

PT-H Series Pressure Transmitters with LED Display

- Silicon oil filled
- Rugged construction
- Stainless steel 316L diaphragm
- Typical G1/4" pressure connection
- Wide measuring range: 0-0.35bar to 400bar
- A wide range of pressure and electrical connections
- Reverse polarity protection and current limit protection
- Output signals: 4-20mA or 0-10V, 0-5V voltage signal output



Descriptions

PT-H series pressure sensors utilize piezoresistive technology with a high performance silicon chip inside, the applied pressure acts on stainless steel 316L diaphragm, then pass to the silicon chip through silicon oil, available pressure ranges spanning from 5 psig up to 5800 psig.

Technical data

Performance (EN 60770)

Total error band (inside the compensated temperature range)	±0.5%
Response time	< 4 ms
Overload pressure	2.0 × FS (≤ 250 bar) 1.5 × FS (> 250 bar)
Pressure range	-1~0, 0~0.35...400bar
Pressure type	vented gauge, sealed gauge, absolute
Stability	≤0.2%FS/Year
Temp coefficient	±0.03%FS/°C

Electrical specifications

	4-20mA Current output	0-10V, 0-5V Not Ratio-metric	Ratio-metric (10-90% of Vs.)
Supply voltage [UB]	12-36V	12-36V	5 V ± 10%
Load [RL] (load connected to 0 V)	RL ≤ (UB-9.0V)/0.02 A	---	---
Polarity protected	yes	yes	yes
Short-circuit protected	yes	yes	yes

Environmental conditions

Medium temperature range	-40°C → +100°C
Ambient temperature range (depending on electrical connection)	-20°C → +80°C
Compensated temperature range	-10°C → +70°C
EMC - Emission	EN 61000-6-3
EMC - Immunity	EN 61000-6-1
Insulation resistance	>100 MΩ at 250 V

Mechanical characteristics

Materials	Diaphragm	Stainless steel 316L / Hastelloy C
	Enclosure	Stainless steel 304
	Electrical connections	PA66
Pressure connection	G1/4, G1/2", PT1/2", 1/2"NPT	
Electrical connection	DIN43650A(Hirschmann), Direct cable, M12*1	

Dimensions

DIN43650A connection	Direct cable connection	DIN43650A connection	Direct cable connection

Electrical connections

	DIN43650A (Hirschmann) connection	Direct cable connection
4-20mA Current output signal (2 wire)	Pin1: + supply Pin 2: + output Pin 3: Not used Earth: Not connected	Red: + supply Green/Yellow: + output
0-10V, 0-5V, 0.5-4.5V Voltage output signal (3 wire)	Pin 1: + supply Pin 2: - supply Pin 3: + output Earth: Not connected	Red: + supply Green: - supply Yellow: + output
IP protection (fulfilled together with mating connector)	IP 65	IP 65