

**With and Without Latching Function**



SEK



SEM2



SIEM2



SD



SID



SID



SIN

Because of their specifications and the safety standards for application (see Cable Safety Pull Switches SRM/SR), these cable pull switches are used generally as safety command devices; switching control signals instead of the power directly.

These switches are available with metal and plastic bodies. They are operated manually by 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.

Switches with tension monitor require per-tension to the cable for the normally closed contact to close.

**The field of application for these cable pull switches includes**

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

The basic design of the standard cable pull switches is similar to 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

Technical data	SEK	SIEK	SEM2	SiEM2
<b>Electrical data</b>				
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
Utilization 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
<b>Mechanical data</b>				
Switching frequency max.	≤ 50/min.	max. 100/min.	max. 50/min.	max. 50/min.
Mechanical service life	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles
B10d	on request	on request	on request	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	IP65 conforming to IEC/EN 60529	IP65 conforming to EN 60529	IP65 conforming to EN 60529	IP65 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 <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>
Enclosure	Thermoplastic, glass fibre-reinforced	Thermoplastic, glass fibre-reinforced	Aluminum pressure die-casting	Aluminum 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
<b>Standards</b>				
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1				

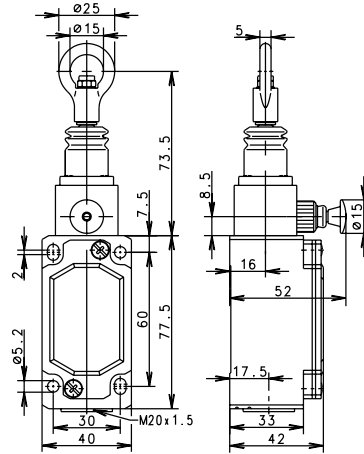
Technical data	SD	SiD	SIN
<b>Electrical data</b>			
Rated insulation voltage $U_i$	400 V AC	400 V AC	400 V AC
Rated operating voltage $U_e$	240 V	240 V	240 V
Conventional thermal current $I_{the}$	16 A	16 A	10 A
Utilization category $U_e/I_e$	AC-15, $U_e/I_e$ 240 V / 3 A	AC-15, $U_e/I_e$ 240 V / 3 A	AC-15, $U_e/I_e$ 240 V / 3 A
<b>Mechanical data</b>			
Switching frequency max.	≤ 20/min.	max. 20/min.	≤ 20/min.
Mechanical service life	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles
B10d	on request	on request	on request
Short-circuit protection	Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG
Protection class	I	I	I
Ambient temperature	-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
Type of connection	Screw connections	Screw connections	Screw connections
Conductor cross sections	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>
Enclosure	Aluminum pressure die-casting	Aluminum pressure die-casting	Aluminum pressure die-casting
Cable entry	2 x M20 x 1.5	2 x M20 x 1.5	2 x M20 x 1.5
<b>Standards</b>			
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1			

**SIEM and SID Latching with Reset Button**

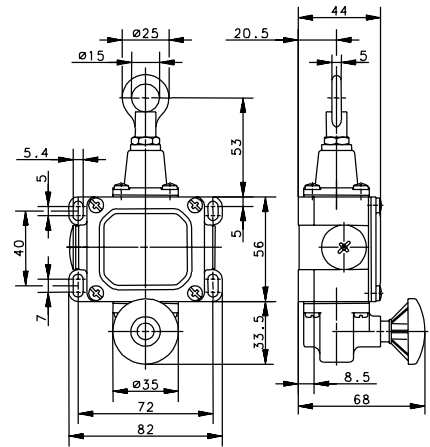


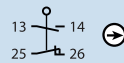
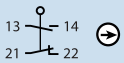
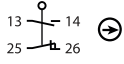
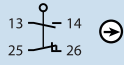
Pull Cable to change contact state, push button to reset

SIEM2 RAST





SID RAST



<p><b>Variant 1</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p> <p><b>601.2831.023</b> SIEM2-UV1Z P-RAST 19.6 Ft. (6 Meters) Metal Body with Tension Monitor</p> 	<p><b>601.1411.868</b> SD-U1 P-RAST 26.2 Ft. (8 Meters) Metal Body without Tension Monitor</p> 
<p><b>Variant 2</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p>	<p><b>611.1431.060</b> SID-UV1Z P-RAST 49.2 Ft. (15 Meters) Metal Body with Tension Monitor</p> 
<p><b>Variant 3</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p>	<p><b>601.1431.869</b> SID-UV1Z P-RAST 39.4 Ft. (12 Meters) Metal Body with Tension Monitor</p> 

**Technical Information**

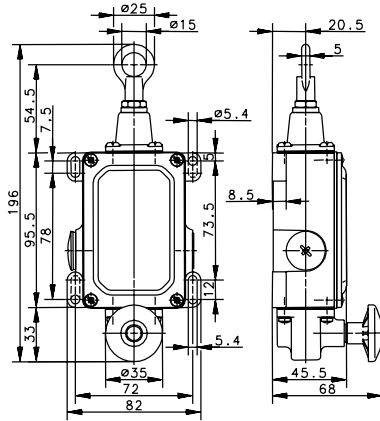
Maximum Switching Voltage	240V	240V
Maximum Switching Amperage	10A	16A
B10d	On Request	On Request
Mechanical Service Life	1 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>
Switching Frequency	≤ 50/min	≤ 20/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category	AC-15, U <sub>e</sub> / I <sub>e</sub> 240 V / 3 A	AC-15, U / I <sub>e</sub> 240 V / 3 A
Rate Insulation Voltage	400VAC	400VAC
Approvals		

## SID and SIN Latching with Reset Button

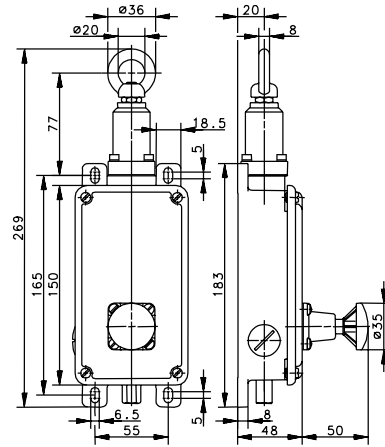


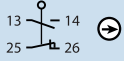
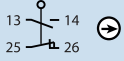
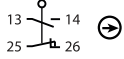
Pull Cable to change contact state, push button to reset

SID RAST





SIN RAST



<p><b>Variant 1</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p> <p><b>611.2431.050</b> SID-UV1Z P-RAST 144.8 Ft. (35 Meters) Metal Body with Tension Monitor</p> 	<p><b>601.3531.367</b> SIN-UV1Z P-RAST 196.8 Ft. (60 Meters) Metal Body with Tension Monitor</p> 
<p><b>Variant 2</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p> <p><b>601.2441.907</b> SID-UV2Z P-RAST 59 Ft. (18 Meters) Metal Body with Tension Monitor</p> 	
<p><b>Variant 3</b></p>		

### Technical Information

Maximum Switching Voltage	240V	240V
Maximum Switching Amperage	16A	10A
B10d	On Request	On Request
Mechanical Service Life	1 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>
Switching Frequency	≤ 20/min	≤ 20/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category	AC-15, U <sub>e</sub> / I <sub>e</sub> 240 V / 3 A	AC-15, U <sub>e</sub> / I <sub>e</sub> 240 V / 3 A
Rate Insulation Voltage	400VAC	400VAC
Approvals		

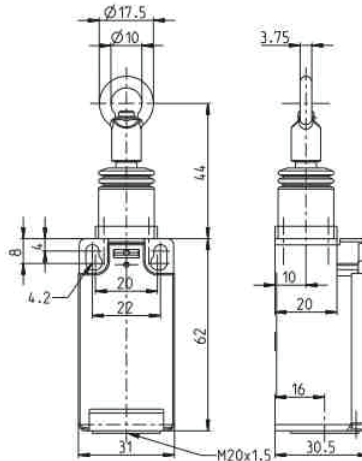
Drawing dimensions in mm

## New SI88 Small Cable Pull Switch

SEK / SIEK



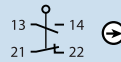
Pull Cable to change contact state, release cable to reset



Variant 1

**Article No.**  
**Designation**  
Max. span  
Type

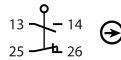
**601.3811.107**  
SI88-U1Z  
6.5 Ft. (2 Meters)  
Plastic Body without  
Tension Monitor



Variant 2

**Article No.**  
**Designation**  
Max. span  
Type


**601.3831.108**  
SI88-UV1Z  
6.5 Ft. (2 Meters)  
Plastic Body without  
Tension Monitor



Variant 3

**Article No.**  
**Designation**  
Max. span  
Type

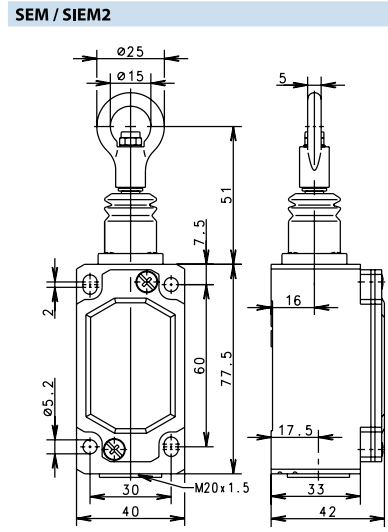
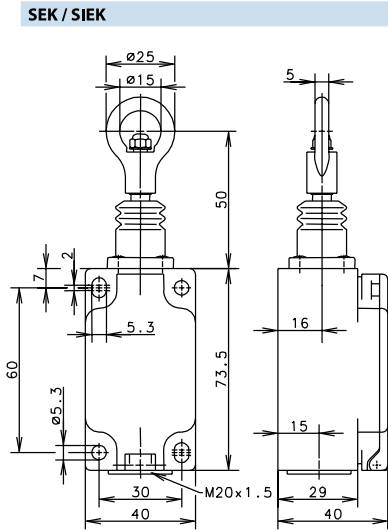
### Technical Information

Maximum Switching Voltage	240V
Maximum Switching Amperage	10A
B10d	On Request
Mechanical Service Life	1 x 10 <sup>6</sup>
Switching Frequency	≤ 50/min
Operating Temperature	-30 °C to +80 °C
Protection Rating	IP65
Utilization Category	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A
Rate Insulation Voltage	250VAC
Approvals	

**SEK, SIEK, SEM2 and SIEM2 Series**



Pull Cable to change contact state, release cable to reset



<b>Variant 1</b>	<b>Article No.</b> <b>Designation</b> Max. span Type	<b>601.1811.133</b> SEK-U1Z 19.6 Ft. (6 Meters) Plastic Body without Tension Monitor		<b>601.2811.029</b> SEM2-U1Z 19.6 Ft. (6 Meters) Metal Body without Tension Monitor	
<b>Variant 2</b>	<b>Article No.</b> <b>Designation</b> Max. span Type	<b>601.1831.134</b> SIEK-UV1Z 13 Ft. (4 Meters) Plastic Body with Tension Monitor		<b>601.2831.022</b> SIEM2-UV1Z 19.6 Ft. (6 Meters) Metal Body with Tension Monitor	
<b>Variant 3</b>	<b>Article No.</b> <b>Designation</b> Max. span Type				

**Technical Information**

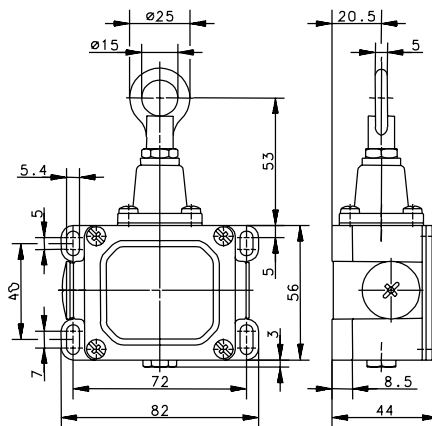
Maximum Switching Voltage	240V	240V
Maximum Switching Amperage	10A	16A
B10d	On Request	On Request
Mechanical Service Life	1 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>
Switching Frequency	≤ 50/min	≤ 20/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A
Rate Insulation Voltage	400VAC	400VAC
Approvals		

**SD and SID Series**

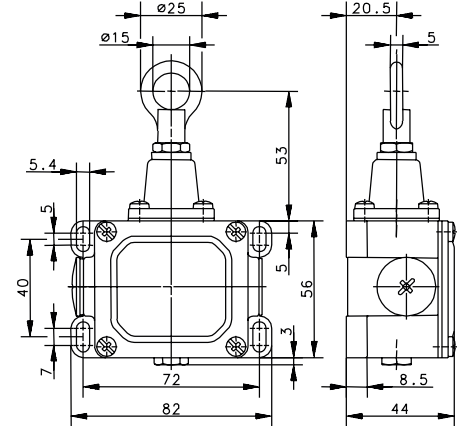


Pull Cable to change contact state, release cable to reset

SD



SID



<b>Variant 1</b>	<b>Article No.</b> <b>Designation</b> Max. span Type	<b>601.1411.856</b> SD-U1 26.2 Ft. (8 Meters) Metal Body without Tension Monitor		<b>601.1431.857</b> SID-UV1Z 13.1 Ft. (4 Meters) Metal Body with Tension Monitor	
<b>Variant 2</b>	<b>Article No.</b> <b>Designation</b> Max. span Type	<b>611.1411.029</b> SD-U1 19.7 Ft. (6 Meters) Metal Body without Tension Monitor		<b>611.1431.022</b> SID-UV1Z 26.2 Ft. (8 Meters) Metal Body with Tension Monitor	
<b>Variant 3</b>	<b>Article No.</b> <b>Designation</b> Max. span Type	<b>611.1411.161</b> SD-U1 19.7 Ft. (6 Meters) Metal Body without Tension Monitor		<b>611.1431.069</b> SID-UV1Z 39.4 Ft. (12 Meters) Metal Body with Tension Monitor	

**Technical Information**

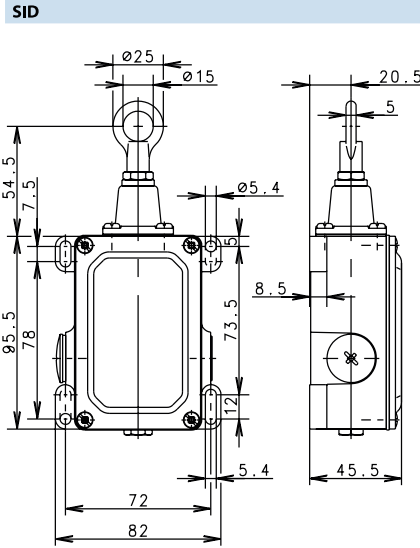
Maximum Switching Voltage	240V	240V
Maximum Switching Amperage	16A	16A
B10d	On Request	On Request
Mechanical Service Life	1 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>
Switching Frequency	≤ 20/min	max. 20/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A
Rate Insulation Voltage	400VAC	400VAC
Approvals		

Drawing dimensions in mm

**SID Series**




Pull Cable to change contact state, release cable to reset



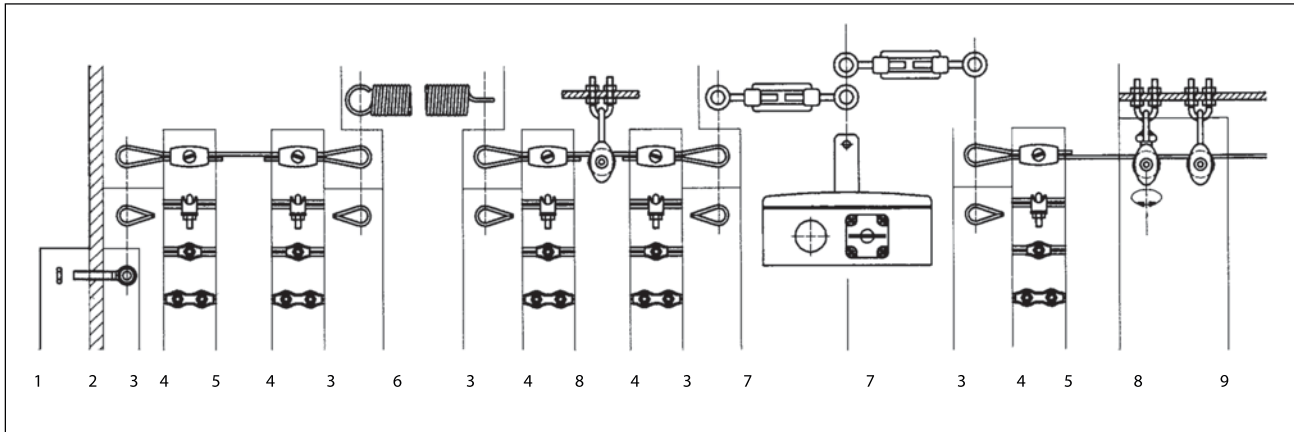
<p><b>Variant 1</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p> <p><b>601.2431.877</b> SID-UV1 26.2 Ft. (8 Meters) Metal Body with Tension Monitor</p> 
<p><b>Variant 2</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p>
<p><b>Variant 3</b></p>	<p><b>Article No.</b> <b>Designation</b> Max. span Type</p>

**Technical Information**

Maximum Switching Voltage	240V
Maximum Switching Amperage	16A
B10d	On Request
Mechanical Service Life	1 x 10 <sup>6</sup>
Switching Frequency	≤ 50/min
Operating Temperature	-30 °C to +80 °C
Protection Rating	IP65
Utilization Category	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A
Rate Insulation Voltage	400VAC
Approvals	



**Cable Clamps. Eye-bolts & Hardware**



**1 Nut**



Size		Strength class	Art. No.
M 6	DIN 439T2	A2-70	<b>260.0439.090</b>
M 8	DIN 439T2	04	<b>260.0439.187</b>
M 10	DIN 934	8	<b>260.0934.092</b>

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

**2 Eye bolt**



Size	Strength class	Art. No.
M 10 x 50	4.6	<b>260.0444.076</b>
M 6 x 50	4.6	<b>260.0444.185</b>
M 8 x 50	4.6	<b>260.0444.186</b>

Coating: Thick-layer passivated, RoHs-compliant

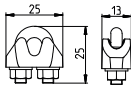
**3 Cable eye stiffener**



Size		Art. No.
D 2.5	to DIN 65457	<b>269.6899.013</b>
D 3	to DIN 65457	<b>269.6899.014</b>
D 4	to DIN 65457	<b>269.6899.015</b>
D 5	to DIN 6899B	<b>269.6899.001</b>

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

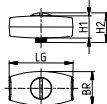
**4 Cable grip**



Size	Art. No.
D5	<b>269.0741.002</b>

Material: GTW/steel  
Coating: Yellow chromed, RoHs-compliant

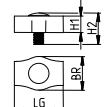
**4 Cable grip, oval**



Size	LG	BR	H1	H2	Art. No.
2	28 mm	15 mm	11 mm	13 mm	<b>269.0000.004</b>
3	28 mm	15 mm	12 mm	13 mm	<b>269.0000.005</b>
4	34 mm	20 mm	14 mm	18 mm	<b>269.0000.006</b>

Material: Refined zinc cast alloy  
Coating: Blue passivated, RoHs-compliant

**4 Cable grip, simplex**



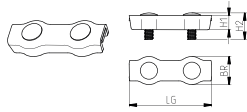
Size	LG	BR	H1	H2	Art. No.
2	15 mm	12 mm	5 mm	11 mm	<b>269.0000.007</b>
3	17 mm	14 mm	6 mm	14 mm	<b>269.0000.008</b>
4	20 mm	17 mm	7 mm	16 mm	<b>269.0000.009</b>

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

Drawing dimensions in mm

## Cable Clamps, Cable, Springs, Turnbuckles & Pulleys

### 4 Cable grip, duplex



Size	LG	BR	H1	H2	Art. No.
2	35 mm	12 mm	5 mm	11 mm	<b>269.0000.010</b>
3	35 mm	14 mm	6 mm	14 mm	<b>269.0000.011</b>
4	40 mm	17 mm	7 mm	16 mm	<b>269.0000.012</b>

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

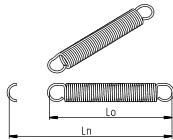
### 5 Cable



Cable Ø / Sheath Ø	Design	Minimum breaking strength	Art. No.
D 1,8/D 5	Similar to DIN 3055	275 kp	<b>369.9100.008</b>
D 2 / D 2.5	to DIN 3055	239 kp	<b>369.9100.024</b>
D 3/D 4	to DIN 3055	538 kp	<b>369.9100.025</b>
D 4/D 5	to DIN 3055	957 kp	<b>369.9100.026</b>

Material: Fiber-core galvanized, strength 1770 N/mm<sup>2</sup>  
Coating: Blue passivated, RoHS-compliant

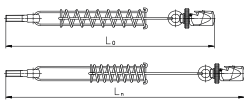
### 6 Compression spring, eye shape to DIN 1479



Fo	Fn	R	Lo	Ln	Art. No.
18 N	296 N	1.269 N/mm	188 mm	408 mm	<b>365.2100.331</b>
24 N	354 N	2.466 N/mm	180 mm	314 mm	<b>365.2100.332</b>
13.3 N	153 N	0.694 N/mm	185 mm	387 mm	<b>365.2100.211</b>
35.2 N	450 N	3.490 N/mm	201 mm	319 mm	<b>365.2100.198</b>

Material: Wire to DIN 2076 - 1.4310

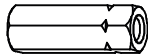
### 7 Pull cable spring



Fn	R	Lo	Ln	Art. No.
218 N	2.1 N/mm	383 mm	487 mm	<b>391.1042.153</b>
335 N	1.9 N/mm	483 mm	653 mm	<b>391.1042.154</b>

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	<b>2601479188</b>
M 8	<b>2601479189</b>

Material: Steel, min. tensile strength 330 N/mm<sup>2</sup>  
Coating: Blue passivated, RoHS-compliant

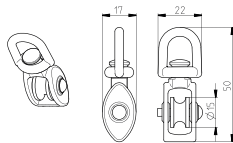
### 7 Turnbuckle similar to DIN 1480 with two eyes



Open	Art. No.
M 5 x 50	<b>260.1480.016</b>
M 6 x 60	<b>260.1480.017</b>

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

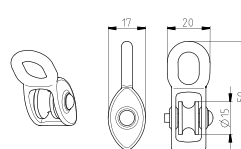
### 8 Pulley block, swivel version



Art. No.
<b>2690000023</b>

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

### 8 Pulley block, fixed version



Art. No.
<b>260.0000.022</b>

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

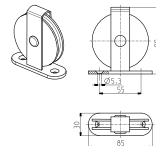
### 9 Mounting bracket for pulley to DIN 1142



Art. No.
<b>3911751437</b>

Material: Steel  
Coating: Blue passivated, RoHS-compliant

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



Art. No.
<b>269.0000.051</b>

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