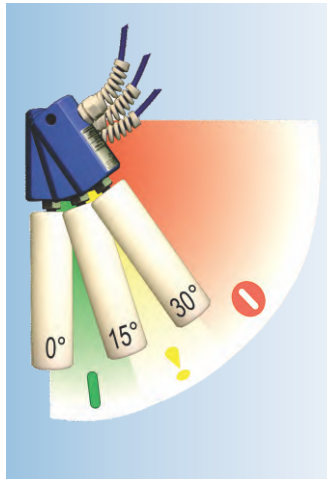




# The sensors of belt coming off checking - ДКСЛ-В-11...22



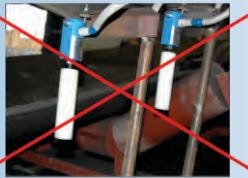
The sensors of belt coming off checking of ДКСЛ-В-11...22 - series have two pairs of contacts changing their state according to the angle of actuation – when tilting about the vertical at 15 or 30 degrees respectively and allows to control positions of conveyor belt in three areas:

- when tilting of the casing of ДКСЛ-В-... less than 15° - mode «OPERATING», here electric contacts of a sensor are in the original state.
- when tilting from 15° to 30° - mode «ALARM». First pair of contacts switches.
- when tilting at 30° and more - mode «EMERGENCY». Second pair of contacts switches.

The sensors are made according to GOST 24754-81, conform to the electrical equipment mine regular MN-2 and must be used on the conveyors that operate in enterprises of various industries, in drift mining that are not dangerous with respect to gas, vapour and dust explosion.

The sensors of ДКСЛ-В-11 ... and ДКСЛ-В-22-series allows to cut by half a total amount of required items when it is necessary, according to regulations, to give a warning of an oncoming emergency !

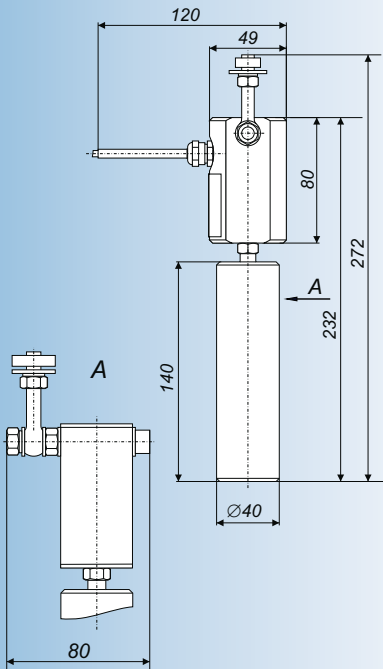
$$1 + 1 = \cancel{2}^1$$



The sensors of ДКСЛ-В-11 ... ДКСЛ-В-22 -series in anticorrosive execution in stainless steel and polyformaldehyde housing are available for manufacturing for operation in the corrosive medium conditions.



## Sensors dimensions

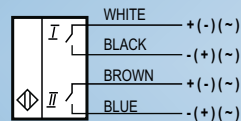


## Specifications

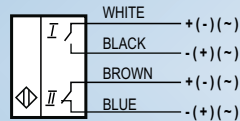
### Denomination - sensors of ДКСЛ-В-11...22-series

Number of controlled positions	2
Angle of actuation, degree	15 / 30
Switching voltage, V	60 AC/DC
Switching current, I <sub>max</sub> , A	250
Resistance, Ohm, not more than	0,15
Operating temperature range, °C	
• high- temperature - BT	t= -15°...+105°C;
• typical execution	t= -25°...+75°C;
• low-temperature - HT	t= -45°...+65°C;
• low-temperature - 2HT	t=-60...+50°C
Protection degree	IP67
Cable connection, L=2m	4x0,25 mm <sup>2</sup>
when ordering other lengths, indicate the number of meters in the end of the denomination (see example of notation)	
Sensor's housing material	housing - Д16Т/12Х18Н10Т/ polyformaldehyde, roller - polyformaldehyde,
Dimensions, mm	40x50x232
Weight, kg	0,8

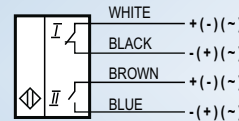
## Wiring diagrams:



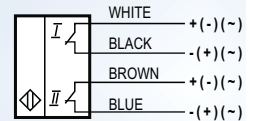
11



12

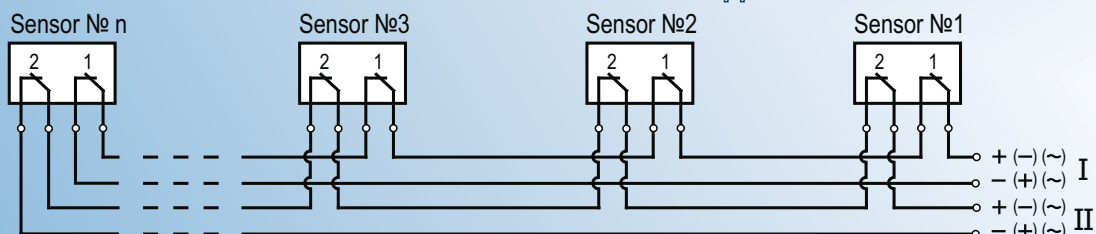


21



22

## Several sensors series connection mode of ДКСЛ-В-22 series





Sensors of ДКСЛ-В-11 ... 22 - series are available for manufacturing in several versions that differ from each other in operating temperature ranges, contacts types controlling angle of inclination and cable length.

Example of sensor notation in the documentation and orders:

**ДКСЛ-В - 22 - НТ - 3**

Sensor of belt coming off checking —————  
 Type of sensor contact controlling angle of inclination 15°: —————  
 1 - normally open contact, NO;  
 2 - normally closed contact, NC.  
 Type of sensor contact controlling angle of inclination 30°: —————  
 1 - normally open contact, NO;  
 2 - normally closed contact, NC.  
 Temperature range of usage: —————  
 no marking - -25°...+75°C;  
 HT - -45°...+65°C;  
 2HT- -60°...+50°C;  
 BT- -15°...+105°C  
 Cable length: —————  
 3 - cable length in meters,  
 - if no marking cable length 2 m

## Optional equipment for the sensors of ДКСЛ-В-11...22 series

**Brackets №7 и №8** - are designed for setting the sensors of belt coming off checking of ДКСЛ-В-11 ... 22-series on conveyor flight. The brackets provides three-dimensional positioning of the sensors, considerably simplifying its installation adjustment and make it possible to use them on the conveyor with inclined flight. A bracket is provided with adjusting holes for fastening terminal-block box KM-1 or KM-2:

**Terminal-block boxes KM-1 и KM-2** are designed for connecting and branching wires and control cable conductors with the cross section from 0,25 to 4 mm<sup>2</sup> when installing primary sensors of the set "Control" and devices of secondary switching.

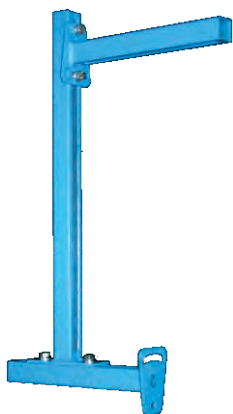
### Terminal-block boxes



### Brackets

**№7**

**№8**



weight 2 kg



weight 1,46 kg

	Terminal-block box KM-1-...	Terminal-block box KM-2-...
Maximum terminal-blocks number	5	16
Cross section of a conn. wire, mm <sup>2</sup>	0,25 - 4	
Cable lead-in numbers/ diameter of leading-in cable, mm	3 / 4 - 9	
Housing material/ coat	aluminium alloy ADC-10/ polymer powder according to GOST 9-410-88	
Dimensions, mm	52x75x80	57x80x125
Protection degree	Ip65	
Weight, gr.	280	550

Example of sensor notation in the documentation and orders:

Terminal-block box **KM-2-12**

**KM-2** - terminal-block box 125x80x57;

**12** - terminal-block numbers