

# EXPLOSIONPROOF TEMPERATURE SWITCH

MODEL  
C1.03



## PRODUCT DESCRIPTION

Explosion-Proof Switches are designed to reduce the risk of explosions in white goods and in hazardous environments. These explosion-resistant switches are environmentally sealed to prevent flammable gases from entering the switching cavity. It consists of a pressure switch that has a sealed temperature sensing bulb attached directly to the pressure port. The temperature sensing system is partially filled with a fluid. Process temperature changes cause proportional vapor pressure changes in the temperature sensing bulb that act on the diaphragm/piston assembly to actuate and deactivate a snap-action electrical switching element at discrete process temperatures



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### KEY FEATURES

- Fix / Adjustable differential filed adjustable set point weatherproof to 1P66.
- External set point adjustable with locking

### APPLICATION

- Textile machineries
- Power & steel plants
- Oil & gas, refineries
- Cement & glass industries
- Railway engines & Turbines
- Petrochemical & fertilizers
- Marine & furnace applications

### SPECIFICATIONS

System	: Inter Gas Filled (Nitrogen)
Ambient Temperature	: -10..60 °C
Repeatability	: ± 1% of full scale
Scale Accuracy	: ± 1% of full scale
Switching Accuracy	: ± 1% of full scale
Over range	: 125 % of full scale
Range Adjustment	: External
Differential	: Fixed
Mounting	: Bottom
Switch	: SPDT Snap action micro switch
Switch Rating	: 15A 250VAC / 0.2A,24VDC
Set point	: Between 20 to 80% of full scale
Process Connection	: ½ " NPT (M)
Ingress Protection	: IP66

### MATERIAL OF CONSTRUCTION

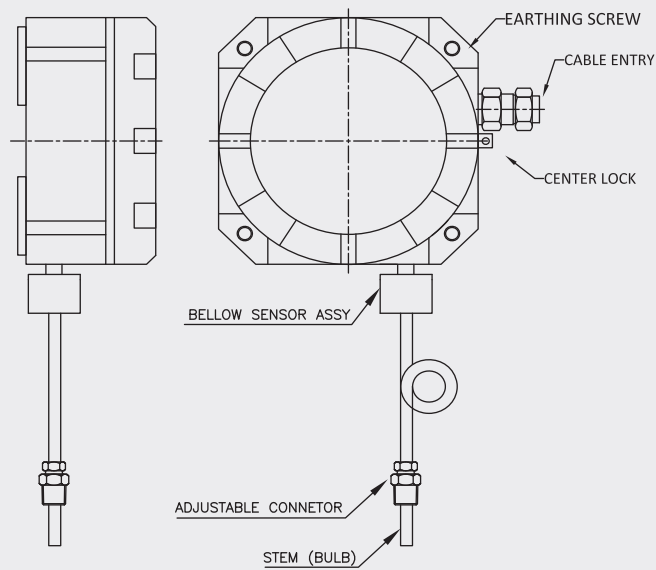
Sensing Element	: SS316 Bellow
Enclosure Material	: Aluminum process die cast
Capillary	: SS316 with SS304 Armour
Gasket	: Neoprene

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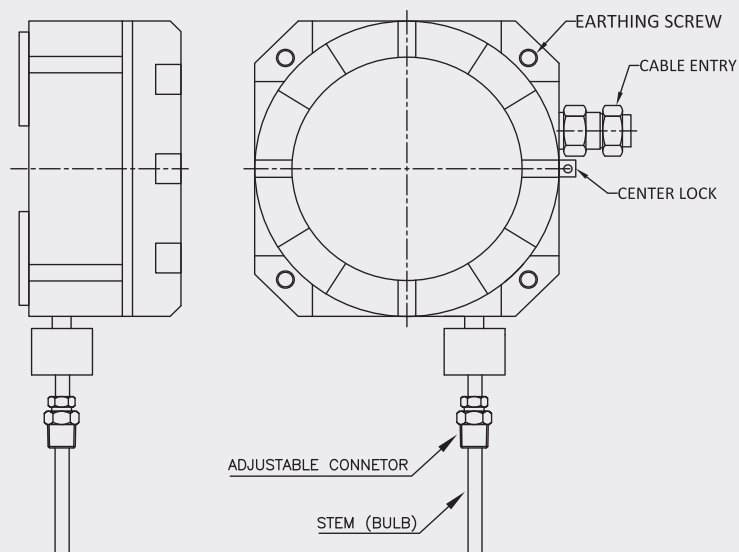
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## Dimensional Drawing:

### Explosionproof Capillary Type Temperature Switch



### Explosionproof Stem Type Temperature Switch



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### MODEL CODING & ORDERING INFORMATION

DESCRIPTION	CODE	C1.03	SM	F	S6	S4	SD1	AL	XXX	C1	XXX	12BM	TS	K2	12N	X16
<b>Type</b> Explosionproof Temperature Switch	C1.03	C1.03														
<b>Version</b> Stem Type	SM		SM													
Capillary type	CP															
<b>Differential</b> Fixed	F			F												
Adjustable	A															
<b>Bellows</b> SS 316	S6				S6											
<b>Steam/Capillary</b> SS 316	S6					S6										
SS 316L	SL															
<b>Steam Diameter (mm)</b> 6	SD1						SD1									
8	SD2															
10	SD3															
12	SD4															
<b>Enclosure Material</b> Aluminum	AL							AL								
SS 304	S4															
SS 316	S6															
<b>Range</b> To be selected from Table 1 (Other custom ranges available on request)	XXX								XXX							
<b>Calibration</b> Increasing	C1									C1						
Decreasing	C2															
<b>Set Point</b> As per customer specify	XXX										XXX					
<b>Connection</b> ½" BSP (M)	12BM											12BM				
½" NPT (M)	12NM															
M20 × 1.5 (M)	M20M															
<b>Type of switch</b> Standard	TS												TS			
Adjustable differential	TA															
Gold plated	TG															
Environmentally sealed	TE															
Harmatically sealed	HS															
DPDT	K3															
<b>No. of switch</b> 1 SPDT	K2													K2		
1 DPDT	K3															
2 SPDT	K4															
<b>Cable Entry</b> ½" NPT	12N														12N	
½" BSP	12B															
¾" ET	34E															
M20 × 1.5 (M)	M20M															
DIN Connector	E7															
<b>Options</b> Bracket for wall mounting	XBF															
2" Pipe mounting bracket	XB6															
Calibration Certificate	X16															X16
Material Test Certificate	X17															
Wetted part complied to NACE	X20															
Certificate of degreasing	X25															
SS Tag plate	X26															

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## SAMPLE ORDERING CODE:

**C1.03-SM.F.S6.S4.SD1.AL.XXX.C1.XXX.12BM.TS.K2.12N.X16**

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and material specified may be replaced by others without prior notice.