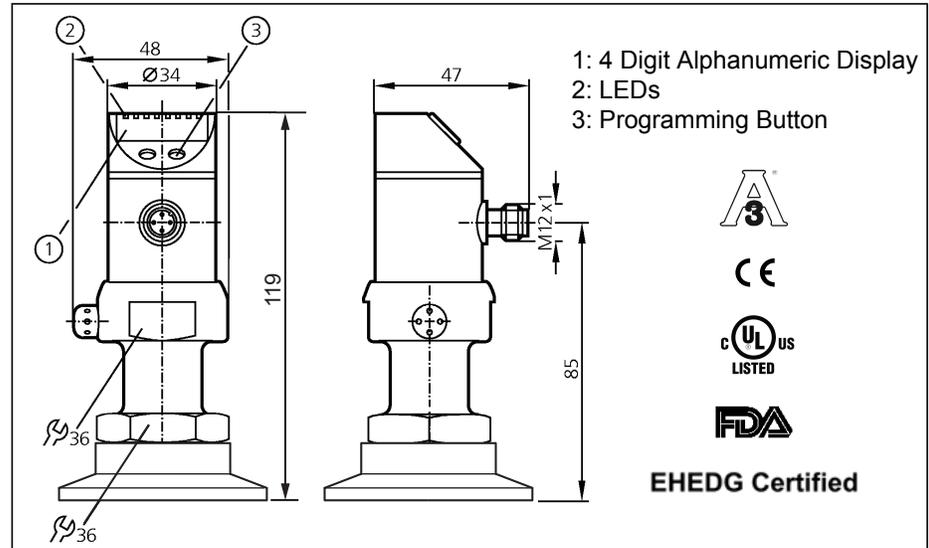


# SANITARY PRESSURE SWITCH WITH DISPLAY

## PI70 SERIES

Electronic Pressure Switch PI70  
Sanitary Process Connection  
2 Outputs:  
OUT1 = Switching or Diagnostic Output  
OUT2 = Switching Output  
4 Digit LCD Display  
Freely Rotatable Housing 350°  
Can be Locally or Remotely  
Programed via EPS Interface  
Zero & Span Adjustable  
Quickly Connects with Water Tight  
Standard M12 Industrial Connector  
*(Cables and Connectors Sold Separately)*  
Available in the following Ranges and  
% of Span with Field Selectable Scale



Model	PSI	BAR	MPa	"H <sub>2</sub> O	mBAR	kPa
PI7093	-14.40 to 362.7	-1.000 to 25.00	-0.100 to 2.500	--	--	--
PI7094	-14.50 to 145.0	-1.000 to 10.00	-0.100 to 1.000	--	--	--
PI7096	-1.800 to 36.26	-0.124 to 2.500	--	-49.78 to 1004	--	-12.40 to 250.0

### Applications

### Electrical Design

### Output

Type of Pressure: Relative Pressure  
Hygienic Systems, Viscous Media and Liquids with Suspended Partivcles  
Liquids and Gases  
DC PNP/NPN  
2 x Normally Open/Closed Programmable or 1 x Normally Open/Closed  
Programmable + 1 x Normally Open/Closed (Diagnostic Function)

Operating Voltage [V]	18...32 Volts DC
Current Rating (mAmps)	2 x 250
Short-Circuit Protection	Yes (Non-Latching)
Reverse Polarity Protection	Yes
Overload Protection	Yes
Integrated Watchdog	Yes
Voltage Drop (V)	< 2
Current Consumption (mAmp)	< 50
Pressure Rating (min)	4 x Pressure Rating
Bursting Pressure (min)	14 x Pressure Rating
Accuracy / Deviations (in % of span) Turn Down 1:1	
Switch Point Accuracy	< ± 0.2
Characteristics Deviation *)	< ± 0.2
Linearity	< ± 0.15
Hysteresis	< ± 0.15
Repeatability **)	< ± 0.1
Long-Term Stability ***)	< ± 0.1
Temperature Coefficients (TEMPCO) in the Temperature Range of 0...80°C (in % of the Span Per 10 K)	
Greatest TEMPCO of the Zero Point	< ± 0.05
Greatest TEMPCO of the Span	< ± 0.15



CHICAGO STAINLESS EQUIPMENT

# SANITARY PRESSURE SWITCH

Power-On Delay Time (sec)	0.5
Min. Switching Response Time (ms)	6
Switching Frequency (Hz)	85
Ambient Temperature (°C)	-25...80
Medium Temperature (°C)	-25...125 (145 max 1 Hr)
Storage Temperature (°C)	-40..100
Protection	IP67 / IP 69K, III
Insulation Resistance (MΩ)	> 100 (500 V DC)
Shock Resistance	DIN IEC 68-2-27: 50 g (11ms)
Vibration Resistance	DIN IEC 68-2-6: 20 g (10... 2000Hz)
Switching Cycles min.	100 Million
EMC	EN61000-4-2 ESD: 4kV CD / 8 kV AD EN61000-4-3 HF Radiated: 10V/m EN61000-4-4 Burst: 2kV EN 61000-4-5 Surge: 0.5/1 kV EN61000-4-6 HF Conducted: 10 V
Housing Materials	Stainless Steel 316L/1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton); PTFE
Materials Wetted Surfaces	Stainless Steel 316L/1.4435; Ceramics (99.9% Al <sub>2</sub> O <sub>3</sub> ); PTFE; Ra < 0.4/Rz 4
Connection	M12 Connector; Gold-Plated Contacts
Remarks	The devise shall be supplied from an isolating source and protected by an overcurrent device such that the limited voltage circuit requirements in accordance with UL 508 are met. *) Linearity, Including Hysteresis and Repeatability; (limit value setting to DIN 16086) **) With Temperature Fluctuations < 10 K ***) In % of Span per Year

## Wiring

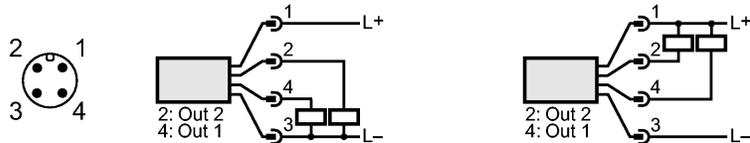
Programmin of the Output Function:

### OUT1

- Hno = Hysteresis / Normally Open
- Hnc = Hysteresis / Normally Closed
- Fno - Window Function / Normally Open
- Fnc = Window Function / Normally Closed
- dESI - Diagnostic Function (Normally Closed)

### OUT2

- Hno = Hysteresis / Normally Open
- Hnc = Hysteresis / Normally Closed
- Fno - Window Function / Normally Open
- Fnc = Window Function / Normally Closed



## DISTRIBUTED BY:

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