## **Pull Cord Switch**

LHPEw-xx/x-BSx LHMEw-xx/x-BSx







- Single-side pullcord, 1 x 50m
- Snap action
- Direct opening, positive drive
- Malfunctions unlikely by long actuation travel
- Impact resistant BMC enclosure optional cast iron
- IP67

### **Options**

- Dupline Safety Bus or Fieldbus by Carlo Gavazzi
- Signalling light
- (Ex) Explosion protection (ATEX) separate leaflet

The design of these pull cord switches considerates heavy duty service. Enclosures made of most stable, impact resistant, thick walled glass fibre-reinforced polyester (BMC) or optional of cast iron are the best guarantors for long years of reliable service. Both types are at least IP67-protected (water- and dust proof).

Pull cord switches of this type are for single-sided rope mounting with a maximum rope length of 1 x 50 metres. Pulling on this rope operates all contacts via snap action mechanism. Simultaneously with this operation the latching is being effected automatically. The actuation arm indicates the 3 different switch positions: Neutral, manually actuated or rope slack. In neutral position and at correct rope length the lever stands vertical. In actuated position, after pulling the rope, the lever rests in its manually actuated position. Reset by manual release. In the position "rope slack" the lever is turned away from the pullcord by the internal spring and the contacts are also commutated. This complies to the standard EN 60947-5-5 (automatic emergency stop demand at rope break).

These switches will be equipped with up to 2 micro switches. Each micro switch incorporates either 1NC plus 1NO contact or alternatively 2NC's. The contacts are made of silver, a gold coating is optional. Each micro switch is certified by VDE and CCC and is bearing their signs:







The switches are also approved to bear the Eurasian EAC sign.

Malfunctions and unwanted stops caused by vibrations or thermical tensions within the ropes are unlikely due to the unrivalled large rope travel (34 mm, longitudinally drawn) as well as the large rope tension ( $>40\,$  N) necessary for switching.

Guarantors for an extended, reliable life time are most important details like sealing rings protecting the shafts, an extra hard rubber gasket in the lid, shafts and screws made of stainless steel.

2 different versions for the mounting of the rope to the left or to the right are available.

# **Pull Cord Switch** LHPEw-xx/x-BSx LHMEw-xx/x-BSx

Selection	table					
Switch type		Contacts				
	Contact					
		NC	NO			
	surface					
<b>BMC</b> housin	g					
Pullcord to the right						
LHPEw-10/1-B		1	1	Silver		
LHPEw-18/1-B	SR	2	-	Silver		
LHPEw-10/2-B	SR	2	2	Silver		
LHPEw-18/2-B	SR	4	-	Silver		
LHPEw-18/1+	10/1-BSR	3	1	Silver		
LHPEw-13/1-B	SR	1	1	Gold		
LHPEw-19/1-B	SR	2	-	Gold		
LHPEw-13/2-B	SR	2	2	Gold		
LHPEw-19/2-B		4	-	Gold		
Cast iron er	closure					

# **Pullcord to the right**

LHMEw-10/1-BSR	1	1	Silver
LHMEw-18/1-BSR	2	-	Silver
LHMEw-10/2-BSR	2	2	Silver
LHMEw-18/2-BSR	4	-	Silver
LHMEw-18/1+10/1-BSR	3	1	Silver
LHMEw-13/1-BSR	1	1	Gold
LHMEw-19/1-BSR	2	-	Gold
LHMEw-13/2-BSR	2	2	Gold
LHMEw-19/2-BSR	4	-	Gold

### **BMC** housing **Pullcord to the left**

LHPEw-10/1-BSL	1	1	Silver
LHPEw-18/1-BSL	2	-	Silver
LHPEw-10/2-BSL	2	2	Silver
LHPEw-18/2-BSL	4	-	Silver
LHPEw-18/1 + 10/1-BSL	3	1	Silver
LHPEw-13/1-BSL	1	1	Gold
LHPEw-19/1-BSL	2	-	Gold
LHPEw-13/2-BSL	2	2	Gold
LHPEw-19/2-BSL	4		Gold

# **Cast iron housing**

Pullcord to the left			
LHMEw-10/1-BSL	1	1	Silver
LHMEw-18/1-BSL	2	-	Silver
LHMEw-10/2-BSL	2	2	Silver
LHMEw-18/2-BSL	4	-	Silver
LHMEw-18/1 + 10/1-BSL	3	1	Silver
LHMEw-13/1-BSL	1	1	Gold
LHMEw-19/1-BSL	2	-	Gold
LHMEw-13/2-BSL	2	2	Gold
LHMEw-19/2-BSL	4	_	Gold

### **Technical Data**

EN 60 947-5-5 / EN60204 / EN13850 According to standards DVE Reg.Nr.: 6671, 6827, 40026213 Approval of micro switches

Aproval Ith (thermical current)

> Rating Silver: 400VAC 6A / 230VAC 8A / 24VDC 10A / 80VDC 3A

Minimum Current Gold: 1mA bei 6VDC

AC-15 230V 1A AC-12 230V 250mA DC-13 110V 0,5A DC-12 110V 250mA **Utilization Category** Silber: Gold:

U<sub>i</sub> Rated Insulation Voltage 400V 4kV U<sub>imp</sub> Rated Impulse

**Terminals** Screw, each terminal clamp 1 or 2 cables, each max 2,5mm<sup>2</sup> **Protection** IP67 acc. EN 60529, at least IK08 acc. EN 66262 2 x M25-threaded, EXW closed by IP67-protecting plugs **Cable Entries Housing Material** Fibreglass Reinforced Polyester BMC (types LHP....) Cast Iron (LHM...)

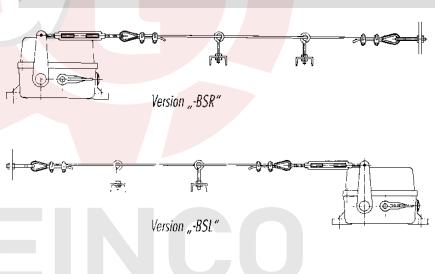
yellow RAL 1003 optional red RAL 3000 Colours Cast iron 2 layer 2-component PU / BMC none Coating approx. 2.2 kg (LHP...), 6 kg (LHM...) Weight / Mass

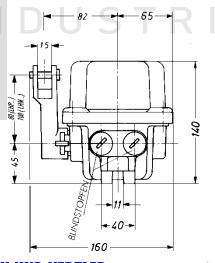
Mounting position

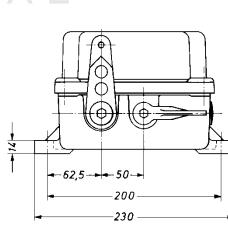
**Ambient operation temperature**  $-40^{\circ}$ C up to  $+85^{\circ}$ C (-55°C on request)

Basic values for calculation of SIL or PL according EN 13849 and IEC 61508:

 $B_{10} = B_{10}d$  80000 cycles







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