

Digital Electronic Pressure Sensor



measuring
•
monitoring
•
analyzing

PSC



- Measuring Range: Vacuum, Compound, and Positive Pressures up to 10000 PSIG
- Accuracy: 1.0% of Full Scale
- Max. Temperature: 176 °F
- Process Connection: 1/4" NPT, G 1/4
- Four Digit LED Rotatable Display
- Easy, 2 Button Programming
- Integrated Password Protection
- Output: Dual NPN/PNP Open Collector, or NPN/PNP Open Collector & 4...20 mA Output, or NPN/PNP Open Collector & 0...10 VDC Output



KOBOLD companies worldwide:

ARGENTINA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLUMBIA, CZECH REPUBLIC, EGYPT, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, ROMANIA, SINGAPORE, SOUTH KOREA, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Instruments, Inc.
1801 Parkway View Drive
Pittsburgh, PA 15205
☎ Main Office:
1.800.998.1020
☎ 1.412.788.4890
info@koboldusa.com
www.koboldusa.com



Description

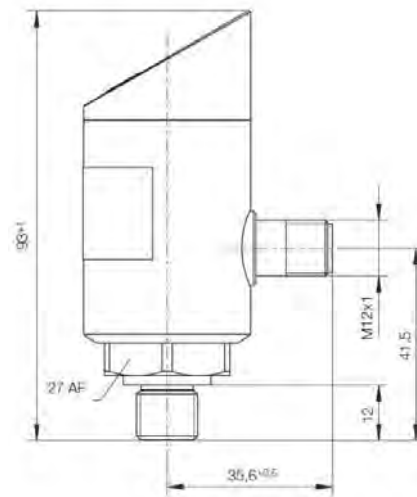
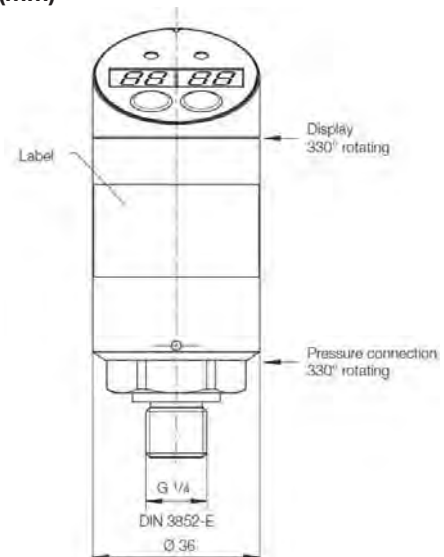
The KOBOLD PSC pressure sensor is used for continuous pressure measuring and allows simple switch-point/transmitter programming without pressurization. For each switching point the contact function, reset points, switch types, and switching function are fully programmable. The transistor output is capable of switching up to 500 mA. Analog output options are available for remote sensing. The ceramic or thin-film cells give the PSC excellent repeatability and longevity, even with wide pressure swings. The rotating display enables the switch to be used in difficult mounting conditions. A high quality stainless steel housing makes the PSC suitable for rugged environmental conditions. For higher pressure ranges, up to 1500 PSIG, all wetted parts are stainless steel. This enables the PSC to handle aggressive medias.



Technical Details

- Display:** 7-segment LED, 0.3" high
-.999...9999 digits
- Unit:** PSIG or Bar selectable
- Accuracy:** 1.0% or full scale, ± 1 digit
- Repeatability:** 0.2% or full scale
- Effect of Temp.:** 0.3% / 10 K
- Temp. Ranges:**
 - Storage** -22...176 °F
 - Media** -4...176 °F
 - Ambient** -4...158 °F
- Alternating Loads:** > 10 million pressure cycles
- Max. Pressure:** see table (page 3)
- Housing:** 303 stainless steel
- Display Electronics:** Plastic
- Wetted Materials:**
 - ≤ 750 PSIG 316L SS, AL₂O₃ (ceramic cell), NBR
 - ≥ 1500 PSIG 316L SS (thin-film cell)
- Process Connection:** 1/4" NPT, G 1/4
- Power Supply:** 12...30 VDC, reverse polarity protected
- Current Consumption:** ≤ 50 mA, without load current
- Electric Connection:** 4-pin connector M12 x 1
- Switching Function:** NC or NO contact
PNP or NPN programmable switching
- Switching Power:** max. 0.5 A
- Setting:**
 - Switching Point** 0.5...100% of full scale
 - Hysteresis** 0.5...100% of full scale
- Analog Output:** 4...20 mA 2-wire or 0...10 V, 3-wire
- Load Resistance:** Voltage output > 10 kΩ
Current output < 500 Ω
- Hysteresis:** 0.3% of range for ceramic cell
0.2% of range for thin-film cell
- Protection Class:** IP 65
- Shock Resistance:** 50 g according to IEC
- Vibration Resistance:** 10 g according to IEC
- Weight:** 0.67 lb

Dimensions (mm)





Max. Pressure

Measuring Range (PSIG)	Overload Limit (PSIG)	Burst Pressure (PSIG)	Sensor Element
-14.5...30	70	85	Ceramic Cell
-14.5...45	70	85	
-14.5...60	145	170	
-14.5...145	290	325	
0...30	70	85	
0...75	145	170	
0...145	290	325	
0...300	580	725	
0...750	1450	1740	
0...1500	2900	3625	Thin-Film Stainless Steel Cell
0...2300	4640	6960	
0...3600	7250	10870	
0...6000	11600	17400	
0...9000	17000	21750	
0..10000	17000	21750	

Order Details (Example: **PSC-132N2P369**)

Display	Process Connection		Measuring Range
	1/4" NPT	G 1/4	
2 PNP/NPN Switching Outputs	PSC-132N2..	PSC-132R2..	..P345 = -30" Hg...30 PSIG ..P438 = -30" Hg...45 PSIG ..P346 = -30" Hg...60 PSIG ..P844 = -30" Hg...160 PSIG ..P145 = -14.5...14.5 PSIG ..P101 = -14.5...30 PSIG ..P047 = -14.5...145 PSIG ..P366 = 0...30 PSIG ..P486 = 0...75 PSIG ..P707 = 0...145 PSIG ..P369 = 0...160 PSIG ..P371 = 0...300 PSIG ..P992 = 0...750 PSIG ..P081 = 0...1450 PSIG ..P377 = 0...1500 PSIG ..P421 = 0...2300 PSIG ..P784 = 0...3600 PSIG ..P456 = 0...3750 PSIG ..P382 = 0...6000 PSIG ..P423 = 0...9000 PSIG ..P383 = 0...10000 PSIG
1 PNP/NPN Switching Output + 4...20 mA Analog Output	PSC-232N2..	PSC-232R2	
1 PNP/NPN Switching Output + 0...10 V Analog Output	PSC-332N2..	PSC-332R2..	