

# GAUGE PRESSURE TRANSDUCER



## MODEL GPX 220

### FEATURES

- Loop powered 4-20 mADC output
- Pressure ranges to 75 PSI (173 ft.), 10:1 turn-down
- Rugged Construction:
  - Lightning protection
  - Transient protection
- In-circuit calibration
- Manual level simulation
- Selectable damping

### APPLICATIONS

- Closed system pump control
- Tank level sensing:
  - Elevated tanks
  - Stand pipes
  - Ground storage
- Waterworks distribution system pressure

The Contegra Model GPX 220 is a reliable and accurate gauge pressure transducer. It provides superior service in demanding pressure or level sensing applications including elevated tanks, ground storage reservoirs, clearwells, standpipes, etc. The GPX 220's 2-wire loop-powered 4-20 mADC output signal is directly proportional to the calibrated pressure range.

The transmitter provides convenient non-interactive signal spanning and offsetting adjustments, in-circuit calibration, selectable damping, manual signal simulation (for easy

range adjustment and process simulation) and is protected by three levels of transient protection on the 4-20 mA loop. For added convenience and system reliability, the transmitter can be calibrated without disconnecting from the process loop.

Model GPX 220's integral gauge protector and oil fill provide electrical isolation of the sensing element from the sensed media and offers increased immunity to electrical surges caused by lightning.

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# MODEL GPX 220

## Engineering Specs

A gauge pressure transducer shall be provided to sense the system pressure of the \_\_\_\_\_ at the location as shown on the plan drawings and in accordance with the manufacturer's recommendations. The transducer shall be a 4-20 mA DC, 2-wire, 12-40 VDC loop-powered type with its output signal directly proportional to the measured level excursion. The transducer shall be UL Listed.

The transducer shall be electrically isolated from the sensed media. The sensor shall provide an output that is directly proportional to the calibrated range. The sensor shall have a brass 1/4" NPT bulkhead fitting for connection to the system's pressure tap. The transmitter shall contain:

- 1) easily accessible calibration and ranging adjustments allowing for a 10:1 turndown
- 2) integral level simulation for ranging adjustment and system test purposes
- 3) an integral, selectable time constant for signal damping of 0.1, 2, and 5 seconds
- 4) in-circuit calibration circuitry for measuring the transmitter's output without disconnecting from the loop power.

The transmitter shall provide three levels of transient protection on the 4-20 mA loop: a gas tube arrestor for suppression of high voltages, transorbs, and varistors for fast clamping of lower voltage transients. The transducer shall be a CONTEGRA Model GPX 220.

## Features and Benefits

### Pressure Ranges (PSI)\*:

- 5 (0-11.5 ft. max.)
- 15 (0-34.6 ft. max.)
- 30 (0-69.3 ft. max.)
- 75 (0-173.2 ft. max.)

*Consult the factory for other ranges.*

**Pressure Overload:** Five times full scale of the sensor (gauge guard to 200 PSI waterhammer)

**Accuracy:** 0.25% over the full-scale pressure range including nonlinearity, hysteresis, and non-repeatability

**Dimensions:** 8" H x 3" W x 2" D

**Approvals:** UL Listed as pictured

**Operating Temperature:** 0° to +75° C (+32° to +167° F) non-freezing

**Relative Humidity:** 95% non-condensing

**Damping:** Selectable time constant of 0.1, 2 and 5 seconds

**Input/Output:** Loop powered 4-20mA output, 12-40 VDC Class 2 supply into 0-1400 ohms

**Span and Offset:** Turn-down 10:1

**Electrical Connections:** Cage clamp type barrier terminals for AWG #12-22

**Pressure Connection:** Brass, 1/4" female NPT

## Ordering Information (SEE EXAMPLE BELOW\*\*)

Model	PSI Range	Engr Units	Offset	Span	Options
GPX 220	XXX * Ref Above	X P - PSI F - Ft	XXX	XXX	ENCLOSURE A = Enclosed - Nema 4X FRP OTHER M = Meter (digital) G = Gauge (3.5 Inch) V = Block and Bleed valves C = Condensation/freeze protection P = Power (local loop power)

*Consult your Contegra representative or the factory for additional options.*

### \*\*A typical model number is GPX 220 - 15 - F - 20 - 10 - AGV

GPX 220 with 15 PSI sensor, calibrated in feet, 20 foot offset, 10 foot span, includes enclosure, gauge, and valves.

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