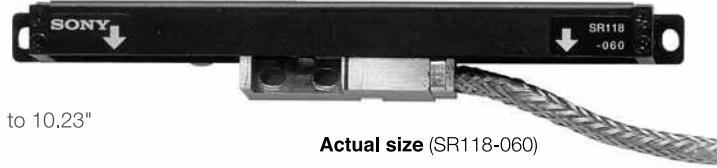


# SR

# SR118 SERIES

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

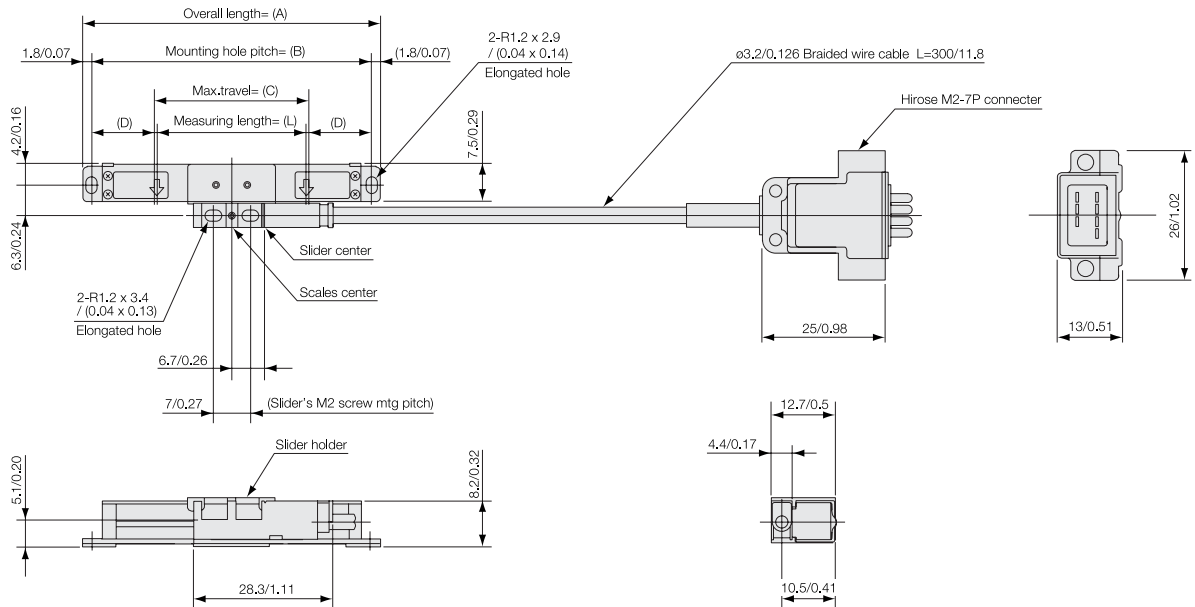
- Magnetic principle
- Compact and slim design. Space saving.  
Cross section: 7.5 mm x 8.2 mm / 0.29" x 0.32"
- Scale recording and calibration using laser signal.
- Resolution: 0.5  $\mu\text{m}$  ● Measuring length: 15 mm to 260 mm / 0.59" to 10.23"
- Easy mounting ● Light weight: 40 g / 1.41oz (SR118-015)



Actual size (SR118-060)

**MAGNESCALE®**

## Dimensions



Model name	(L)	(A)	(B)	(C)	(C)-(L)		(D)
					Left side	Right side	
SR118-015	15/0.591	45/1.77	41.4/1.629	15.6/0.614	0.3/0.0118	0.3/0.0118	13.2/0.519
SR118-030	30/1.18	60/2.36	56.4/2.22	30.6/1.2	0.3/0.0118	0.3/0.0118	13.2/0.519
SR118-060	60/2.36	90/3.54	86.4/3.4	60.6/2.385	0.3/0.0118	0.3/0.0118	13.2/0.519
SR118-100	100/3.94	140/5.51	136.4/5.37	107.4/2.12	2/0.079	5/0.197	18.2/0.716

Model name	(L)	(A)	(B)	(C)	(C)-(L)		(D)
					Left side	Right side	
SR118-130	130/5.12	170/6.69	166.4/6.55	137/5.39	2/0.079	5/0.197	18.2/0.716
SR118-160	160/6.30	205/8.07	201.4/7.93	172/6.77	4.5/0.177	7.5/0.295	20.7/0.815
SR118-210	210/8.27	255/10.04	251.4/9.89	222/8.74	4.5/0.177	7.5/0.295	20.7/0.815
SR118-260	260/10.24	305/12.01	301.4/11.86	272/10.7	4.5/0.177	7.5/0.295	20.7/0.815

Unit : mm/inch

## 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	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)
	Rgt	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)
Accuracy (at 20 °C / 68 °F)	± 2 $\mu\text{m}$			± 2.5 $\mu\text{m}$			± 3 $\mu\text{m}$	
Resolution				0.5 $\mu\text{m}$ -p				
Max. response speed	30 m/min			20 m/min			10 m/min	
Mounting parallelism	Within 0.1 mm/ 0.004"							
Expansion coefficient	(14 ± 1) × 10 <sup>-6</sup> / °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)	40g/1.41 oz	42g/1.48 oz	45g/1.58 oz	50g/1.76 oz	53g/1.87 oz	57g/2.01 oz	63g/2.22 oz	68g/2.39 oz