

This series of pressure switches are used to monitor the difference between two pressures. For example, they can be used to monitor filter condition and signal when the filter is becoming blocked. They can also be used as flow monitoring switches if used across orifice plates etc.

- Robust and Reliable
- Diaphragm Operated
- Proven Performance
- Fully Adjustable
- Enclosure Rating IP65
- CE marked for all Directives that apply
- UL 508 Certified

Pressure Ranges

TYPE No.	PRESSURE RANGE	HYSTERESIS TYPICAL
1382	0.07 to 1 bar	0.04 bar
1382	0.2 to 4 bar	0.07 bar
1382	0.5 to 11 bar	0.3 bar
1382	2 to 28 bar	0.6 bar
1482	5 to 125 mbar	2.5 mbar
1482	15 to 250 mbar	4 mbar
1482	25 to 400 mbar	10 mbar

Max. Line Pressure

Pressure range >250mbar34 bar

Pressure range <125 mbar 14 bar

Electrical Ratings

10 amp at 250V 50Hz Inductive load

1 amp at 30V dc Inductive load

For other voltages and currents please consult our technical department.

Overload

Dimensions of the diaphragm housing are such that the movement of the diaphragm is stopped when the diaphragm exceeds the range. This ensures that the differential pressure switches will accept the accidental application of 4 times the range without damage except for a possible setting shift of up to 2 % of range. It is possible that these switches can be modified to accept the full line pressure on one side of the diaphragm.



Installation

These pressure switches can be mounted directly on the connecting thread. A Mounting Bracket is available if required.

Vacuum Use

If used to detect the difference between two levels of vacuum a slight modification is needed and vacuum use must be specified when ordering.

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

Materials of Construction Types 1382 & 1482

Diaphragm.....Beryllium Copper

All Seals.....Nitrile rubber

ConnectionBrass

HousingAluminium / Zinc diecast

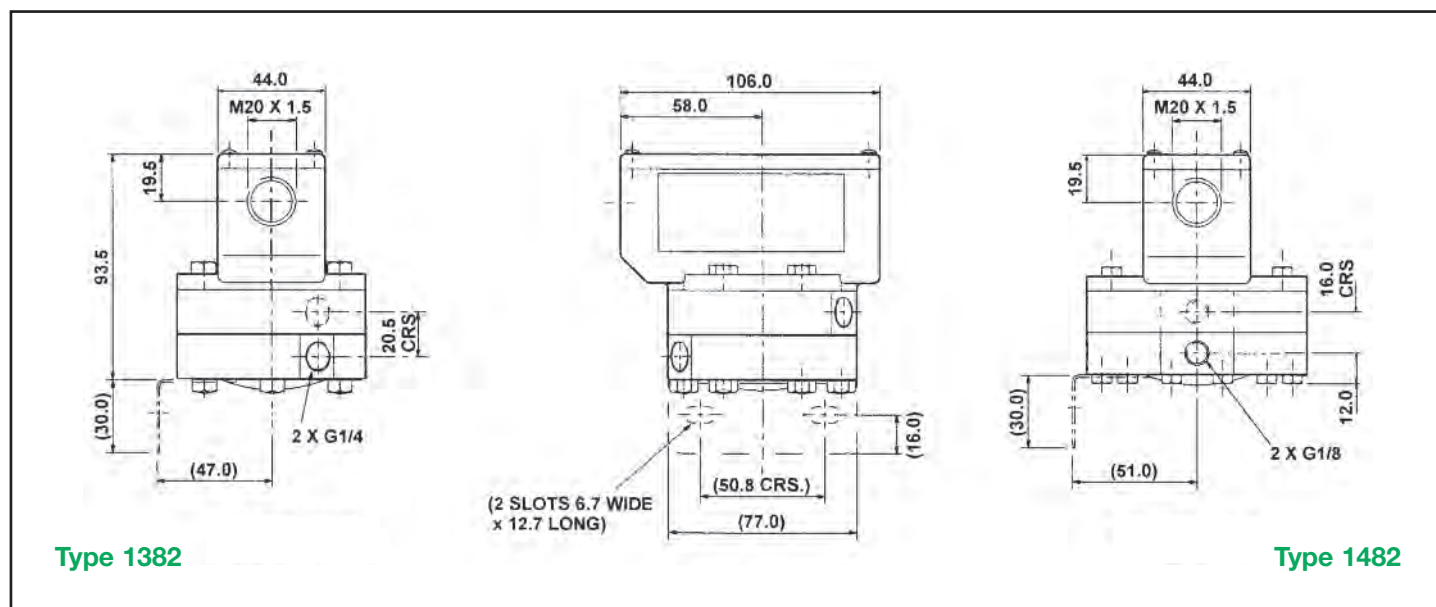
CoverGlass Filled Nylon with Nitrile seal

Alternative Wetted Parts

Connections316 Stainless Steel

Diaphragm.....17 / 7 ph Stainless Steel

SealsViton rubber



Options Available

To make Series 1000 Differential Pressure Switches more suitable for many applications there are several standard options available. A suffix letter that follows the Type Number designates these options.

Option D – Degreased for oxygen use

Pressure switches for use on oxygen have to be free from all traces of oil or grease. Diaphragm pressure switches have the diaphragm, pressure chamber and seal specially cleaned and handled during assembly and are marked with the 'Use no oil' symbol.

Option G – Gold plated micro-switches

Micro-switches with Gold plated contacts are used in low power circuits where the contact resistance of standard silver contacts is too high. For electrical loads below 6V at 1.0A dc.

Option P – With plug & socket

Fitted with 4 –pin plug and socket for SPDT micro-switch version.
Fitted with 7 –pin plug and socket for twin SPDT & DPDT micro-switch versions.

Option R & RF – Manual Reset

On some applications, for safety reasons, a manual reset is required e.g. after changing a filter element or for alarm purposes.

R = Manual Reset above the set point

RF = Manual Reset below the set point

Option V- Adjustable Hysteresis

This option enables the hysteresis to be increased and can be varied between approximately 5% and 95% of the adjustable pressure range.

Option X

In some applications a higher electrical rating is required this option is fitted with a micro-switch for 15 amps at 250V 50Hz.

Other Options

Visual Setting Scale	Type 1392 & 1492
Twin Circuit	Type 2382 & 2482
Twin Circuit with Visual Setting Scale	Type 2392 & 2492