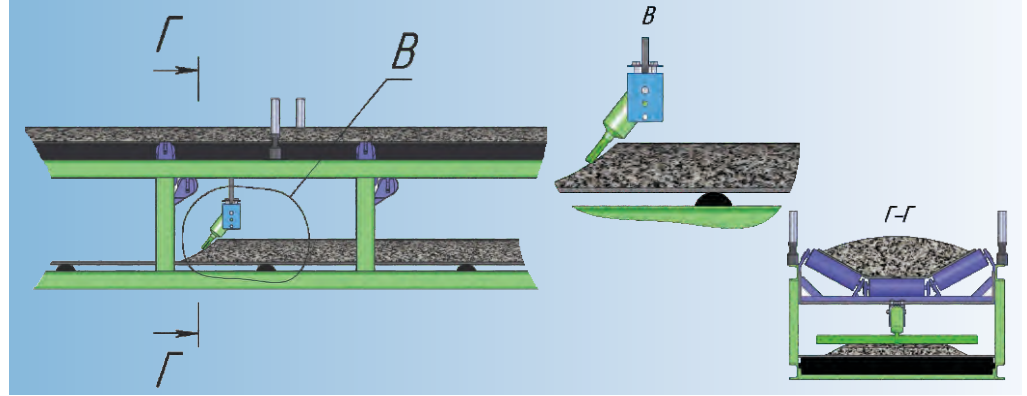
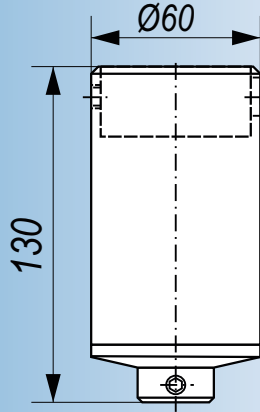




## Sensor of belt longitudinal break checking of ДКПР-...-series

**Sensors of ДКПР-...-series** - are designed for conveyor belt longitudinal break checking on conveyors with straight and V-shaped return run that transfer loose materials. The product is based on sensor of the critical angle of inclination (**patents** of ФИПС №109551 and №110473 of 20.10.2011), which does not contain mercury as distinct from their foreign counterparts.

Sensor dimensions



### Denomination - sensors of ДКПР-...-series

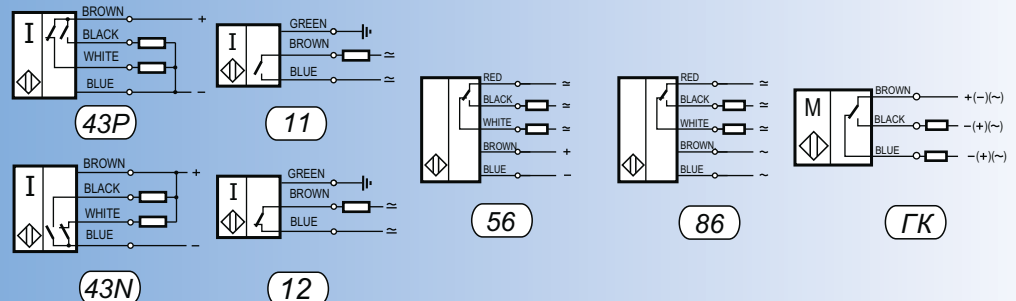
4-wire DC voltage sensors	2-wire AC/DC voltage sensors + ground wire	5-wire DC voltage sensors with relay output	5-wire AC voltage sensors with relay output	3-wire hermetically sealed sensor
... 43P	... 11	... 56	... 86	... ГК
... 43N	... 12			

### Specifications:

Angle of actuation, degree			30		-
Voltage supply, V	10...30 DC	20...250AC/ 20...320DC	24 DC	220 AC	-
Switching voltage of load, V	-	-	240 AC / 60 DC	240 AC / 60 DC	0,05 - 200 DC/ 0,05 - 250 AC
Max. switching current, I <sub>max</sub> mA	250	500	500	500	1000
Residual current, I mA	-	≤1,7	-	-	-
Surge current when t=20ms	-	3 A, f=1 Hz	-	-	-
Voltage drop when I <sub>max</sub> , V	≤2,5	≤5	-	-	-
Operating temperature range, °C		t= -15°...+105°C	t= -15°...+85°C	t= -25°...+75°C	t= -15°...+105°C
• high-temperature - <b>BT</b>				t= -45°...+65°C	
• typical execution					
• low-temperature - <b>HT</b>					
• low-temperature - <b>2HT</b>		t= -60°...+50°C	-	-	t= -60°...+50°C
Protection degree			IP67		
Cable connection, L=2m	4x0,25 mm <sup>2</sup>	3x0,34 mm <sup>2</sup>	5x0,25 mm <sup>2</sup>	5x0,25 mm <sup>2</sup>	3x0,34 mm <sup>2</sup>
when ordering other lengths, indicate the number of meters in the end of the denomination ( see example of notation)					
Dimensions, mm	60x130 without extension cable, Ø60x180 with extension cable				
Weight, kg	1,5				



### Wiring diagrams:





# CONVEYOR AUTOMATION

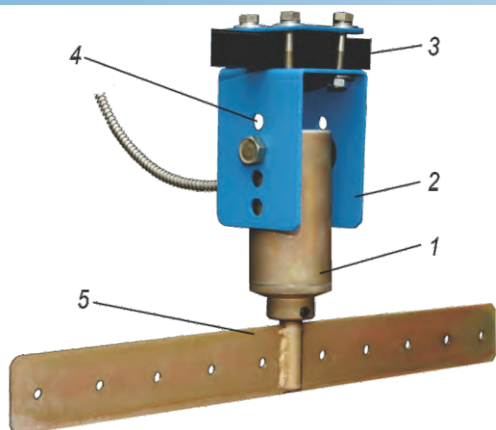
Sensors of ДКПГ-...-series are available for manufacturing in several versions that differ from each other in wiring diagram, supply voltage, operating temperature ranges.

Example of sensor notation in the documentation and orders:

**ДКПГ- 43P - HT - 3**

Number and sensor contacts type: \_\_\_\_\_  
 11, 12 - 2-wire sensors with normally open (NO) and normally closed (NC) contact respectively;  
 43P, 43N - 4-wire sensors with switching contact (NO/NC) with the PNP and NPN types of transistor switch respectively;  
 56, 86 - 5-wire sensors with relay DC and AC voltage output respectively  
 Operating temperature range: \_\_\_\_\_  
 HT -  $-45^{\circ}\dots+65^{\circ}\text{C}$ ;  
 2HT-  $-65^{\circ}\dots+50^{\circ}\text{C}$ ;  
 BT -  $-15^{\circ}\dots+105^{\circ}\text{C}$ , ( $-15^{\circ}\dots+85^{\circ}\text{C}$  - for 5-wire sensors );  
 no marking -  $-25^{\circ}\dots+75^{\circ}\text{C}$   
 Cable length: \_\_\_\_\_  
 3 - length in metres, no marking - cable length 2 m

## Operating principle

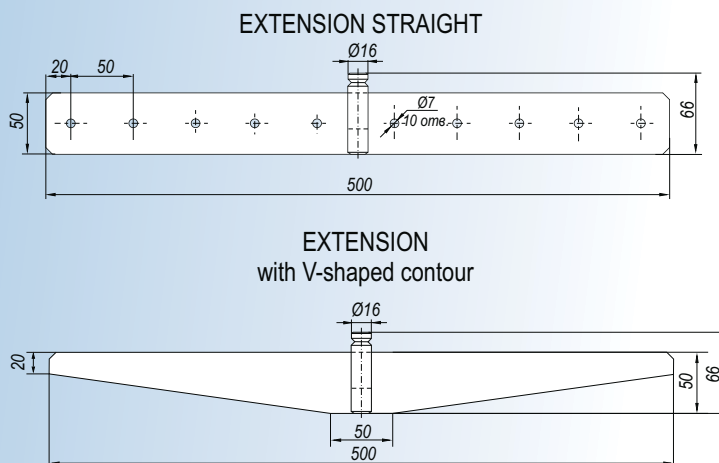
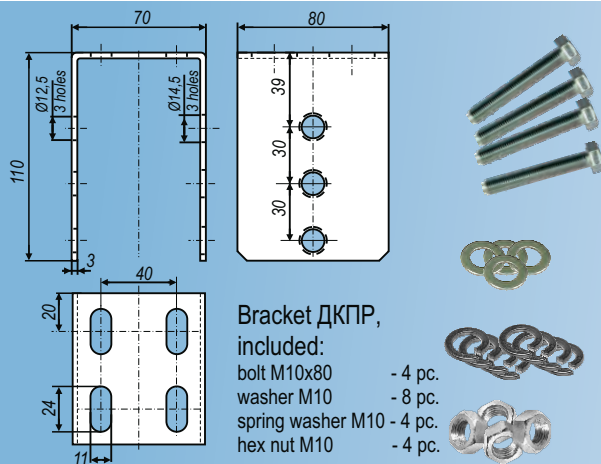


ДКПГ Sensor (1) is set over the return run close to the drive drum of the conveyor and attached by the bracket 2 to the conveyer flight 3. The bracket has holes 4 for adjusting the height of the sensor. At the bottom of the sensor, extension cable with a crossbar 5 are attached. Operating position of the sensor is vertical.

In case of belt longitudinal break transported material is discharged into the appeared hole from the loaded run to the rerun one, which carries it toward the drive drum. Upon reaching the sensor, material impacts on the crossbar and deflects the sensor. More than 30° sensor inclination from the vertical causes a change in its logic signal.

When having the sensor on the conveyor with V-shaped contour of the return run it is necessary to use an extension with matched bar contour from supply set.

## Sensors of ДКПГ-...-series supply set



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