

Standard Rope Pull Switches

With and Without Latching Function



SEK



SEM2



SIEM2



SD



SID



SID



SIN



SGC



SI88

Because of their specifications governed by corresponding standards (see Cable Safety Pull Switches SRM/SR), these cable pull switches are used exclusively as command devices.

These switches are available in metal enclosures as well as in insulation-enclosed versions. They are operated manually by pulling on the attached cable.

Thanks to their pretension, these switches, which feature a switching contact with overlap, execute a switching function when the cable is pulled or in the event of cable breakage.

The field of application for these rope pull switches includes

- Opening and closing of (garage) doors
- Starting machines
- Issuing commands in production processes

The basic design of the standard rope pull switches is based on that of position switches.

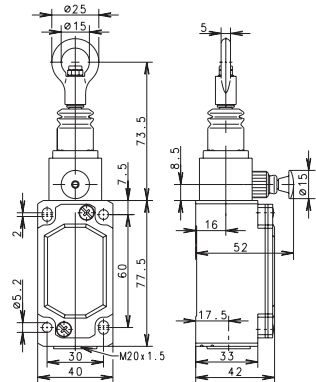
The specified cable length refers to the maximum length at minimum temperature variation. The maximum cable length may decrease under different environmental conditions.

Technical data		SEK	SiEK	SEM2	SiEM2
Electrical data					
Rated insulation voltage U_i		400 V AC	400 V AC	400 V AC	400 V AC
Rated operating voltage U_e		240 V	240 V	240 V	240 V
Conventional thermal current I_{the}		10 A	10 A	10 A	10 A
Utilisation category U_e/I_e		AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A
Mechanical data					
Switching frequency max.		≤ 50/min.	max. 100/min.	max. 50/min.	max. 50/min.
Mechanical service life B10d		1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request
Short-circuit protection		Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG
Protection class		II, Insulated	II, Insulated	I	I
Ambient temperature		-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C
Protection class		IP 65 conforming to IEC/EN 60529	IP 65 conforming to EN 60529	IP 65 conforming to EN 60529	IP 65 conforming to EN 60529; DIN VDE 0470 T1
Type of connection		4 Screw connections (M3, 5)	4 Screw connections (M3, 5)	4 Screw connections (M3, 5)	Screw connections
Conductor cross sections		Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²
Enclosure		Thermoplastic, glass fibre-reinforced	Thermoplastic, glass fibre-reinforced	Aluminium pressure die-casting	Aluminium pressure die-casting
Cable entry		1 x M20 x 1.5	1 x M20 x 1.5	1 x M20 x 1.5	1 x M20 x 1.5
Standards					
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1					

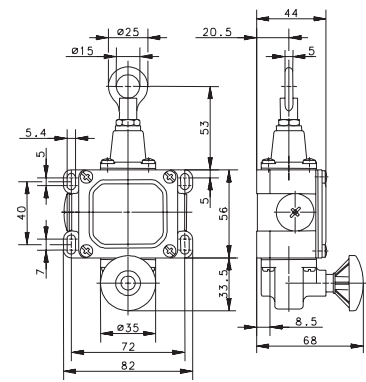
Technical data		SD	SiD	SIN	SGC	Si88
Electrical data						
Rated insulation voltage U_i		400 V AC	400 V AC	400 V AC	400 V AC	250 V AC
Rated operating voltage U_e		240 V	240 V	240 V	240 V	240 V
Conventional thermal current I_{the}		16 A	16 A	10 A	10 A	10 A
Utilisation category U_e/I_e		AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A	AC-15, U_e/I_e 240 V / 3 A
Mechanical data						
Switching frequency max.		≤ 20/min.	max. 20/min.	≤ 20/min.	≤ 20/min.	≤ 50/min.
Mechanical service life B10d		1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request	1 x 10 ⁶ switching cycles on request
Short-circuit protection		Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG
Protection class		I	I	I	I	I
Ambient temperature		-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C
Protection class		IP65 conforming to EN 60529	IP65 conforming to EN 60529	IP65 conforming to EN 60529	IP 65 conforming to EN 60529	IP 65 conforming to EN 60529
Type of connection		Screw connections	Screw connections	Screw connections	Screw connections	Screw connections
Conductor cross sections		Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²	Single-wire 0.5 – 1.5 mm ² or Stranded wire with ferrule 0.5 – 1.5 mm ²
Enclosure		Aluminium pressure die-casting	Aluminium pressure die-casting	Aluminium pressure die-casting	Aluminium pressure die-casting	Thermoplastic, glass fibre-reinforced
Cable entry		2 x M20 x 1.5	2 x M20 x 1.5	2 x M20 x 1.5	1 x M20 x 1,5	1 x M20 x 1,5
Standards						
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1						

Standard Rope Pull Switches

SIEM2 RAST



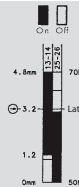
SID RAST



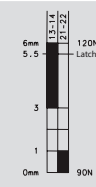
Variant 1

Article No.
Designation
Max. span

6012831023
SIEM2-UV1Z P-RAST
6 m



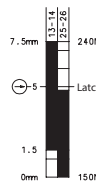
6011411868
SD-U1 P-RAST
8 m



Variant 2

Article No.
Designation
Max. span

6111431060
SID-UV1Z P-RAST
15 m



Variant 3

Article No.
Designation
Max. span

6011431869
SID-UV1Z P-RAST
12 m



Technical data

Rated insulation voltage U_i max.

400 V AC

400 V AC

Rated operating voltage U_e max

240 V

240 V

Conventional thermal current I_{thc}

10 A

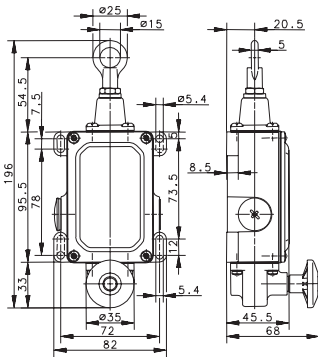
16 A

Utilisation category U_e/I_e

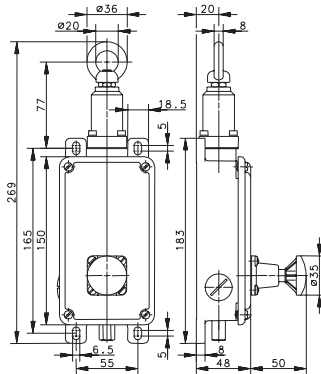
AC-15, 240 V/3 A

AC-15, 240 V/3 A

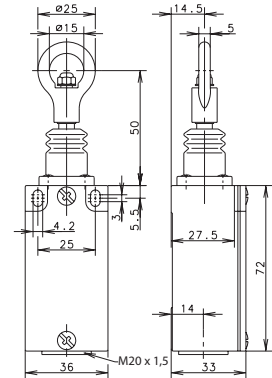
SID RAST



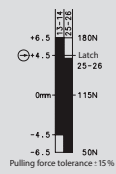
SIN RAST



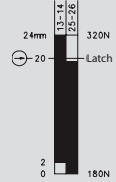
SGC



6112431050
SID-UV1Z P-RAST
35 m



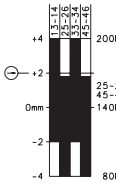
6013531367
SIN-UV1Z P-RAST
60 m



6011211908
SGC-U1Z
4 m



6012441907
SID-UV2Z P-RAST
18 m



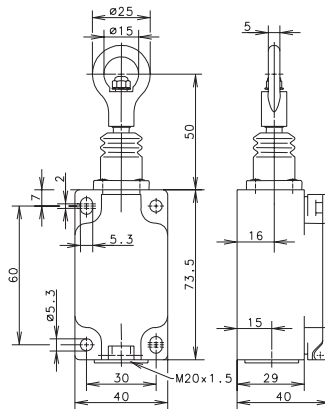
400 V AC
240 V
16 A
AC-15, 240 V/3 A

400 V AC
240 V
10 A
AC-15, 240 V/3 A

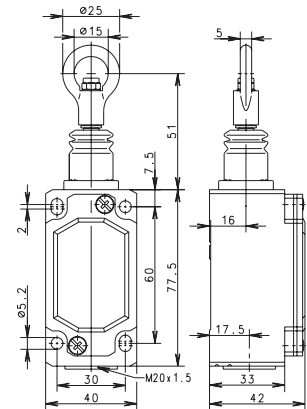
400 V AC
240 V
10 A
AC-15, 240 V/3 A

Standard Rope Pull Switches

SEK/SIEK



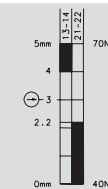
SEM/SEM2



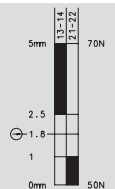
Variant 1

Article No.
Designation
Max. span

6011811133
SEK-U1Z
6 m



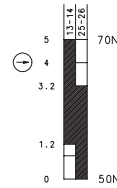
6012811029
SEM2-U1Z
6 m



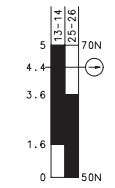
Variant 2

Article No.
Designation
Max. span

6011831134
SIEK-UV1Z
4 m



6012831022
SIEM2-UV1Z
6 m



Variant 3

Article No.
Designation
Max. span

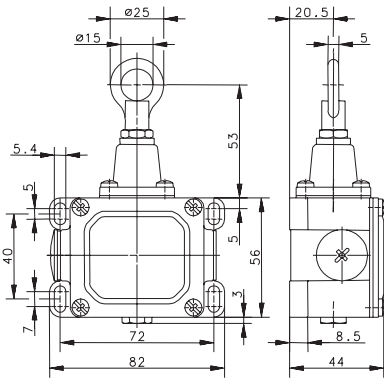
Technical data

Rated insulation voltage U_i max.
Rated operating voltage U_e max
Conventional thermal current I_{thc}
Utilisation category U_e/I_e

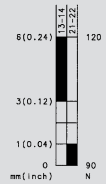
400 V AC
240 V
10 A
AC-15, 240 V/3 A

400 V AC
240 V
10 A
AC-15, 240 V/3 A

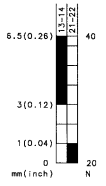
SD



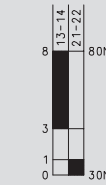
6011411856
SD-U1
8 m



6111411029
SD-U1
6 m

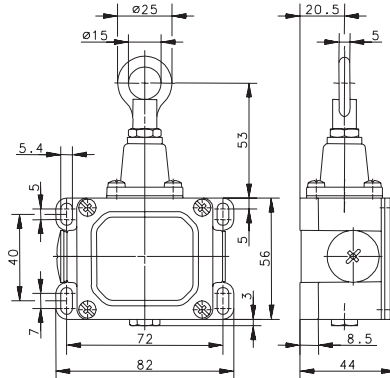


6111411161
SD-U1
6 m

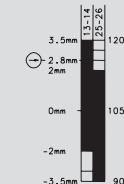


500 V AC
240 V
16 A
AC-15, 240 V/3 A

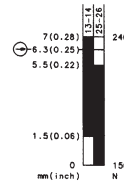
SID



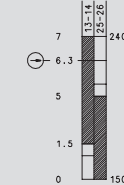
6011431857
SID-UV1Z
4 m



6111431022
SID-UV1Z
8 m

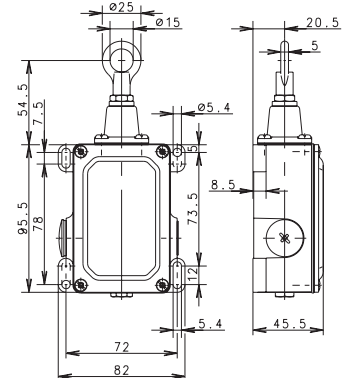


6111431069
SID-UV1Z
12 m

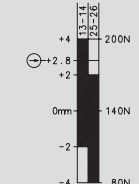


400 V AC
240 V
16 A
AC-15, 240 V/3 A

SID



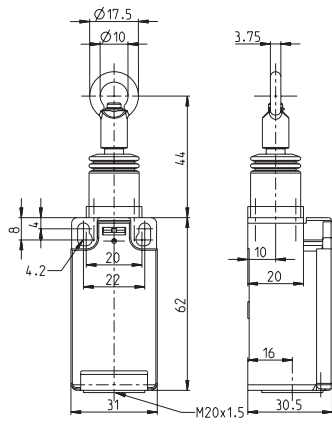
6012431877
SID-UV1
8 m



500 V AC
240 V
16 A
AC-15, 240 V/3 A

Standard Rope Pull Switches

SI88



Variant 1

Article No.
Designation
Max. span

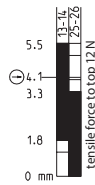
6013811107
SI88-U1Z
2 m



Variant 2

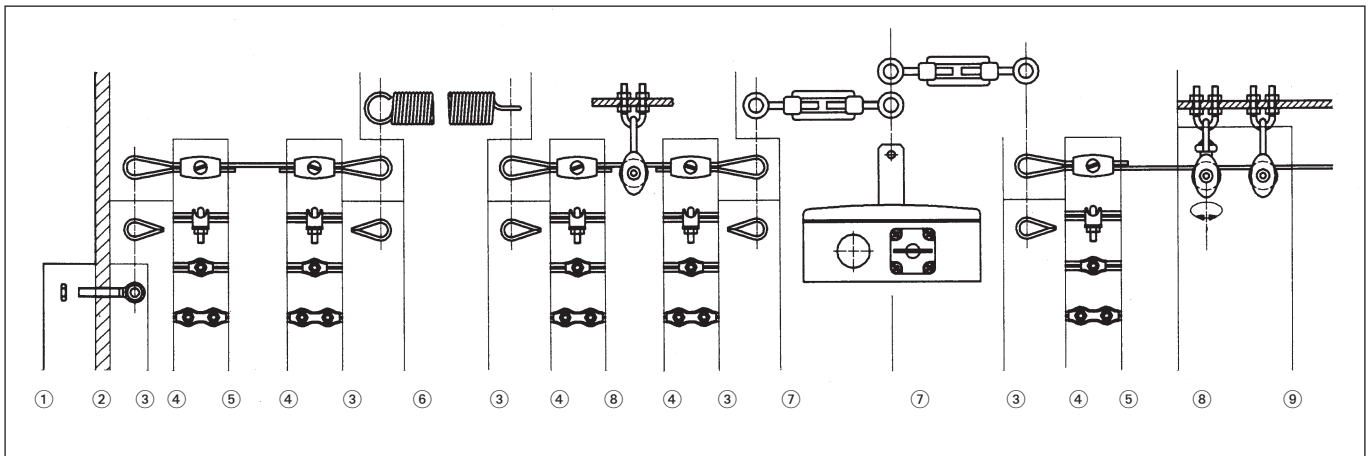
Article No.
Designation
Max. span

6013831108
SI88-UV1Z
2 m



Technical data

Rated insulation voltage U_i max.	250 V AC
Rated operating voltage U_e max	240 V
Conventional thermal current I_{thc}	10 A
Utilisation category U_e/I_e	AC-15, 240 V/3 A



① Nut



Size		Strength class	Art. No.
M 6	DIN 439T2	A2-70	2600439090
M 8	DIN 439T2	04	2600439187
M 10	DIN 934	8	2600934092

Coating: Thick-layer passivated (M 8/M 10), RoHs-compliant

② Eye bolt



Size	Strength class	Art. No.
M 10 x 50	4.6	2600444076
M 6 x 50	4.6	2600444185
M 8 x 50	4.6	2600444186

Coating: Thick-layer passivated, RoHs-compliant

③ Cable eye stiffener

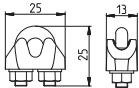


Size		Art. No.
D 2.5	to DIN 65457	2696899013
D 3	to DIN 65457	2696899014
D 4	to DIN 65457	2696899015
D 5	to DIN 6899B	2696899001

Material: Steel strip

Coating: Blue passivated, RoHs-compliant

④ Cable grip

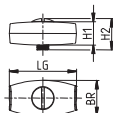


Size	Art. No.
D5	2690741002

Material: GTW/steel

Coating: Yellow chromated, RoHs-compliant

④ Cable grip, oval

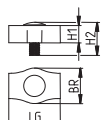


Size	LG	BR	H1	H2	Art. No.
2	28 mm	15 mm	11 mm	13 mm	2690000004
3	28 mm	15 mm	12 mm	13 mm	2690000005
4	34 mm	20 mm	14 mm	18 mm	2690000006

Material: Refined zinc cast alloy

Coating: Blue passivated, RoHs-compliant

④ Cable grip, simplex



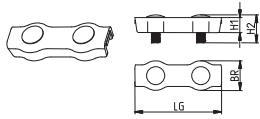
Size	LG	BR	H1	H2	Art. No.
2	15 mm	12 mm	5 mm	11 mm	2690000007
3	17 mm	14 mm	6 mm	14 mm	2690000008
4	20 mm	17 mm	7 mm	16 mm	2690000009

Material: Steel strip

Coating: Blue passivated, RoHs-compliant

Accessories for Rope Pull Switches

④ Cable grip, duplex



Size	LG	BR	H1	H2	Art. No.
2	35 mm	12 mm	5 mm	11 mm	2690000010
3	35 mm	14 mm	6 mm	14 mm	2690000011
4	40 mm	17 mm	7 mm	16 mm	2690000012

Material: Steel strip
Coating: Blue passivated, RoHs-compliant

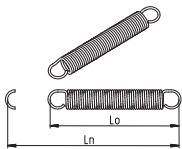
⑤ Cable



Cable Ø / Sheath Ø	Design	Minimum breaking strength	Art. No.
D 1,8/D 5	Similar to DIN 3055	275 kp	3699100008
D 2 / D 2.5	to DIN 3055	239 kp	3699100024
D 3 / D 4	to DIN 3055	538 kp	3699100025
D 4 / D 5	to DIN 3055	957 kp	3699100026

Material: Fibre-core galvanised, strength 1770 N/mm²
Coating: Blue passivated, RoHs-compliant

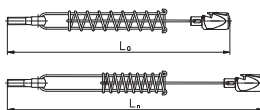
⑥ Compression spring, eye shape to DIN 1479



Fo	Fn	R	Lo	Ln	Art. No.
18 N	296 N	1.269 N/mm	188 mm	408 mm	3652100331
24 N	354 N	2.466 N/mm	180 mm	314 mm	3652100332
13.3 N	153 N	0.694 N/mm	185 mm	387 mm	3652100211
35.2 N	450 N	3.490 N/mm	201 mm	319 mm	3652100198

Material: Wire to DIN 2076 - 1.4310

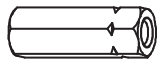
⑦ Pull cable spring



Fn	R	Lo	Ln	Art. No.
218 N	2.1 N/mm	383 mm	487 mm	3911042153
335 N	1.9 N/mm	483 mm	653 mm	3911042154

Material: Wire to DIN 2076 - 1.4310, cable grip - zinc pressure die-cast alloy, eye bolt to DIN 444 - 4.6
Coating: Thick-layer passivated (except spring), RoHs-compliant

⑦ Turnbuckle sleeve



Size	Art. No.
M 6	2601479188
M 8	2601479189

Material: Steel, min. tensile strength 330 N/mm²
Coating: Blue passivated, RoHs-compliant

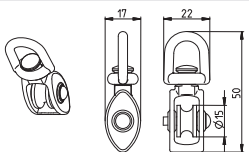
⑦ Turnbuckle similar to DIN 1480 with two eyes



Eyes	Art. No.
M 5 x 50	2691480016
M 6 x 60	2691480017

Material: Steel, forged
Coating: Blue passivated, RoHs-compliant

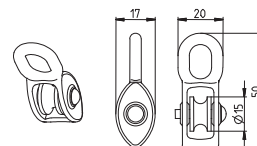
⑧ Pulley block, swivel version



Art. No.
2690000023

Material: Zinc pressure die-cast alloy (pulley polyamide)
Coating: Blue passivated, RoHs-compliant

⑧ Pulley block, fixed version



Art. No.
2690000022

Material: Zinc pressure die-cast alloy (pulley polyamide)
Coating: Blue passivated, RoHs-compliant

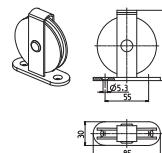
⑨ Mounting bracket for pulley to DIN 1142



Art. No.
3911751437

Material: Steel
Coating: Blue passivated, RoHs-compliant

Deflection pulley ø 75 mm for cable diameter up to 8 mm



Art. No.
2690000051

Material: Steel/polyamide
Coating: Blue passivated, RoHs-compliant