

DLR3110 Digital Pressure Standard



DLR3110 - 19 inch wide rack-mountable version of DLR334 plus precision patented Orion valve assembly and vernier, test port and test hose, pressure limit control and monitor.*** Test port may be mounted on front or rear of unit
 *** Pressure limit control and monitor are not required for 5000 psi models and above

DIGITAL INDICATORS/GAUGES

STANDARD FEATURES

- Test port placement may be configured for front or rear of unit
- 115 or 230 VAC operation
- Ranges from vacuum to 10,000 psi
- 20 selectable engineering units
- Freeze mode for pressure switch testing
- 0.05% of reading, 0.1% of reading, or the economical 0.25% of reading model
- Selectable resolution
- Digital outputs: RS-232, RS-422, and RS-485
- Min/Max pressure readings
- Accuracy is percent of reading from 20% of full scale
- Different technicians can operate the system and get identical results...every time
- Pneumatic only - no hydraulics or distilled water messes
- Calibration Certificate included - traceable to the National Institute of Standards and Technology (NIST)

APPLICATIONS

- Test stands
- On-site manufacturing pressure monitoring
- Transfer standard
- Low-cost digital data logging of readings

SPECIFICATIONS

Overall Accuracy:

0.05% of reading, 0.1% of reading, 0.25% of reading all from 20% of full scale and above. Below 20% of full scale units remain 0.05%, 0.1%, or 0.25% of 20% of full scale range. Includes all effects of linearity, hysteresis, repeatability, and ambient temperature. No temperature effect from 40°F to 140°F. NIST traceable

Temperature Range:

Operating: 40°F to 140°F (4°C to 60°C)
 Storage: 0°F to 185°F (-17°C to 85°C)
 Warm up: 3 minutes to rated accuracy, 15 minutes to complete stability

Calibration:

Full NIST traceability. Calibration points can be adjustable for operator convenience. Calibration via front panel and/or digital interface

Resolution:

Adjustable, 50,000 display counts (maximum) of range

Display Size:

Two-line, six-digit, 0.6 in. high numeric display, eight alpha characters per line, three annunciator light bars, bright red Light Emitting Diode (LED)

Pressure Hose:

Quantity supplied: One output
 Length: 4 ft. nominal

Display Update:

Adjustable, 100 ms maximum

Media Compatibility:

Any media compatible with 17-4PH or 15-5PH stainless steel

Overpressure:

200% of range (minimum)

Power Requirements:

115 or 230 VAC

Case Material:

16 gauge, mild steel with textured finish, baked epoxy enamel paint

Weight:

DLR3110: 19 lb (8.6 kg)

Overall Dimensions:

19 W x 7 H (EIA 4U) x 10 in. deep (482.6 W x 177.8 H (4 HE) x 254 mm) Excluding front handles

DLR3110 Model Numbering Guide

DLR3110 () () () () ()

MOUNTING

- A = 19 in rack-mount (with test port on rear of unit, **add'l cost \$200.00**)
- B = 19 in rack-mount with test port on front of unit

POWER

- A = 115 VAC, 50/60 Hz
- D = 230 VAC, 50/60 Hz

RANGE

- | | | | |
|----------------|---|---|--|
| A = 0-3 psig | G = 0-250 psig | M = 0-10,000 psig
add'l cost \$1,900.00 | T = 0-250 psia |
| B = 0-10 psig | H = 0-500 psig | N = 0-15 psia | V = 0-500 psia* |
| C = 0-15 psig | J = 0-1000 psig | P = 0-25 psia | W = 0-1000 psia* |
| D = 0-25 psig | K = 0-2500 psig | R = 0-50 psia | Y = 0-2500 psia* |
| E = 0-50 psig | L = 0-5000 psig
add'l cost \$1,900.00 | S = 0-100 psia | Z = 0-10,000 psia*
add'l cost \$1,900.00 |
| F = 0-100 psig | | | |

ACCURACY

- A = 0.05% indicated value from 20% full scale. **Base cost \$5,700.00**
- B = 0.1% indicated value from 20% full scale**. **Base cost \$5,300.00**
- C = 0.25% indicated value from 20% full scale. **Base cost \$4,900.00**

OPTIONS

- A = Standard unit which includes multiple conversion units, min/max, freeze mode, RS232, RS422, & RS485
- B = Standard unit plus two relays and setpoints option (**NO LONGER AVAILABLE**)
- C = Standard unit plus selectable scalable analog output (**add'l cost \$275.00**)
 0-5 VDC, 1-6 VDC, 0-10 VDC, 0-20 mA, and 4-20 mA outputs
- D = Standard unit plus parallel BCD output (**add'l cost \$150.00**)

*NOTE: Pressure ranges V,W,Y, and Z are not available in the 0.25% accuracy rating.

**NOTE: PSIA not available in 0.1% accuracy models.

Determine model configuration before ordering

Example: DLR3110ADAAA = DLR3110 (A) 19 inch rack-mount, (D) 230 VAC, (A) 0-3 psig, (A) 0.05%, (A) standard unit

DLR3110 Digital Pressure Standard

MODEL/PRICE

MODEL CONFIGURATION	DESCRIPTION	EST. SHIP WEIGHT	PRICE
DLR3110 A()A()	19 in rack-mount, test port on rear of unit, 0.05%	19 lb	Consult
DLR3110 A()B()**	19 in rack-mount, test port on rear of unit, 0.1%	19 lb	Consult
DLR3110 A()C()	19 in rack-mount, test port on rear of unit, 0.25%	19 lb	Consult
DLR3110 B()A()	19 in rack-mount, test port on front of unit, 0.05%	19 lb	Consult
DLR3110 B()B()**	19 in rack-mount, test port on front of unit, 0.1%	19 lb	Consult
DLR3110 B()C()	19 in rack-mount, test port on front of unit, 0.25%	19 lb	Consult

**PSIA not available in 0.1% accuracy models.



OPTIONS/ACCESSORIES

PRICE	DESCRIPTION	PRICE
58478	Pressure trap (DLR3110, 5000 psi and above) Literature sheet PN 58596	Consult
58483	Pressure trap (DLR3110, 250-2500 psi) Literature sheet PN 58609	Consult
58487	Pressure trap (DLR3110, 3-100 psi) Literature sheet PN 58621	Consult
74843	Additional operating and maintenance manual for DLR3110	Consult
55281	Additional test port (output) 5 ft. long hose, 2500 psig working pressure, with quick-disconnect plug (brass) on one end and 1/4 in. 37° female AN swivel tube coupling on the other end. (DLR3110 3-100 psi operation)	Consult
55328	Additional test port (output) 10 ft. long hose with quick-disconnect plug (brass) on one end and 1/4 in. 37° female AN swivel tube coupling on the other end. (DLR3110 3-100 psi operation)	Consult
55336	Additional test port (output) 15 ft. long hose with quick-disconnect plug (brass) on one end and 1/4 in. 37° female AN swivel tube coupling on the other end. (DLR3110 3-100 psi operation)	Consult
55341	Additional test port (output) 20 ft. long hose with quick-disconnect plug (brass) on one end and 1/4 in. 37° female AN swivel tube coupling on the other end. (DLR3110 3-100 psi operation)	Consult
55279	Additional test port (output) 5 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 in. 37° female AN swivel tube coupling on the other end (DLR3110 250-2500 psi operation)	Consult
55300	Additional test port (output) 10 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end (DLR3110 250-2500 psi operation).	Consult
55304	Additional test port (output) 15 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end (DLR3110 250-2500 psi operation).	Consult
55310	Additional test port (output) 20 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end (DLR3110 250-2500 psi operation)	Consult
55280	Additional test port (output) 4-1/2 ft. long hose with quick-disconnect (SST) plug on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end. (DLR3110 5000 psi and above operation)	Consult
131096	Additional test port (output) 10 ft. long hose with quick-disconnect (SST) plug on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end. (DLR3110 5000 psi and above operation)	Consult

Additional options available:

Standard unit plus 0-10 VDC and 4-20 mA outputs

Standard unit plus parallel BCD output