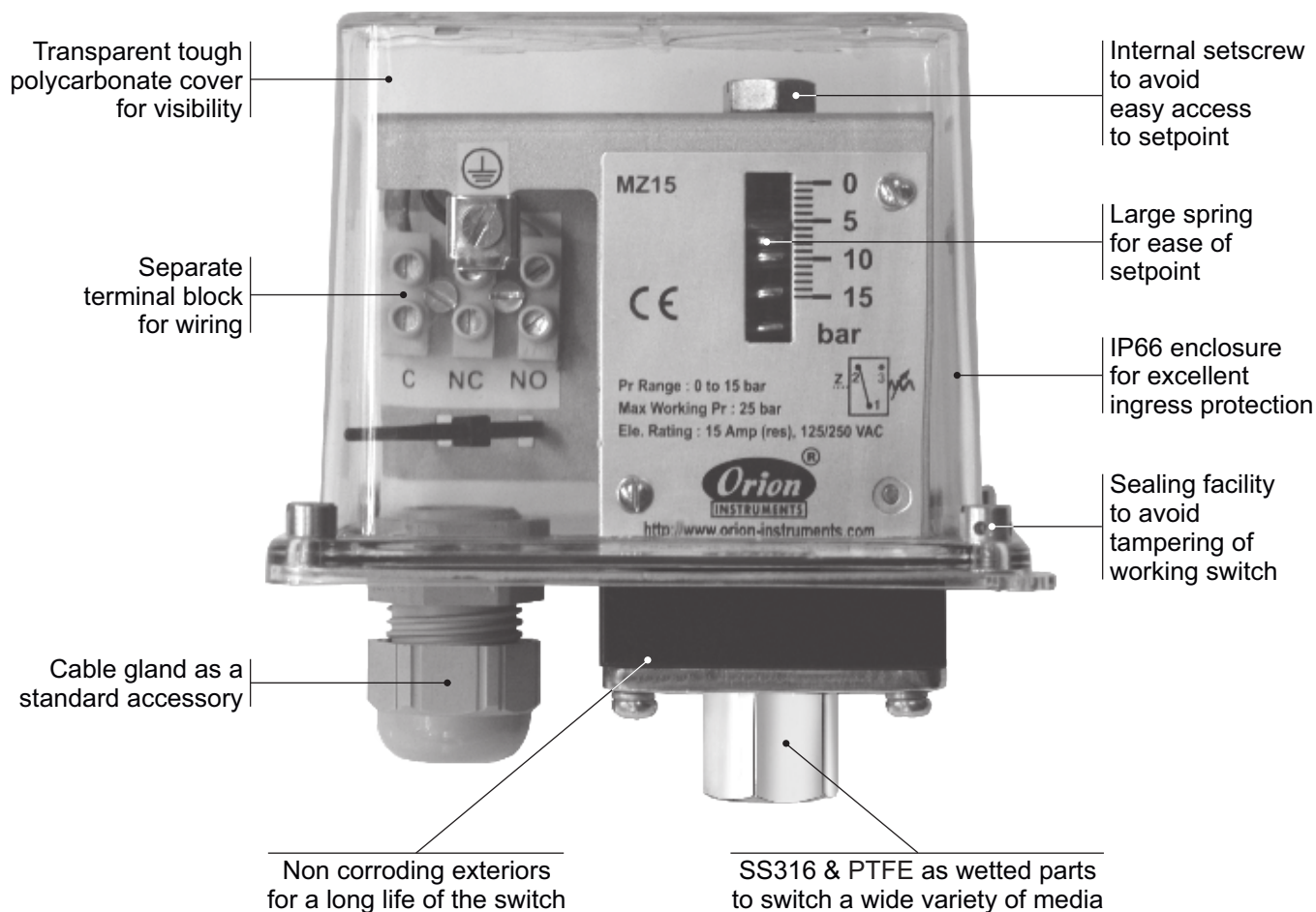


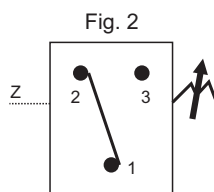


**Approximate Weight :** 0.900 Kg.

### Some Applications :

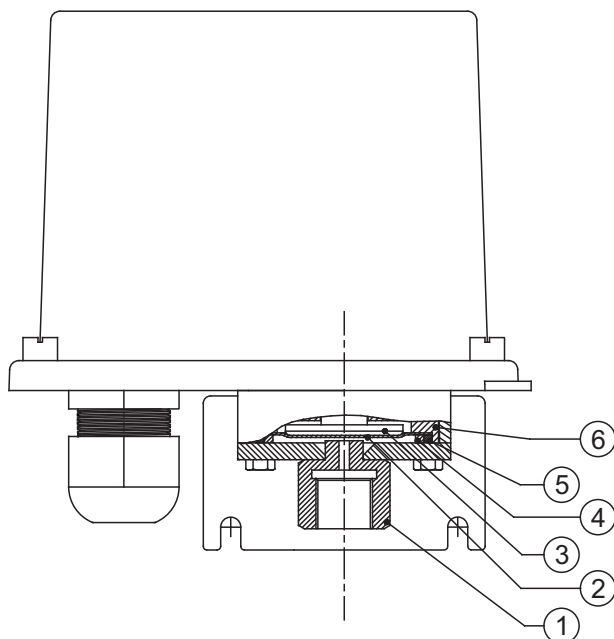
Used where low set point and high proof pressure is required like tyre moulding machines, etc.

### Electrical Connection :





## PRESSURE CAPSULE DETAILS

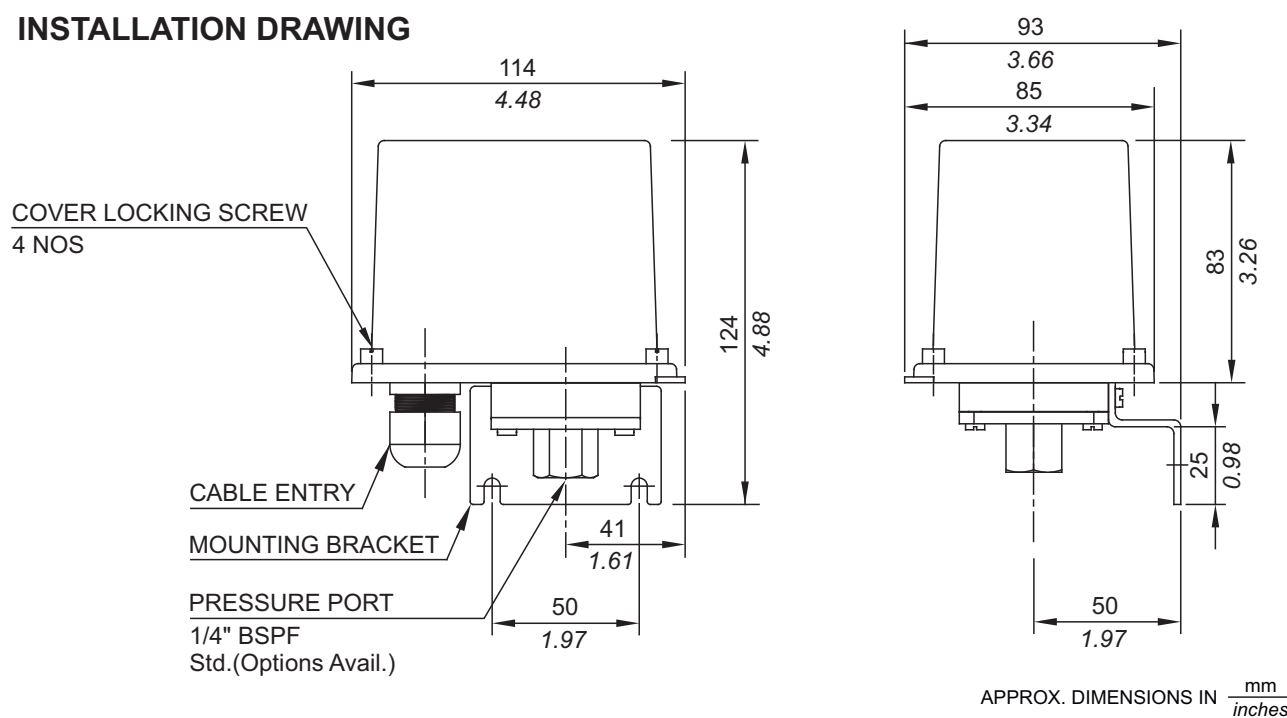


### No. Description

1. Pressure Port (SS316)
2. Diaphragm (PTFE®)
3. Plunger
4. Steel Ring (SS316)
5. O-Ring (PTFE®)
6. Disc

Note : wetted parts are mentioned in italics.

## INSTALLATION DRAWING



APPROX. DIMENSIONS IN  $\frac{\text{mm}}{\text{inches}}$

## RANGE SELECTION TABLE

| Range Code | Range bar (psi)                | Differential* bar (psi)                  | Maximum Working Pressure bar (psi) |
|------------|--------------------------------|------------------------------------------|------------------------------------|
|            |                                | Approximate Maximum for "A8" microswitch |                                    |
| P01        | 0.1 - 1.0<br>(1.45 - 14.50)    | 0.20<br>(2.90)                           | 70<br>(1015.26)                    |
| P02        | 0.1 - 1.5<br>(1.45 - 21.76)    | 0.40<br>(5.80)                           | 70<br>(1015.26)                    |
| P03        | 0.2 - 2.6<br>(2.90 - 37.71)    | 0.40<br>(5.80)                           | 70<br>(1015.26)                    |
| P04        | 0.2 - 3.6<br>(2.90 - 52.21)    | 0.50<br>(7.25)                           | 70<br>(1015.26)                    |
| P07        | 0.5 - 7.0<br>(7.25 - 101.53)   | 1.00<br>(14.50)                          | 70<br>(1015.26)                    |
| P10        | 0.5 - 10.0<br>(7.25 - 145.04)  | 1.00<br>(14.50)                          | 70<br>(1015.26)                    |
| P15        | 1.0 - 15.0<br>(14.50 - 217.56) | 1.5<br>(21.76)                           | 70<br>(1015.26)                    |
| P30        | 5.0 - 25.0<br>(72.52 - 362.6)  | 1.5<br>(21.76)                           | 70<br>(1015.26)                    |

### 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.



Note: Welded diaphragm also available as shown

2. When using 2SPDT switching arrangement, both microswitches may not actuate and/or deactuate at the same point. A small stage gap, normally upto +/- 5% FSR (depending on range code) may be observed. The On-Off differential (hysteresis) typically tends to be atleast double of those published for 1SPDT pressure switches.

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.

## HOW TO ORDER PROCESS HIGH PROOF HIGH RANGE PRESSURE SWITCHES

| Group 1                                                                                                                                                                                                                                     | Group 2                                                                                               | Group 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Group 4                                                                                                                                                                                                                                                                                   | Group 5                                                                                                                                                                                                                         | Group 6                                                                                                                                         | Group 7                                                                                                                                                                                                                                                                                                                                              | Group 8                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Non standard allocation                                                                                                                                                                                                                     | Model                                                                                                 | Cable Entry Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Switch Type                                                                                                                                                                                                                                                                               | Range Code (values in bar)                                                                                                                                                                                                      | Microswitch Type                                                                                                                                | Pressure Port Material / Size                                                                                                                                                                                                                                                                                                                        | Diaphragm                                                                                                  |
| <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. | <b>MZ</b> = Process pressure switch with a weatherproof enclosure rated IP66/IP68 as per IS/IEC 60529 | <b>1</b> = Polycarbonate Enclosure<br>1/2" NPT threads<br><b>2</b> = Polycarbonate Enclosure<br>3/4" NPT threads<br><b>3</b> = Polycarbonate Enclosure<br>M20 x 1.5 threads<br><b>4</b> = Diecast Al. Enclosure<br>1/2" NPT threads<br><b>5</b> = Diecast Al. Enclosure<br>3/4" NPT threads<br><b>6</b> = Diecast Al. Enclosure<br>M20 x 1.5 threads<br><b>7</b> = SS Enclosure<br>1/2" NPT threads<br><b>8</b> = SS Enclosure<br>3/4" NPT threads<br><b>9</b> = SS Enclosure<br>M20 x 1.5 threads | <b>PF2</b> = pressure switch, fixed differential with scale<br><b>PF3</b> = pressure switch, fixed differential with scale in psi<br><b>PA2*</b> = pressure switch, adjustable differential with scale in bar<br><b>PA3*</b> = pressure switch, adjustable differential with scale in psi | <b>P01</b> = (0.1 - 1.0)<br><b>P02</b> = (0.1 - 1.5)<br><b>P03</b> = (0.2 - 2.6)<br><b>P04</b> = (0.2 - 3.6)<br><b>P07</b> = (0.5 - 7.0)<br><b>P10</b> = (0.5 - 10.0)<br><b>P15</b> = (1.0 - 15.0)<br><b>P30</b> = (5.0 - 25.0) | <b>A8</b> = General purpose microswitch<br><b>A7</b> = 2SPDT microswitches<br><b>A9</b> = General purpose microswitch                           | <b>S1</b> = SS316 / 1/4" BSP(F)<br><b>S2</b> = SS316 / 1/4" NPT(F)<br><b>S3</b> = (welded diaphragm) SS316 / 1" BSP(M)<br><b>S4</b> = SS316 / 1/2" NPT(F)<br><b>S5</b> = SS316 / 1/2" NPT(M)<br><b>H1</b> = Hastelloy C / 1/4" BSP(F)<br><b>H2</b> = Hastelloy C / 1/4" NPT(F)<br><b>N1</b> = Monel / 1/4" BSP(F)<br><b>N2</b> = Monel / 1/4" NPT(F) | <b>0</b> = Neoprene<br><b>1</b> = PTFE<br><b>2</b> = SS 316L<br><b>3</b> = Hastelloy C<br><b>4</b> = Monel |
| The prefix is subject to change as per specific requirement.                                                                                                                                                                                | Note : Contact sales office for IP 68 enclosure                                                       | Note : For dual cable entries contact sales office                                                                                                                                                                                                                                                                                                                                                                                                                                                 | *Available only with option A7 and A9 in Group 6                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                 | * Please refer to page nos. 290 & 291 for options and specifications of microswitches<br>Please contact sales office for additional information | More options available, please contact sales office                                                                                                                                                                                                                                                                                                  |                                                                                                            |

eg. A process pressure switch with fixed differential having 0.1 bar to 1 bar pressure range, with 5 Amp. microswitch, SS316 pressure housing with 1/4" BSP port size & neoprene diaphragm shall be specified by

| Group 1                  | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | Group 7 | Group 8 |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|
| <input type="checkbox"/> | MZ      | 3       | PF2     | P01     | A8      | S1      | 0       |

Please specify full model number to avoid ambiguity.