-proof Pullcord switch

LHPEw-xx/xEX-B
LHMEw-xx/xEX-B

Installation and operating instructions

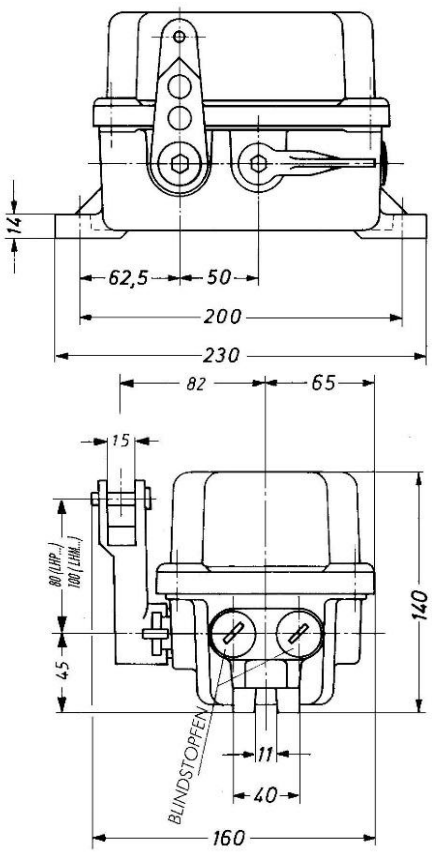
Principle: Any installation works only by skilled staff knowing all details of any applicable standard, guideline and regulation. Before any work shall be carried out the circuits have to isolated from the mains.
Pullcord switches of this type are provided to be installed between two rope ends. Length of the ropes should not extend on none of both sides 50 m. For fulfilling the demands of standard EN 60947 (automatic emergency stop in the case of a rope rupture) the switch should be actuated also by the force of one of two externally mounted and pre-tensioned springs (not part of this switch). The switch latches itself and can be released exclusively manually by lifting the blue lever.

Mounting: The mounting position is free. Fix the switch on a plane, stable console with two suitable screws M10 at the 2 slotted feet. Fix one end of each rope to the bolt within the actuation arm via suitable accessories (such as eyelets SKA and rope clips SKL out of our accessory programme), connect the other end of the ropes at the preload springs (for fulfillment of EN 60947 and DIN EN 418) (e.g. type SPF out of our accessories). Pre-tensioning of these springs according to their installation instruction. The rope should be guided and suspensioned by aid of suitable accessories (such as rope loops SH out of our accessory programme). The width between each suspension should not exceed 4 meter. Due to less friction there should be no deviation within the line of the rope.

Electrical installation: Open lid by loosening the 4 slotted screws. Inside are up to 4 micro switches. Each microswitch inside is equipped with 4 terminals. Each terminal is marked with a number. Terminals 1 and 2 indicate a NC-contact, terminals 3 and 4 indicate a NO-contact.
The 2 cable inlets are M25-threaded. These ducts are closed exw by IP67-worthy blind plugs. They have to be exchanged against explosion protected cable glands or blind plugs before taking into service. The switch must be earthed inside (LHP...) or inside or outside (LHM...). Afterwards put on the lid again, take care for right sealing by the sealing ring, and tighten lid screws with a torque of 3 Nm.. Tighten the cable glands and blind plugs according to the instructions of the manufacturer, however, by a maximum torque of 6 Nm. Please note: If ambient temperatures overstep +60 °C, certified cable glands with a maximum operating temperature ≥ 80 °C shall be used.

Check: Check any electrical and mechanical function after completion of installation and afterwords in intervals according to the applicable standards. Exchange any damaged switch! Take care for wear.

Maintenance: DUK pullcord switches are maintenance-free.



Technical Data

Conforms to standards	EN 60079-31, EN 60204, EN 60204
	EN 60947-5-5 if equipped with 2 preload springs
Certification	II 2D Ex tb IIIC T80°C Db and II 3G Ex nR IIC T6 Gc
Certificate-Number	BVS 17 ATEX E058X, IECEx BVS 17.0051X
Switching capacity	silver contacts: max. 230 VAC 4A / 24 VDC 4A
	gold plated: min. 5V 4 mA, max. 24VDC 400mA
Utilization category	AC-15 4A 250V / DC-13 0,15A 250V
Rope tension for actuation	approximately 40 N
Protection	IP67
Cable inlet	2x M25 threaded holes
Housing material	Fibre glass reinforced polyester (LHP…)
	cast iron (LHM…)
Ambient temperature	-50°C up to +70°C
	(with signalling lamp „S“ -35°C up to +50°C)
Mounting position	free
Mounting	2 slotted feet for M10-screws

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