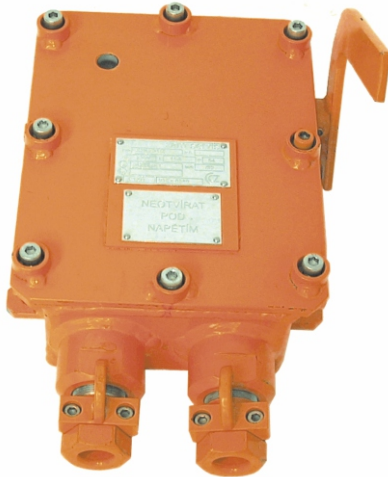




## X2K2B1/Z – End Lever Switch

 Certificate: ATEX



### Technical Parameters:

Model	IM2 Exd I
Supply voltage	230 V, 50 Hz
Nominal current	16 A
Supply network	3 NPE 50 Hz 400 V/TN-S
Service life	Mechanical: 150 000 switching cycles Electrical: 30 000 switching cycles
Working position	Vertical, bushings in the lower part
Ambient temperature	-20°C - +40°C
Protection	IP 54
Weight	9.5 kg

### Use:

A non-explosive end switch is an electric device serving for switching on/off of electrical circuits, signalling in end positions of lifts and mining machines, controlling pumps at the level regulation and pumps and compressors at the required pipeline pressure regulation and controlling other power devices in an environment with a methane explosion hazard.

### Description:

An X2K2B1/Z non-explosive switch is formed by a welded steel cabinet with the surface treatment of all its parts by chromate treatment and the top outer surface is protected by powder paint.

Cables are connected through the terminal block space by means of non-explosive NV32 bushings. A two-pole double position switch controlled by a lever which is led out on the right side is situated in the steel welded cabinet.

The lever shape is modified both for manual control and for connecting of another additional device. The switch is switched on in position 1 in the rest position arrested by a spring, which is signalled by LED visible through a sight glass in the cabinet cover.

The non-explosive pushbutton can be attached on a steel structure by means of 4 M8 screws. Flanges for its attachment are welded on the back side of the cabinet.

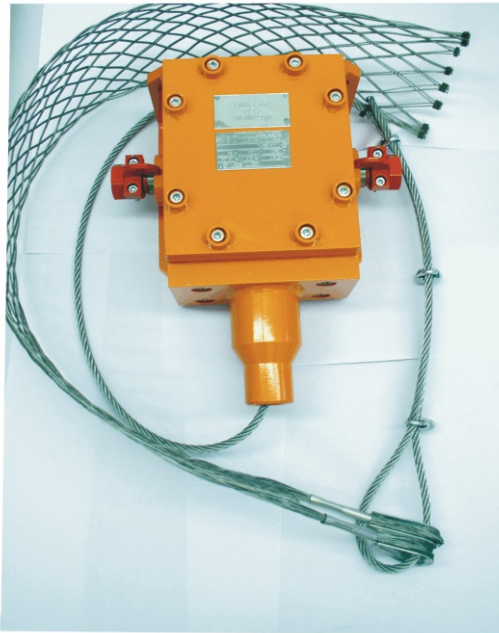
**The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.**



## KTK-1 Sensor for the Mining Machine Trailing Cable and Hauling Rope Pull Control



Certificate: ATEX, Po



### Technical Parameters:

Model	IM 2Ex d I
Supply voltage	Max. of 250 V/AC/DC
Nominal current	Max. of 0.2 A/AC/DC
Cable cross-sections ZTK 01 is intended for	25 - 95 mm <sup>2</sup>
Switch function when the maximum pull is exceeded	Disconnection
Ambient temperature	-20°C - + 40°C
Humidity	0 - 95 %
Protection	IP 54
Dimensions	350 x 150 x 220 mm
Weight	28 kg

### Use:

The KTK1 securing device serves for the control of the permitted pull of trailing cables of movable mine machinery. The maximum pull set on KTK1 is from 1125N to 4275 N. It is set according to the used cable type. This pull enables connecting trailing cables from the core cross-section of 25mm<sup>2</sup> to 95mm<sup>2</sup> in various core combinations. A flat PP 65/2/2 cable grip is intended for all types of cables. KTK1 can also be used in controlling the mining machine rope twist. The principle of the device is to check the pulling force of the hauling rope, where the rope grip is released when the rope is twisted and thus the tension is cancelled and contact released.

The device can be used in a mine in circuits with the voltage up to 250 V/ 50 Hz/AC/DC. The device is intended for an environment with a methane explosion hazard with shock bumps. It can be included in intrinsically safe Ex ia I circuits. It is a simple device according to ČSN EN 60079-11.

### Description:

KTK1 consists of a cabinet with a cover made as Exd I or EXia I, pull switch, rope guide, hauling rope with a grip and a steel cable grip. The non-explosive cabinet is welded of steel plates. Non-explosive NV 32 bushings are screwed in two side walls.

A pull switch which is screwed in the front wall and secured by a lock ring is situated in the cabinet.

A rope holder is screwed on the pull switch pin coming from the cabinet, which is secured in it by sealing by lead. The rope guide is screwed to the cabinet by 4 M12 screws. The hauling rope passes through the rope guide and its other end is threaded through two eyes of the steel cable grip and is fixed by means of 2 cable clamps.

The steel cable grip serves for transmitting the cable pull on the hauling rope. It consists of two parts, a grip (stocking) stranded of steel zinc-plated cables to the shape of a flat network and two steel zinc-plated eyeholes for grasping the hauling rope. It enables fixation to the cable at any place for all types of cables.

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