### **APPLICATIONS**

INJECTION MOLDING MACHINES

PRINTING PRESSES

MEAT PACKING EQUIPMENT

WEATHER INSTRUMENTS

DRILL PRESSES

WOODWORKING MACHINES

**CRANES** 

FRONT-END LOADERS

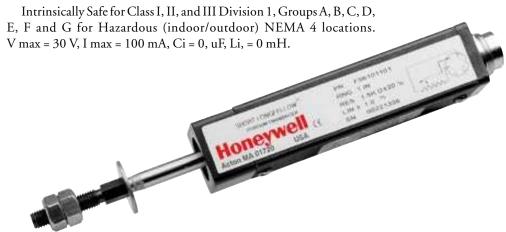
**SCALES** 

SEMI CONDUCTOR PROCESSING

# SHORT LONGFELLOW SERIES • LINEAR POSITION TRANSDUCER

The Short Longfellow is frequently used for measuring linear position or displacement up to 6 inches on a wide variety of manufacturing and process equipment. The mechanical design of the unit's front and rear bearings, anodized extruded aluminum housing, stainless steel shaft and precious metal wipers are suitable for a factory's harsh environment.

Based on the proprietary  $MystR^{\circledast}$  conductive plastic film, it provides a high resolution, absolute position measurement without external signal conditioners.



### **FEATURES**

- Precious metal wipers
- 0.081 inch thick housing with 0.25 inch shaft
- Shaft seals
- MystR® plastic element
- Absolute continuous measurement
- High performance bearings
- High level DC output

### **BENEFIT**

- Insures high performance, low noise
- Rugged construction for manufacturing environment
- Protects internal components from factory environment
- Tested up to 1 billion operations
- Accurate position at power up
- Long life even with side load conditions
- Works with simple controls

#### HOW TO ORDER 01 1500 Model . **Termination** SLF = Standard A = Binder SLW = Water Resistant Shaft Electrical . 6 = 1/4 - 28 Thread Travel 01 = 150002 = 3000Linearity 03 = 4500F = 1.0%04 = 6000B = 0.1%05 = 9000Total Unit of Resistance 1500, 3000, 4500, 6000, 9000 Measure N = Inches

Note: Not all combinations are available. Minimum quantity orders apply. Contact the factory for more details.

Note: The *Total Resistance* is determined by *Electrical Travel*, at 1500 Ohms per inch.

## **TECHNICAL SPECIFICATIONS**

Total Mechanical Travel	See table below		
Starting Force*	1 lb		
Total Weight	0.26 to 0.49 lb		
Vibration	20 g / 0.75 mm (rms) 5-2 kHz		
Shock	50 g, 11 ms half sine		
Backlash	0.001 in.		
Life	One Billion operations		
ELECTRICAL			
Theoretical Electrical Travel	See table below		
Independent Linearity**	±1.0% or ±0.1%		
Total Resistance	1500 Ohms per inch		
	theoretical electrical travel		
Resistance Tolerance	±20%		
Operating Temperature	-65° to 105° C		
Resolution	Infinite		
Maximum Applied Voltage	40 Vdc		
Recommended Wiper Curre	ent <1 μA		
Electrical Connection	Binder Series 681 Connector or equivalent		

- \* Starting Force for SLW 5 lbs. (2.3 kg)
- \*\* 5-95% of Theoretical Electrical Travel

Caution: Do not test on an Ohm Meter on the Rx 1 scale or other current devices.

Caution: Excessive Wiper Current can cause Output errors or damage.

Caution: Zero shaft side load is recommended to achieve maximum life.

Model	Electrical Travel in inches	Mechanical Travel in inches	Total Resistance in Ohms	Body Length 'X' in inches
SLF01 or SLW01	1.0	1.20	1500	4.05
SLF02 or SLW02	2.0	2.20	3000	5.05
SLF03 or SLW03	3.0	3.15	4500	5.95
SLF04 or SLW04	4.0	4.15	6000	6.95
SLF06 or SLW06	6.0	6.15	9000	8.95

### **DIMENSIONS** (11.4) xx.xx = inches (xx.x) = mm(22.9)0.06 (1.5)0.45 (11.4)0.154 (3.91) 0.90 (2 holes per bracket) (22.8) 1.75 0.88 Movable $\bigcirc$ 0.19 (4.8) mounting brackets ₻ Ф 0.38 (9.6) **4**(17.2)**►** X MOUNTING BRACKETS $\bigcirc$ 7/16 in. (6.6) across (6.3)across flats flats 03 Shaft (34.5)**-0** 2 2000 ohm current limiting resistor 0.45 (11.4)1/4-28 NF-2A thread

### SPECIALS AND ACCESSORIES

- · Other Mechanical Travels
- Other Electrical Travels
- Other Resistance Values
- · Rod and Bearings
- · Ball Joint Assembly
- · Other Linearity Values

## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Item # 1098800 M.G. 10/01





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