

Signal Conditioners, Transmitters

Two-Wire, Process-Loop Indicator in Nema-4X Housing



508B

STANDARD FEATURES

- ✓ FM Intrinsic Safety Certification
- ✓ Powered by 1-5, 4-20 or 10-50 mA Signal
- ✓ 2.5 V Max Voltage Drop
- ✓ 0.35 in (8.9 mm) LCD
- ✓ 2,000-Count Zero Suppression or Elevation
- ✓ 100 to 2,000 Count Span Adjust
- ✓ Selectable Dummy Right-Hand Zero
- ✓ -40°C to +85°C Operation
- ✓ Compact, 2.9 in (73.6 mm) Diameter Die-Cast Housing
- ✓ Waterproof to 35 kPa (5 psi)
- ✓ Shock Resistant to 55 g

OPTIONS

- ✓ 1/2 EMT Conduit Fitting
- ✓ 1/2 NPT Pipe Fitting
- ✓ Relay-Track Mounting Adapters
- ✓ External Explosion-Proof Housing
- ✓ Companion Current Transmitters

Model 508B is a two-wire current-loop indicator that is powered directly by a 1-5 mA, 4-20 mA or 10-50 mA process loop signal, with a maximum voltage drop of 2.5 V. No separate power supply connections are required. This reduces overall hardware and field wiring costs and provides immunity from most electrical noise encountered in process control environments. The electronics are isolated from the case.

Easy to Configure and Calibrate

Both span and zero are fine-tuned with precision multiturn potentiometers. These are accessible through holes in the die-cast cover, which are normally sealed with fluorosilicone plugs. Coarse zero and span steps are selected by removing the cover with attached electronics and changing plug-in jumpers.



For more information visit: newportUS.com/508b

Items shown are not actual size.

Designed for Harsh Environments

All versions of the 508B are rated for operation from -40 to +85°C (-40 to +185°F) with specified accuracy. The case is made of die-cast metal and is waterproof to 35 kPa (5 psi). The electronics are firmly connected to the case top, so that the meter can withstand high vibration and shock. Mounting options include a male 1/2 EMT conduit fitting and a male 1/2 NPT pipe fitting in lieu of the normal rail or surface mount. These fittings eliminate the external screw terminals and provide a NEMA-4X rating.

Explosion-Proof Housing Options

Two external NEMA-7 explosion-proof and NEMA-4 waterproof, sand-cast, copper-free aluminum enclosures with corrosion resistance "safety-blue" polyester powder-coating for use in hazardous locations. FM, UL, cUL Certification: Class I, Groups B, C, D; Class II, Groups E, F, G; and Class III, Type 4X. Demko/ATEX Certification: Ex II 2 G D EEx d IIC.

Model No.	Description
508B-1	Two-wire current-loop indicator for Flat surface or relay track mounting
508B-2	Two-wire current-loop indicator for EMT conduit mounting
508B-3	Two-wire current-loop indicator for NPT pipe mounting
Accessories	
EPW3-ATEX	NEMA-7 and NEMA-4 rated single-height environmental enclosure, with window for 508B loop-powered indicator. Includes MXS1 spring retainers (supplied with Demko/ATEX certificate)
EPW2-ATEX	NEMA-7 and NEMA-4 rated double-height environmental enclosure, with window for 500 Series transmitter on bottom and one 508B loop-powered indicator on top. Includes MXS1 and MXS2 spring retainers (supplied with Demko/ATEX certificate)
MAT1	Adaptor plate, surface mount or 69.9 mm (2.75") relay track
MDT1	Rail clamp for DIN relay track

Ordering Example: 508B-1, current loop indicator for flat surface or relay track mounting; 508B-3, current loop indicator with NPT pipe mounting.