

Tilt Switches and Sensors

KBT Europe product line.

For bulk monitoring. To be safe.



Tilt Switches and Sensors

All tilt probes are available mercury-free, or with a mercury switch inside. The mercury-free probes use the most advanced technology to achieve the same performance as conventional mercury probes. Mercury probes may no longer be used in the European Union.

Contact output tilt switches can be used independently or in combination with a control unit. They only recognize the vertical or tilted position.

Electronic tilt sensors must be operated in combination with a control unit. They also monitor errors, cable breaks and short circuits.



Reliable and Precise Bulk Monitoring

The precision-engineered tilt switches/sensors provide 20° or 35° sensing over the full 360° range. Two basic models and a wide range of variants and options are available for different applications.

TILT SWITCHES AND SENSORS



Tilt Probes:



CB-39
Cast iron, nickel plated
Heavy duty probe, 950 g



SS-43
Stainless steel
Lightweight probe, 350 g

Optional Accessories:

Extension plate
Wear probe
Cross paddle



Ball float
Diameter:
4", or 6"



Control Units:

Our tilt probes are available in different versions: as an electronic sensor version with analogue output for use in combination with a control unit; or as a switch version with a simple contact output that also works without a control unit. However, the sensor version with control unit offers additional error monitoring and delay settings.



Control unit KT-35DIN
DIN rail enclosure
IP 20, NEMA 1; for sensors only



Control unit KT-30F
Painted steel enclosure
IP 66, NEMA 4



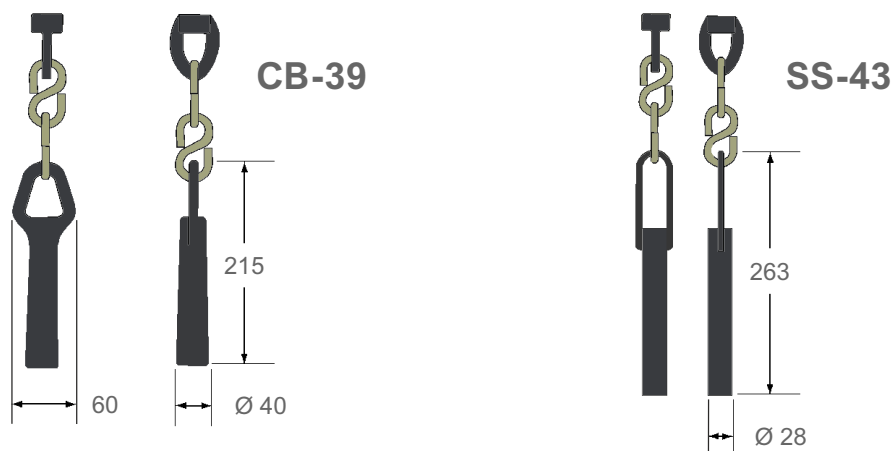
Control unit KT-30F
Stainless steel enclosure
IP 66, NEMA 4X



Control unit KT-32F
Plastic enclosure
IP66, NEMA 4X

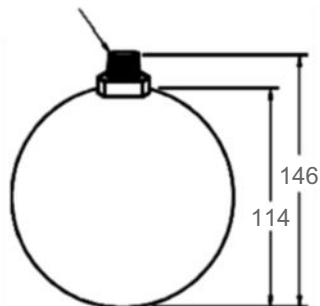


Dimensions of Tilt Probes:



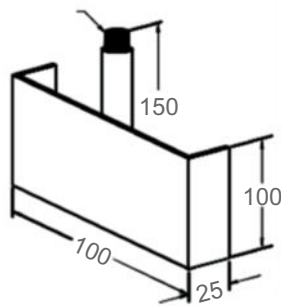
Dimensions of Optional Accessories:

3/4" NPT for CB-39
1/2" NPT for SS-43



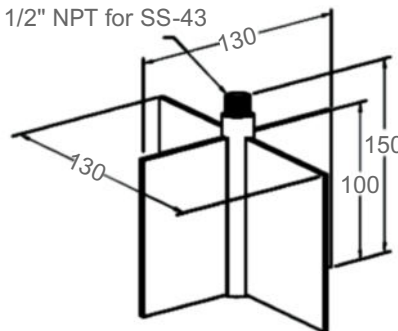
Ball float

3/4" NPT for CB-39
1/2" NPT for SS-43



Extension plate

3/4" NPT for CB-39
1/2" NPT for SS-43



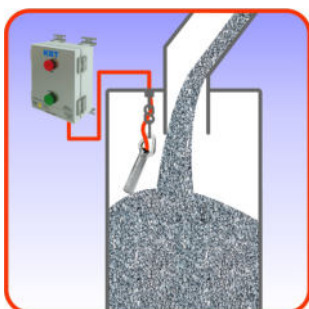
Cross paddle

1/2" NPT (for SS-43 only)

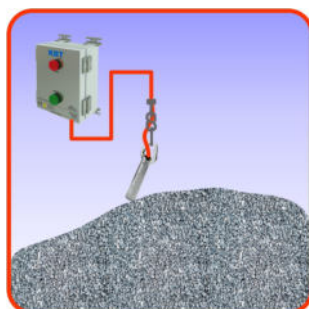


Wear probe

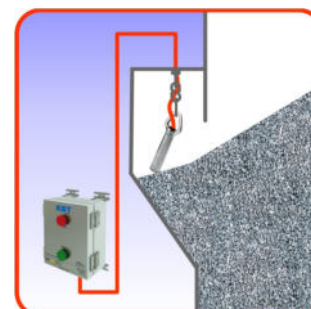
Typical Applications for Tilt Switches and Sensors:



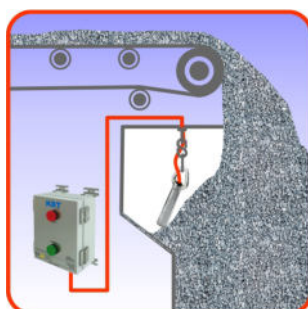
High level



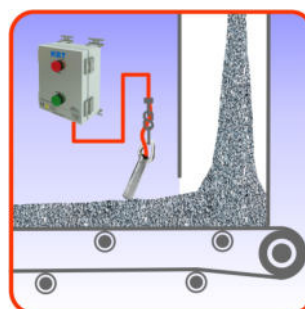
High pile



Low level



Plugged chute



Material flow

TILT SWITCHES AND SENSORS



Technical Specifications:

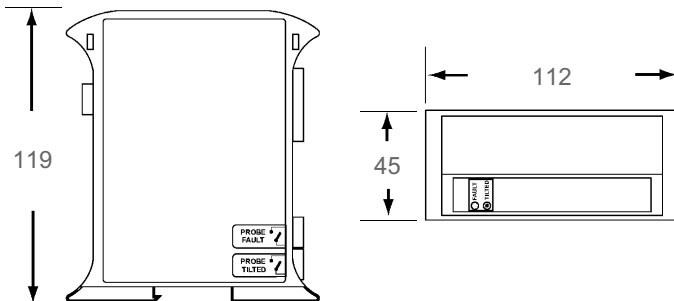
Tilt Probes:

Operating temperature:	(All models)	-40 °C ... +80 °C (optional -40 °C ... +180 °C)
Protection:	(All models)	IP 67, NEMA 4X
Mounting hardware:	(All models)	Hanger and two S-hooks included
Output:	(Mercury-free sensor variants) (Mercury-free dry contact variants) (Mercury contact variants)	Analogue output; to be connected to a control unit; 20° switching angle (1) NO, 12.5 A at 120 V AC and 35° switching angle; or 1.5 A and 20° switching angle; control unit is optional (1) NO, 12.5 A at 120 V AC and 35° switching angle; or 1.5 A and 20° switching angle; control unit is optional CE, EAC
Certifications:	(Standard)	

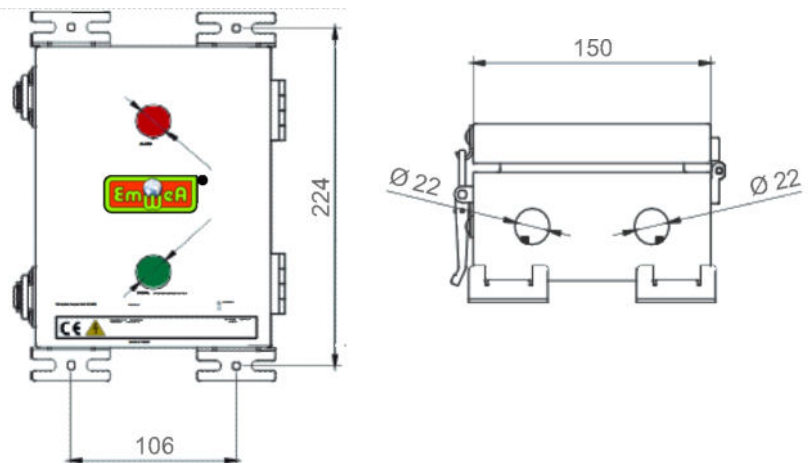
Control Units:

Input power:	(All models)	110/220 V AC, 50 / 60 Hz
Alarm contact:	(KT-35DIN) (All other models)	(1) NO, 2 A at 110 / 220 V AC, 3 A at 24 V DC, non-inductive (1) SPDT, 6 A at 110 / 220 V AC, 6 A at 30 V DC, non-inductive
Fault contact:	(KT-35DIN) (All other models)	(1) NO, 2 A at 110 / 220 V AC, 2 A at 24 V DC, non-inductive (1) SPDT, 2 A at 110 / 220 V AC, 2 A at 24 V DC, non-inductive
Time delay:	(All models)	1, 2, 4, or 6 seconds, selectable
Operating temperature:	(All models)	-40 °C ... +50 °C
Protection:	(KT-30F) (KT-30FS, KT-32F) (KT-35DIN)	IP 66, NEMA 4 IP 66, NEMA 4X IP 20, NEMA 1
Certifications:	(Standard)	CE

Dimensions of KT-35DIN Control Unit:



Dimensions of KT-30F, KT-30FS, and KT-32F Control Units:



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