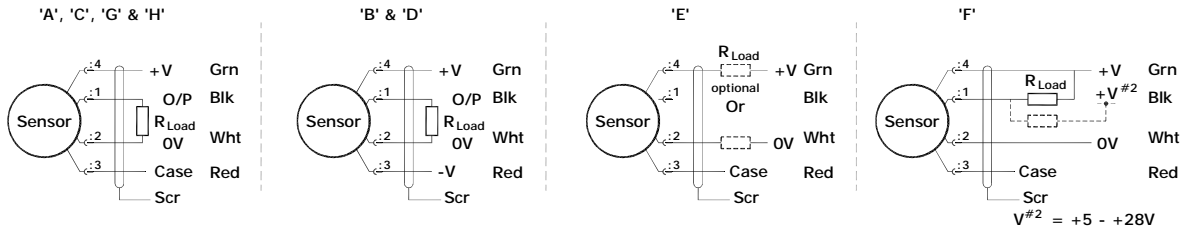


Installation Information

LIPS[®] S125 350 BAR SUBMERSIBLE STAND-ALONE LINEAR POSITION 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) | $\geq 5k\Omega$ |
| B | $\pm 5V$ | $\pm 15V$ nom. ($\pm 9 - 28V$) | $\geq 5k\Omega$ |
| C | 0.5 - 9.5V | +24V nom. (13 - 28V) | $\geq 5k\Omega$ |
| D | $\pm 10V$ | $\pm 15V$ nom. ($\pm 13.5 - 28V$) | $\geq 5k\Omega$ |
| E | 4 - 20mA 2 wire Current Loop | +24V nom. (18 - 28V) | $\approx 0 - 300\Omega$ max. @24V - 1.2 to 6V across 300 Ω { R_L max. = $(V_s - 18) / 20^{-3}$ } |
| F | 4 - 20mA 3 wire Sink | +24V nom. (13 - 28V) | $\approx 0 - 950\Omega$ max. @24V - 3.8 to 19V across 950 Ω { R_L max. = $(V_s - 5) / 20^{-3}$ } |
| G | 0.5 - 4.5V | +24V nom. (9 - 28V) | $\geq 5k\Omega$ |
| H | 4 - 20mA 3 wire Source | +24V nom. (13 - 28V) | $\approx 0 - 300\Omega$ max. - 1.2 to 6V across 300 Ω |

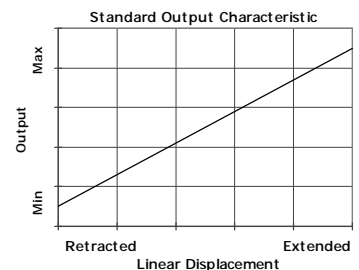
Connector Pin Layout:
 MC BH 4 M (face view)



Mechanical Mounting: Depending on options; Body can be mounted by M8 rod eye or by clamping the sensor body - body clamps are available, if not already ordered. Target by M8x1.25 male thread or M8 rod eye. It is assumed that the sensor and target mounting points share a common earth.

N.b. cable free end must be appropriately terminated to prevent water ingress into the cable. **See page 2 for connector handling instructions.**
 The sensor is sealed to IP68 350 Bar.

Output Characteristic: Target is extended 7 mm from end of body at start of normal travel. The output increases as the target extends from the sensor body, the calibrated stroke is between 5 mm and 800 mm.



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 $\pm 12V$.
- 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.

Installation Information

LIPS[®] S125 350 BAR SUBMERSIBLE STAND-ALONE LINEAR POSITION SENSOR

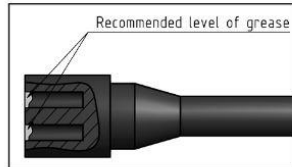
Handling

- Always apply grease before mating
- Disconnect by pulling straight, not at an angle
- Do not pull on the cable and avoid sharp bends at cable entry
- When using a bulkhead connector, ensure that there are no angular loads
- Do not over-tighten the bulkhead nuts
- SubConn[®] connectors should not be exposed to extended periods of heat or direct sunlight. If a connector becomes very dry, it should be soaked in fresh water before use

Cleaning

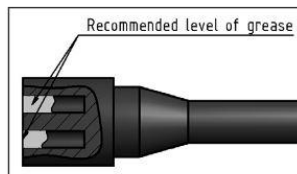
- General cleaning and removal of any accumulated sand or mud on a connector should be performed using spray based contact cleaner (isopropyl alcohol)
- New grease must be applied again prior to mating

Greasing and mating above water (dry mate)



- Connectors must be greased with Molykote 44 Medium before every mating
- A layer of grease corresponding to minimum 1/10 of socket depth should be applied to the female connector
- The inner edge of all sockets should be completely covered, and a thin transparent layer of grease left visible on the face of the connector
- After greasing, fully mate the male and female connector in order to secure optimal distribution of grease on pins and in sockets
- To confirm that grease has been sufficiently applied, de-mate and check for grease on every male pin. Then re-mate the connector

Greasing and mating under water (wet mate)



- Connectors must be greased with Molykote 44 Medium before every mating
- A layer of grease corresponding to approximately 1/3 of socket depth should be applied to the female connector
- All sockets should be completely sealed, and transparent layer of grease left visible on the face of the connector
- After greasing, fully mate the male and female connector and remove any excess grease from the connector joint