## FC HYDRAULIC RANGES



## Approximate Weight :

Pressure switches with Aluminium enclosure : 1.95 Kg .
Pressure switches with Grey Cl enclosure $: 4.35 \mathrm{Kg}$.
Pressure switches with SS enclosure $\quad: 4.45 \mathrm{Kg}$.

Electrical Connection :


## Some Applications :

For high pressure cylinder testing jigs, CNG/LPG gas skids, high pressure compressors, etc.



## FC HYDRAULIC RANGES

## RANGE SELECTION TABLE

| Range Code | Range bar (psi) | Differential* bar (psi) | Maximum <br> Working Pressure bar (psi) |
| :---: | :---: | :---: | :---: |
|  |  | Approximate Maximum for "A1" microswitch |  |
| H1T | $\begin{gathered} 0.5-10 \\ (7.25-145.04) \end{gathered}$ | $\begin{gathered} 0.5 \\ (7.25) \end{gathered}$ | $\begin{gathered} 150 \\ (2175.00) \end{gathered}$ |
| H2T | $\begin{gathered} 2-20 \\ (29.00-290.08) \end{gathered}$ | $\begin{gathered} 2 \\ (29.00) \end{gathered}$ | $\begin{gathered} 200 \\ (2900.76) \end{gathered}$ |
| H4T | $\begin{gathered} 5-40 \\ (72.52-580.15) \end{gathered}$ | $\begin{gathered} 5 \\ (72.52) \end{gathered}$ | $\begin{gathered} 200 \\ (2900.76) \end{gathered}$ |
| H1H | $\begin{gathered} 10-100 \\ (145.04-1450.38) \end{gathered}$ | $\begin{gathered} 12 \\ (174.045) \end{gathered}$ | $\begin{gathered} 200 \\ (2900.76) \end{gathered}$ |
| H 2 H | $\begin{gathered} 7-200 \\ (101.53-2900.76) \end{gathered}$ | $\begin{gathered} 24 \\ (348.09) \end{gathered}$ | $\begin{gathered} 400 \\ (5801.52) \end{gathered}$ |
| H4H | $\begin{gathered} 40-400 \\ (580.15-5801.52) \end{gathered}$ | $\begin{gathered} 70 \\ (1015.27) \end{gathered}$ | $\begin{gathered} 500 \\ (7251.90) \end{gathered}$ |

* Minimum differential increases with setpoint (Graphs available on request)
* Differentials of miroswitches A2 through A9 will vary. Differentials for A7 are typically twice that for A1 microswitch.

Please indicate specifically the differential value in enquiry/order, when it is critical in your application.

HOW TO ORDER FLAMEPROOF HYDRAULIC RANGE PRESSURE SWITCHES

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | Group 7 | Group 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non standard allocation | Gas Group Classification | Cable Entry Size | Switch Type | Range Code (values in bar) | Microswitch Type | Pressure Port <br> Material / Size | Diaphragm |
| Reserved for non-standard $\square$ options not covered in catalogue. Will be given by manufacturer, only after agreement of supply details with customer. | $\text { FC }=$ <br> Flameproof pressure switch, ATEx \& IECEx approved, with Aluminium head as per IS/IEC 60079-1 for Gas Gr. IIC | 1 = AI. head <br> $1 / 2{ }^{1}$ NPT threads <br> 2 = AI. head <br> $3 / 4$ " NPT threads <br> 3 = AI. head <br> M20 x 1.5 <br> threads <br> 4 = Grey Cl <br> head $1 / 22^{\prime \prime}$ NPT <br> threads <br> 5 = Grey Cl <br> head 3/4" NPT <br> threads <br> $6=$ Grey Cl <br> head M20 x 1.5 <br> threads <br> 7 = SS head $1 / 2^{\prime \prime}$ <br> NPT threads <br> 8 = SS head <br> 3/4" NPT <br> threads <br> $9=$ SS head <br> M20 x 1.5 <br> threads | P $1=$ <br> pressure switch, fixed differential without scale <br> P2 = <br> pressure switch, fixed differential with scale in bar <br> P3 = <br> pressure switch, fixed differential with scale in psi | H1T = <br> (0.5-10) <br> H2T = <br> (2-20) <br> H4T = <br> (5-40) <br> $\mathrm{H} 1 \mathrm{H}=$ <br> (10-100) <br> $\mathrm{H} 2 \mathrm{H}=$ <br> (7-200) <br> $\mathrm{H} 4 \mathrm{H}=$ <br> (40-400) | A1 = General purpose microswitch rated at 15 A; 250 VAC <br> *A2 = Hermetically sealed for corrosive environments <br> *A3 = gold plated contacts for low voltage applications <br> *A4 = DPDT configuration <br> *A5 = for high DC ratings <br> *A6 = elements with adjustable deadband <br> *A7 = 2SPDT switching elements <br> *A8 = General purpose microswitch rated at 5 <br> A; 250 VAC <br> *A9 = General purpose microswitch rated at 5 <br> A; 250 VAC <br> Please refer page no. 230 for more microswitch options <br> * Please refer note under Range Selection Table | S1 = <br> SS316 / 1/4" BSP(F) <br> S2 = <br> SS316 / 1/4" NPT(F) <br> Please refer page no. 226 \& 227 for more pressure port options | $0=$ <br> Neoprene <br> 1 = <br> Teflon <br> 2 = <br> SS 316L <br> 3 = <br> Hastelloy C <br> 4 = <br> Monel <br> $5=$ <br> Titanium <br> 6 = <br> Tantalum <br> 7 = <br> Inconel |

eg. A flameproof switch for gas group IIC, with $1 / 2$ " NPT cable entry in aluminium housing as 1SPDT pressure switch, having 5 bar to 40 bar pressure range, with 15 Amp. microswitch, SS316 pressure housing with $1 / 4^{\prime \prime}$ BSP port size \& SS316L diaphragm shall be specified by

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 | Group 6 | Group 7 | Group 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ | FC | 1 | P1 | H4T | A1 | S1 | 2 |

Please specify full model number to avoid ambiguity. If only the first two groups are specified while ordering, uncalibrated switches with standard wetted parts and enclosures will be supplied.

Continuous efforts for product development may necessitate changes in these details without notice

