

IP Series

Industrial Pressure Sensor Platform



DESCRIPTION

Honeywell's Industrial Pressure (IP) series is a new platform of general purpose pressure sensors designed to offer repeatable, reliable, and accurate pressure measurements over time. These rugged, stainless steel, all-welded pressure sensors are pre-configured with tailored features and options for a wide range of demanding applications. All models are designed to work with a variety of media and built to provide consistent performance in harsh environments.

FEATURES

- Rugged design - all welded, 300 series stainless steel and Hastelloy®
- Accuracy options: $\pm 0.15\%$, $\pm 0.25\%$ BFSL
- Voltage outputs
- Current output
- Total error band that includes non-linearity, repeatability and hysteresis as well as temperature error.
- Pre-configured pressure sensor package with most commonly requested options
- IP65 rated for protection for harsh environments
- < 2 ms response time provides accurate, high-speed measurement
- CE and RoHS compliant*

* RoHS compliant for 100 psi to 5000 psi [7 bar to 350 bar]

Configurations for voltage and current measurements are fully temperature compensated and calibrated for pressure ranges from 0.5 bar to 700 bar and 5 psi to 10K psi.

Customers can choose from two different accuracies to meet their specific application requirements:

IPG1 offers $\pm 0.15\%$ BFSL (Best Fit Straight Line) accuracy

IPG2 offers $\pm 0.25\%$ BFSL (Best Fit Straight Line) accuracy

APPLICATIONS

- General industrial process control
- Factory automation/Industrial equipment
- Medical equipment systems
- Pump/Compressor control
- Power generation
 - Wind
 - Propulsion
- Transportation
 - Construction equipment
 - Rail equipment testing

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TABLE 1. PRESSURE RANGE SPECIFICATIONS (AT 25 °C [77 °F])

psi (gauge)									
Pressure	5	10	15	25	30	50	75	100	150
Proof pressure	20	40	60	100	120	200	300	400	450
Burst pressure	1000	1000	1000	1000	1000	1000	1000	1000	1500

psi (gauge)										
Pressure	200	250	500	750	1000	1500	3000	5000	7500	10000
Proof pressure	600	750	1500	2250	2000	3000	6000	7500	15000	15000
Burst pressure	2000	2500	5000	7500	10000	15000	30000	30000	15000	15000

bar (gauge)									
Pressure	0.5	1	2	3.5	4	7	10	16	25
Proof pressure	2	4	8	14	16	28	30	48	75
Burst pressure	100	100	100	100	100	100	100	160	250

bar (gauge)							
Pressure	40	60	100	160	250	350	700
Proof pressure	80	120	200	320	500	700	1000
Burst pressure	400	600	1000	1600	2068	2068	1000

TABLE 2. PHYSICAL AND ENVIRONMENTAL SPECIFICATIONS

Parameter	Characteristic
Material in contact with media	Port: 300 Series stainless steel, Hastelloy®
Housing material	300 Series stainless steel
Weight	
100 psi to 5000 psi	158 g [5.6 oz] (1/4 BSP port with DIN 43650)
5 psi to 75 psi and 7500 psi to 10000 psi (0.5 bar to 3.5 bar, 700 bar)	186 g [6 oz] (1/4 BSP port with DIN 43650)
Shock	100 g peak [11 ms]
Vibration	MIL-STD-810C, Figure 514.2-5, Curve AK, Table 514.2-V, Random Vibration Test [overall g rms = 20.7 min.]
Compensated temperature range	
100 psi to 5000 psi	-10 °C to 85 °C [14 °F to 185 °F]
5 psi to 75 psi and 7500 psi to 10000 psi (0.5 bar to 3.5 bar, 700 bar)	4 °C to 60 °C [40 °F to 140 °F]
Operating & storage temperature range	-40 °C to 125 °C [-40 °F to 257 °F]
Approvals	CE, RoHS* (*RoHS compliant for 100 psi to 5000 psi [7 bar to 350 bar])