Mercury free **TILT SWITCH** BS2
Manual

DITTELBACH UND KERZLER

This tilt switch will provide an output whenever it is tilted more than approximately 22° out of vertical.

It can be used for

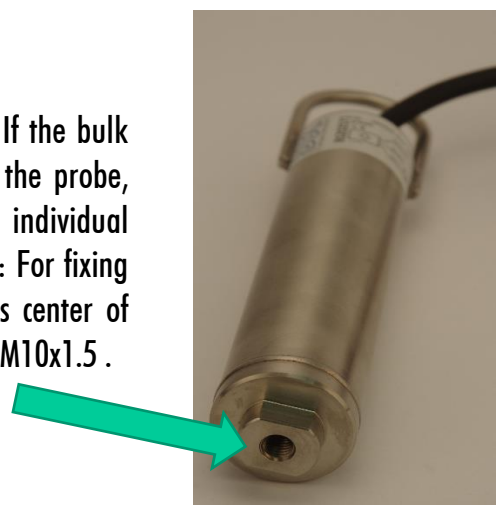
- **High level or low level detection in bins or silos**
- **Chute plug-up detection**
- **Belt conveyor transfer point plug-up detection**
- **Belt conveyor no-flow detector**
- **Crash probe**

If tilted regardless of direction more than 22° out of vertical, the internal electronics opens the circuit. The hysteresis for switching back is approximately 10°, the delay typical <1 second.

The probe is intended for suspension on its eye in its top. A shackle, a rope or chain can be placed between this eye and the fix point on the structure. The longer the suspension, the less sensitive the sensor becomes. Or, with other words: The shorter the suspension, the higher the sensitivity. If the regulations require protective earthing, then this should be realised via the suspension.

When this switch is used to detect high level in a silo or of a stockpile, do not mount it in the centre of the dumped cone, mount it beside the centre.

Exclusively type BS202571: If the bulk material is too light to tilt the probe, equip the probe with an individual custom made float or wings: For fixing it, the probe provides in its center of the bottom a female thread M10x1.5 .



Connect the wires of this tilt switch direct to your PLC or port regarding the colour code overlief.

Check the function of the switch and the integrity of the connection cable at regular intervals. There are no user serviceable parts inside.

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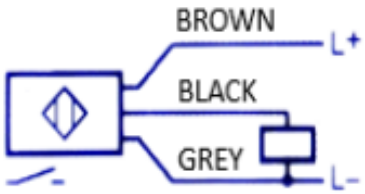

Electrical connection by colour code

Technical data

HOUSING	all stainless steel
Protection	IP69K
ELECTRONICS	PNP, closed in vertical
Actuation angle	approx. 22° from vertical, regardless the direction
Hysteresis	approximately 10°
Resetting delay, typ.	<1s
Conformity	EN 60947-5-2
Voltage Ub	10 up to 30VDC supply class 2 acc UL
Consumption	<10mA
Current Ie	max 100mA
Utilisation category	DC-13
Voltage drop	max 2,5VDC
MTTF	861 years
CONNECTION CABLE	H07RN-F 3x1
Flame Retardence	according IEC/EN 60332-1-2
UV resisitivity	yes
Ozone resistivity	yes
Oil resistivity	according EN 60811-404
Length	7m
Diameter	8,4mm
GENERAL	
Ambient temperature	-25°C up to +55°C due to cable specifications

Original EC Declaration of Confomity

According to 2014/30/EU

As mandatory we hereby declare that the electrical equipment named above conforms to the above mentioned directive.

Description of equipment:	Tilt Switch
Relevant directives:	2014/30/EU
Applied harmonized standards:	EN 60947-5-2,
Date of application of CE-mark:	2020
Place + date of issue:	Gießen, 3.10.2020

Legally binding signature:

Eckart Maas (General Manager)

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