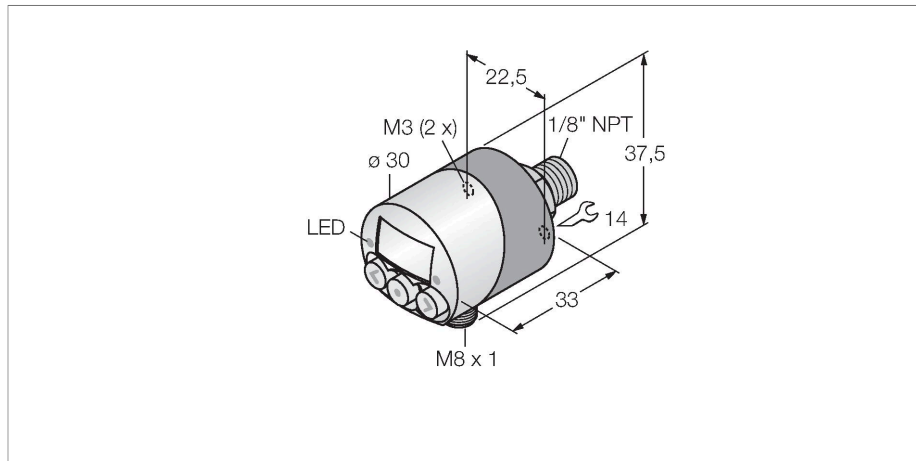


PK01VR-N14AL-2UP8X-V1141

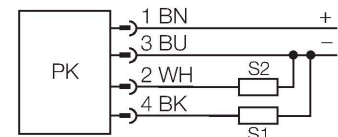
Pressure Sensor – 2 PNP Transistor Switching Outputs



Features

- Compact design
- Pressure and vacuum monitoring
- Display rotatable by 180°
- Excellent EMC properties
- Pressure range -1...0 bar rel.

Wiring diagram



Functional principle

The pressure transmitters of the PK series operate with a silicon measuring cell. Through the pressure applied on the silicon, a pressure proportional signal is generated and electronically processed. The processed signal is made available as switching output. The sensors are intended only for use in non-aggressive gas and compressed air applications. With lubricated compressed air, the pressure connection should point downwards

Technical data

Type	PK01VR-N14AL-2UP8X-V1141
Ident. no.	6833011
Pressure range	
Relative pressure bar	-1...0 bar rel.
	-14.5...0 psi
	-0.1...0 MPa
Admissible overpressure	≤ 5 bar
Response time	< 2.5 ms
Power supply	
Operating voltage	10.8...30 VDC
Short-circuit/reverse polarity protection	yes / yes
Protection type and class	IP65
Outputs	
Output 1	Switching output
Output 2	switching output
Switching output	
Output function	NO/NC, PNP
Accuracy	± 1 % of final value BSL
Rated operational current	0.3 A
Switching frequency	≤ 400 Hz
Switch point:	0...100%
Temperature behaviour	
Medium temperature	0...+50 °C

Technical data

Temperature coefficient zero point T_{k0}	± 0.15 % of full scale/10 K
Temperature coefficient span T_{ks}	± 0.15 % of full scale/10 K
Ambient conditions	
Ambient temperature	-10...+50 °C
Storage temperature	-20...+85 °C
Vibration resistance	10 to 55 Hz, 1.5 mm, XYZ 2 h
Shock resistance	10 g (11 ms) , acc. to IEC 68-2-27
EMV	Emitted interference acc. to EN 61000 EN 61000-6-4* Intrinsically safe acc. to EN 61000-6-2* * shielded connection cable recommended
Housing	
Housing material	Aluminium, Al/PVC
Pressure transducer material	Silicon
Process connection	1/8" NPT male thread
Wrench size pressure connection / coupling nut	SW 14
Electrical connection	Connector, M8 × 1
Reference conditions acc. to IEC 61298-1	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC
Display	
Display	3-digit 7-segment display, rotatable by 180°
Switching state	2 × LEDs, Red/Green
Unit display	LEDs for display of output status report
Programming options	switch/release point, hysteresis/window mode, NO/NC, muting, peak pressure memory
MTTF	acc. to SN 29500 (Ed. 99) 40 °C