

0166

Diaphragm pressure switches up to 42 V with spade terminal

- Made of zinc-plated steel (CrVI-free)
- Spade terminal
- Overpressure safety up to 300 bar¹⁾

Adjustment range tolerance at room temperature	Male thread	Order number NO → :	Order number NC → :
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0166 Diaphragm pressure switches with spade terminal

0.1 – 1 (±0.2) bar	G 1/4	0166 – 403 03 – X – 011	0166 – 404 03 – X – 015
	G 1/8	0166 – 403 28 – X – 603	0166 – 404 28 – X – 604
	M 10x1 cyl.	0166 – 403 13 – X – 003	0166 – 404 13 – X – 004
	M 10x1 con.	0166 – 403 01 – X – 009	0166 – 404 01 – X – 013
	M 12x1.5 cyl.	0166 – 403 02 – X – 010	0166 – 404 02 – X – 014
	NPT 1/8	0166 – 403 04 – X – 012	0166 – 404 04 – X – 016
0.5 – 3 (±0.3) bar	G 1/4	0166 – 423 03 – X – 070	0166 – 424 03 – X – 070
	G 1/8	0166 – 423 28 – X – 070	0166 – 424 28 – X – 070
	M 10x1 cyl.	0166 – 423 13 – X – 070	0166 – 424 13 – X – 070
	M 10x1 con.	0166 – 423 01 – X – 070	0166 – 424 01 – X – 070
	M 12x1.5 cyl.	0166 – 423 02 – X – 070	0166 – 424 02 – X – 070
	NPT 1/8	0166 – 423 04 – X – 070	0166 – 424 04 – X – 070
1 – 10 (±0.5) bar	G 1/4	0166 – 407 03 – X – 027	0166 – 408 03 – X – 031
	G 1/8	0166 – 407 28 – X – 607	0166 – 408 28 – X – 608
	M 10x1 cyl.	0166 – 407 13 – X – 007	0166 – 408 13 – X – 008
	M 10x1 con.	0166 – 407 01 – X – 025	0166 – 408 01 – X – 029
	M 12x1.5 cyl.	0166 – 407 02 – X – 026	0166 – 408 02 – X – 030
	NPT 1/8	0166 – 407 04 – X – 028	0166 – 408 04 – X – 032
10 – 20 (±1) bar	G 1/4	0166 – 411 03 – X – 043	0166 – 412 03 – X – 047
	G 1/8	0166 – 411 28 – X – 611	0166 – 412 28 – X – 612
	M 10x1 cyl.	0166 – 411 13 – X – 011	0166 – 412 13 – X – 012
	M 10x1 con.	0166 – 411 01 – X – 041	0166 – 412 01 – X – 045
	M 12x1.5 cyl.	0166 – 411 02 – X – 042	0166 – 412 02 – X – 046
	NPT 1/8	0166 – 411 04 – X – 044	0166 – 412 04 – X – 048
20 – 50 (±2) bar	G 1/4	0166 – 415 03 – X – 059	0166 – 416 03 – X – 063
	G 1/8	0166 – 415 28 – X – 615	0166 – 416 28 – X – 616
	M 10x1 cyl.	0166 – 415 13 – X – 015	0166 – 416 13 – X – 016
	M 10x1 con.	0166 – 415 01 – X – 057	0166 – 416 01 – X – 061
	M 12x1.5 cyl.	0166 – 415 02 – X – 058	0166 – 416 02 – X – 062
	NPT 1/8	0166 – 415 04 – X – 060	0166 – 416 04 – X – 064

Seal material – Application areas

NBR	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
HNBR	Hydraulic/machine oil, ester-based bio-oils	9

Refer to page 41 for the temperature range and application thresholds of sealing materials.

Your order number: 0166 – XXX XX – X – XXX

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

M.3

hex 24



SUCO

M.3

hex 24

Pressure switches hex 24

NC or NO, maximum voltage 42 V



- Most cost-effective solution for mechanical pressure monitoring
- Stable switching point even after long use and high load
- Switching point can be adjusted when fitted on site ¹⁾
- High pressure resistance, compact, small switches, available as normally closed (NC) or normally open (NO)
- For solutions with integrated connectors please refer to chapter M.1, starting at page 22

¹⁾ Pressure switches can also be supplied preset at factory.
Our preset switches are sealed with lacquer paint, set points are embossed on the housing.

Pressure switches hex 24

Technical data

M.3

hex 24



Rated working voltage:	10 ... 42 VAC/DC	
Rated current range (resistive load, 12 DC and 12 AC):	10 mA ... 4 A	
Switching power DC12 / AC12:	100 W / 100 VA	
Temperature resistance of sealing materials:	NBR	-40 °C ... +100 °C
	EPDM	-30 °C ... +120 °C
	EPDM-W270, diaphragm	-20 °C ... +100 °C
	FKM (in diaphragm pressure switch)	-5 °C ... +120 °C
	FKM (in piston pressure switch)	-10 °C ... +120 °C
	Silicone, diaphragm	-40 °C ... +120 °C
	HNBR	-30 °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 to max. 50 bar)	
Pressure rise rate:	≤ 1 bar/ms	
Hysteresis:	Average value 5 – 30 % depending on type, not 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	
Protection class:	IP65 Terminals IP00	
Weight:	approx. 90 g	

Type:		0163	0164	0166	0167	0168	0169
Material:	Zinc-plated steel (CrVI-free)	●		●		●	●
	Stainless steel		●				
	Brass				●		
Overpressure safety up to:	35 bar				●		
	300 bar			●		●	
	600 bar	●	●				●



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