APPLICATIONS
An affordable digitally compensated instrument for general industrial applications.
• Process Automation
• Compressor Control
• Hydraulic Systems
• Engine Monitoring
• Pump Control
• Pneumatics
• Refrigeration Equipment
• Presses
• Machine Tools
• Other General Industrial Applications

FEATURES
• 0.25% accuracy class
• Ranges 30 psi through 20,000 psi
• –40 to +125°C temperature capability
• All welded pressure construction
• Proven polysilicon thin film sensor
• Precision ASIC based electronics
• High EMI/RFI immunity rating
• Highly configurable
• Voltage and current outputs
• Choice of electrical connections

PERFORMANCE SPECIFICATIONS
Ref. Temperature, 21°C ±1°C (70°F, ±2°F)
Accuracy:
Static Accuracy Class: ±0.25% of span (BFSL Method) including non-linearity, hysteresis, non-repeatability at reference temperature
Temperature Effect:
~20°C to 85°C <±1% of Span – Total Error Band
~40°C to -20°C <±1.5% of Span – Total Error Band
~85°C to 125°C <±1.5% of Span – Total Error Band
Total Error Band includes the combined effects of non-linearity (Terminal Point Method), hysteresis, non-repeatability, temperature and zero offset and span setting errors. For higher performance availability consult factory
Stability: Less than ±0.25% span/year
Durability: Tested to 50 million cycles

ENVIRONMENTAL SPECIFICATIONS
Temperature:
Compensated –40 to 125°C (–40 to 257°F)
Operating –40 to 125°C (–40 to 257°F)
Storage –40 to 125°C (–40 to 257°F)
Humidity: 0 to 100% R.H., no effect

FUNCTIONAL SPECIFICATIONS
Select from over 25 pressure ranges starting at 30 psi and running through 20,000 psi. Compound (vacuum & pressure) ranges are also available, see below.
Overpressure (F.S.):    Proof   Burst
750 psi & below  200% FS 1000% FS
1500 psi  200% FS  500% FS
3000 psi  200% FS  500% FS
5000 psi   150% FS  500% FS
7500 psi  120% FS  500% FS
10,000 psi   120% FS  240% FS
20,000 psi  120% FS  240% FS
Vibration: Random vibration (20 g) over temperature range (~40° to 125°C). Exceeds typical MIL. STD. requirements
Shock: 100gs, 6 ms
Drop Test: Withstands 1 meter on concrete 3 axis
Response Time: Less than 1 msec
Warm-up Time: Less than 500 msec typical
Position Effect: Less than ±0.01% span, typical

ELECTRICAL SPECIFICATIONS
Output Signals Available:
Voltage Output  Excitation Current
0-5 Vdc, 3 wire  9-36 Vdc 5mA
0-10 Vdc, 3 wire 14-36 Vdc 5mA
1-5 Vdc, 3 wire  9-36 Vdc 4mA
1-6 Vdc, 3 wire  9-36 Vdc 4mA
Ratiometric Output
0-4-5 Vdc, 3 wire  5 Vdc ±0.5 Vdc 3.5mA
Current Output
4-20mA, 2 wire  9-36 Vdc
Reverse Polarity & Miswired Protected: Yes
Insulation Breakdown Voltage: 100 Vac
Insulation Resistance: Greater than 100 megohms at 100 Vdc
Model T2 Pressure Transducer

UL Recognized component per IL-61010-1, CDA 22.2
6101-1 Electrical Equipment for Measurement, Control and Laboratory use.

PHYSICAL SPECIFICATIONS

Wetted Materials: 304SS pressure connection and 17-4PH SS sensor diaphragm
Housing: 20% Glass Reinforced Nylon, Fire retardant to UL94 V1
Available Process Connections (Male):
¾ NPT, ¼ BSP, ¼ NPT, G1/8, ¼-20 UNF-2A
For other connections consult factory
Ingress Rating: Enclosure meets NEMA 4X, IP65

ELECTRICAL TERMINATION

Type

| Configuration (T2) | M12 x 1, 4 pin, Circular style |

Pressure Connection

M01 ½ NPT-male
M02 ½ NPT-male
MEK ¼-20 SAE-male
MG2 ¼-19 bsp male

Accuracy ±0.25% Static

Accuracy Class (BFSL)

1.0% Total Error Band

~20°C/+85°C
1.5% Total Error Band

–40°C/-20°C, 85/125°C

Output Signal

| 05 = 0-5 Vdc |
| 10 = 0-10 Vdc |
| 15 = 1-5 Vdc |
| 16 = 1-6 Vdc |
| 42 = 4-20mA |
| RM = 0.5-4.5 Vdc Ratio Metric to 5Vdc supply |

Electrical Termination

M12 – Mates to Hirschmann 933 172-100 or similar
EN 175301-803, Form A (DIN 43650, Form A) – Mates to Hirschmann GDM 3009 or similar
D0 = no mating conn.
H1 = w/mating conn., no cable
L1 = w/mating conn., 3’ shielded cable

Power Supply Voltage vs. Loop Resistance (4-20mA ONLY)

To Determine minimum loop supply voltage:

LSV(min)=9(V)+[.022(A)*RL ]

Where:

LSV= Loop Supply Voltage (Vdc)
RL = RS+ RW (ohms)
RS = Sense Resistance (ohms) [Measuring Instrument]
RW = Wiring Resistance (ohms)

Pressure Ranges

psi Ranges

30# = 30 psi
50# = 50 psi
60# = 60 psi
100# = 100 psi
150# = 150 psi
200# = 200 psi
300# = 300 psi
400# = 400 psi
500# = 500 psi
750# = 750 psi
1000# = 1000 psi
1500# = 1500 psi
2000# = 2000 psi
3000# = 3000 psi
5000# = 5000 psi
6000# = 6000 psi
7500# = 7500 psi
10000# = 10000 psi
15000# = 15000 psi
20000# = 20000 psi

Ranges in bar, kPa and mPa are also available

How To Order

Consult Factory for Available Options

All specifications are subject to change without notice.
All sales subject to standard terms and conditions.
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