TILT SWITCHES - TILT SENSORS

DATA SHEET

Tilt Switches (Tilt Sensors)

KBT Europe product line.

For bulk monitoring. To be safe.

Tilt Switches (Tilt Sensors)

All tilt switches are available mercury-free, or with a mercury switch inside. The mercury-free tilt sensors use the most advanced technology to achieve the same performance as conventional mercury switches. Mercury switches 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.

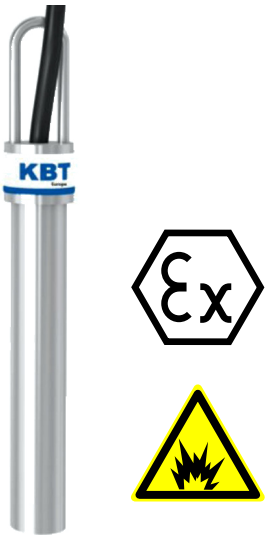
Reliable and precise Bulk Monitoring

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

TILT SWITCHES - TILT SENSORS

Tilt Probes:

CB-39
Cast Iron, Nickel Plated
Heavy Duty Probe, 950 g



SS-43
Stainless Steel
Standard Probe, 350 g

Optional Accessories:

Extension Plate
Wear Probe
Cross Paddle

Ball Float
Diameter:
4", or 6"

Control Units:

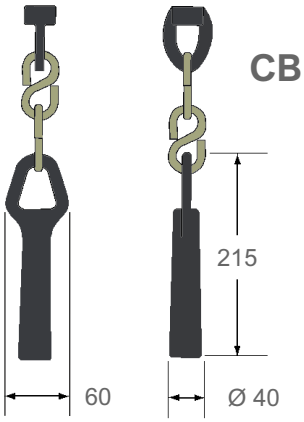
Our tilt switches are available in different versions: as an electronic sensor version with analogue output for use in combination with a control unit; or as a switch version with a simple contact output that also works without a control unit. However, the sensor version with controller offers additional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

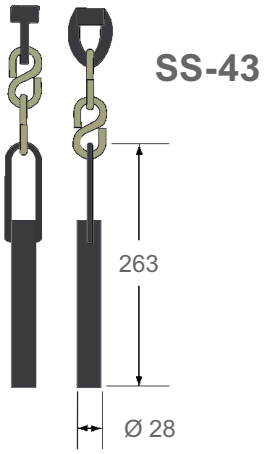
Control Unit KT-35DIN
DIN Mount Enclosure
IP 20 / NEMA 1

Control Units KT-30F and KT-30FS
Painted Steel resp. Stainless Steel Enclosure
IP 66 / NEMA 4 resp. 4X

Control Unit KT-32F
Thermoplastic Enclosure
IP 66 / NEMA 4X

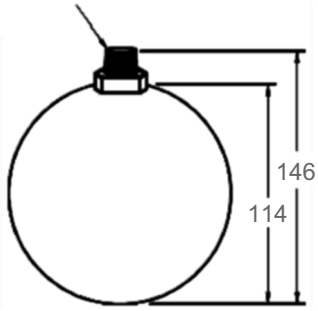
Dimensions of Tilt Probes:





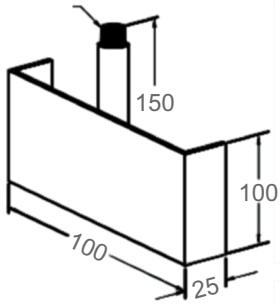
Dimensions of optional Accessories:

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



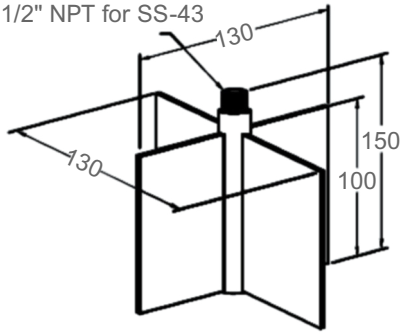
Ball Float

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

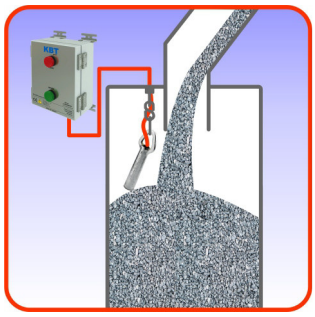


Cross Paddle

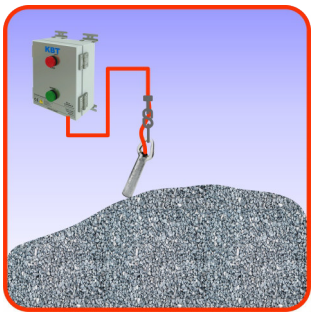
1/2" NPT (for SS-43 only)

Wear Probe

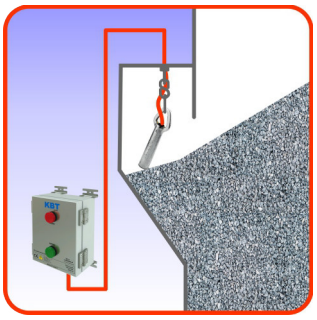
Typical Applications for Tilt Switches (Tilt Sensors):



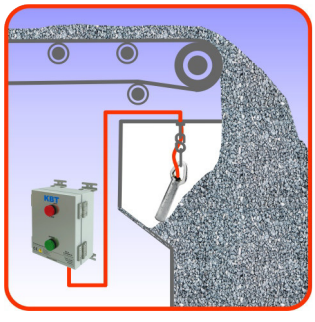
High Level



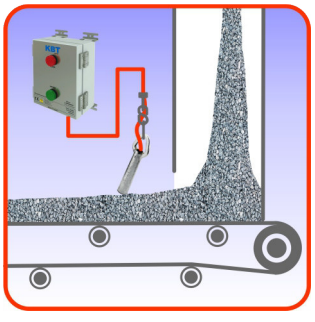
High Pile



Low Level



Plugged Chute



Material Flow

Hazardous areas

Technical Specifications:

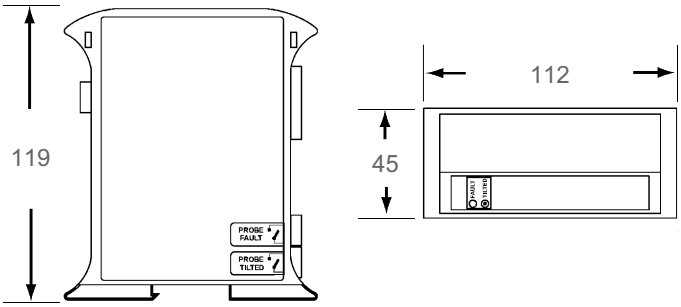
Tilt Switches (Tilt Sensors):

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)	Analogue output; to be connected to a control unit; 20° switching angle
	(Mercury-free dry contact variants)	(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
	(Mercury contact variants)	(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
Certifications:	(Standard)	CE; EAC
Certifications:	(Optional)	ATEX Zone 20 / 21; cULus

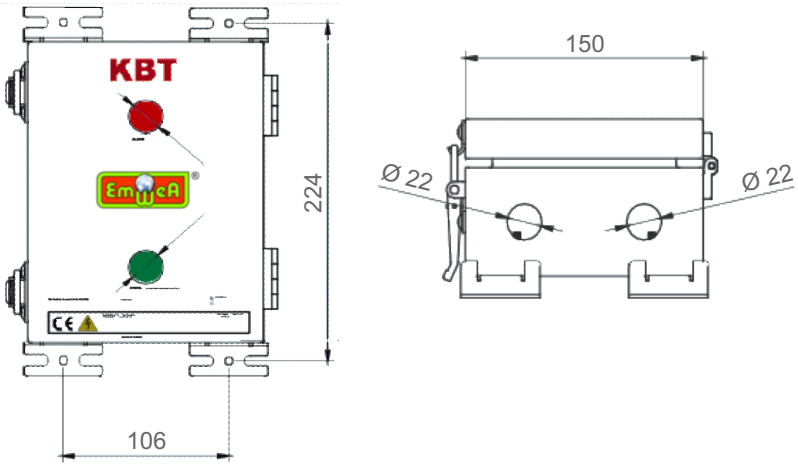
Control Units:

Input power:	(All models)	110 / 220 V AC, 50 / 60 Hz
Alarm contact:	(KT-35DIN)	(1) NO, 2 A at 110 / 220 V AC, 3 A at 24 V DC, non-inductive
	(All other models)	(1) SPDT, 6 A at 110 / 220 V AC, 6 A at 30 V DC, non-inductive
Fault contact:	(KT-35DIN)	(1) NO, 2 A at 110 / 220 V AC, 2 A at 24 V DC, non-inductive
	(All other models)	(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)	IP 66 / NEMA 4
	(KT-30FS, KT-32F)	IP 66 / NEMA 4X
	(KT-35DIN)	IP 20 / NEMA 1
Certifications:	(Standard)	CE

Dimensions of KT-35DIN Control Unit:



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



EmWeA Prozessmesstechnik e.K.
Günzerode Am Hagen 3
99735 Werther
Germany

Any question?

Phone: +49 36335 3800-0
Telefax: +49 36335 3800-10
info@emwea.de
www.emwea.de

© EmWeA Prozessmesstechnik e.K. · Subject to change without prior notice!