

ProScale[™] General Purpose Linear Measuring Systems

Accurate Technology manufactures 9 different general purpose measuring systems. When selecting a system, it is helpful to know the following:

- (1) Does the application require absolute¹ or incremental encoder technology²?
- (2) Is battery power preferred (no power wires!), or is an external power connection desired?
- (3) What measuring range is required?
- (4) Will the system be applied to a machine/apparatus which already has a linear guide or bearing?
- (5) Which digital readout model³ (if any) will be used?

Models 150, 150G

Models 150/150G are general purpose measuring systems designed for use on machinery (or other applications) requiring absolute encoder technology. Model 150 only works with battery power. Model 150G works with battery or an external power supply. Standard measuring ranges are 10, 18, and 24 inches⁴. These systems should be used on machinery which already has linear guideways or controlled linear motion.

Models 250, 250G

Models 250/250G are general purpose measuring systems designed for use on machinery (or other applications) requiring absolute encoder technology. Model 250 only works with battery power. Model 250G works with battery or an external power supply.

Standard measuring ranges are 24, 48, 60, 96, 120, 180, and 240 inches4.

These systems should be used on machinery which already has linear guideways or controlled linear motion.

Model 190

Model 190 is a general purpose measuring systems designed for use on machinery (or other applications) which do not require absolute encoder technology.

Model 190 systems work with battery or an external power supply.

Standard measuring ranges are 10, 18, and 24 inches⁴.

These systems should be used on machinery which already has linear guideways or controlled linear motion.

Model 290

Model 290 is a general purpose measuring systems designed for use on machinery (or other applications) which do not require absolute encoder technology.

Model 290 systems work with battery or an external power supply.

Standard measuring ranges are 24, 60, 96, 120, 180, and 240 inches⁴.

These systems should be used on machinery which already has linear guideways or controlled linear motion.

Model 390

Model 390 are general purpose measuring systems designed for use on machinery (or other applications) which do not require absolute encoder technology.

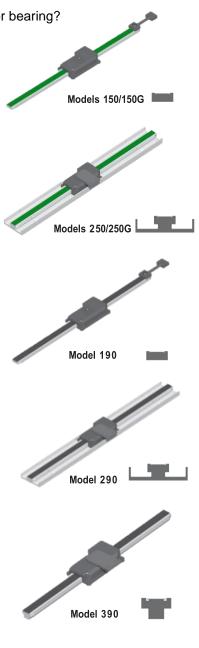
Model 390 systems work with battery or an external power supply.

Standard measuring ranges are 24, 60, 96, and 120 inches4.

These systems should be used on machinery which already has linear guideways or controlled linear motion.

Models 550, 590

Models 550 and 590 are general purpose measuring systems *with an integrated linear bearing system.* Model 550 is made using absolute technology, and 590 is made using incremental technology. Both should be battery powered. Standard ranges are 48, 96, 120, 144, and 192 inches. These systems should be used on machinery which without existing linear guideways.



Models 550/590

Information/Notes:

¹Absolute technology measuring systems will not lose their position due to signal interruption (due to static, electrical noise, etc), or power loss (when power is removed). These systems are generally limited to slew rates of 12 inches/second without customization.

²Incremental technology measuring systems *might* lose their position due to signal interruption (due to static, electrical noise, etc), and *will* lose position when power is lost. These systems are generally limited to slew rates of 80 inches/second.

³There are currently 8 different digital readout models available. Some of these operate only on battery power. Others use only external power, and some can be used either way.

Note: The number of customizable features/options varies. Special features and/or customization are available.

Note: A digital readout may not always be necessary (see accessories list or contact us for details). However, not using a readout might affect overall system accuracy.

⁴Custom measuring ranges are available on request and generally do not extend lead time by more than 2-3 days. Extended ranges are available for Models 250 and 290, up to 480 inches total range. The physical length of each system is longer than the measuring range. 2D and 3D CAD files are available for all models and readouts.

The encoder (sensor part) for each system includes a hard-wired cable. Each cable is terminated with an overmolded RJ12 connector. Stock cable lengths are 4, 12, 24, 36, 72, 120, 240, and 360 inches long. Custom cable lengths available on request. If a greater distance is required between the encoder and readout, use ProRF transmitter system. The encoder type must match the scale type. For instance, a Model 250 encoder will not work for a Model 290 scale.

All systems and readouts are RoHs compliant (lead free).

Accuracy of systems is generally related to measuring range. Maximum error of any system with a readout (up to 240" range) is within .010" of nominal, at 70 degrees F.

Multiple encoders can be used on a single scale for all models.

Digital readout models currently available are shown below.

- Note display type (LCD, LED, or computer screen).
- Note power options.
- CAD models are available

