

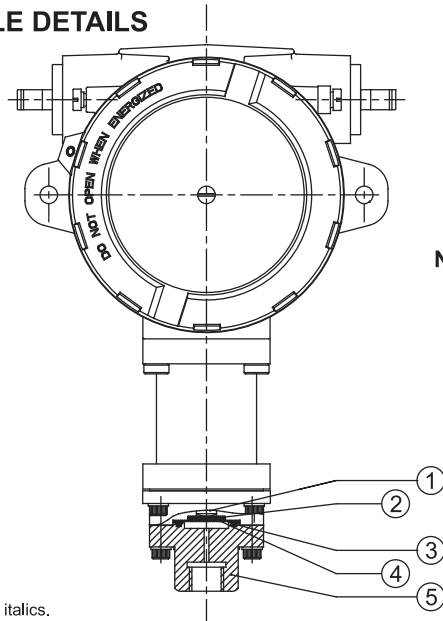
HYDRAULIC DIAPHRAGM AIR RELAY SWITCHES **FC**



FC



PRESSURE CAPSULE DETAILS

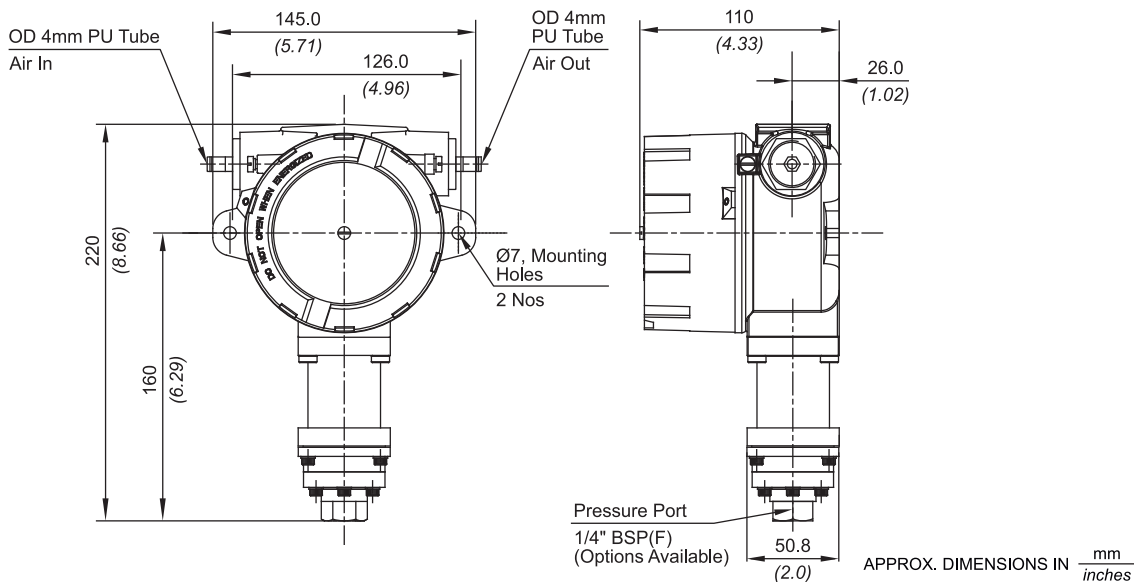


No. Description

1. Transfer PIN (SS)
2. Cushining Pad
3. O-ring (PTFE[®])
4. Diaphragm (PTFE[®])
5. Pressure Housing (SS316)

Note : *wetted parts* are mentioned in italics.

INSTALLATION DRAWING



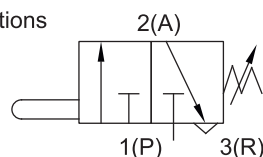
FC HYDRAULIC DIAPHRAGM AIR RELAY SWITCHES

RANGE SELECTION TABLE

| Range Code | Range bar (psi) | Differential* bar (psi) | Maximum Working Pressure bar (psi) |
|------------|------------------------------------|---|------------------------------------|
| | | Approximate Maximum for P1 / P2 (Refer Group 6 of How to order table) | |
| H1T | 0.5 - 10 (7.25 - 145.04) | 1 (14.50) | 150 (2175.51) |
| H2T | 2 - 20 (29.00 - 290.07) | 2 (29.00) | 200 (2900.76) |
| H4T | 5 - 40 (72.52 - 580.15) | 5 (72.52) | 200 (2900.76) |
| H1H | 10 - 100 (146.04 - 1450.38) | 12 (174.05) | 200 (2900.76) |
| H2H | 7 - 200 (101.52 - 2900.76) | 24 (348.09) | 400 (5801.52) |
| H4H | 40 - 400 (580.15 - 5801.52) | 50 (725) | 500 (7251.88) |
| H7H | 70 - 700 (1015.26 - 10152.64) | 60 (870) | 800 (11603) |
| H1K | 100 - 1000 (1450.37 - 14503.77) | 70 (1015.26) | 1100 (15954.15) |

Pneumatic valve specifications

NO = Normally Open
or
NC = Normally Closed



CAUTION : Supply pressure of air/inert gas = min. 2 and max. 7 bar

Note:

1. The minimum differential increases with the setpoint. The differential values mentioned in the above table are approximate maximum for FSR. The differential value will vary according to the pressure range selected and microswitch type. For actual values of differential please contact sales office.

If actuation and/or deactuation at same point is critical part of operation, then it can be achieved by using a separate DPDT relay. This relay will need a separate power supply for it's coil.

HYDRAULIC DIAPHRAGM AIR RELAY SWITCHES



HOW TO ORDER HIGH RANGE AIR RELAY SWITCHES

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | Group 7 | Group 8 | | | | | | | | |
|---|--|---|---|---|--|---|---|----|-------|------------------------------------|--|--|--|--|--|
| <p>Non standard allocation</p> <p><input type="checkbox"/> A prefix "N" is used in the model code in case of any non standard options / accessories that are provided with the switches. Will be given by manufacturer, only after agreement of supply details with customer.</p> <p>The prefix is subject to change as per specific requirement.</p> | <p>Model</p> <p>FC = Air Relay switch</p> <p>Note: Flameproof certification not applicable for Air Relay Switch</p> | <p>Air Inlet/Outlet Ports</p> <p>A1 = Al. head PU tube 4mm OD *A4 = Grey CI PU tube 4mm OD A7 = SS head PU tube 4mm OD</p> | <p>Switch Type</p> <p>P1 = pressure switch, fixed differential without scale</p> | <p>Range Code (values in bar)</p> <p>H1T = (0.5 - 10) H2T = (2 - 20) H4T = (5 - 40) H1H = (10 - 100) H2H = (7 - 200) H4H = (40 - 400) H7H = (70 - 700) H1K = (100 - 1000)</p> | <p>Valve Type</p> <p>P1 = NC valve P2 = NO valve</p> | <p>Pressure Port Material / Size</p> <p>S1 = SS316 / 1/4" BSP(F) S2 = SS316 / 1/4" NPT(F)</p> | <p>Diaphragm</p> <p>1 = PTFE 2 = SS 316L 3 = Hastelloy C 4 = Monel 5 = Titanium 6 = Tantalum 7 = Inconel</p> | | | | | | | | |
| <p>Approx. switch weight in Kgs</p> <table border="1"> <thead> <tr> <th>Enclosure</th> <th>FC</th> </tr> </thead> <tbody> <tr> <td>Aluminium</td> <td>2.220</td> </tr> <tr> <td>Grey CI</td> <td>4.720</td> </tr> <tr> <td>SS</td> <td>4.810</td> </tr> </tbody> </table> | | Enclosure | FC | Aluminium | 2.220 | Grey CI | 4.720 | SS | 4.810 | <p>*Not available in FE models</p> | | | | | |
| Enclosure | FC | | | | | | | | | | | | | | |
| Aluminium | 2.220 | | | | | | | | | | | | | | |
| Grey CI | 4.720 | | | | | | | | | | | | | | |
| SS | 4.810 | | | | | | | | | | | | | | |
| <p>eg. Flameproof air relay switch in aluminium housing with PU tube 4mm OD, fixed differential without scale, having 0.5 bar to 10 bar pressure range, with NC valve, SS316 pressure housing with 1/4" BSP port size & neoprene diaphragm shall be specified by</p> | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | FC | A1 | P1 | H01 | P1 | S1 | 1 | | | | | | | | |

Please specify full model number to avoid ambiguity.