

# Diaphragm Seal Piston Press. Switches

**P1X**

Mechanical single switch  
Repeatability  $\pm 2.0$  % at constant temperature

## Features

Mechanical pressure switches,  
Switching point can be adjusted with corresponding reference unit during operation

## Adjustment ranges

0.1 ... 107 bar

## Applications

Hydraulic and pneumatic power units,  
Autoclaves,  
Shipbuilding applications



## Technical Data

Wetted parts: Diaphragm:	NBR Optional: FKM, PTFE
Process connection:	Aluminium, anodized Optional: stainless steel 1.4401
Repeatability:	$\pm 2$ % at constant temperature
Switching rate:	max. 20/min
Temperature range:	-30 °C... +70 °C
Protection class:	IP65
Housing:	Explosion proof housing acc. to CSA and cULus
Housing: Cap:	Aluminium, anodized Aluminium, anodized
Process connection:	1/4" NPT female thread Optional: 1/2" NPT female thread

Electrical connection:	Screw terminals and cable gland 1/2" NPT female thread
Electrical ratings and hysteresis:	A large variety of micro switches offers different electrical ratings and hysteresis for many applications.
Weight:	P1X-...: approx. 1.3 kg
Set point adjustment:	Turn the adjustment screw clockwise to increase the set point
Intrinsically safe:	The switches are also applicable for inherent safety applications. In this case we recommend gold contacts. Add "Exi" in case of ordering. The following max. values are valid when using those switches: $U_{max} = 28$ V $I_{max} = 50$ mA
Approval:	CSA, UL File No. E37043, NACE

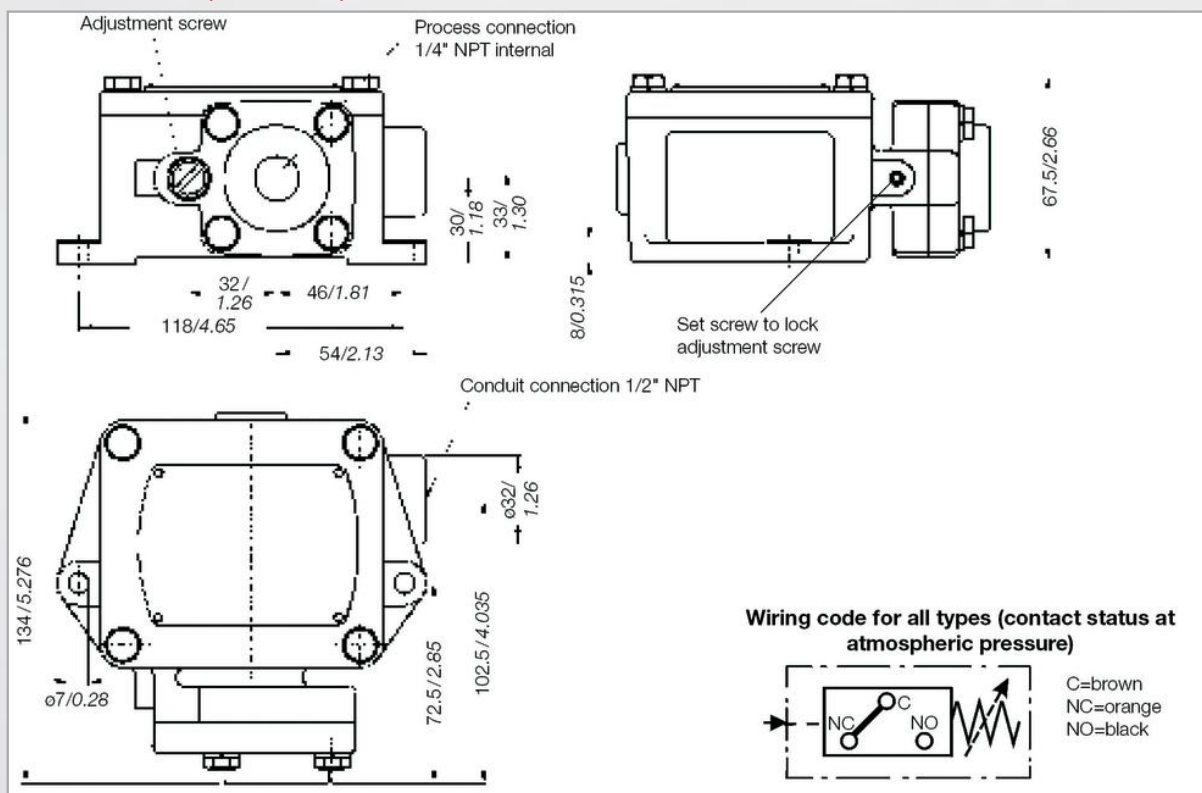
## Pressure Ranges

Pressure range code	Adjustment range [bar]		Max. operating pressure [bar]	Proof pressure [bar] (short term)	Max. hysteresis of switch types in bar (end of range)		
	Increasing press.	Decreasing press.			B	H, GH [bar]	K [bar]
30	0.1... 2.1	0.03... 2.0	91	137	0.14	0.06	0.17
85	0.4... 6.0	0.2... 5.8	91	137	0.50	0.17	0.58
340	0.8... 23.4	0.4... 23.0	91	137	1.50	0.41	1.83
600	2.9... 41.0	1.7... 40.0	91	137	2.00	1.17	2.42
1600	32.0... 107.0	27.0... 101.0	110	165	6.8	4.8	8.6

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### Dimensions (mm / inch)



### Electrical Ratings

Micro switch	Special features	Volt AC 50/60 Hz	Ind. load A	Res. load A	Volt DC	Ind. load A	Res. load A	Comments
H	Micro switch with silver contacts	125 250 480	10 10 3	10 10 3	6 to 28	0.50	0.5	Small hysteresis; High AC / low DC loads
GH	Micro switch with gold-plated contacts for low voltage and low current (e. g. "Exi")	125	1	1	24	0.10	1.0	Small hysteresis
K, B	Micro switch with silver contacts K: with sealed plunger and/ or stainless steel blade	125 250 480	10	10	12 24 250	10.00 5.00 0.03	10.0 6.0 0.2	Medium hysteresis; High AC and DC loads

### Material / Options / Diaphragm

Material	Options	Diaphragm
( ) Aluminium	(P2)1/2" NPT female SS	( - ) NBR
(SS) Stainless steel	(EXI) for intrinsically safe applications	(V) FKM
		(T) PTFE

### Order Code

Example for order number

Type	Micro switch	Pressure range code	Material	Options	Diaphragm
P1X	GH	85	SS	EXI	V

Your order number

Type	Micro switch	Pressure range code	Material	Options	Diaphragm