

Pressure Transmitter

Model 430/530

ISO 9001 Qualified

Application

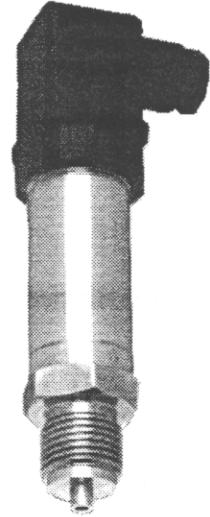
Piezo-resistive pressure transmitters are used to measure pressures in hydraulic and pneumatic system, chemical plants and process engineering as well as in air conditioning and environmental technology.

Model designation

| | |
|-----|--|
| X30 | pressure instrument pipemounted piezo-resistive case size |
| 430 | output 1-6V |
| 530 | output 4-20mA, 2 wire (standard) |

Pressure ranges

| Gauge pressure PSI | Absolute Pressure PSI |
|-----------------------|-----------------------------|
| 30" to 0 | 0 to 10 |
| 30" to 10 | 0 to 15 |
| 30" to 50 | 0 to 25 |
| 0 to 5 | 0 to 50 |
| 0 to 10 | 0 to 100 |
| 0 to 15 | 0 to 150 |
| 0 to 25 | 0 to 200 |
| 0 to 50 | 0 to 500 |
| 0 to 100 | 0 to 1,000 |
| 0 to 150 | 0 to 1,500 |
| 0 to 200 | 0 to 2,500 |
| 0 to 300 | 0 to 4,000 |
| | 0 to 6,000 |
| | 0 to 10,000 |



Supply voltage error

0.2% max. per 10V

Output

4-20mA burden $\frac{U_B - 13V}{0.02A}$ max.

Extra Codes

| | |
|-----|---|
| /44 | flange pressure connection with weld-in socket |
| /45 | miniature flange pressure connection DN 25 to DIN 28403** |
| /64 | flush diaphragm pressure connection 3/4" straight or NPT |
| /73 | with cable attached |
| /91 | absolute pressure |
| /93 | special ranges |

Ordering Example

Piezo-resistive pressure transmitter
Type: Model 430/530
Range: 0 to 50 PSI

Technical data

Case

316 SS

Parts in contact with medium

316 SS
316 SS diaphragm

Pressure connection

1/2" pipe NPT (standard)
other connections optional

Electrical connection

standard terminal box Type AF
up to AWG 16
Pg 9 cable gland
1/4" NPT connection available

Hysteresis

not exceeding 0.1%

Supply U_B

standard 13 to 30VDC
with reverse polarity protection
max. permitted noise 1V_{pp}
max. current 30mA

1-6V burden 2k Ohm min.
Adjustable by potentiometer
zero: typically > +/- 10%
span: typically > +/- 10%

Burden error

0.15% max.

Characteristic

linear

Deviation from characteristic after starting point calibration

0.6% or less according to DIN/IEC 770
0.5% BFSL
0.25% optional

Overload limit to VDI/VDE 2184

200% full scale below 2,500 PSI
150% full scale 2,500 to 6,000 PSI
120% full scale above 6,000 PSI

Permitted ambient temperature

-20 to 250°F Below 500 PSI
 -20 to 200°F for code /73
 0 to 185°F to 500 PSI & above

Permitted medium temperature

-20 to 250°F

Ambient temperature error

within range 0-212°F
 typically less than 0.01% /°F
 0.03% /°F max.

Response time

3 millisecond max.

Effect of sinusoidal vibration

less than 0.06% /g on range 20 PSI
 and 14g acceleration decreases with increasing range

Nominal position

up to 60 PSI vertical (see dimensions)
 above 60 PSI unrestricted

Protection

IP 65 (NEMA 5)

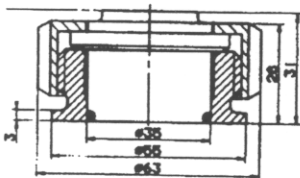
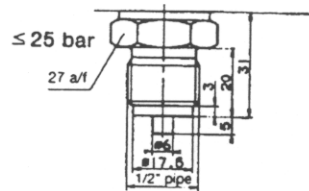
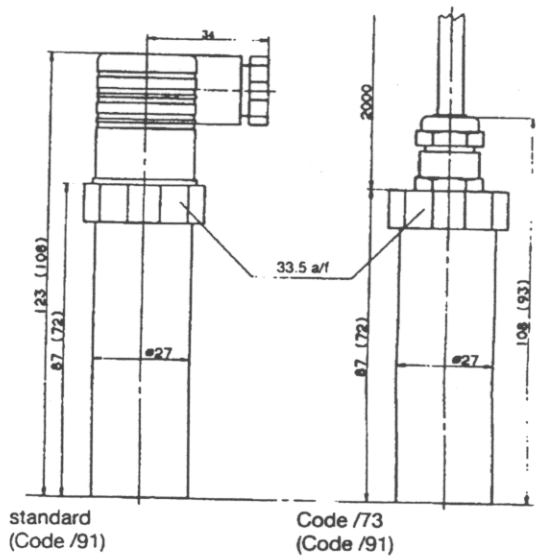
Weight

typical 9oz.

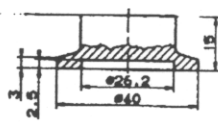
Connection diagram

| Connection | Symbol | Termination | |
|------------------------|--------|---|----------------|
| | | plug | cable |
| Supply 13-30 V d.c. | | 1 L+ 2 L- | white grey |
| Output 1-6 V | | 2 - 3 + | grey yellow |
| Output 4-20 mA | | 2 - 3 + | grey yellow |
| Output 2-wire | | proportional current 4-20 mA in supply | |
| Protective ground | | | |
| Screen | | | black |

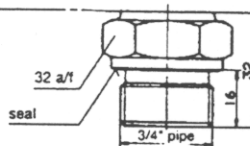
Dimensions



Code /44



Code /45*



Code /64