

Pressure Switches

JOHNSON
valves

This series of pressure switches can be used for all applications where an electrical circuit is required to close or open at a required pressure.

The robustness of this series of pressure switches enables all applications in all industries to be satisfied.

- **Robust & Reliable**
- **Diaphragm Operated <42 bar**
- **Piston Operated >42 bar**
- **Proven Performance**
- **Wetted parts for use with all Fluids**
- **Fully Adjustable**
- **Easily Customised**
- **Enclosure Rating IP65**
- **CE marked for all Directives that apply**
- **LPCB Approved**
- **UL 508 Certified**

Pressure Ranges

TYPE No.	PRESSURE RANGE	HYSTERESIS TYPICAL
1381	-1 to +1 bar	0.04 bar
1381	0.2 to 4 bar	0.07 bar
1381	0.5 to 11 bar	0.3 bar
1381	0.7 to 14 bar	0.4 bar
1381	2 to 28 bar	0.6 bar
1381	2 to 42 bar	0.8 bar
1481	5 to 125 mbar	2.5 mbar
1481	15 to 250 mbar	4 mbar
1481	25 to 400 mbar	10 mbar
1581	9 to 100 bar	10 bar*
1581	14 to 200 bar	18 bar*
1581	20 to 400 bar	25 bar*

*Typical for mid-range set point

Maximum Pressure

To ensure long service life select the pressure range as follows:

Dynamic pressure applications $P_{max} = 75\%$ of Range

Static pressure applications $P_{max} = 100\%$ of Range

Maximum pressure that can be applied is 125% of pressure range (see option Q page 8 for higher pressures.)

Electrical Ratings

10 amp at 250V 50 Hz Inductive load

1 amp at 30V dc Inductive load

For other voltages and currents please consult our technical department.

Setting Accuracy±2%

Temperature Range-10 to +85°C
(Process fluid must not solidify)

Temperature Coefficient0.05%
of range per °C from 20°C



Installation

These pressure switches can be mounted directly on the connecting thread. Sealing grooves are machined onto the end face of parallel threads for use with sealing washers. A Mounting Bracket is available if required.

Vacuum Setting

At ambient pressure the switches will be in the operated condition consequently the wiring should be reversed i.e. NO becomes NC.

Connecting Threads

All connecting threads used in industry are available including British, American and metric. Please state the connection thread when ordering.

Flanges & Hygienic Fittings

(see page 5 for alternative connections)

Flanged fittings are available and all types of Hygienic fittings can be supplied assembled directly onto the pressure switch.

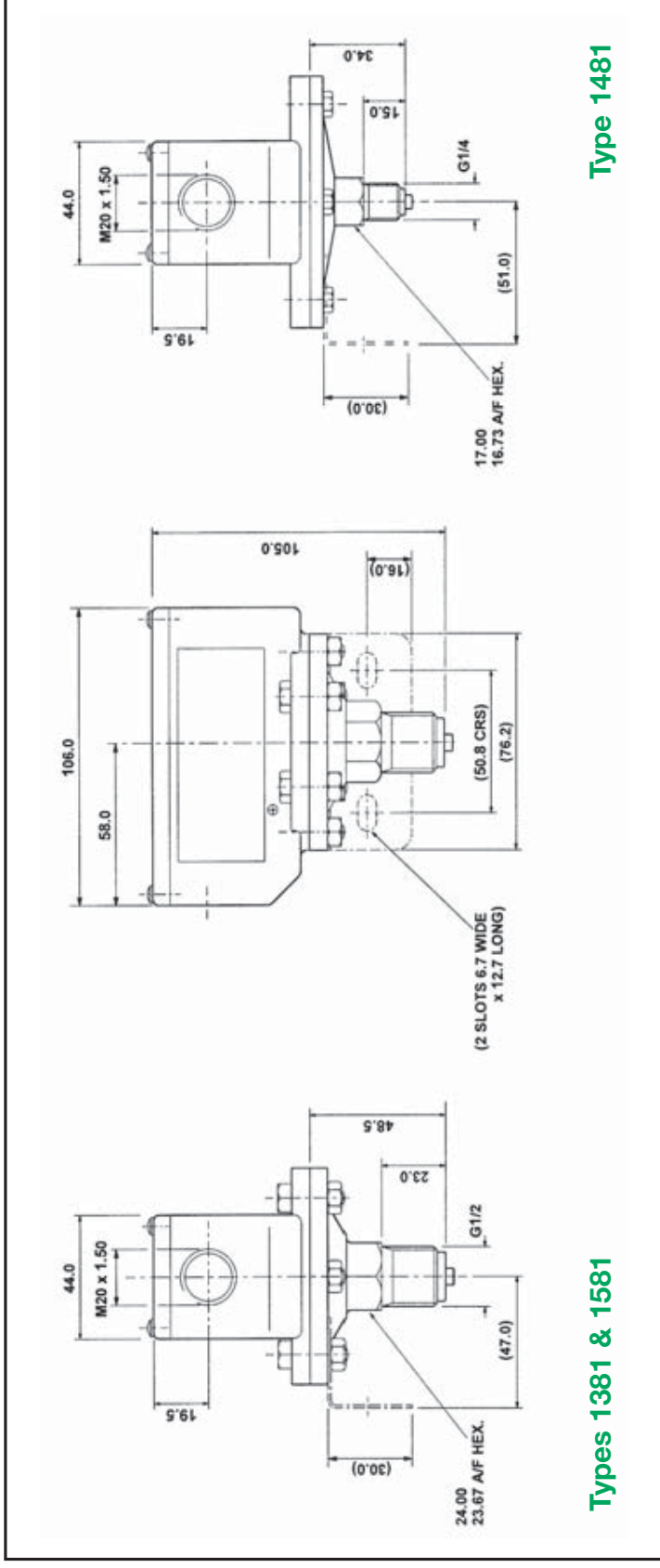
If flush diaphragms are required please consult our Technical Department

Materials of Construction Types 1381 & 1481

Diaphragm.....Beryllium Copper
SealGlass filled PTFE <11 bar
Nitrile rubber >11 bar
BaseBrass
HousingAluminium / Zinc diecast
Cover.....Glass Filled Nylon with Nitrile seal

Material of Construction Type 1581

PistonStainless Steel
SealNitrile rubber with PTFE
anti-extrusion rings
BaseStainless Steel
HousingAluminium / Zinc diecast
Cover.....Glass Filled Nylon with Nitrile seal



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