

Gage/Absolute Pressure Transmitter GXR Series



General Process Pressure Measurement

Design & Application

The GXR Series Pressure Transducer is developed to provide our customers with reliability in aggressive, high cyclical environments, such as water hammer and spiking, where other transmitters fail. Key feature of the sensing element is its isolation from induced stresses such as mounting torque, thermal excursions, and vibration/shock. Every Dylix GXR Series is rated to NEMA 4X standards regardless of the output (mVdc, Vdc or mAdc) or pressure format (gage, absolute or vacuum). Pressure ranges are available from 0-1 psig through 0-20,000 psig.

Manufacturing & Quality

The GXR is built using an advanced modular assembly process that allows high customization and short delivery times. Sophisticated manufacturing techniques, extreme environmental burn-in and thorough residual stress relieving procedures ensure the GXR Series maintains its performance over time.

Dylix's Customer Service

Each transducer is delivered with a NIST traceable calibration certificate. Annual re-calibration and repair/refurbishment services are available.

Standard Features

- · Rugged All-Welded Pressure Cavity
- ≤±0.25% FSO Static Accuracy
- 0-1 psi through 0-20,000 psi
- NEMA 4X packaging

Optional Features

- · ≤± 0.04% FSO Static Accuracy
- · 0-10V Output
- Internal Shunt Cal Resistor
- Hastelloy C-276 Wetted Parts
- · Zero & Span controls
- Various connector styles
- Intrinsically Safe

Contact Dylix Sales for Other Custom Applications... sales@dylixcorp.com • 716.773.2985

Specifications: GXR Series

Pressure Transmitter

0-1 through 0-20K psi

Baseline Configuration Specs Represented.

Modifications Encouraged - See Below
Custom Designs Available

Electrical

Excitation

GXR1 2-15 Vdc GXR2, GXR3, GXR7 9-38 Vdc*

Output

GXR1 1-2 mV/V* GXR2 0-5 Vdc* GXR3 4-20 mAdc

GXR7 4-20 mAdc Intrinsically Safe

Zero Balance ≤± 1% FSO **FSO Setting** ≤± 1% FSO

Resolution Infinite (± 0.001% FSO usable)

Response Time

 $\begin{array}{lll} \text{GXR1} & < 1 \text{ mS} \\ \text{GXR2, GXR3, GXR7} & < 5 \text{ mS} \\ \end{array}$

Insulation Resistance 1,000 M Ω @ 50 Vdc

Reverse Polarity Protected **Warm-up** < 10 mS

Power Supply Effect ≤± 0.002% FSO per V input

(GXR2, GXR3, GXR7)

EMI/RFI Internal Filtering (GXR2, GXR3, GXR7)

Short Circuit Protected 0 Vdc (GXR2, GXR3, GXR7)

Mechanical

Pressure Ranges 0-1 through 0-20K psi

(Customer may specify any range/eng. unit) (Absolute, Vacuum or Compound are available options)

Proof Pressure* 2X Full Scale*
Burst Pressure* 5X Full Scale*

Materials

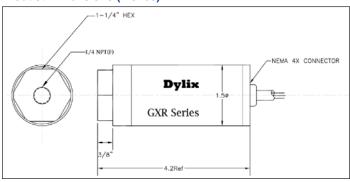
Wetted Parts 316 & 17-4 ss* Non-wetted Parts 316 ss

Pressure Port ¼" NPT (Female)*

Electrical Connector NEMA 4X cable exit (24" cable)*

DimensionsPer DrawingWeight15 oz (nominal)

Product Dimensions (inches)



Performance

Static Accuracy ≤± 0.25% FSO* (BFSL, RSS)*

(Combined effects of non-linearity,

hysteresis & repeatability)

Repeatability ≤± 0.05% FSO

Temperature Effects ≤± 1.5% FSO over comp range*

(Combined effects of Zero & FSO

with reference at 70° F)

Long Term Stability ≤± 0.25% FSO per year

Environmental

Compensated Temp Range 0° to 170° F
Operating Temp Range -40° to 200° F
Storage Temp Range -40° to 250° F

Certifications

CSA C/US Intrinsically Safe Class1 Div 1 Groups A,B,C,D T4 CSA C/US Intrinsically Safe Zone 0,1&2 A/Ex ia IIC T4 Ga

Entity Parameters

Vmax, Ui	32 Vdc
lmax, li	100 mA
Pmax, Pi	800 mW
Ci	0.055 μF
Li	0 mH

Standard Wiring

Model	Output	+ Power	- Power	+ Signal	- Signal
GXR1	mV/V dc 4 wire	Red/Pin 1/Pin A	Black/Pin 2/Pin B	Green/Pin 3/Pin C	White/Pin 4/Pin D
GXR2	0-5 (10) Vdc 3 wire	Red/Pin 1/Pin A	Black/Pin 2/Pin B	Green/Pin 3/Pin C	Black/Pin 2/Pin B
GXR3	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	
GXR7	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	

*Options Available





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Datasheet GXR-1118

Modifications and Warranty

MODIFICATIONS: Transducer/Transmitter applications vary greatly. As such our designs are flexible. Choices such as pressure ports, electrical termination, material compatibility, and performance are a few of the many options available. Specifications on this datasheet represent standard configuration only. Product and company names that may be listed are trademarks of their respective companies. Any and all specifications subject to change without notice.

WARRANTY: Dylix Corporation warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Dylix Corporation's obligation shall be limited to correcting any defective material, FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Dylix Corporation. This warranty is in lieu of all other warranties expressed or implied.