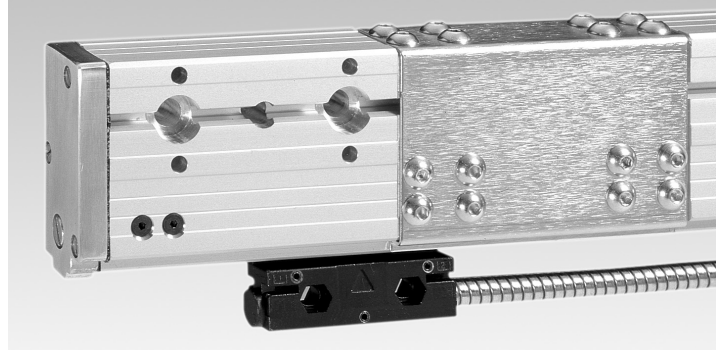


Acu-Rite Companies Inc.

An **ENC 250** long travel precision scale withstands the elements of contamination found in even the harshest environment. Every **Acu-Rite Companies Inc.**

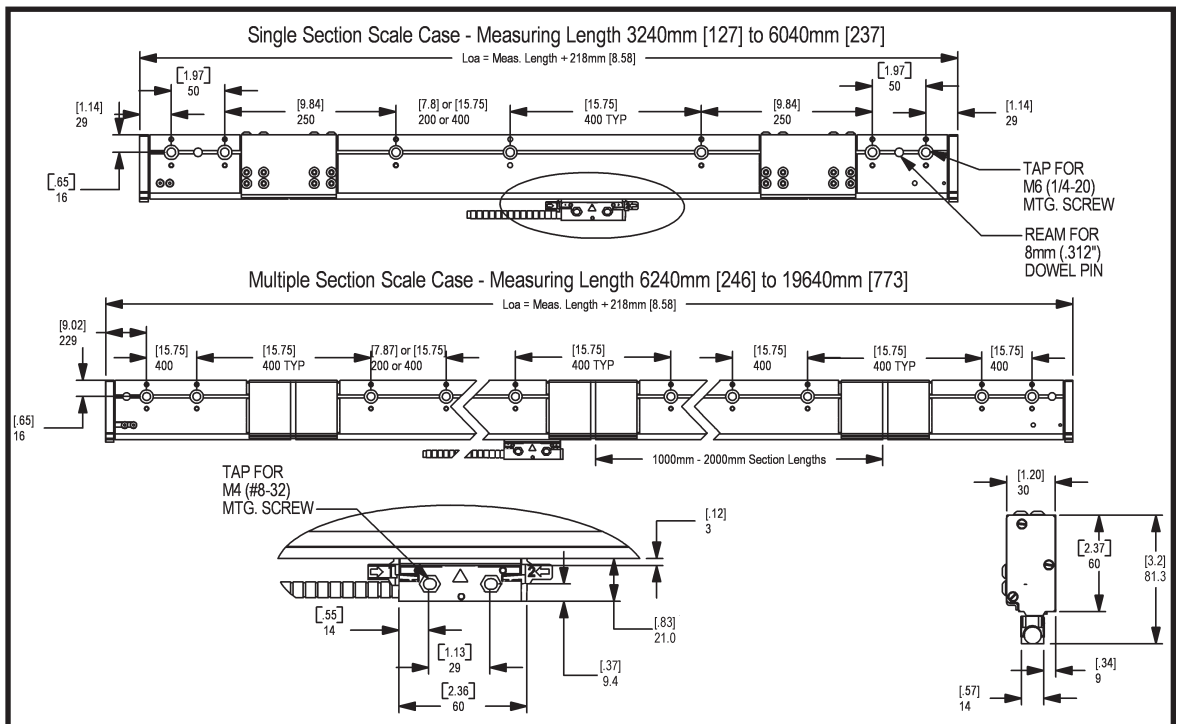


precision scale incorporates

Acu-Rite Companies Inc.'s long-standing tradition of quality, reliability, durability and dependability at an affordable price.

Features

- ◆ **3.24m [127"] to 6.04m [237"]** measuring lengths available as single-section cases.
- ◆ **Longer lengths - up to 19.64m [773"]** available as multi-section units.
- ◆ **Rugged, thick-walled scale case - ideal for lathes, boring mills and other large machine tools.**
- ◆ **Built-in leveling screws for easy installation to uneven machine tool surfaces. Most installations require no additional backup spar.**
- ◆ **5µm [.0002"] Resolution.**
- ◆ **Exceptional accuracy - precision, gold rulings on stainless steel scale tape.**
- ◆ **Position-Trac™ - enables quick and easy workpiece zero-reset after power loss.**
- ◆ **3 Year HASSLE-FREE Warranty.**



ENC 250 assembly and mounting dimensions

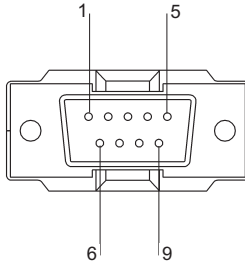
ENC 250
 Long Travel Precision Scale

Electrical Specifications

Electrical Specifications	Digital
Light Source	LED
Operating voltage	5.1 ± 0.1 VDC
Operation current	140 mA Max.
Output signals Incremental	Two square wave voltage signals, channels A and B, in 90° quadrature relationship
RM	One square-wave signal
Signal levels	Differential TTL
RM	Differential TTL

Options

D-9 Connector



Mechanical Specifications

Mechanical Specifications	Digital
Resolution	5µm (0.0002 in)
Grating Pitch	100µm (0.00393 in)
Scale Medium	Reflective Metal Tape
Accuracy @ 20 degrees C	+/-15 µm /M (.00018 in/ft)
Max. Slew Speed	1 Meter/sec (40 in/sec)
Force required to move reading head	+/-3.3 Newtons (0.75 lbs)
Operating Environment	
Temperature	0° to 40°C (32° to 104°F)
Relative Humidity	20% to 95% (non-condensing)
Storage Environment	
Temperature	-40° to 60°C (-40° to 140°F)
Humidity	20% to 95% (non-condensing)
Weight	1 kg + 3.2 kg/m (2.2 lb + .18 lb/in)
Connecting Armored Cable Length	.61 m (2 ft)
Max. Cable Length	22.9 m (75 ft) with VRO 10.7 m (35 ft) with DRO
Single Section Measuring Length	3240 mm(127 in) - 6040 mm(237 in)
Multi Section Measuring Length	6240 mm(246 in) - 19,640 mm(773 in)
Reference Mark Interval	100 mm (3.937 in) Distance Encrypted

Digital pin-outs

Pin	Signal	Wire Color
1	No Connect	
2	Channel A+	Green
3	Channel A-	Yellow
4	Channel B+	Blue
5	Channel B-	Red
6	Ground (power supply and signal return)	White
7	Operating Voltage	Brown
8	Channel R+	Pink
9	Channel R-	Gray
Shell	Shield	

Output signals

