

## Vacuum/Pressure Sensors FEMTO

- Intelligent Sensor
- Teach in function
- Analog output 1-5 VDC
- 1 x digital output PNP
  - NO or NC
  - Freely programmable
- Easy key assignment
- Robust design in IP65
- Infinitely rotatable house 360°



### Analog / Digital

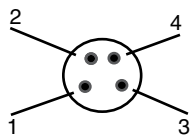
FEMTO is developed for use in material handling/robot applications and in the pharmaceutical industry.

One digital output (NO/NC, hysteresis etc.) and one analogue output 1 to 5 V is available.

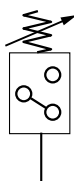
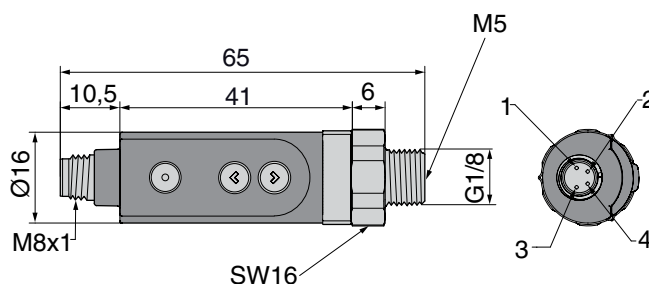
The programming is made with the push buttons.

Available in pressure ranges between -1 bar to +10 bar.

See next page.



Pin	Function	Cable Colour
1	Feed Voltage, Ub +	Brown
2	Analog output 1 - 5 V	White
3	0 V	Blue
4	OUT1	Black



**3D CAD FILES (STEP)**  
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<http://www.avac.se/en/home/>

### Technical Data

#### Electrical Characteristics

Operating voltage	10,8 to 30 VDC, polarity protected
Current consumption	< 35mA without load
Outputs	1 x PNP, NO or NC, and one analog
Output voltage PNP	approx. Ub -1,5 V
Max load	250 mA, overload protected)
Output impedance	≥500Ω
Output voltage Analog	1 to 5 VDC
Offset	1 V, +/- 0,1 V
Hysteresis	0 - 100% (adjustable)
Response Time	≤2,5 ms
On/Off delay	0 to 180 s
Switching Frequency	200Hz
Repeatability	0,2 % FS
EMC	according to EU-directive 2004/108/EG*

#### Mechanical specifications

Material Housing	ABS and PC plastic
Size of body	approx Ø18 x 79 mm (D x L)
Fluid connection	G1/8 externally/M5 internally, nickel plated brass
Protection class.	IP65
Electrical connection	4-pin M8, nickel plated brass

\* shielded cable recommended

#### Environment

Operating temp.	-10 to +50 °C
Storage temp.	-20 to +85 °C
Chock	10G, XYZ
Vibration	10 to 55 Hz, 1,5 mm, XYZ, 2h
Humidity	10 to 90% RH

#### Indication

LED	Multicoloured (yellow/green)
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#### Media

Media	Filtered, dried lubricated or non lubricated compressed air neutral gases
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Designation	OUT1		OUT2	Overpressure safe (Intermittent)	Weight g	Order no.
	Breakpoint Factory setting	Hysteresis Factory setting				
Vacuum Sensor FEMTO, -1 to 0 bar	46% vacuum/-0,46 bar	3% av FS	1 - 5 V	Max 5 bar	20	520 018 01
Vacuum/Pressure Sensor FEMTO, -1 to +1 bar	0 bar	3% av FS	1 - 5 V	Max 5 bar	20	520 018 21
Vacuum/Pressure Sensor FEMTO, -1 to +10 bar	5 bar	3% av FS	1 - 5 V	Max 16 bar	20	520 018 22

## Accessories

3 m cable fitted with a 4-pin M8 connector on one end and bare wire on the other end.



Designation	Weight	Order no.
Connection cable 3 m	90	590 001 04

### Operating Instructions

<http://www.avac.se/pdf/I-FEMTO.pdf>

