KPG
HIGH PRECISION PRESSURE TRANSDUCER

Flow
Pressure
Level
Temperature
measurement
monitoring
control

P2

- **Advanced Thin Film or Piezoresistive Sensing Technology**
- **Variety of Output Signals**
- **CE EMI Compliant**
- **Absolute or Gauge Measuring Ranges**
- **High Overpressure Protection**
- **Fast Response Time**
- **Stainless Steel Construction**
- **Pressures to 60,000 PSIG**
- **Easy-to Use Hirchmann Connector Standard**

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Model:
KPG

Features

- Advanced thin film or piezoresistive sensing technology
- Variety of output signals
- CE EMI compliant
- Absolute or Gauge measuring ranges
- High overpressure protection
- Fast response time
- Stainless steel construction
- Pressures to 60,000 PSIG
- Easy-to-use Hirschmann connector standard

KOBOLD KPG series transducers are intended for heavy duty, high accuracy applications. Utilizing either thin film or piezoresistive technologies, the KPG can achieve accuracies of ±0.12% at pressures up to 60,000 PSIG while offering shock resistance, extreme long term sensor stability and excellent noise immunity (CE compliance.) Along with these features, the KPG offers protection against common installation problems such as reverse polarity wiring, overvoltage and short circuiting.

As with all sensors in the KP line, KPG sensors undergo 100% inspection and testing to ensure a trouble-free installation process.

KOBOLD KPG Pressure Transducer

Specifications

Accuracy
- **Standard:** ±0.25% of full scale
- **Optional:** ±0.12% of full scale
- **Included Components**
  - **Repeatability:** ±0.05% of full scale
  - **Hysteresis:** ±0.1% of full scale

Fittings: ¼", ½" male NPT or 9/16-18 aminco

Materials of Construction
- **Wetted Parts:** 316 SS
- **Case:** 304 SS

Temperature Information
- **Compensation:** 32°F to 175°F
- **Drift:** ±0.02%/50°F
- **Medium:** -22°F to 212°F
- **Ambient:** 14°F to 175°F
- **Storage:** -40°F to 212°F

Shock Sensitivity: < ±0.05% full scale @100g for 20 ms

Vibration Sensitivity: < ±0.01% full scale @20g & 0-2000 Hz

Pressure Limitations
- **Vacuum & 15-7,500 PSI Ranges**
  - **Proof Pressure:** 2 x range
  - **Burst Pressure:** 4 x range
- **10,000-60,000 PSI Ranges**
  - **Proof Pressure:** 1.2 x range
  - **Burst Pressure:** 2 x range

Electrical Data
- **Output:** -See ordering table
  - **Adjustability:** ±5% of span
- **Input Power**
  - **Current Output:** 12-30 VDC
  - **Voltage Output:** 14-30 VDC
- **Response Time:** < 1 ms, 10-90% FS
- **Frequency Limit:** 150 Hz
- **Protection**
  - **Environmental:** NEMA 4X
  - **Fault:** Reverse polarity, overvoltage, short circuit

Applications

- Hydraulic & pneumatic systems
- Industrial machinery & machine tools
- Injection molding machines
- Stamping & forming presses
- Pumps & compressors
- Laboratory & test equipment
- Railroad equipment
- HVAC systems
- Refrigeration equipment
- Marine
- Power generation
- Construction
- Petrochemical
- Water management

KPG Ordering Information

KPG = High Precision, Heavy Duty Pressure Transducer

Range = Pressure Range Abbreviation

Available Measuring Ranges

0030V = 0 to 30" Hg	**00002** = 2 PSIG	**00100** = 100 PSIG	**01000** = 1000 PSIG	**15000** = 15000 PSIG
30/15 = - 30" Hg to 15 PSIG	**00003** = 3 PSIG	**00150** = 150 PSIG	**02000** = 2000 PSIG	**20000** = 20000 PSIG
30/30 = - 30" Hg to 30 PSIG	**00005** = 5 PSIG	**00200** = 200 PSIG	**03000** = 3000 PSIG	**30000** = 30000 PSIG
30/45 = - 30" Hg to 45 PSIG	**00010** = 10 PSIG	**00300** = 300 PSIG	**05000** = 5000 PSIG	**40000** = 40000 PSIG
30/60 = - 30" Hg to 60 PSIG	**00015** = 15 PSIG	**00500** = 500 PSIG	**07500** = 7500 PSIG	**50000** = 50000 PSIG
	00030 = 30 PSIG	**00750** = 750 PSIG	**10000** = 10000 PSIG	**60000** = 60000 PSIG
	00060 = 60 PSIG			

Accuracy

- **1** = ± 0.25% of full scale (standard)
- **2** = ± 0.12% of full scale

Output Signal

- **1** = 4-20 mA, 2-wire (standard)
- **2** = 0-5 VDC, 3-wire
- **3** = 1-5 VDC, 3-wire
- **5** = 0-10 VDC, 3-wire

Fittings

- **2** = 1/4" NPT (20,000 PSIG max.)
- **6** = 9/16 - 18 aminco female (standard on 30,000 to 60,000 PSI versions)
- **8** = 1/2" NPT male (standard)

Electrical Connections

- **1** = 36" cable with Hirschmann connector
- **3** = 6 pin Bendix (Ni-plated aluminum)
- **6** = 1/2" NPT male conduit with 36" cable (polyurethane cladding)
- **8** = Hirschmann with mating connector (standard)

Options

- **D** = Surge damping orifice

Sample KPG Specification

KPG	-00500	-1	-2	-8	-8	-D

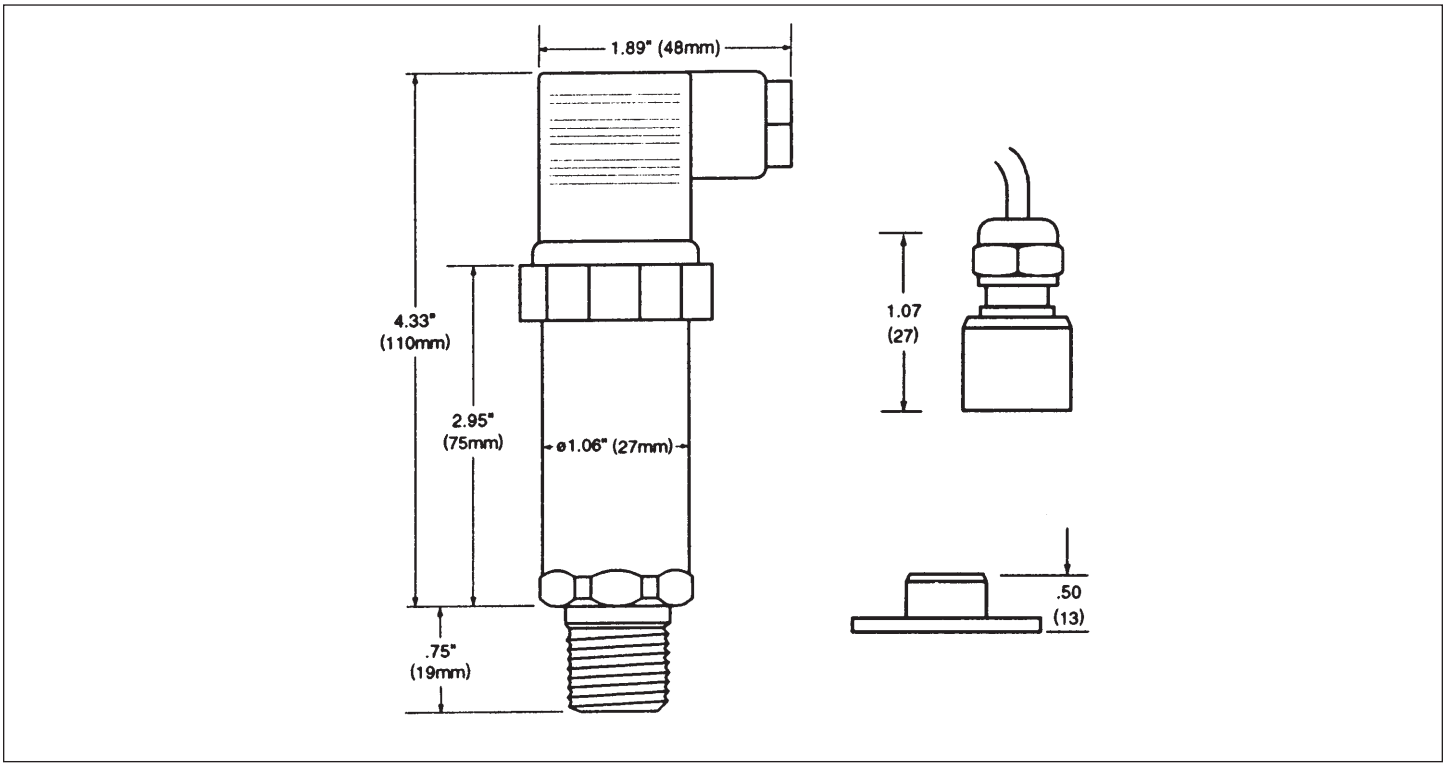
Diaphragm Seals *

KP-1240	1 1/2"	Tri clamp® diaphragm Seal with glycerine fill
KP-1250	2"	Tri clamp® diaphragm Seal with glycerine fill
KP-2002 SSG	3/4"	NPT 316 SS Flush diaphragm Seal with glycerine fill
KP-2002 HB2H	3/4"	NPT Hastelloy B2 Flush diaphragm Seal with halocarbon fill

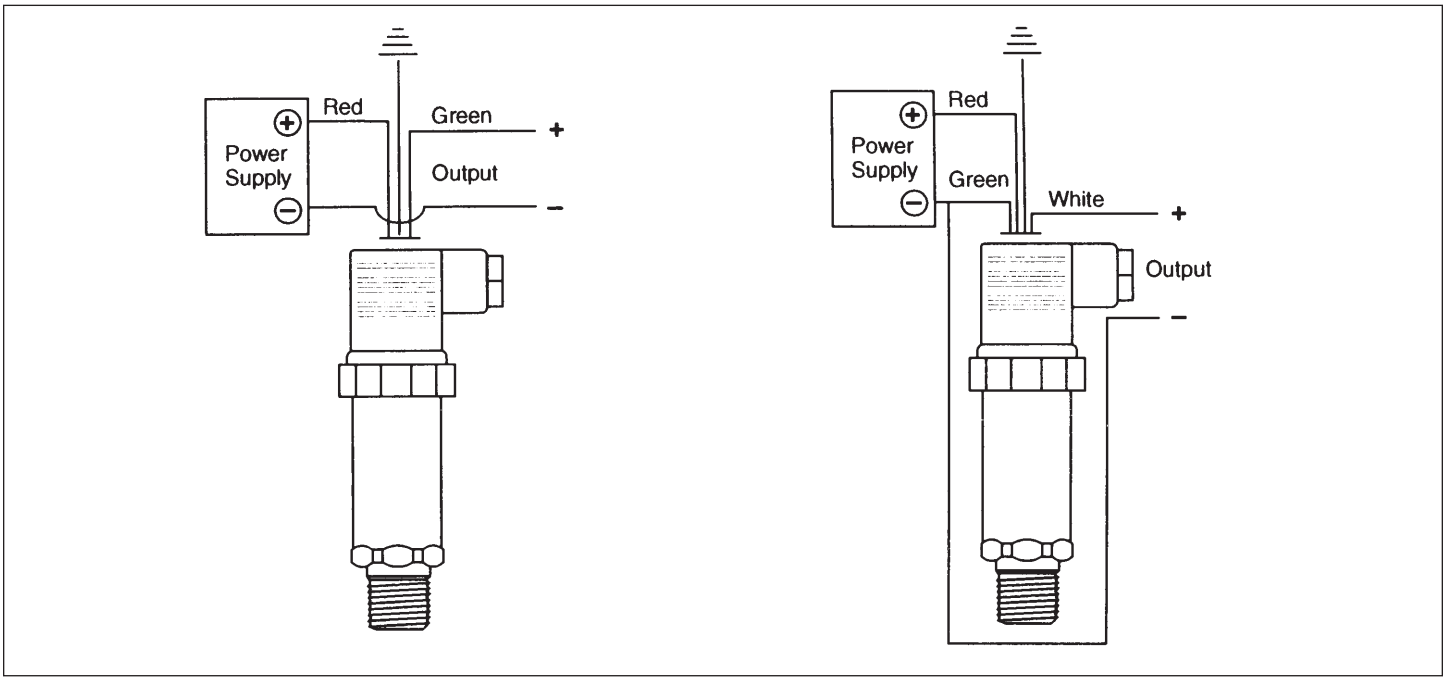
* Diaphragm Seals -usable on ranges 0-60 PSIG and higher.

P2

Dimensions



Wiring Diagrams and Electrical Connections



2 WIRE WIRING DIAGRAM EXAMPLE

4-20 mA 2-Wire Current Loop

Signal	DIN 43650	Wire Color
Supply + (12-30 VDC)	Pin 1, A	RED/BROWN
Signal – (4-20mA)	Pin 2, B	GREEN

3 WIRE WIRING DIAGRAM EXAMPLE

3-Wire Voltage Output

Signal	DIN 43650	Wire Color
Supply + (14-30 VDC)	Pin 1, A	RED/BROWN
- Supply, – Signal	Pin 2, C	GREEN
Signal + –	Pin 3, B	WHITE