



RSF Electronics, Inc.

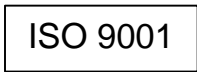
2880 Gold Tailings Court
 Rancho Cordova, CA 95670
 Fax: (916) 852-6664
 Tel: (916) 852-6660
<http://www.rsf.net>

MSA 670 SERIES LINEAR ENCODERS



- Dual Guided Encoder Head
- Large Mounting Tolerance
- Square Wave Output
- High Speed Operation

RSF Linear Encoders are designed for CNC machine closed loop positioning feedback. Digital Readouts are also available for manually operated machines.

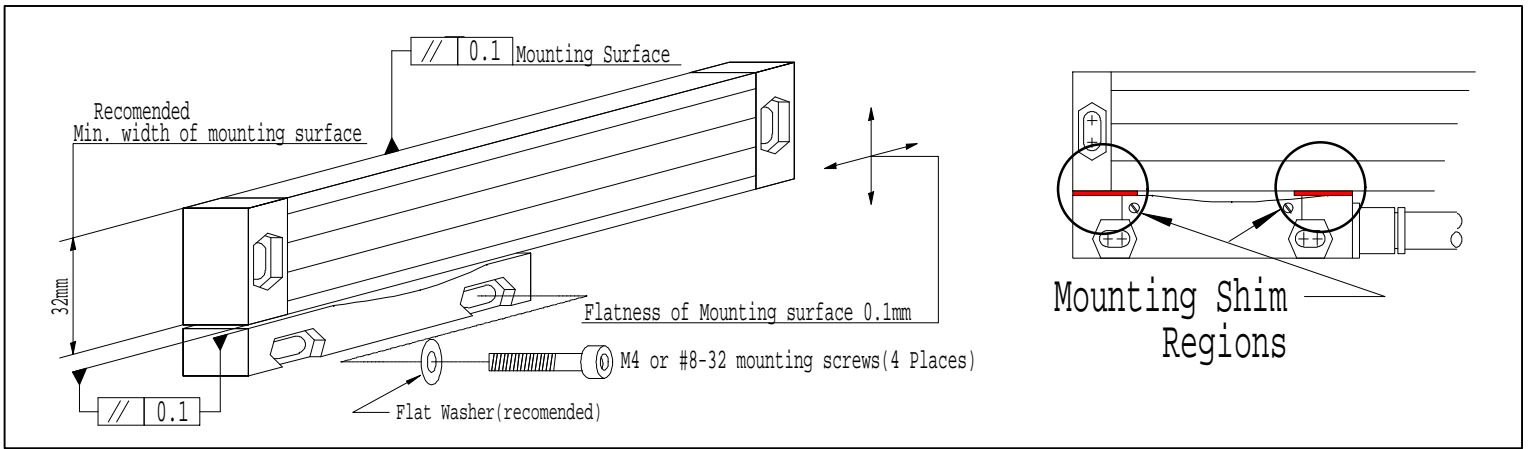


Scale Model	System Resolution*	Accuracy Grades**	Grating Pitch	Max. Rated Velocity
Square wave Line Driver signals from integrated subdividing electronics				
MSA 6705	0.1µm	±2,±3 µm/m	10µm	0.5 m/s
MSA 6709	0.25µm	±2,±3,±5 µm/m	10µm	1.0 m/s
MSA 6707	0.5µm	±3,±5 µm/m	20µm	1.0 m/s
MSA 6706	1µm	±3,±5 µm/m	20µm	2.0 m/s
MSA 6708	2µm	±5 µm/m	40µm	2.0 m/s
MSA 6702	5µm	±5,±10 µm/m	20µm	2.0 m/s
MSA 6704	10µm	±10 µm/m	40µm	2.0 m/s
Sinusoidal voltage signals 1Vss				
MSA 6700-1	Dependent on external interpolation	±2,±3 µm/m	10µm	1 m/s
MSA 6700-2	Dependent on external interpolation	±3,±5,±10 µm/m	20µm	2 m/s
Sinusoidal micro-current signals				
MSA 6701	Dependent on external interpolation	±3,±5,±10 µm/m	20µm	2 m/s
MSA 6703	Dependent on external interpolation	±2,±3 µm/m	10µm	1 m/s

* For **TRUE INCH** scales - Contact your RSF Representative

** Other accuracy grades upon request

Standard Measuring Lengths: (mm) 70, 120, 170, 220, 270, 320, 370, 420, 470, 520, 620, 720, 820, 920, 1020, 1140, 1240, 1340, 1440, 1540, 1640, 1740, 1840, 2040, 2240, 2440



Standard Reference Index Locations (Home pulses Locations)

For measuring lengths up to 170mm: RI-02 = Middle of measuring length
 For measuring lengths 220mm to 1020mm: RI-07 = 35 mm from each end
 For measuring lengths greater than 1020mm: RI-08 = 45 mm from each end
 Please contact RSF for available custom Reference Index locations.

RSF Standard Cable & Connector Specifications

Function	MSA67xx Cable 58023200	UHF Cable 58023198	7 Pin Din (L70) Sq Wave	12 Pin Din (L120) Sq Wave	9 Pin 'D' 15 Pin 'D' Sq Wave	25 Pin 'D' Sq Wave	Bendix PT06 Sq Wave	Connei L121 1V p-p	Connei L91 µA
A +	Green	Green	3	C	1	1	A	5	1
A -	Yellow	Yellow	---	D	2	2	---	6	2
B +	Pink	Orange	4	E	3	3	B	8	5
B -	Red	Red	---	L	4	4	---	1	6
RI +	Brown	Violet	6	G	5	5	F	3	7
RI -	Gray	Blue	---	H	6	6	---	4	8
5 v	Black	Black	5	K, M**	7	23	C	2 7 12	3
0 v	White	Brown	1	B, F**, J**	8	14	D	10 11	4
Shield	Bare	Bare*	7	A	9	8	E	9 inner*	9 inner*

* Outer shield to connector housing ** Optional

Connector Types

7 Pin Din: L70 Cable, Male 12 Pin Din: L120 Cable, Male 'D' Style: 9 Pin 'D' Male
 K70 Cable, Female K120 Cable, Female 15 Pin 'D' Male
 F70 Chassis, Female F120 Chassis, Female 25 Pin 'D' Male
 9 Pin Connei: L91 Cable, Male 12 Pin Connei: L121 Cable, Male Bendix: PT06, Male

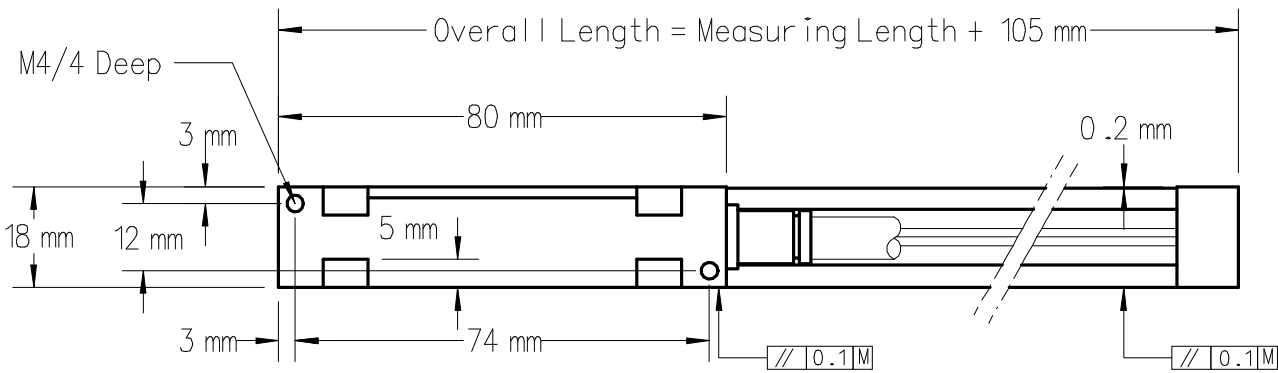
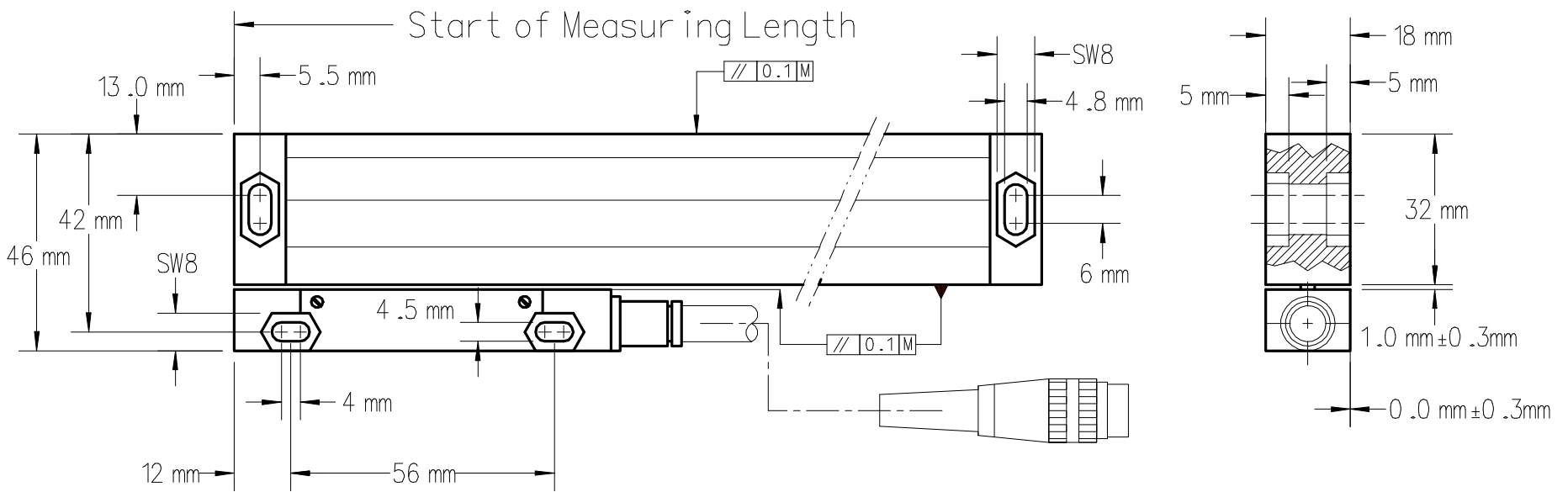
Cable Length & Special Connector Requirements

- A Three meter vinyl cable is standard.
- Custom cable lengths are rounded to the nearest 100 mm.
- Cable length is measured from the back of the connector strain relief to the strain relief on the encoder head.
- Standard tolerances for RSF cables are -0 mm +20 mm/meter of cable length.
- When ordering cables and connectors with special requirements. Please obtain a Cable Code Number from RSF Electronics.

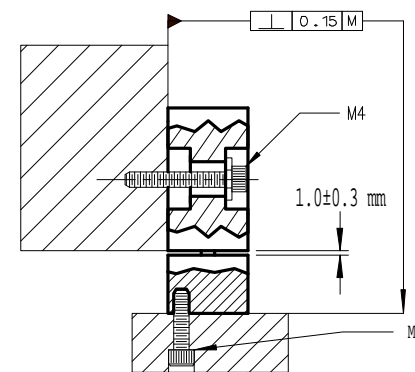
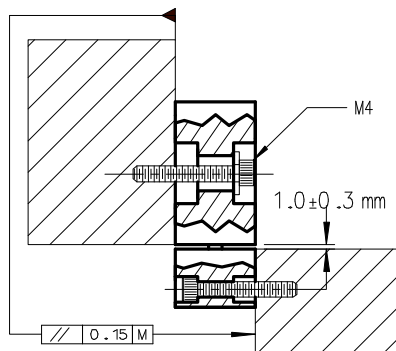
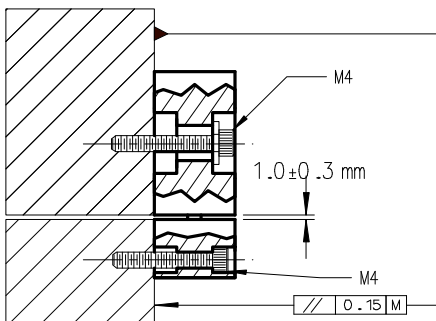


RSF Electronics, Inc

2880 Gold Tailings Court
 Rancho Cordova, CA 95670
 Fax: (916) 852-6664
 Tel: (916) 852-6660
<http://www.rsf.net>



	ISO 9001
MSA670_Series Linear Encoders	



Mounting Examples