

0175

Diaphragm pressure switches up to 250 V

- For low pressure, high accuracy
- Aluminium housing
- Changeover with silver contacts
- Overpressure safety up to 363 psi (25 bar)¹⁾
- Socket device similar to DIN EN 175301 (DIN 43650)
- Hysteresis adjustable at factory

p_{max} in bar	Adjustment range in bar	Tolerance at room temperature in bar	Thread	Article number
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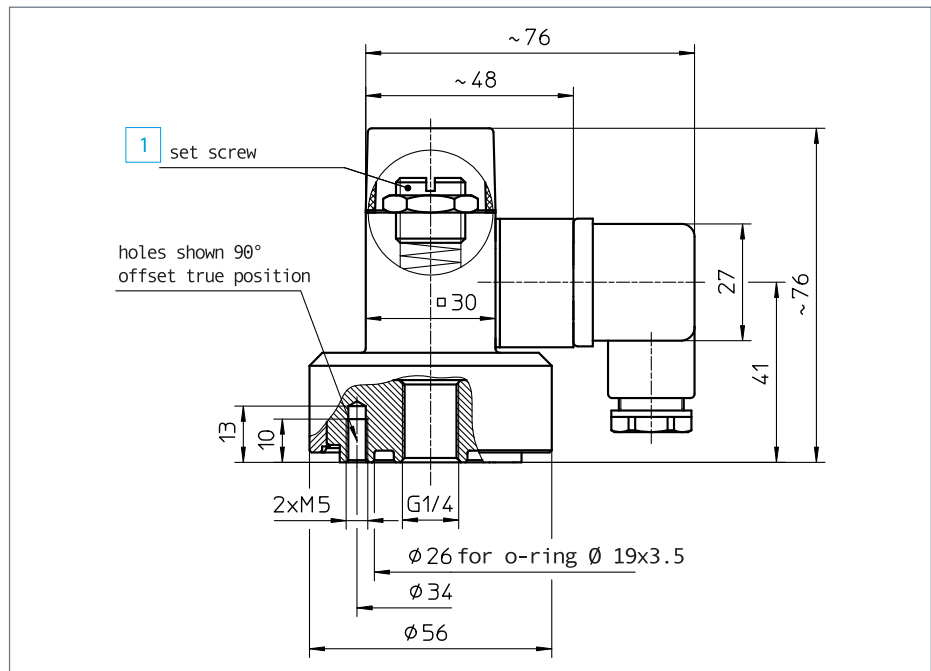
With female thread
0175 Diaphragm pressure switches

363 psi (25 bar) ¹⁾	0.1 – 1	± 0.1 – 0.2	G 1/4 female	0175 - 435 14 - 1 - 001
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Seal material – Application areas

NBR	Hydraulic/machine oil, air, nitrogen, etc.
	Temperature resistance: -30 °C ... +100 °C

Article number: **0175 - 435 14 - 1 - 001**



- 1** **Adjusting the set point**
To adjust the set point, undo the locknut and adjust the set screw M16 using a screwdriver. Clockwise screwing increases the switching pressure. After adjusting, tighten the locknut again.

¹⁾ Static value. Dynamic value is 30-50 % lower. Values pertain to the hydraulic/pneumatic part of the pressure switch.

Pressure switches 30 A/F

Technical data

M.7

30 A/F



Temperature resistance of sealing materials:	NBR (diaphragm pressure switch) -40 °F...+212 °F (-40 °C...+100 °C)
	NBR (piston pressure switch) -22 °F...+212 °F (-30 °C...+100 °C)
	EPDM -22 °F...+248 °F (-30 °C...+120 °C)
	FKM (Viton®) (in diaphragm pressure switch) +23 °F...+248 °F (-5 °C...+120 °C)
	FKM (Viton®) (in piston pressure switch) +5 °F...+248 °F (-15 °C...+120 °C)
Switching frequency:	200 / min.
Mechanical life expectancy:	1,000,000 cycles (for diaphragm pressure switches, life expectancy value only applies for switching pressures up to 725 psi / 50 bar)
Pressure rise rate:	≤ 1,450 psi / s (≤ 1,000 bar / s)
Differential:	Typ 0159: approx. 10 ... 30 % (not adjustable)
	Types 0161, 0162, 0175: approx. 10 ... 30 % (factory adjustable)
Vibration resistance:	10 g; 5 ... 200 Hz sine wave; DIN EN 60068-2-6
Shock resistance:	294 m/s ² ; 14 ms half sine wave; DIN EN 60068-2-27
Housing material:	Aluminium
Protection class:	IP65 with Socket device fitted
Weight:	Typ 0159, 0161, 0162: approx. 8.5 oz (240 g)
	Typ 0175: approx. 11 oz (310 g)

Electrical values	0159	0161 / 0162 / 0175
Rated working voltage U_{r}	Rated working current I_{r}	
250 VAC 50 / 60 Hz, AC 12	2.5 A	5 A
250 VAC 50 / 60 Hz, AC 14	1 A	1 A
24 VDC, DC 12 / DC 13	2 / 2 A	3.5 / 3.5 A
50 VDC, DC 12 / DC 13	1 / 0.5 A	2 / 1 A
75 VDC, DC 12 / DC 13	0.75 / 0.4 A	1 / 0.5 A
125 VDC, DC 12 / DC 13	0.3 / 0.2 A	0.3 / 0.2 A
250 VDC, DC 12 / DC 13	0.3 / 0.2 A	0.25 / 0.2 A
Rated insulation voltage U_{i}	300 V	
Rated impulse withstand voltage U_{imp} :	2.5 kV	
Conventional thermal current I_{the} :	6 A	
Switching overvoltage:	< 2.5 kV	
Rated frequency:	DC and 50 / 60 Hz	
Nominal current of short-circuit mechanism:	to 2.5 A	to 6.3 A
Conditional short-circuit current:	< 350 A	
Tightening torque of terminal screws:	< 0.35 Nm	
Connector cross-section:	0.5 – 1.5 mm ²	



Pressure switches 30 A/F

Snap action with silver contacts



- Attachment options for wall fitting and block style enable clearly structured, accessible, easy-maintenance installation
- Switching pressure can be adjusted easily by user
- High overpressure safety
- Socket devices enable simple installation on the machine