TILT SWITCH PROBES & CONTROLS







Bulk Pro Systems Tilt Switch Probes and Controls provide simple alarm output for dry bulk materials. The rugged tilt switch probe is suspended vertically over a material pile, bin or conveyor belt and as the material level rises to tilt the switch approximately 20° from vertical in any direction, an alarm output signal is activated.

Three (3) optional control units are designed with an adjustable time delay to prevent false trips from vibration, wind or accidental movement. A failsafe relay is provided when using the electronic type probes for notification of a damaged cable or short circuit with the electronic probe.

Attachment accessories are available for the probe, such as float balls.

FEATURES:

- **NON-MERCURY or Mercury Probes**
- 115VAC or 24 VDC Probes
- Failsafe Relay with Electronic Probe
- Simple Installation and Operation
- FRP, Metal and DIN Rail Mount Controls
- Solid State Electronics with Adjustable Time Delay to Prevent False Trips, 0-6 seconds
- Field Mount Controls with Large green ("Normal") and red ("Alarm") LED indicating lights on front cover
- Latched and Hinged Covers
- Mounting Hardware Included
- Rugged High Temp, Stainless Steel and Cast Tilt Switch Probes
- CE and EAC approved
- Atex Hazardous Approval Coming Soon.
- Optional Accessories available, Float Balls

SPECIFICATIONS

Technical data	
Enclosure	SL23-8C, SL23-16C, SL23-8C-HT, SL20-8C, SL20-8E: Ductile Iron SL24-8C: Stainless Steel
Protection class	IP68
Cable length	SL23-8C, SL23-8C-HT, SL24-8, SL20-8C, SL20-8E: 8 meters SL23-16C: 16 meters

Specifications	Mercury	Non-Mercury
Contact Form / Style	Normally Closed	Normally Closed
Switching Voltage	120 VAC	60 VAC
Switching Current	1.5 A	0.25 A
Switching Capacity	180 VA	3 VA
Contact Resistance	5 Ohms	30 Ohms at 5 VDC
Operating Angle	20° ± 5	25° ±10

SL29-115C FRP, SL28-115C Metal		SL29-DIN DIN Rail Mount	
Alarm Contact	1 SPDT - 110/220 VAC 10 A 30 VDC 7 A	Alarm Contact	1 NO - 110/220 VAC 2 A 24 VDC 3 A
Fault Contact	1 SPDT - 110/220 VAC 2 A 24 VDC 2 A	Fault Contact	1 NO - 110/220 VAC 2 A 24 VDC 3 A
Delay (seconds)	1, 2, 4 or 6	Delay (seconds)	1, 2, 4 or 6
Temperature Rating	-40°C, +80°C	Temperature Rating	-40°C, +80°C
Protection Class	IP66	Protection Class	IP20
Mounting Style	Field Mount via brackets	Mounting Style	DIN Mount

Certifications

Bulk Pro Systems Tilt Switches are in conformity with the following standards:

EN 60947-1	2007/A1 : 2011/A2 : 2014
EN 60947-3	2009/A1 : 2012/A2 : 2015
EN 60204-1	2006/A1 : 2009
EN 60529	1991/A1 : 2000/A2 : 2013

CE EAC

SPECIFICATIONS

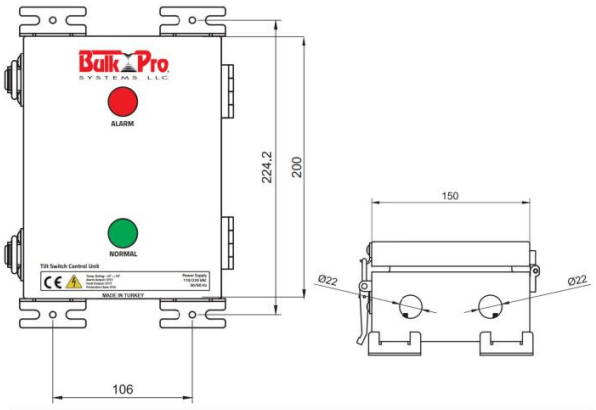
Model	Tilting Angle	Contact Type	Temperature Rating	Description
SL23-8C	20°	Mercury	-40°C to +80°C	Standard SL23-8C with heavy duty casting body.
SL23-8C-HT	20°	Mercury	-40°C to +190°C	High Temp with heavy duty casting body.
SL20-8C	20°	Non-mercury	-40°C to +80°C	Non-mercury version.
SL20-8C-X	20°	Non-mercury	-40°C to +80°C	ATEX version for hazardous locations (coming soon).
SL20-8E	20°	Non-mercury	-40°C to +80°C	Non-mercury version with electronic output. SPDT alarm and fault output thru. control unit.

Model	Tilting Angle	Contact Type	Temperature Rating	Description
SL24-8C	20°	Mercury	-40°C to +80°C	Standard SL24-8C with corrosion resistant stainless-steel body.
SL24-8C-NM	20°	Non-mercury	-40°C to +80°C	Non-mercury version.
SL24-8C-NM-X	20°	Non-mercury	-40°C to +80°C	ATEX version for hazardous locations. (coming soon).

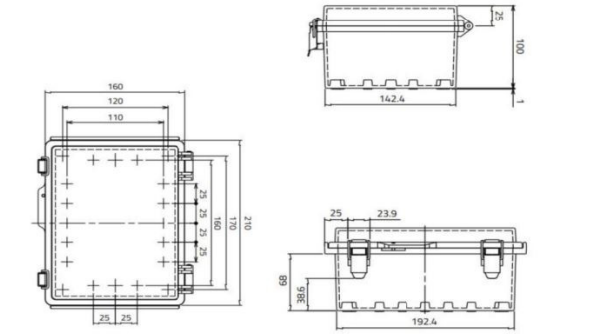
Options	Description
HT	High temperature version. -40°C to +190°C

Extensions	Description
FLG-304	Ball float extension, 6" diameter, 304 Stainless Steel

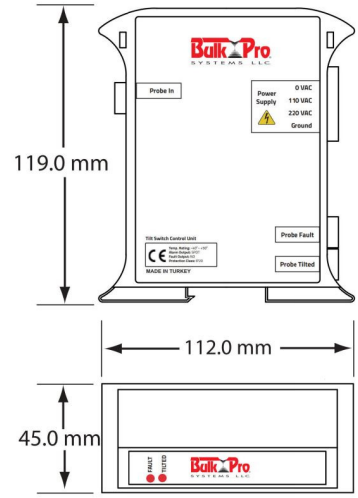
Tilt Switch Control Dimensions SL28-115C

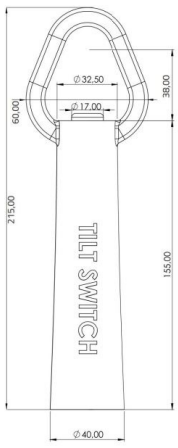


Tilt Switch Control Dimensions SL29-115C

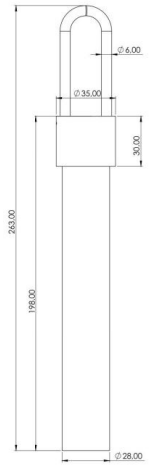


Tilt Switch Control Dimensions SL29-DIN





SL23 & SL20



SL24