

Output

The Temposonics E-Series Model EP2 analog output sensor comes standard with integrated analog conditioning electronics. The sensor can be connected to a control system or indicator directly without the need for an additional interface. Built-in microelectronics produce a continuous voltage output that is proportional to the magnet position. The active measurement stroke range is factory set (see 'Figure 1').

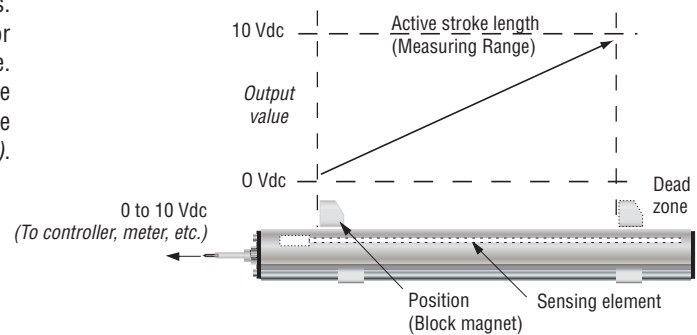


Figure 1. Active stroke length (measuring range)

Model EP2 profile-style sensor (analog output) dimension references

Model EP2, profile-style sensor with Block, Style L Magnet

Drawing is for reference only, contact applications engineering for tolerance specific information.

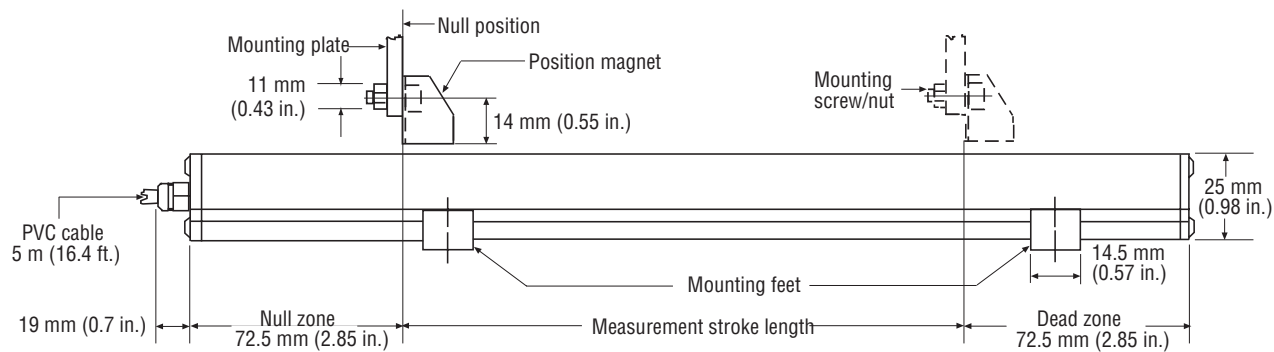


Figure 2. E-Series Model RP Profile-style sensor dimension reference (Shown with 5 m (16.4 ft.) integral cable)

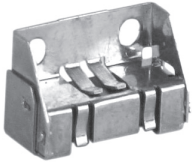
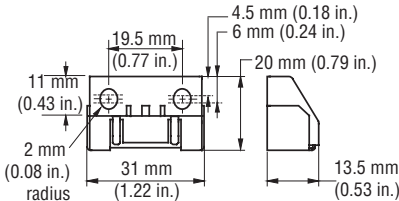
Standard magnet (Model EP2)

One Block magnet included with Model EP2 sensor

The Style L 'block' magnet (part no.: 252887) mounts on the moving machine part and travels just above the sensor's extrusion. The magnet can be mounted using ferrous metal screws on a customer supplied mounting plate or flat surface of the machine's moving part. The mounting plate or machine's moving part can not extend beyond 11 mm (0.43 in.) from the top of the magnet, unless it is made of non-ferrous material. The magnet should be installed in a perpendicular orientation relative to the top surface of the sensor extrusion (see 'Figure 2' on page 3). Optimal performance is achieved when this orientation remains consistent throughout the full measurement stroke range.

STANDARD POSITION MAGNET (One Magnet included with each Model EP2 sensor)

(Drawing dimensions are for reference only)

Magnet	Magnet dimensions	Description	Part number
		Block magnet, Style L For Model EP2 profile-style sensor	252887

Sensor mounting

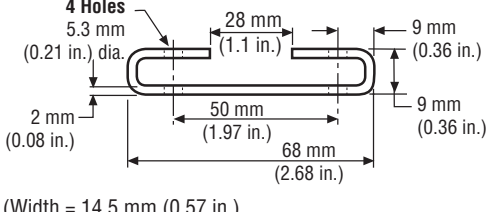
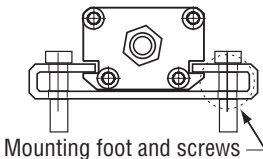
MODEL EP2 SENSOR MOUNTING

Temposonics model EP2 profile-style sensors are mounted onto a flat straight surface of the machine with moveable mounting feet. A pair (2) mounting feet are provided with each sensor. Two additional mounting feet (part no. 400802) are included for measurement stroke lengths greater than 48 inches.

Mounting feet slide into side grooves and should be evenly distributed along the sensor extrusion to best secure the sensor for each particular application.

Notes:

- 1. Additional mounting feet can be ordered separately.
- 2. MTS recommends using 10-32 cap screws (customer supplied) at a maximum torque of 44 in. lbs. when fastening mounting feet.

Profile-Style sensor mounting and installation reference	Mounting method	Part number
 	Mounting feet, standard (304 SS) Profile-style sensor mounting for sensor model EP2	400802
 Mounting foot and screws	Mounting feet and screws Profile-style sensor foot installation Secure mounting feet with customer supplied 10-32 cap screws. (recommended) Block magnet, Style L mounting Magnet installs on a mounting plate (customer supplied) or flat surface of the machine's moving part.	Mounting feet, part number 400802 Block magnet, Style L, part number 252887

Wiring and integral cable connection

E-Series EP2 analog sensor - integral cable

The E-Series Model EP2 sensor connects directly to a controller, meter, etc. via 5 m (16.4 ft). PVC cable shown in 'Figure 3'. Wiring color and signal functions are described in 'Table 1'.



Figure 3. EP2 analog sensor Integral cable

Wire color	Signal
Green	0 to 10 Vdc
Brown	+24 Vdc (-15% / +20%)
White	DC Ground (0 Vdc)
Shield	Connected to sensor housing (Appropriate grounding of cable shield is required at the controller end).

Table 1. EP2 analog sensor cable wiring diagram