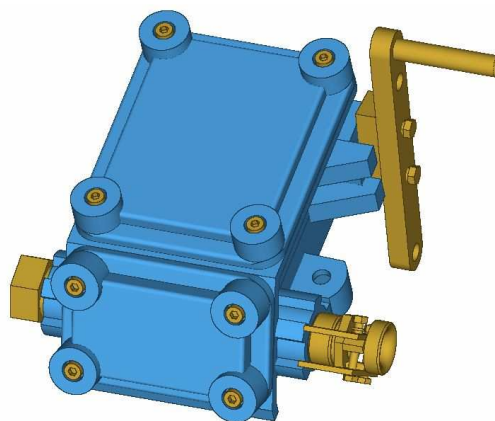
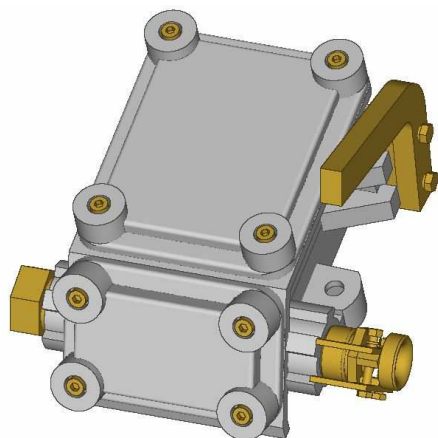
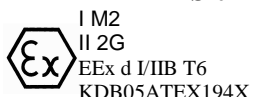


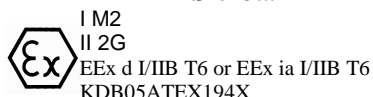
SIGNAL TRANSMITTER KFS-02



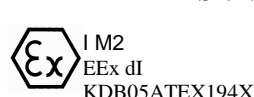
KFS-022...



KFS-023...



KFS-02...



Characteristic:

Signal transmitter type KFS-02 are purposed for working in signalling circuits as a limit switch that cooperate with impulse counter. It is generally use in shaftsman's signalling and safety systems of carrying belt conveyor flight. Types of signal transmitters KFS-023... are purposed for working in low voltage (up to 250V AC DC) electric circuits, or only for intrinsic safety devices **ia** or **ib** level. Types of signal transmitter KFS-022... are assigned for working in low voltage (**to 250V AC, DC**).

Accordance with standards:

Signal transmitter meet requirements of standards referenced with 94/9/WE Instruction of European Union:

- PN-EN 60079-0: 2006(U)
- PN-EN 60079-1: 2004(U)
- PN-EN 60079-11: 2007(U)

Using conditions.

Signal transmitter type KFS-02 is adapted for working in: underground and superficial mining's with methane or/ and carbon dust explosion hazard and in rooms and outer spaces / areas with gases and vapour explosion hazard-class IIB.

Devices guarantee high degree of protection accordance with designation:

- types compatible with Table 1



I M2
II 2G

and accordance with PN-EN 60079-0: 2006(U) standard, marked with the symbol:
EExdl/IIBT6 lub EExial/IIBT6

- types compatible with Table 2



IM2
II 2G

and accordance with PN-EN 60079-0: 2006(U) standard, marked with the symbol:
EExdl

- types compatible with Table 3



I M2
II 2G

and accordance with PN-EN 60079-0: 2006(U) standard, marked with the symbol:
EExdl/IIBT6

Special using conditions in rooms with explosion hazard.

Signal transmitter type KFS-023... marked with the symbol: EExdl/IIBT6 lub EExial/IIBT6 can be used in intrinsic-proof or non intrinsic-proof electric circuits, in methane fields of mining's, of "a", "b", "c" methane explosion or "A" or "B" class explosive conditions of coal dust and can be installed in rooms and outer spaces / areas impending of 1 and / or 2 zones gases and vapour with air (II B, temperature T6 class) explosion.

Signal transmitter type KFS-022... marked with the symbol: EExdl/IIBT6 can be used in non intrinsic-proof electric circuits, in methane fields of mining, in excavation impending of „a“, „b“, „c“ methane explosion or „A“ or „B“ class impending of coaldust explosion and can be used in rooms and outer spaces /areas impending of 1 and / or 2 gases and vapour with air (IIB, temperature T6 class) explosion.

Signal transmitter type KFS-022610 i KFS-022620 marked with the symbol: EExdl can be used in non intrinsic-proof electric circuits, in methane fields of mining, in excavation impending of „a“, „b“, „c“ methane explosion or „A“ or „B“ class impending of coaldust explosion.

Technical data:

Working voltage:

Intrinsic-proof circuits – voltages sum should be less or equal 90V for one connector circuits for transmitter KFS-023...

Non explosion-proof circuits – 250 AC; DC – for transmitters KFS-022..., KFS-023...

Contacts loading (for all types): 1,6A DC or 4A AC

Bulb power (for KFS-022610, KFS-022620): 15W 230V/E14

Clamps for connecting conduits (for all types): to 2,5 mm²

Capacity (for all types): Ci – negligible

Inductance (for all types): Li – negligible

Ambient temperature (for all types): -20°C to +40 °C

Degree of protection (for all types): IP55

Relative humidity (for all types): to 95%

Position of work (for all types): optional

Weight (for all types): 16 kg

Diameter of insert cable (for all types):

Insert cable seal KVC-011	
Inside seal diameter Ø [mm]	Diameter of insert cable Ø [mm]
12	10 ÷ 12
16	14 ÷ 16
20	18 ÷ 20

The force moment necessary to switch over the lever for:

- transmitter without escapement (Table 1 and 3): 5Nm do 7Nm
- transmitter with non-stable escapement (Table 1, 2 and 3): 7Nm do 9Nm
- transmitter with stable escapement (Table 1 and 3): 8Nm do 12Nm

Types.

Types of signal transmitters (Table 1, 2 and 3).


Table 1						
With one cable enter	With two cable enter	Driving lever after drawing	Circuit diagram after drawing	Escapement	Light signal	Designation
KFS-022110	KFS-022120	Draw. 1	Draw. 4	non-stable	without	 IM2 II2G EExdI/IIBT6
KFS-022210	KFS-022220	Draw. 1	Draw. 4	without	without	
KFS-022310	KFS-022320	Draw. 2	Draw. 4	without	without	
KFS-022410	KFS-022420	Draw. 1	Draw. 5	non-stable	without	
KFS-022510	KFS-022520	Draw. 3	Draw. 4	without	without	
KFS-022211	KFS-022221	Draw. 1	Draw. 4	stable	without	
KFS-022311	KFS-022321	Draw. 2	Draw. 4	stable	without	
KFS-022511	KFS-022521	Draw. 3	Draw. 4	stable	without	



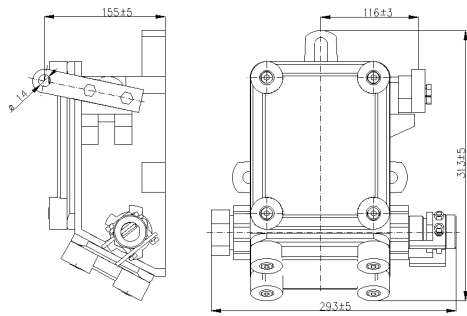
Table 2						
With one cable enter	With two cable enter	Driving lever after drawing	Circuit diagram after drawing	Escapement	Light signal	Designation
KFS-022610	KFS-022620	Draw. 1	Draw. 6	non-stable	bulb	 IM2 EExdI

Table 3						
With one cable enter	With two cable enter	Driving lever after drawing	Circuit diagram after drawing	Escapement	Light signal	Designation
KFS-023110	KFS-023120	Draw. 1	Draw. 4	non-stable	without	 IM2 II2G EExdI/IIBT6 or EExial/IIBT6
KFS-023210	KFS-023220	Draw. 1	Draw. 4	without	without	
KFS-023310	KFS-023320	Draw. 2	Draw. 4	without	without	
KFS-023410	KFS-023420	Draw. 1	Draw. 5	non-stable	without	
KFS-023510	KFS-023520	Draw. 3	Draw. 4	without	without	
KFS-023211	KFS-023221	Draw. 1	Draw. 4	stable	without	
KFS-023311	KFS-023321	Draw. 2	Draw. 4	stable	without	
KFS-023511	KFS-023521	Draw. 3	Draw. 4	stable	without	

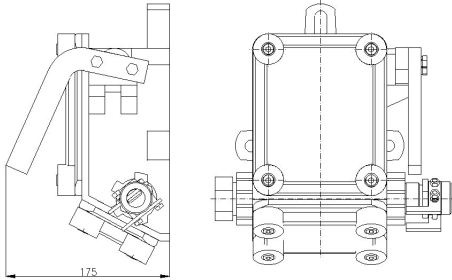
Ordering procedure

You should give designations according to table of type in the order

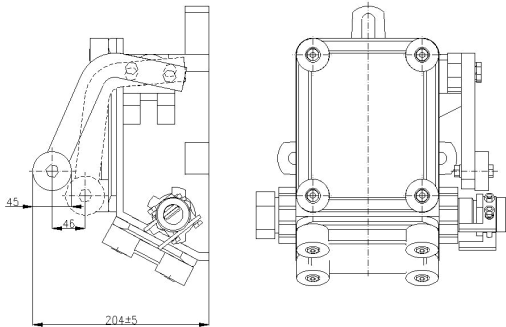
Overall dimension and variations of driving lever.



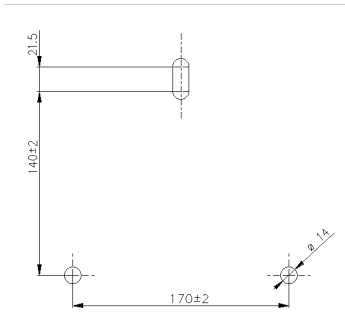
Draw. 1.



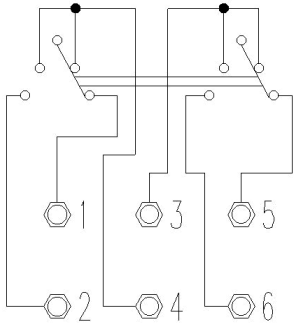
Draw. 2.



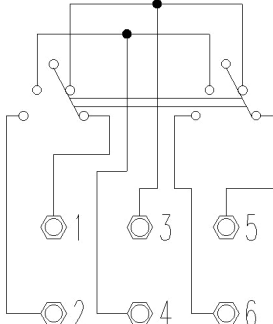
Draw. 3.



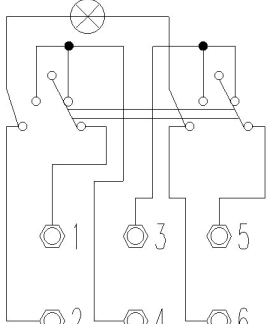
Circuit diagram.



Draw. 4.



Draw. 5.



Draw. 6.