

Magnescale®

SR118

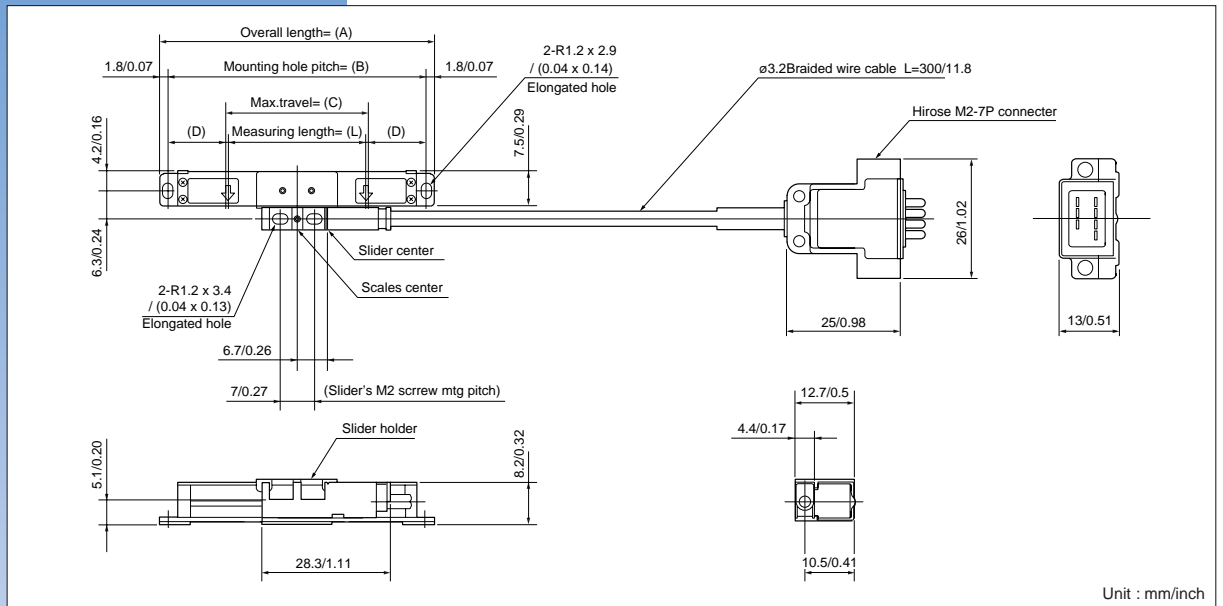
The SR118 series is designed to be mounted on small-size linear stages

- Magnetic principle
- Compact and slim design. Space saving.
Cross section: 7.5 mm x 8.2 mm / 0.29" x 0.32"
- Scale recording and calibration using laser signal.
High accuracy: $\pm 2 \mu\text{m}$ (SR118-015/ -030/ -060)
- Resolution: 0.5 μm
- Measuring length: 15 mm to 260 mm / 0.59" to 10.23"
- Easy mounting
- Light weight: 40 g / 1.41oz (SR118-015)

Specifications

Model	SR118-015	SR118-030	SR118-060	SR118-100	SR118-130	SR118-160	SR118-210	SR118-260
Measuring length L mm (inch)	15 (0.59)	30 (1.18)	60 (2.36)	100 (3.93)	130 (5.11)	160 (6.29)	210 (8.26)	260 (10.23)
Overall length mm (inch)	45 (1.77)	60 (2.36)	90 (3.54)	140 (5.51)	170 (6.69)	205 (8.07)	255 (10.03)	305 (12.00)
Mtg.hole pitch mm (inch)	41.4 (1.62)	56.4 (2.22)	86.4 (3.40)	136.4 (5.37)	166.4 (6.55)	201.4 (7.92)	251.4 (9.89)	301.4 (11.86)
Max. travel mm (inch)	15.6 (0.61)	30.6 (1.20)	60.6 (2.38)	107 (4.21)	137 (5.39)	172 (6.77)	222 (8.74)	272 (10.70)
Movable length outside L mm (inch)	Lft	Rgt						
	0.3 (0.01)	0.3 (0.01)	0.3 (0.01)	2 (0.07)	2 (0.07)	4.5 (0.17)	4.5 (0.17)	4.5 (0.17)
	0.3 (0.01)	0.3 (0.01)	0.3 (0.01)	5 (0.19)	5 (0.19)	7.5 (0.29)	7.5 (0.29)	7.5 (0.29)
Accuracy (at 20 °C / 68 °F)	$\pm 2 \mu\text{m}$			$\pm 2.5 \mu\text{m}$		$\pm 3 \mu\text{m}$		
Resolution	0.5 μm							
Max. response speed	30 m/min			20 m/min		10 m/min		
Mounting parallelism	Within 0.1 mm/0.004"							
Expansion coefficient	$(14 \pm 1) \times 10^{-6}/^{\circ}\text{C}$							
Protective design grade	Equivalent to IP44							
Operating temperature	0 °C to 40 °C / 32 °F to 104 °F							
Storage temperature	-10 °C to 50 °C / 14 °F to 122 °F							
Head cable length	300 mm/11.8"							
Mass (excl. cable unit)	40 g/1.41 oz	42 g/1.48 oz	45 g/1.58 oz	50 g/1.96 oz	53 g/1.86 oz	57 g/2.01 oz	63 g/2.22 oz	68 g/2.39 oz

Dimensions



(SR118-060)



Actual size