

Ultra-High Pressure Transmitter BR Series



Up to 100K psi Pressure Measurement

Design & Application

The BR Series Pressure Transducer is designed for the OEM or end user where ruggedness, high performance and reliability are required at a competitive price. Key feature of the sensing element is its small size, which greatly reduces the force exerted by high pressure, making the BR ideal for high cyclic/high applications.

The unit is rated NEMA 4X for its ranges from 20k to 100K psi.

Manufacturing & Quality

The BR 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 BR 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

- $\leq 0.25\%$ FSO Static Accuracy
- NEMA 4X packaging
- $\leq \pm 0.25\%$ FSO /yr. stability

Optional Features

- $\leq \pm 0.15\%$ FSO Static Accuracy
- Zero & Span controls
- 0-10 V output
- Various connector styles
- Digital output
- Intrinsically Safe

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

Specifications: BR Series

Ultra-High Pressure Transmitter

0-20K through 0-100K psi High Accuracy/High Stability

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below
Custom Designs Available

Electrical

Excitation

BR1	2-15 Vdc
BR2, BR3, BR7	9-38 Vdc*

Output

BR1	1-2 mV/V*
BR2	0-5 Vdc*
BR3	4-20 mAdc
BR7	4-20 mAdc Intrinsically Safe

Zero Balance

± 1% FSO

FSO Setting

± 1% FSO

Resolution

Infinite (± 0.001% FSO usable)

Response Time

BR1	< 1 mS
BR2, BR3, BR7	< 5 mS

Insulation Resistance

1,000 M Ω @ 50 Vdc

Reverse Polarity

Protected

Warm-up

< 10 mS

Power Supply Effect

± 0.002% FSO per V input
(BR2, BR3, BR7)

EMI/RFI

Internal Filtering (BR2, BR3, BR7)

Short Circuit Protected

40 Vac (BR2, BR3, BR7)

Mechanical

Pressure Ranges

0-20K through 0-100K psi
(Customer may specify any range/eng. unit)

Proof Pressure

2X Full Scale* (160K psi max)

Burst Pressure

5X Full Scale* (180K psi max)

Materials

Wetted Parts	15-5 sst ranges ≤ 40 K PSI Custom 465 ranges > 40 K PSI
Non-wetted Parts	316 ss

Pressure Port

Autoclave F-312-C*

Electrical Connector

NEMA 4X cable exit (24" cable)*

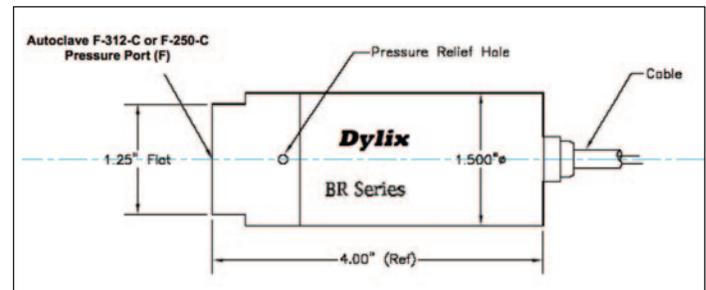
Dimensions

Per Drawing

Weight

12 oz (nominal)

Product Dimensions (inches)



Performance

Static Accuracy

± 0.25% FSO* (BFSL, RSS)
(Combined effects of non-linearity, hysteresis & repeatability)

Repeatability

± 0.15% 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
Imax, li	100 mA
Pmax, Pi	800 mW
Ci	0.055 μF
Li	0 mH

Standard Wiring

Model	Output	+ Power	- Power	+ Signal	- Signal
BR1	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
BR2	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
BR3	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	
BR7	4-20 mAdc 2 wire	Red/Pin 1/Pin A		Black/Pin 2/Pin B	

*Options Available

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: Dylux 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 Dylux 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 Dylux Corporation. This warranty is in lieu of all other warranties expressed or implied.

*Due to the nature of technology, changes are inevitable.
For latest technical specifications, see our website.*



A US Designer and Manufacturer of
Pressure Transducers & Transmitters

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Datasheet BR-1118