

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

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

ACCURACY

- A = 0.05% indicated value from 20% full scale. **Base cost consult**
- B = 0.1% indicated value from 20% full scale**. **Base cost consult**
- C = 0.25% indicated value from 20% full scale. **Base cost consult**

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 (**add'l cost consult**)
- C = Standard unit plus selectable scalable analog output (**add'l cost consult**)
 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 consult**)

*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.



58483



58478



58487

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 |
| 74844 | Two relays and setpoint option supplement manual | Consult |
| 74845 | Duplex serial protocol manual | Consult |
| 55281 | Additional test port (output) 5 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 |
| 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 two relays and setpoints

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

Standard unit plus parallel BCD output

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