

# Diaphragm Seal Piston Press. Switches

**P1H**

Mechanical single switch

Repeatability  $\pm 2.0$  % at constant temperature

## Features

Mechanical pressure switches,  
external setpoint adjustment

## Adjustment ranges

0.1 ... 107 bar

## Applications

Hydraulic and pneumatic power units,  
Shipbuilding applications



## Technical Data

<b>Wetted parts:</b>	
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
Material Housing: Cap:	Aluminium, anodized Steel, galvanized
Process connection:	1/4" NPT female thread Optional: 1/2" NPT female thread (P2)

<b>Electrical connection:</b>	Screw terminals and cable gland 1/2" NPT, cable diameter $\varnothing 7$ ... 12 mm
<b>Electrical ratings and hysteresis:</b>	A large variety of micro switches offers different electrical ratings and hysteresis for many applications.
<b>Weight:</b>	P1H-...: approx. 1.2 kg
<b>Set point adjustment:</b>	Turn the adjustment screw clockwise to increase the set point
<b>Intrinsically safe:</b>	The switches are designed for intrinsically safe applications. In this case we recommend gold contacts. Please add "Exi" to your ordering details when placing an order. To comply with the intrinsically safe approval following max. ratings must not be exceeded: U <sub>max</sub> = 28 V I <sub>max</sub> = 50 mA
<b>Approval:</b>	NACE

## Pressure Ranges

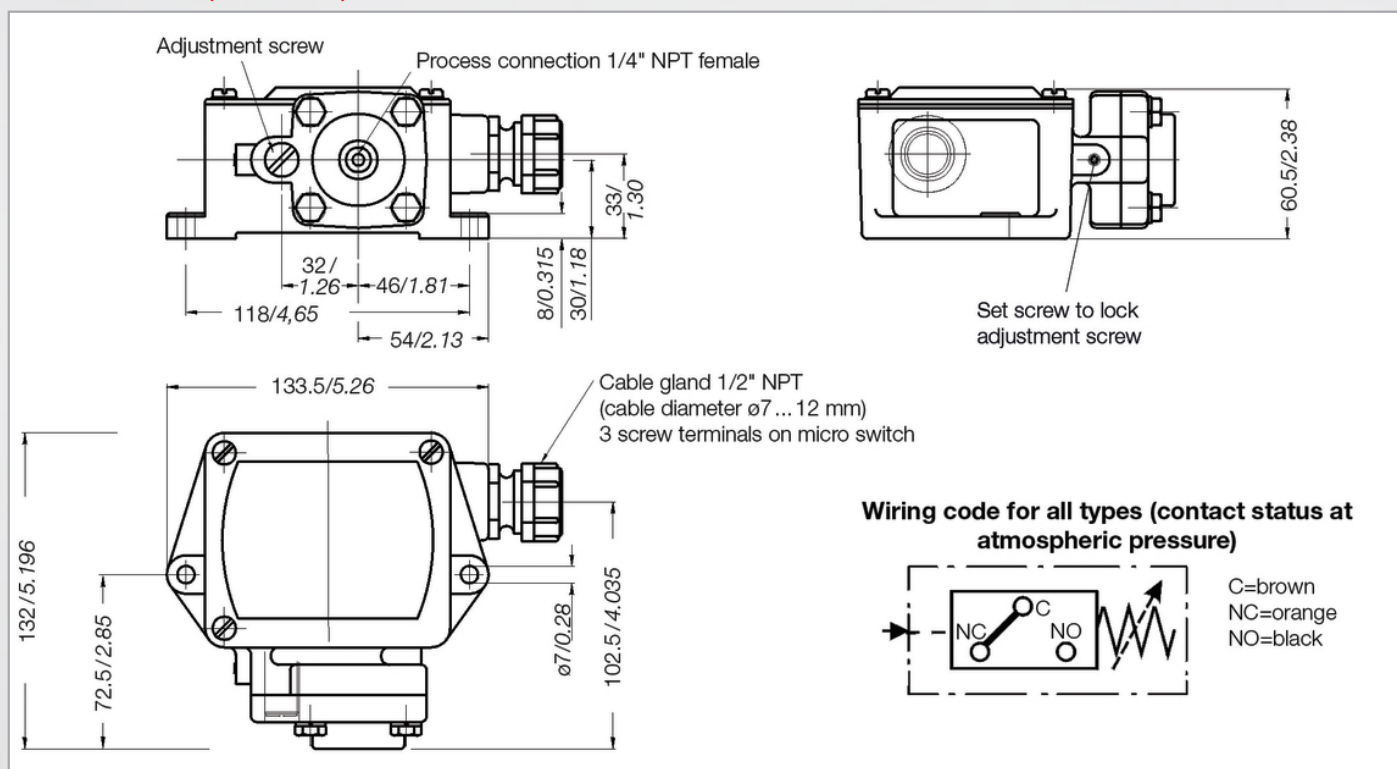
Pressure range code	Adjustment range [bar]		Max. operating pressure [bar]	Proof pressure [bar] (short term)	Max. hysteresis of switch types in bar (end of range)		
	Increasing press.	Decreasing press.			B	H, GH [bar]	K [bar]
30	0.1 ... 2.1	0.03 ... 2.0	91	137	0.14	0.06	0.17
85	0.4 ... 6.0	0.2 ... 5.8	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	7.00	4.80	8.60



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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 contacts for low voltage and low current (e. g. "Exi")	125	1	1	24	0.10	1.00	Small hysteresis
K, B	Micro switch with silver contacts K: with sealed plunger and 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 application	(V) FKM
		(T) PTFE

### Order Code

Example for order number

Type	Micro switch	Pressure range code	Material	Options	Diaphragm
P1H	GH	85	SS	EXI	V

Your order number

Type	Micro switch	Pressure range code	Material	Options	Diaphragm