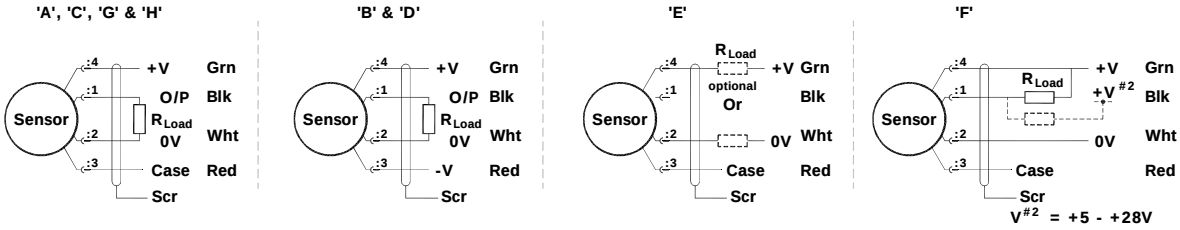
POSITEK LIMITED

Installation Information

TIPS® S623 LARGE ANGLE SUBMERSIBLE TILT SENSOR

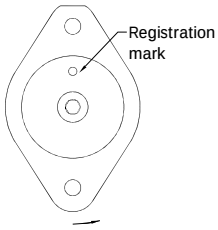
Output Option	Output Description:	Supply Voltage: V_s (tolerance)	Load resistance: (include leads for 4 to 20mA O/Ps)
A	0.5 - 4.5V (ratiometric with supply)	+5V (4.5 - 5.5V)	≥ 5kΩ
B	±5V	±15V nom. (±9 - 28V)	≥ 5kΩ
C	0.5 - 9.5V	+24V nom. (13 - 28V)	≥ 5kΩ
D	±10V	±15V nom. (±13.5 - 28V)	≥ 5kΩ
E	4 - 20mA 2 wire Current Loop	+24V nom. (18 - 28V)	≈ 0 - 300Ω max. @24V ~ 1.2 to 6V across 300Ω {R_L max. = (V_s - 18) / 20^{-3}}
F	4 - 20mA 3 wire Sink	+24V nom. (13 - 28V)	≈ 0 - 950Ω max. @24V ~ 3.8 to 19V across 950Ω {R_L max. = (V_s - 5) / 20^{-3}}
G	0.5 - 4.5V	+24V nom. (9 - 28V)	≥ 5kΩ
H	4 - 20mA 3 wire Source	+24V nom. (13 - 28V)	≈ 0 - 300Ω max. ~ 1.2 to 6V across 300Ω

Connector Pin Layout:
MC BH 4 M (face view)

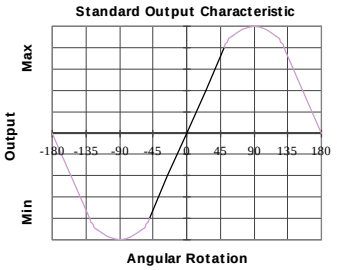


Mechanical Mounting: Flange mounted, flange holes are 5.5mm diameter on a 54mm pitch. As shipped, the sensor calibrated mid-point will be obtained with the flange in the vertical plane, as shown. Mechanical adjustment of the mid point can be achieved by loosening two M4 grub screws in the edge of the flange and rotating the sensor body. **Note:** the sensor should be mounted on a vertical face.

N.b. cable free end must be appropriately terminated to prevent water ingress into the cable. The sensor is sealed to IP68 350 Bar.



Output Characteristic: The sensor has full rotational freedom and two sectors, 180° apart, over which linear response can be achieved. At the mid point of the calibrated range the output signal will be half full scale deflection, and the mounting flanges will be vertical. In the calibrated range the output increases as the sensor is rotated in an anti-clockwise direction viewed from the flange face - see drawing above. The calibrated output is factory set to be between 15 and 160°.



Incorrect Connection Protection levels:-

A	**Not protected** – the sensor is **not** protected against either reverse polarity or over-voltage. The risk of damage should be minimal where the supply current is limited to less than 50mA.
B & D	Supply leads diode protected. Output must not be taken outside ± 12V.
C & G	Supply leads diode protected. Output must not be taken outside 0 to 12V.
E, F & H	Protected against any misconnection within the rated voltage.

For further information please contact:

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