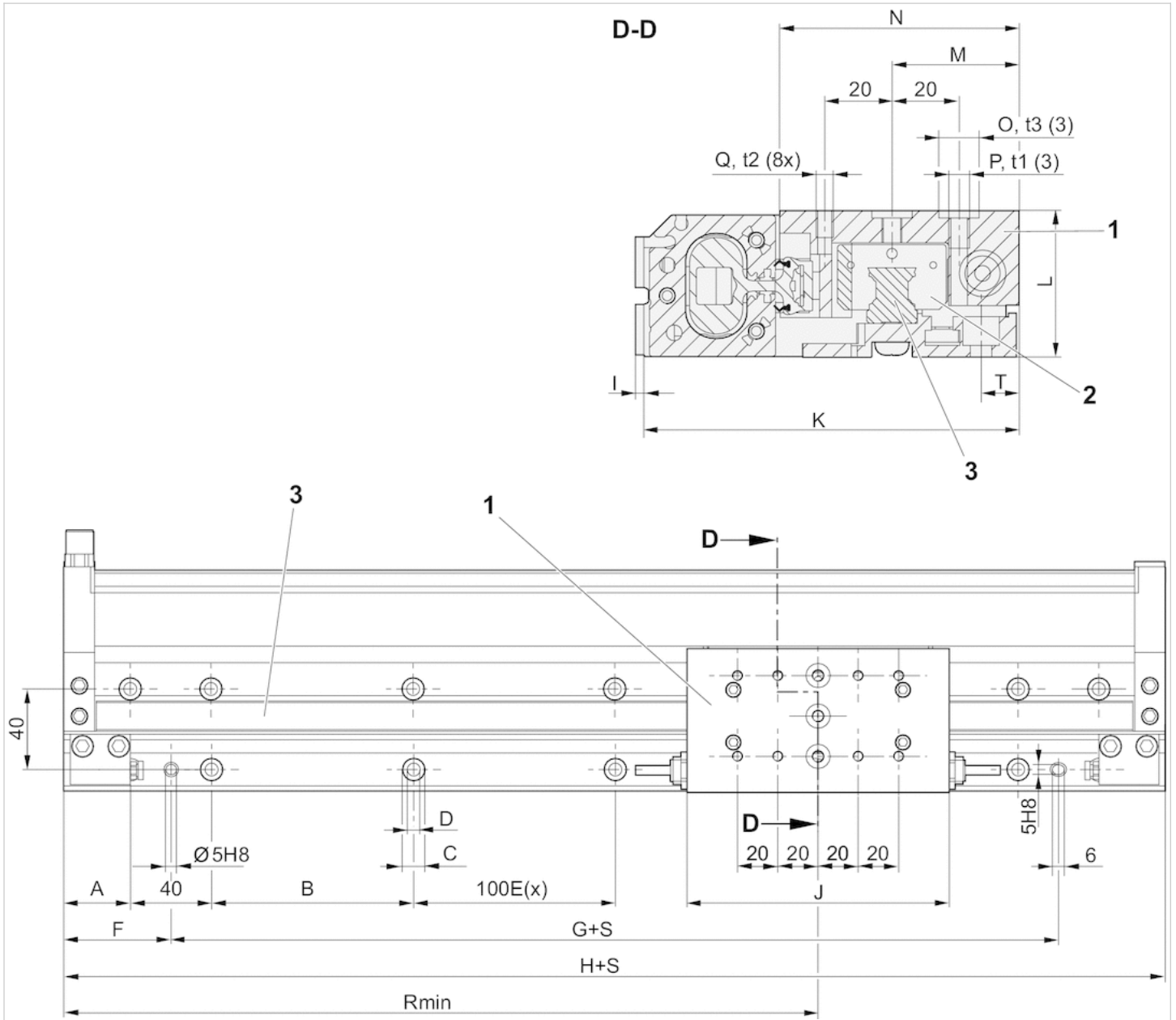
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Cylinder tube	Aluminum, anodized
Cap	Aluminum, anodized
Seal	Polyurethane
Sealing strips	Polyurethane, Stainless steel
Ball rail table	Aluminum, anodized
Guide shuttle	Stainless steel, Steel
Guide rail	Stainless steel, hardened, Steel, hardened

Dimensions

Dimensions



- S = stroke
- t1, t2 = depth of thread
- t3 = sinkhole depth
- 1) Ball rail table
- 2) Guide shuttle
- 3) Guide rail

Dimensions

Piston Ø	A	B	C	D	F	G	H	I	J	K	L	M	N	O	t3
0.63 inch	25	92	Ø 9,5	Ø 5,5	45	124	214	3.6	110	99	29	33.5	69	Ø 9 H8	2,1+0,2
0.984 inch	33	100	Ø 11	Ø 6,6	53	140	246	2.5	130	111.65	43.5	37.85	71.15	Ø 12 H8	2,1+0,2

Piston Ø	P	t1	Q	t2	R 1)	T
0.63 inch	M5	9	M4	8	107	7.5
0.984 inch	M6	9	M5	8	123	11.35

1) Min.

Weight [kg]

Piston Ø	S	200	300	400	500	600	700	800	900	1000
0.63 inch	E(x)	1	2	3	4	5	6	7	8	9
0.984 inch	E(x)	1	2	3	4	5	6	7	8	9

S = stroke

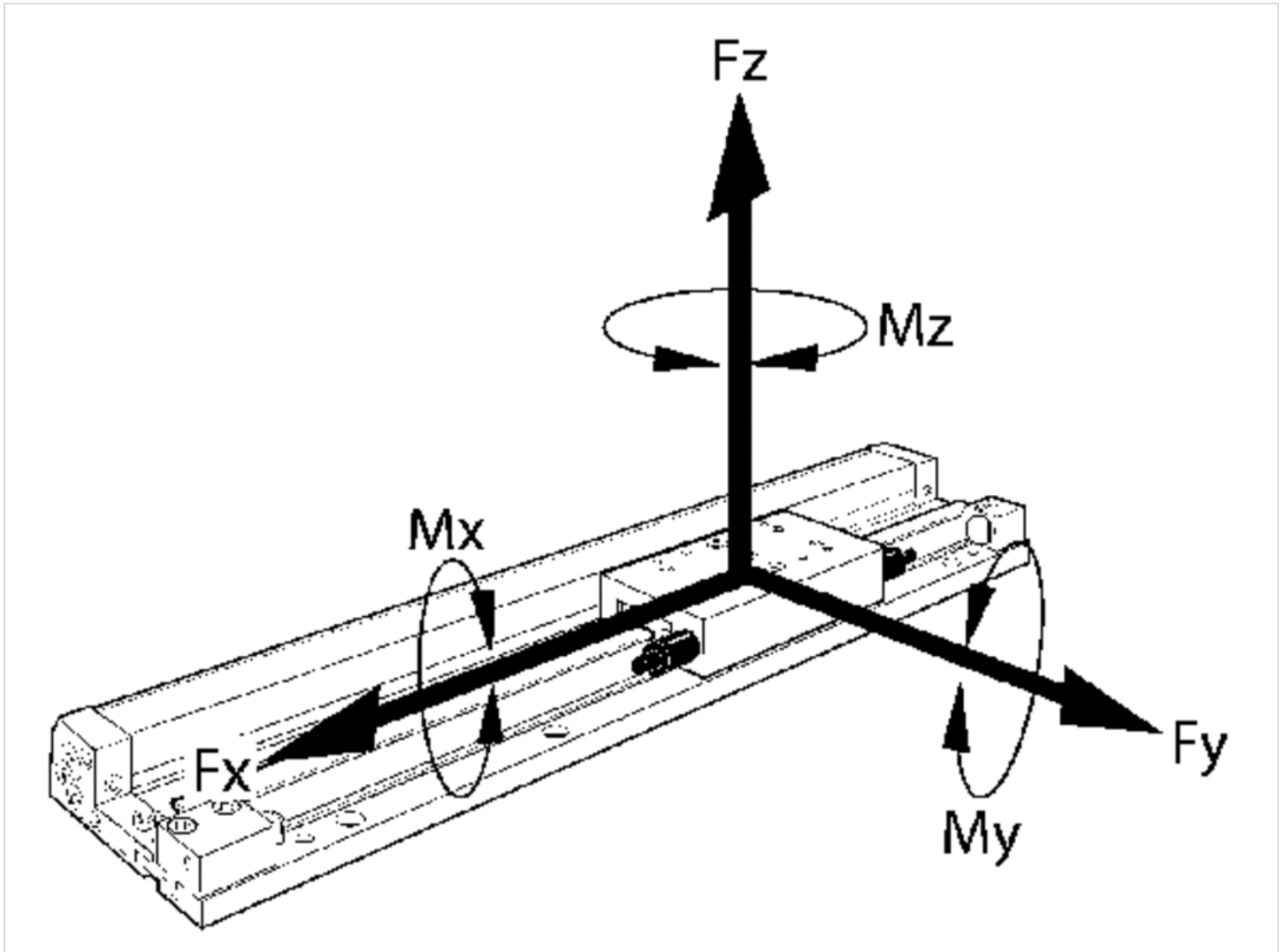
Stroke-dependent dimensions

Piston Ø	S	Weight kg
0.63 inch	200	3.92 lbs
0.63 inch	300	4.61 lbs
0.63 inch	400	5.29 lbs
0.63 inch	500	5.97 lbs
0.63 inch	600	6.66 lbs
0.63 inch	700	7.34 lbs
0.63 inch	800	8.02 lbs
0.63 inch	900	8.71 lbs
0.63 inch	1000	9.39 lbs
0.984 inch	200	7.08 lbs
0.984 inch	300	8.22 lbs
0.984 inch	400	9.37 lbs
0.984 inch	500	10.52 lbs
0.984 inch	600	11.66 lbs
0.984 inch	700	12.81 lbs
0.984 inch	800	13.96 lbs
0.984 inch	900	15.1 lbs
0.984 inch	1000	16.25 lbs

S = stroke

Dimensions

Permissible forces F_x F_y F_z and torques M_x M_y M_z static

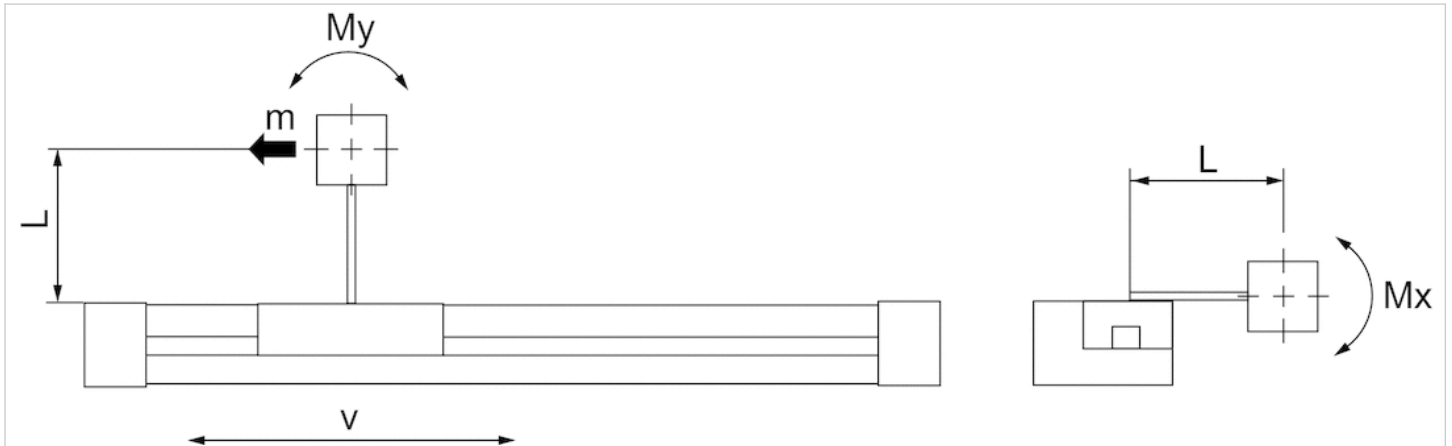


Dimensions

Piston Ø	F_x [N]	F_y [N]	F_z [N]	M_x [Nm]	M_y [Nm]	M_z [Nm]
0.63 inch	880	880	1500	20	40	40
0.984 inch	1070	1070	2500	55	65	65

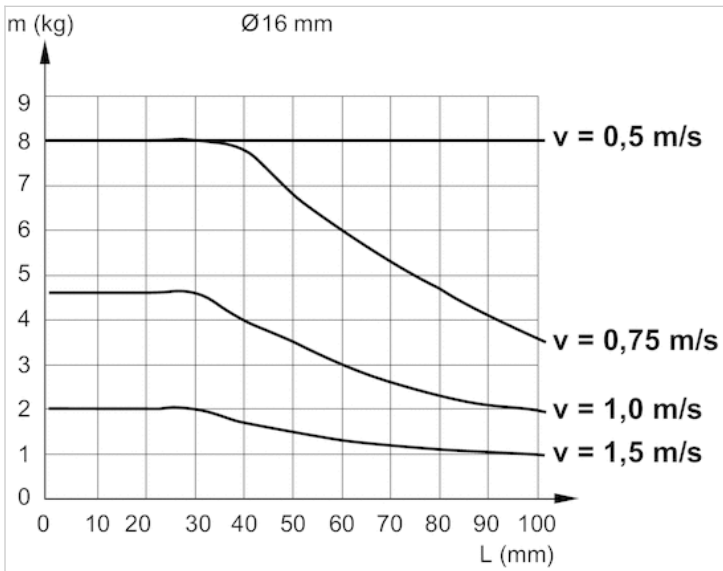
Dimensions

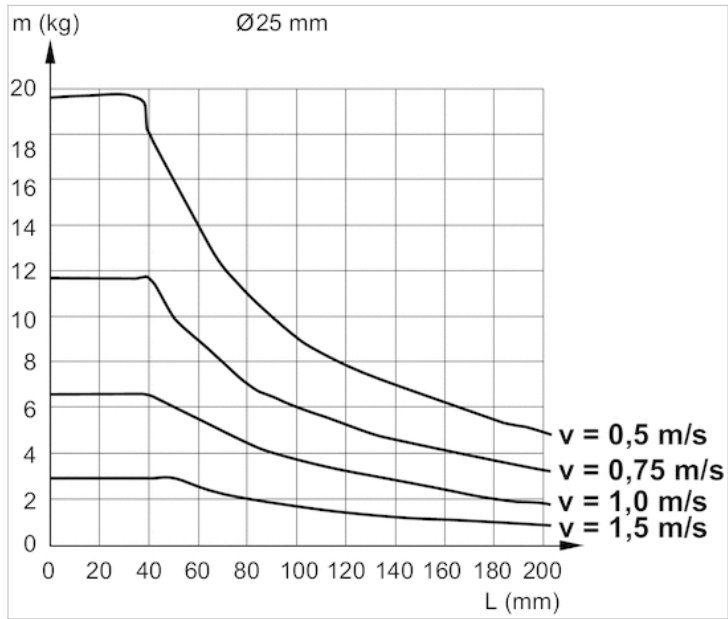
dynamic



L indicates the distance between the mounting plate center and the center of mass of the attached parts.

Diagrams





Sensor, Series ST4

- 4 mm C-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- UL certification
- Reed, electronic PNP
- Direct mounting for series PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
- Indirect mounting for series MNI, CSL-RD, ICM



Certificates	UL (Underwriters Laboratories), cULus, RoHS
Ambient temperature min./max.	-22 ... 176 °F
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Min./max. DC operating voltage	See table below
Switching logic	NO (make contact)
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Mounting screw	Combination: slotted and hexagon socket

Technical data

Part No.		for
R412019490		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019686		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019493		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019687		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI

Part No.	Type of contact	Cable length L	Min./max. DC operating voltage
R412019490	Reed	0.984 ft.	5 ... 30 V DC
R412019686	Reed	1.64 ft.	5 ... 30 V DC
R412019493	electronic PNP	0.984 ft.	10 ... 30 V DC
R412019687	electronic PNP	1.64 ft.	10 ... 30 V DC

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412019490	≤ 0,5 V	0.13 A
R412019686	≤ 0,5 V	0.13 A
R412019493	≤ 2,5 V	0.1 A
R412019687	≤ 2,5 V	0.1 A

Part No.	AC switching current, max.	Switching capacity
R412019490	0.13 A	3 W / 3 VA

Part No.	AC switching current, max.	Switching capacity
R412019686	0.13 A	3 W / 3 VA
R412019493	-	-
R412019687	-	-

Part No.	Version
R412019490	Protected against polarity reversal
R412019686	Protected against polarity reversal
R412019493	short circuit resistant, Protected against polarity reversal
R412019687	short circuit resistant, Protected against polarity reversal

Technical information

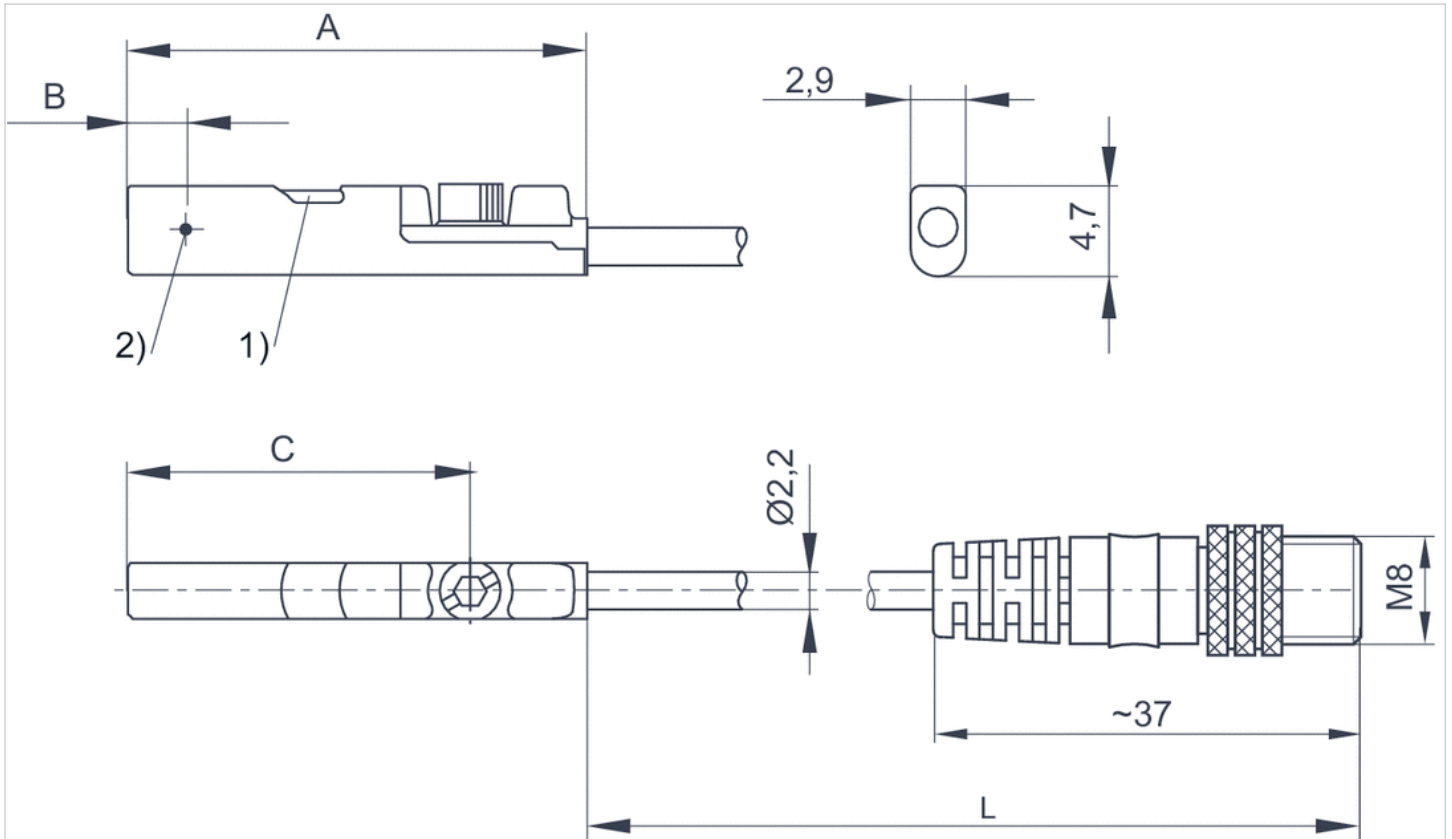
The max. switching capacity must not be exceeded.

Technical information

Material	
Housing	Polyamide, fiber-glass reinforced
Cable sheath	Polyurethane

Dimensions

Dimensions



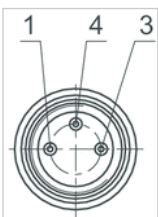
1) LED 2) Switching point
L = cable length

Dimensions

Part No.	A	B	C
R412019490	26.3	6.3	20.3
R412019686	26.3	6.3	20.3
R412019493	23.7	2.8	17.7
R412019687	23.7	2.8	17.7

Pin assignments

Pin assignments



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

Sensor, Series ST4

- 4 mm C-slot
- with cable
- Plug, M8, 3-pin
- UL certification
- Reed, electronic PNP, electronic NPN
- Direct mounting for series PRA, SSI, GSU, RTC, CKP, GSP, MSC, MSN, RCM, CVI
- Indirect mounting for series MNI, CSL-RD, ICM



Certificates

Ambient temperature min./max.	UL (Underwriters Laboratories), cULus, RoHS
Protection class	-22 ... 176 °F
Switching point precision	IP65, IP67
Min./max. DC operating voltage	±0,1 mT
Switching logic	See table below
Display	NO (make contact)
LED status display	LED
Vibration resistance	Yellow
Shock resistance	10 - 55 Hz, 1 mm
Mounting screw	30 g / 11 ms
	Combination: slotted and hexagon socket

Technical data

Part No.		for
R412019682		PRA, SSI, GSU, RTC, CKP, GSP, MSC, MSN, RCM, CVI
R412019683		PRA, SSI, GSU, RTC, CKP, GSP, MSC, MSN, RCM, CVI
R412019694		PRA, SSI, GSU, RTC, CKP, GSP, MSC, MSN, RCM, CVI

Part No.	Type of contact	Cable length L	Min./max. DC operating voltage
R412019682	Reed	0.984 ft.	5 ... 30 V DC
R412019683	electronic PNP	0.984 ft.	10 ... 30 V DC
R412019694	electronic NPN	0.984 ft.	10 ... 30 V DC

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412019682	≤ 0,5 V	0.13 A
R412019683	≤ 2,5 V	0.1 A
R412019694	≤ 2,5 V	0.1 A

Part No.	AC switching current, max.	Switching capacity
R412019682	0.13 A	3 W / 3 VA
R412019683	-	-
R412019694	-	-

Part No.	Version
R412019682	Protected against polarity reversal
R412019683	short circuit resistant, Protected against polarity reversal
R412019694	short circuit resistant, Protected against polarity reversal

Technical information

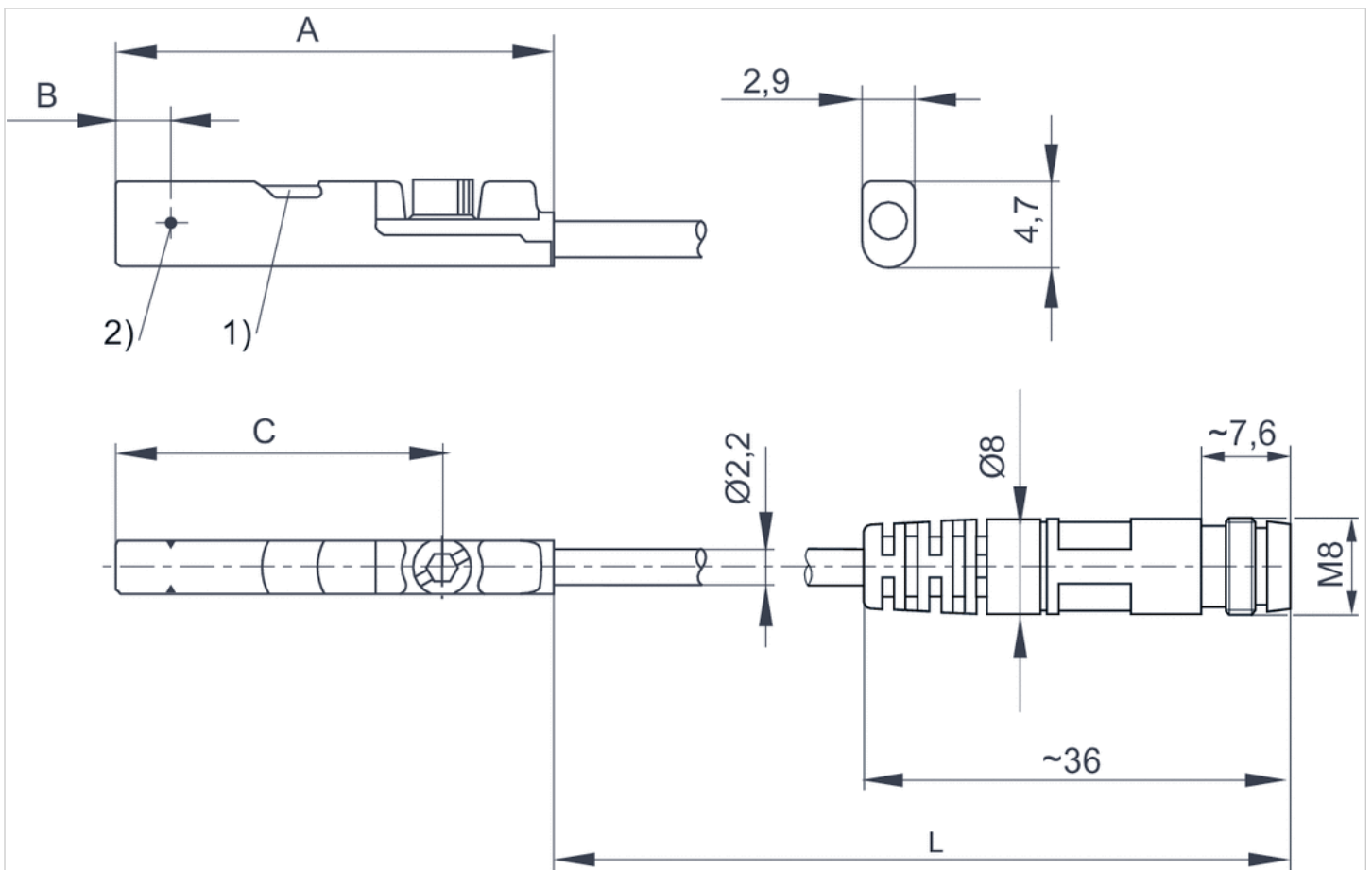
The max. switching capacity must not be exceeded.

Technical information

Material	
Housing	Polyamide, fiber-glass reinforced
Cable sheath	Polyurethane

Dimensions

Dimensions



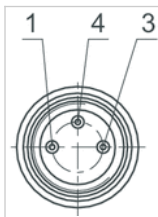
1) LED 2) Switching point
L = cable length

Dimensions

Part No.	A	B	C
R412019682	26.3	6.3	20.3
R412019683	23.7	2.8	17.7
R412019694	23.7	2.8	17.7

Pin assignments

Pin assignments



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

Sensor, Series ST4

- 4 mm C-slot
- with cable
- open cable ends, 3-pin
- UL certification
- Reed, electronic PNP, electronic NPN
- Direct mounting for series PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
- Indirect mounting for series MNI, CSL-RD, ICM



Certificates	UL (Underwriters Laboratories), cULus, RoHS
Ambient temperature min./max.	-22 ... 176 °F
Protection class	IP65, IP67
Switching point precision	±0,1 mT
Min./max. DC operating voltage	See table below
Switching logic	NO (make contact)
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Mounting screw	Combination: slotted and hexagon socket

Technical data

Part No.		for
R412019488		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019489		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019680		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019681		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019684		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI
R412019685		PRA, SSI, GSU, RTC, CKP, GPC, MSC, MSN, RCM, CVI

Part No.	Type of contact	Cable length L	Min./max. DC operating voltage
R412019488	Reed	9.84 ft.	5 ... 30 V DC
R412019489	Reed	16.4 ft.	5 ... 30 V DC
R412019680	electronic PNP	9.84 ft.	10 ... 30 V DC
R412019681	electronic PNP	16.4 ft.	10 ... 30 V DC
R412019684	electronic NPN	9.84 ft.	10 ... 30 V DC
R412019685	electronic NPN	16.4 ft.	10 ... 30 V DC

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412019488	≤ 0,5 V	0.13 A
R412019489	≤ 0,5 V	0.13 A
R412019680	≤ 2,5 V	0.1 A
R412019681	≤ 2,5 V	0.1 A

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412019684	≤ 2,5 V	0.1 A
R412019685	≤ 2,5 V	0.1 A

Part No.	AC switching current, max.	Switching capacity
R412019488	0.13 A	3 W / 3 VA
R412019489	0.13 A	3 W / 3 VA
R412019680	-	-
R412019681	-	-
R412019684	-	-
R412019685	-	-

Part No.	Version
R412019488	Protected against polarity reversal
R412019489	Protected against polarity reversal
R412019680	short circuit resistant, Protected against polarity reversal
R412019681	short circuit resistant, Protected against polarity reversal
R412019684	short circuit resistant, Protected against polarity reversal
R412019685	short circuit resistant, Protected against polarity reversal

Technical information

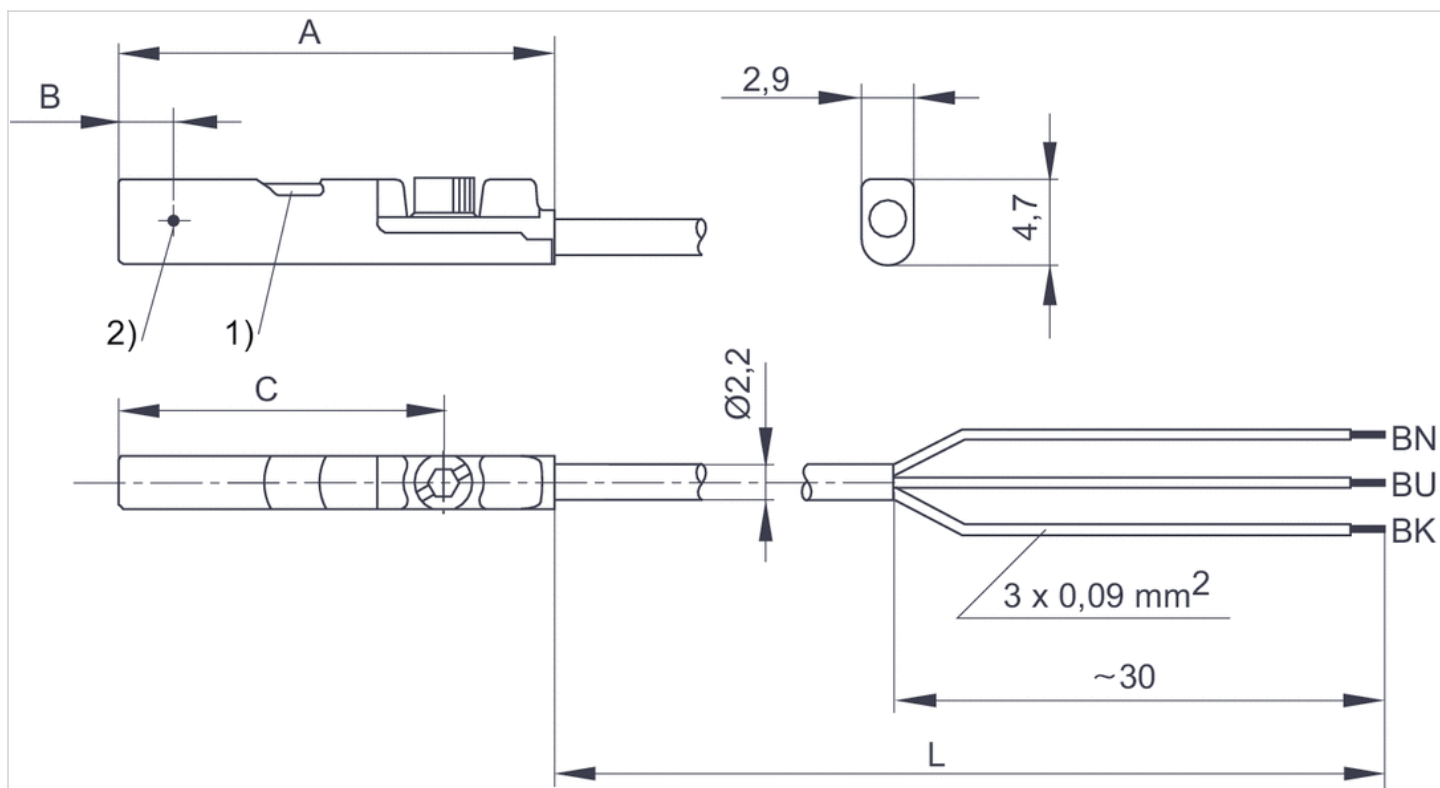
The max. switching capacity must not be exceeded.

Technical information

Material	
Housing	Polyamide, fiber-glass reinforced
Cable sheath	Polyurethane

Dimensions

Dimensions



1) LED 2) Switching point

L = cable length

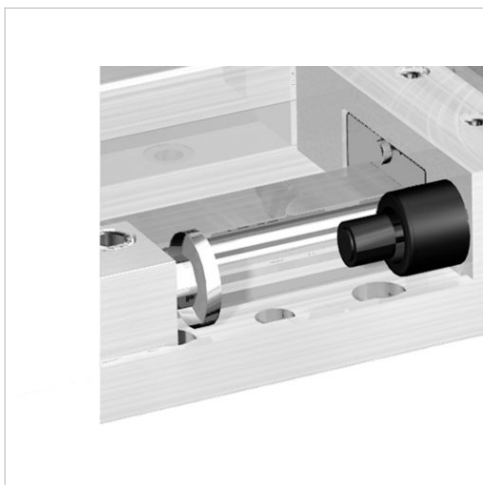
BN = brown, BK = black, BU = blue

Dimensions

Part No.	A	B	C
R412019488	26.3	6.3	20.3
R412019489	26.3	6.3	20.3
R412019680	23.7	2.8	17.7
R412019681	23.7	2.8	17.7
R412019684	23.7	2.8	17.7
R412019685	23.7	2.8	17.7

Kit for shock absorber end stop adjustment

- for series GSU-16, GSU-25



Technical data

Part No.	for series
R402001207	GSU-16
R402001208	GSU-25

The kit contains two stop sleeves and two stop screws., The stop sleeve replaces the mounting nut on the shock absorber.