

This series of pressure switches are intended for use in hazardous areas where an intrinsically safe circuit cannot be used. They can be used to monitor or control pressures within a fluid system by either closing or opening an electrical circuit. The pressure switches consist of a housing containing the pressure sensing mechanism with an external micro-switch contained within an ATEX housing.

- Robust and reliable
- Diaphragm operated < 40 bar
- Piston operated > 40 bar
- Wetted parts for use with all fluids
- Fully adjustable set point
- Enclosure rating IP67
- ATEX Approved to:- CE Ex II2 G (EEx.d.e. IIC. T6)

Pressure Ranges

TYPE NO.	PRESSURE RANGE	HYSTERESIS TYPICAL
5381	0.25 to 1 bar vacuum	0.25 bar
5381	0.25 to 1 bar	0.25 bar
5381	1 to 4 bar	0.35 bar
5381	2 to 10 bar	0.8 bar
5381	3 to 14 bar	0.8 bar
5381	6 to 28 bar	2.5 bar
5381	10 to 40 bar	3.0 bar
5581	20 to 100 bar	19 bar*
5581	40 to 200 bar	40 bar*
5581	100 to 400 bar	95 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.

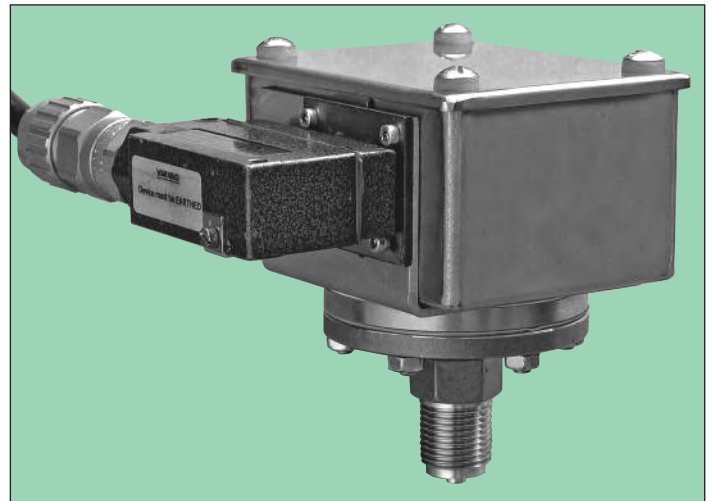
Electrical Rating

5 amp at 250V 50 Hz. For other voltages and currents please consult our technical department.

Setting Accuracy ± 5%

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

Temperature Coefficient 0.05%
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. Normally Open becomes Normally Closed.

Connecting Threads

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

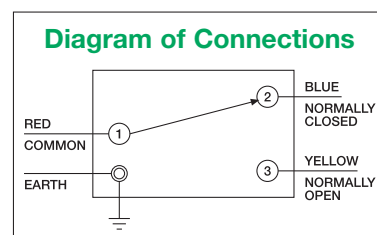
Flanges and Hygienic Fittings

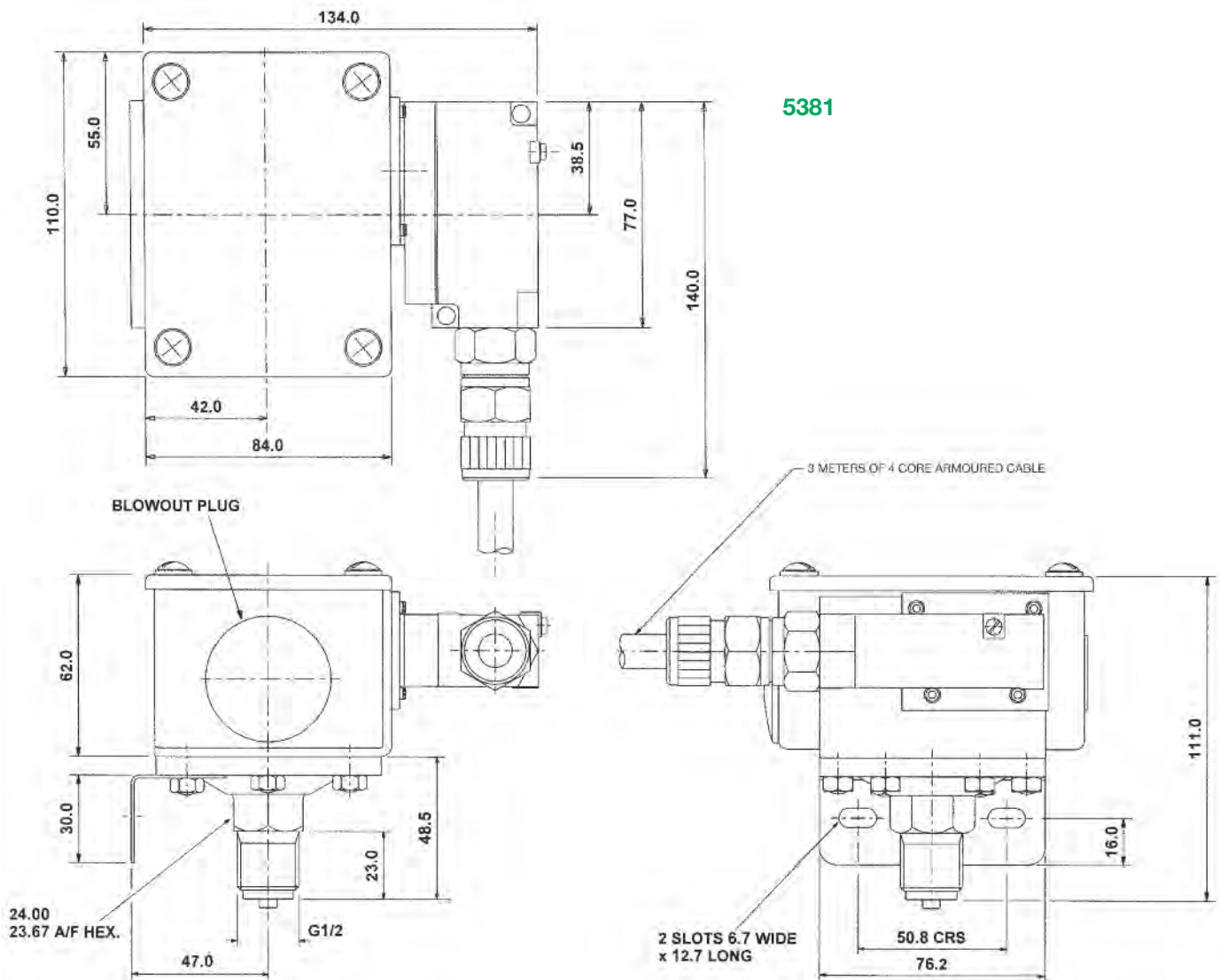
Flanged fittings are available and all types of hygienic fittings can be supplied assembled directly onto the pressure switch. If flush diagrams are required please consult our technical department.

Materials of Construction

Connection	316 Stainless Steel
Diaphragm Type 5381.....	17/7 PH Stainless Steel
	Optional 316 protection disc
Piston Type 5581	316 Stainless Steel
Seals	Glass filled PTFE < 14 bar
	Nitrile Rubber > 14 bar
Housing.....	Polyester Powder Coated
	Stainless Steel

Other wetted parts available for fluids not compatible with those stated above. Please see page 9.





Series 5000 ATEX Differential Pressure Switches

This series of pressure switches are intended for use in hazardous areas where an intrinsically safe circuit cannot be used. Differential pressure switches are used where the difference between two pressures needs to be monitored or controlled. The pressure switches consist of a housing containing the pressure sensing mechanism with an external micro-switch contained within an ATEX housing.

- Robust and reliable
- Spring diaphragm operated
- Max. line pressure 34 bar
- Fitted with mounting bracket
- Fully adjustable
- Enclosure rating IP67
- ATEX Approved to:- CE Ex II2 G (EEx.d.e. IIC. T6)

Pressure Ranges

TYPE NO.	PRESSURE RANGE	HYSTERESIS TYPICAL
5382	0.25 to 1 bar	0.25 bar
5382	0.6 to 4 bar	0.6 bar
5382	1.2 to 10 bar	1.2 bar
5382	3.5 to 25 bar	3.5 bar

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.

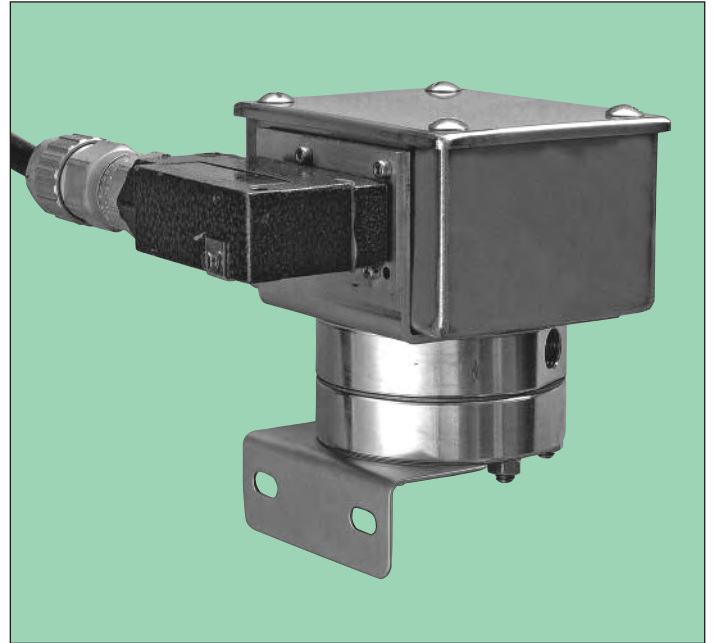
Electrical Rating

5 amp at 250V 50 Hz. For other voltages and currents please consult our technical department.

Setting Accuracy $\pm 5\%$

Temperature Range -10 to $+85^{\circ}\text{C}$
(Process fluid must not be allowed to solidify)

Temperature Coefficient 0.05%
of range per $^{\circ}\text{C}$ from 20°C



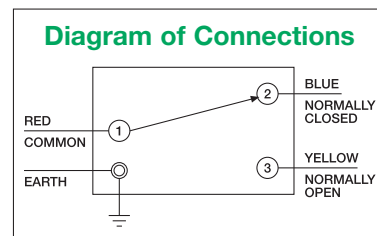
Connecting Threads

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

Materials of Construction

Connections 316 Stainless Steel
Diaphragm 17/7 PH Stainless Steel
Seals Nitrile Rubber
Housing Polyester Powder Coated
Stainless Steel

Other wetted parts available for fluids not compatible with those stated above. Please contact our Technical Department for further information.



ATEX Differential Pressure Switches Series 5000

5382

