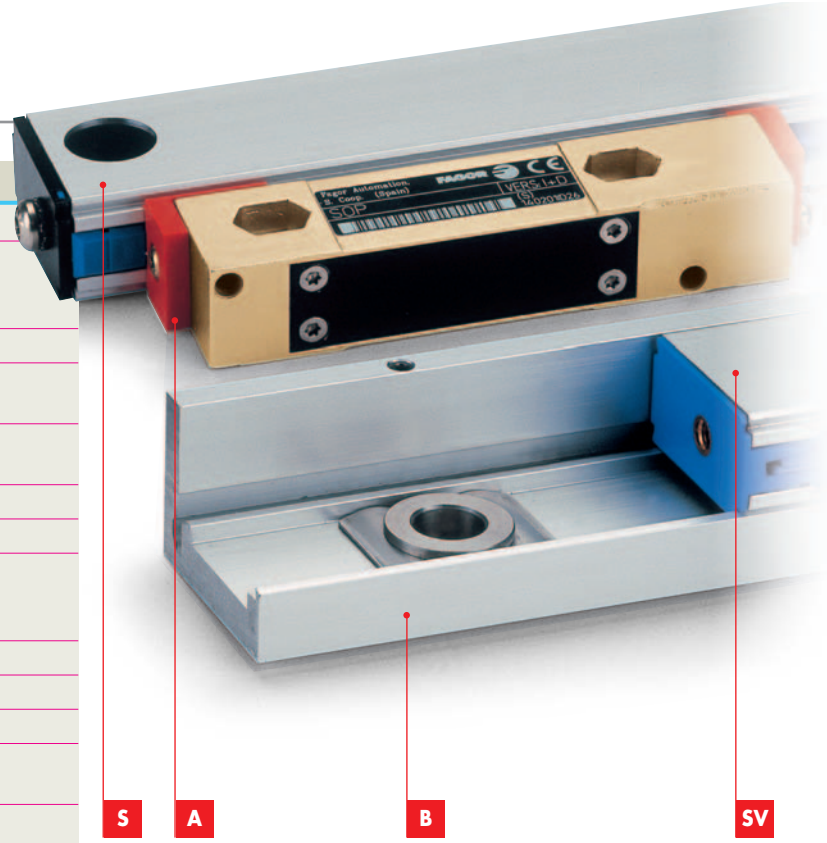


S / SV Series

GENERAL CHARACTERISTICS

Maximum speed	120 m/min. (396 ft / min.)
Maximum vibration	10 g without mounting support 20 g with mounting support (add "V" to the model)
Moving force	<5N
Operating temperature	0°...50°C
Storage temperature	-20°...70°C
Weight	0.20 Kg + 0.50 Kg/m
Humidity	20...80%
Protection	IP 53 (standard) IP 64 (DIN 40050) with pressurized air intake
Movement	On roller bearings
Light source	IRED
Power supply	5V ± 5%, 100 mA
Reader head	With built-in connector (see pages 30-31 for connection devices)
Method of measuring	Chromed glass scale with 20 µm (0.0008 inch) grating pitch



SPECIFICATIONS	SX	SY	SW	SP
	SOX	SOY	SOW	SOP
	SSX	SSY	SSW	SSP
Accuracy	± 5 µm (± 0.0002") ± 3 µm (± 0.00012")			
Resolution	1 µm (0.00004")	0,5 µm (0.00002")	0,1 µm (0.000004")	Up to 0,1 µm (0.000004")
Reference marks I₀	SX, SY, SW and SP: every 50 mm (1.97 inches) from the middle to both ends SOX, SOY, SOW and SOP: Distance-coded reference marks SSX, SSY, SSW and SSP: Selectable reference marks			
Output signals	□ □ Differential TTL			~ 1 V _{pp}
Period "T" of output signals	4 µm	2 µm	0,4 µm	20 µm
Maximum cable length	50 m (165 ft)		150 m (495 ft)	

Especially recommended for applications with a measuring length of up to 2040 mm in high-speed and high-vibration environments and small places. The special and patented design of the mounting points minimizes accuracy errors due to temperature changes. On the other hand, the SV series includes a special support that further improves its behavior against the vibrations caused by the machine (TDMS®). It offers reference marks every 50 mm that may be selected by the installer as well as distance-coded reference marks. The reader head of this linear encoder has a connector.

Order Identification

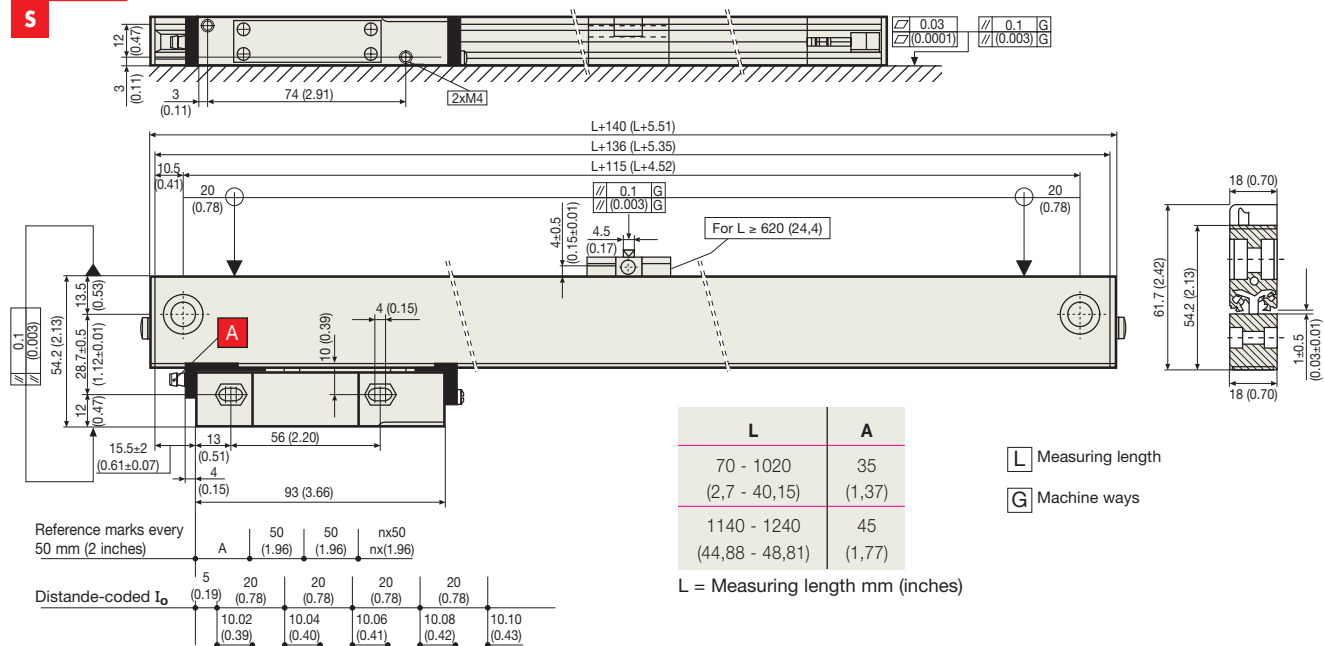
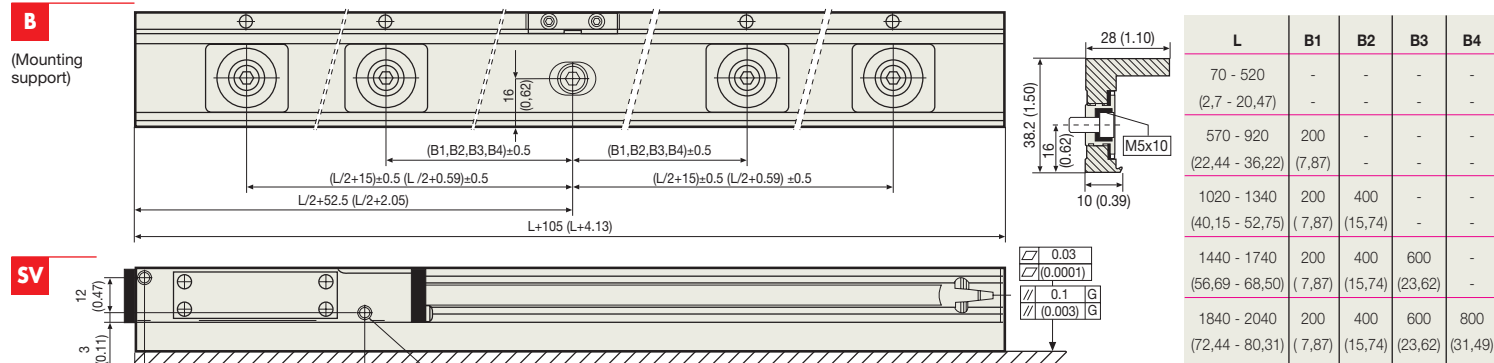
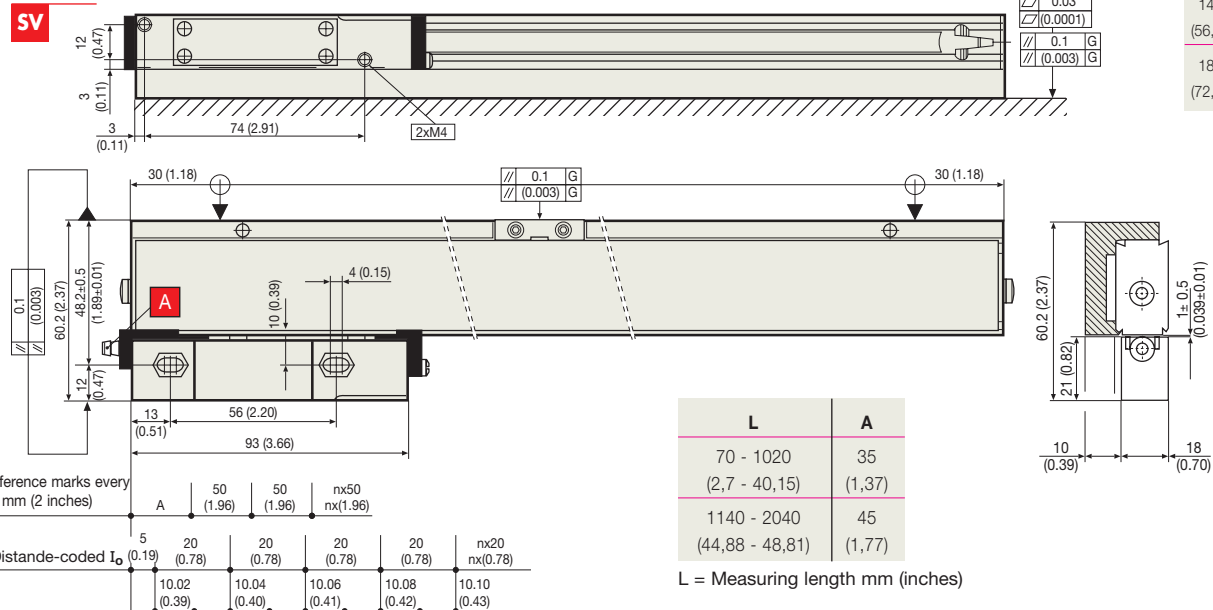
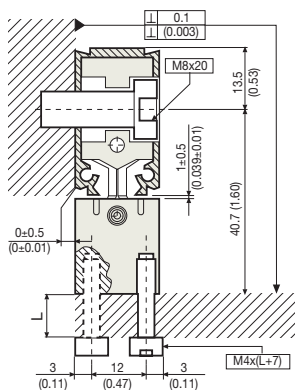
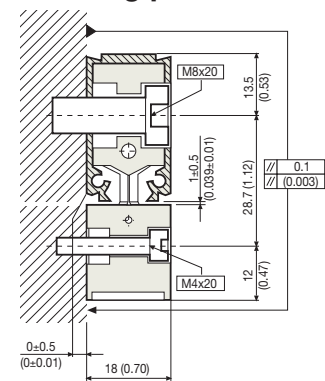
Example: **SVSP - 420 - 5 - B - A**

S	Type of profile: for limited space • S: Standard mounting for vibration up to 10 g. • SV: Special mounting for vibration up to 20 g.
S	Reference mark I₀ type • Blank space: Reference mark every 50 mm (1.97 inches) • O: Distance-coded reference mark • S: Selectable reference marks
P	Signal type • X: Differential TTL, resolution of 1 µm (0.00004 inch) • Y: Differential TTL, resolution of 0,5 µm (0.00002 inch) • W: Differential TTL, resolution of 0,1 µm (0.000004 inch) • P: 1V _{pp} sinusoidal signal
420	Measuring length in mm In the example (420) = 420 mm (16.5 inches)
5	Accuracy • 5: ± 5 µm (± 0.0002 inch) • 3: ± 3 µm (± 0.00012 inch)
B	Linear encoder with mounting support • Blank space: Without support. Vibration up to 10 g • B: with support for vibration up to 20 g
A	• Blank space: Without air inlet on the reader head • A: With air inlet on the reader head

Measuring length: S Series

mm	inches	mm	inches
70	2,7	770	30
120	4,7	820	32
170	6,7	920	36
220	8,6	1020	40
270	10,6	1140	44
320	12,6	1240	48
370	14,5	1340	52
420	16,5	1440	56
470	18,5	1540	60
520	20,5	1640	64
570	22,4	1740	68
620	24,4	1840	72
720	28	2040	80

These measuring lengths require a mounting support plate.

S**B****SV****Mounting possibilities S****Mounting possibilities SV**