

M.3

hex 24

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0168

Diaphragm pressure switches up to 42 V

- Made of zinc-plated steel (CrVI-free)
- Spade or M3 screw terminal
- Overpressure safety up to 300 bar¹⁾
- With female thread for compression-type fitting to DIN 2353

Adjustment range
tolerance at room temperature

Female
thread

Order number
NO → :|

Order number
NC → :|

0168 Diaphragm pressure switches with M3 screw terminal

0.1 – 1 (±0.2) bar
0.5 – 3 (±0.3) bar
1 – 10 (±0.5) bar
10 – 20 (±1) bar
20 – 50 (±2) bar

M 12x1.5
female
DIN 2353

0168 – 401 16 – X – 001
0168 – 421 16 – X – 070
0168 – 405 16 – X – 005
0168 – 409 16 – X – 009
0168 – 413 16 – X – 013

0168 – 402 16 – X – 002
0168 – 422 16 – X – 070
0168 – 406 16 – X – 006
0168 – 410 16 – X – 010
0168 – 414 16 – X – 014

0168 Diaphragm pressure switches with spade terminal

0.1 – 1 (±0.2) bar
0.5 – 3 (±0.3) bar
1 – 10 (±0.5) bar
10 – 20 (±1) bar
20 – 50 (±2) bar

M 12x1.5
female
DIN 2353

0168 – 403 16 – X – 003
0168 – 423 16 – X – 070
0168 – 407 16 – X – 007
0168 – 411 16 – X – 011
0168 – 415 16 – X – 015

0168 – 404 16 – X – 004
0168 – 424 16 – X – 070
0168 – 408 16 – X – 008
0168 – 412 16 – X – 012
0168 – 416 16 – X – 016

Seal material – Application areas

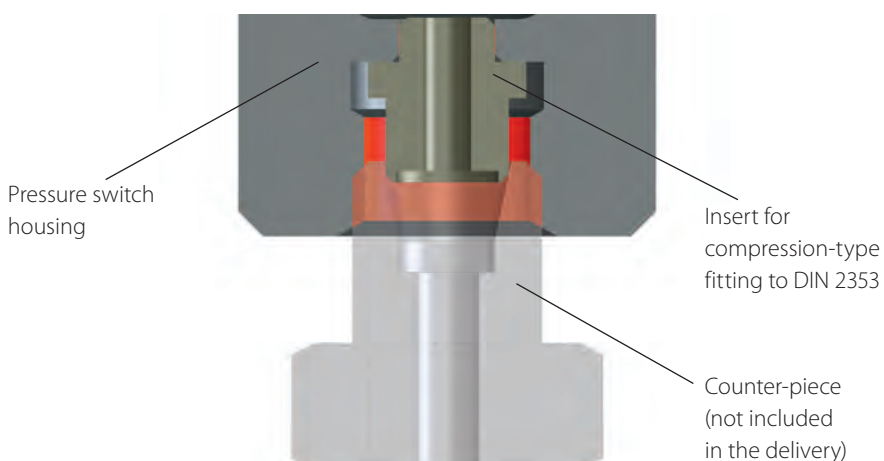
NBR	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
HNBR	Hydraulic/machine oil, ester-based bio-oils	9

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

Your order number:

0168 – XXX XX – X – XXX

**Seal type 0168
Insert with counter-piece**



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

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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

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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	●	●				●

