



Lightning - Surge Protector

OPTION-009™

Sub-nano second response time

- ▶ Effective against fast-rising transients

Multi-stage design

- ▶ Capable of handling high voltage/current

Auto-reset after surge subsides

- ▶ Eliminates fuses/breakers

Ends chronic failure due to lightning discharges

- ▶ 100% guaranteed for life of product



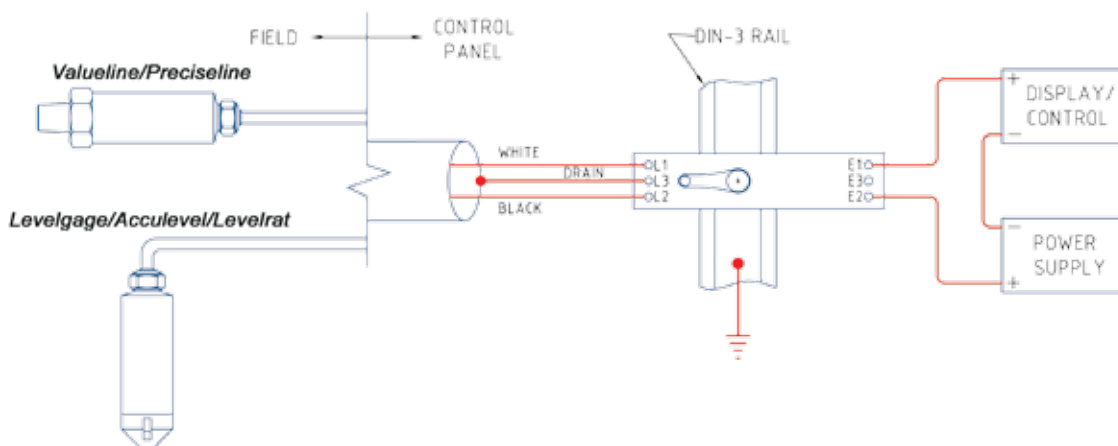
Keller America's Option-009 provides 100% effective surge protection in a miniature package. This system protects both the pressure transmitter and the power supply/readout/control equipment from transients entering through the transmitter as well as through the cabling. The system is comprised of two protectors, one internal to the transmitter and a separate line protector for installation at the cable termination on the control panel. The internal protector is a standard feature on applicable transmitters. The external protection is available at additional cost and maximizes system protection.

Principle Of Operation

Proven in thousands of installations worldwide, Keller America's Option-009 Lightning-Surge Protector incorporates advanced multi-staged circuitry to protect your instrumentation. Fast-acting avalanche diodes intercept the leading edge of the surge. Parallel, high-capacity gas discharge tubes then fire, shunting the surge to ground for the duration of the event. Once the surge has passed the transmitter circuit automatically resumes normal operation.

Applicability & Warranty

All Keller America Levelgag/Acculevel/LevelRat transmitters with a 4-20mA output and all Valueline/Preciseline transmitters with cable and 4-20mA output include protection internal to the transmitter. These instruments carry a lifetime warranty against damage due to voltage surges.



Addition of Option-009 or internal only protection (standard on all 4-20mA pressure transmitters) increases the minimum-required supply voltage, on account of internal resistance of the surge protectors. In addition, cable resistance* adds to the supply requirement. In order to insure proper system operation, calculate the minimum required supply voltage (at the source) as follows:

For two-part (internal+external) system (recommended):
 MINIMUM SUPPLY VOLTAGE = 10.75 + 0.025 (CABLE LENGTH x 0.07) VDC

For internal only protector (standard with 4-20mA output):
 MINIMUM SUPPLY VOLTAGE = 9.65 + 0.025 (CABLE LENGTH x 0.07) VDC

*Cable resistance = ~70Ω / 1000ft

KELLER AMERICA, INC.

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OPTION-009

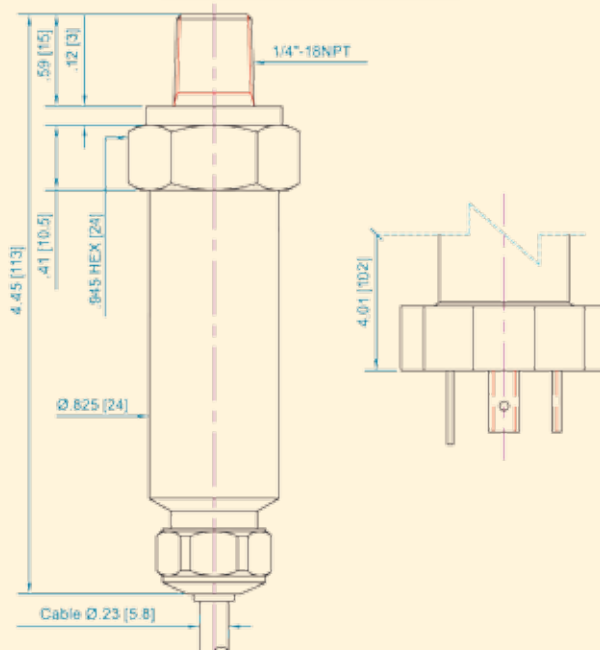
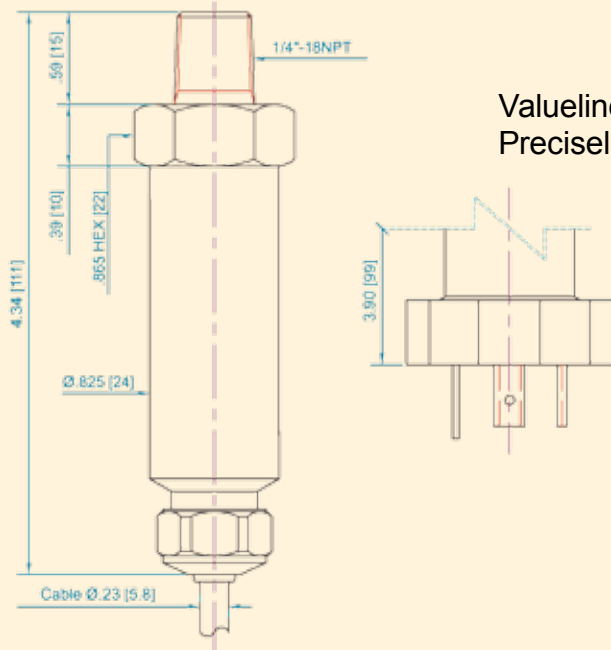


Dimensions

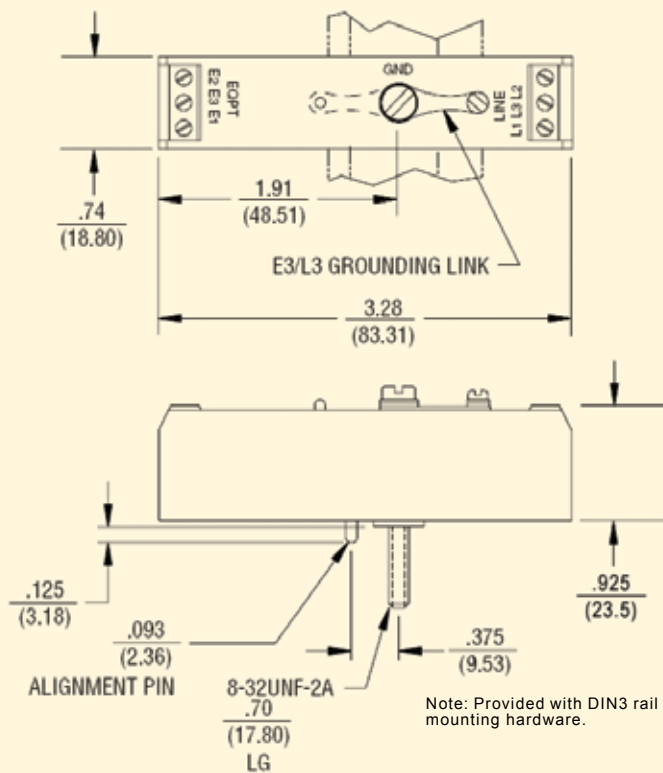
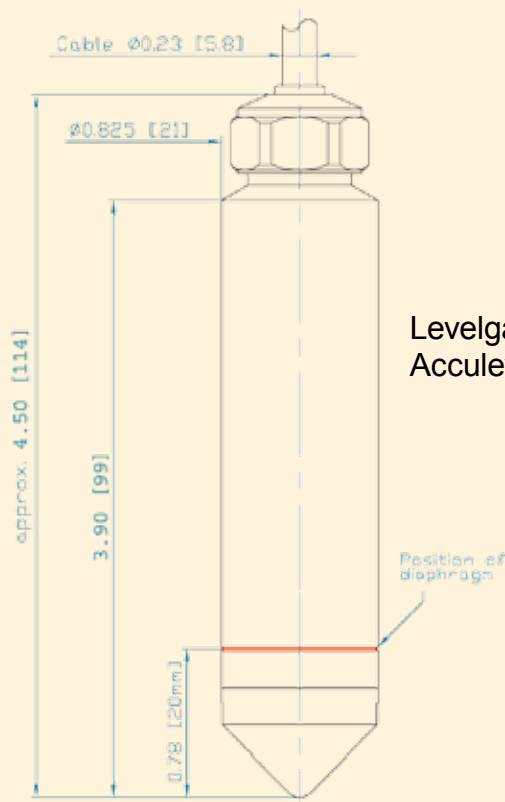
Ranges ≤ 500 PSI

$500 \leq R \leq 15,000$ PSI

Valueline /
Preciseline



Levelgag /
Acculevel



Note: Provided with DIN3 rail mounting hardware.

Dimensions in inches [mm]

Note: Dimensions & specifications are subject to change without notice. For the most accurate and up to date information on all products please visit our website.

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