

New E-Series 2011



E²-Series – Effective and Efficient

EH



EL



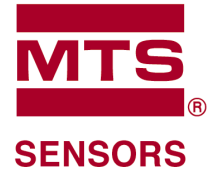
ER



EP



New E-Series 2011 Features Summary



- Newly redesigned E-Series Product Family (EH, EL, ER, EP)
 - EH is a NEW compact size rod-style package
 - EL is a NEW low height profile extrusion design (similar to the old L-Series LS Model)
 - ER has improved internal sealing that better protects the electronics in wet applications (i.e. the IP rating is now improved from IP65 to IP67)
 - EP sensor head is now at the same height as the extrusion and allows a block style magnet to “float” over the complete sensor whenever the movement axis is longer than the measuring range.
- Maintains backward mounting compatibility with current E-Series
 - New EP and ER models are backwards compatible, except the connector has changed (i.e. industry standard M12 style connector is used instead of the M16 (“D60”)).
 - MTS offers M12 to M16 adapter cables as an option when retrofitting applications that had used the old E-Series sensors and extension cables.
- Incorporates latest advances in magnetostrictive technology
 - Improved sensing element waveguide and electronic ASICs
- Option for two output channels using two magnets now available for analog outputs

E-Series 2011 Specifications

Specifications

Outputs:

- Voltage (0 to 10 V, and/or 10 to 0 V)
- Current (4 to 20mA, or 20 to 4 mA)
- Start/Stop

Stroke lengths:

- EH -- 50 to 2500 mm (2 to 100 in.)
- ER – 50 to 1500 mm (2 to 60 in.)
- EP /EL -- 50 to 2500 mm (2 to 100 in.) for analog
-- 50 to 3000 mm (2 to 120 in.) for EP Start/Stop

Performance

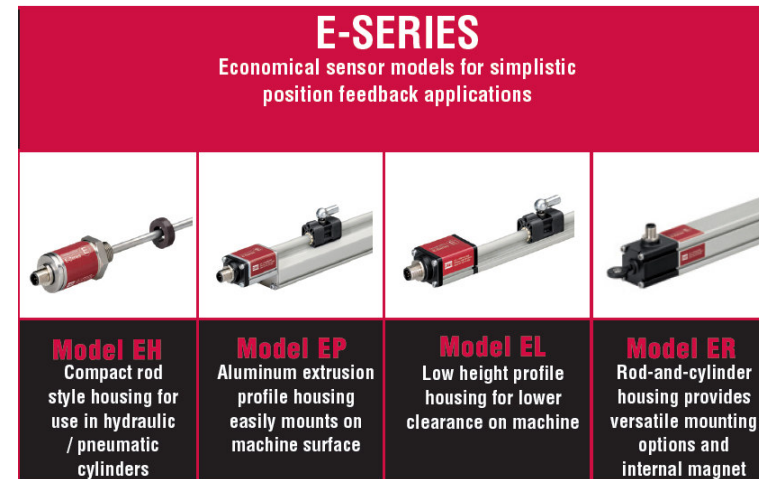
- Resolution – Analog: infinite, Start/Stop: 0.005 mm
- Linearity deviation -- 0.02% (minimum +/- 0.060 mm)
- Repeatability -- 0.001%

Simultaneous multi-position measurements

- 2 positions for analog outputs
- Controller dependent for Start/Stop

Environmental

- IP67 (IP69K for EH), 100g shock, 15g vibration *
- * Resonance frequencies causing excess of 15g are excluded



New E-Series 2011

New E-Series M12 Connectors

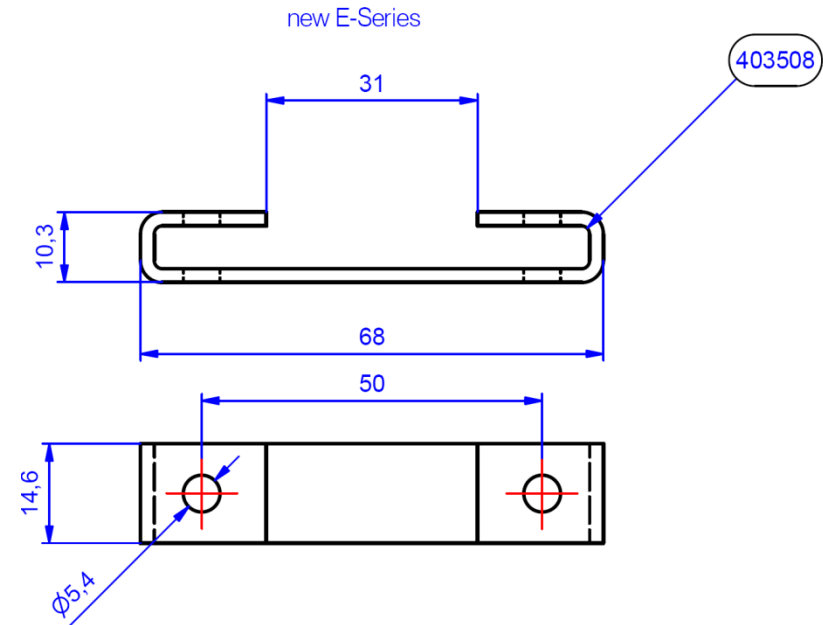
- M12 style connectors are a common industry standard that offer good performance at low costs.
- Large variety of molded connector cord sets are readily available from many suppliers, off the shelf.
- MTS offers M12 to M16 (“D60”) adapter cables as an option when retrofitting applications that had used the old E-Series sensors and extension cables.



New E-Series 2011

New E-Series Mounting Clamps

- New mounting clamps (part no. 403508) are required due to the new E-Series extrusion.
- A larger gap and a slightly taller height are the only differences compared with the standard mounting foot, 400802. (The mounting holes and overall width are the same.)
- When retrofitting to use the new E-Series sensors the old 400802 mounting feet must be replaced with the new 403508 mounting clamps. The same mounting holes can be used.
- The new mounting clamps are stamped “E2” for easy visual identification.



Suitable situations for using New E-Series

- **Application Requirements (Why Choose E-Series?):**
 - Analog output (only 0 to 10V, or 4 to 20mA) for strokes up to 100 inches
 - Start/Stop output for strokes up to 120 inches (EP Start/Stop only)
 - Adequate sensor performance for the application at a lower price than G-Series
 - No requirements for field diagnostics, fieldbus interfaces, programming and setpoint adjustments, or status LEDs
 - No need for replacement sensor cartridges (rod style)
 - Only moderate EMI protection needed
 - Low to moderate vibration exposure only
 - Rod and Cylinder style housing required (model ER)
 - Low height clearance required (model EL or model EP2)
 - Simultaneous multi-position measurements: 2 positions for analog outputs (for Start/Stop certain controllers are required)