

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[®] conductive plastic film, it provides a high resolution, absolute position measurement without external signal conditioners.

Intrinsically Safe for Class I, II, and III Division 1, Groups A, B, C, D, E, F and G for Hazardous (indoor/outdoor) NEMA 4 locations.
 $V_{max} = 30\text{ V}$, $I_{max} = 100\text{ mA}$, $C_i = 0, \mu\text{F}$, $L_i = 0\text{ mH}$.



SHORT LONGFELLOW SERIES
LINEAR POSITION TRANSDUCER

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

SLF 01N1500 F 6A

Model

SLF = Standard Seal
 SLW = Water Resistant

Electrical Travel in inches and Resistance in Ohms

01N1500 = 1.0"; 1,500 ohms
 02N3000 = 2.0"; 3,000 ohms
 03N4500 = 3.0"; 4,500 ohms
 04N6000 = 4.0"; 6,000 ohms
 06N9000 = 6.0"; 9,000 ohms

Shaft and Connector

6 = 1/4 - 28 Thread
 A = Binder 681 Connector or equivalent

Linearity

B = 0.5%
 F = 1.0%

TECHNICAL SPECIFICATIONS

MECHANICAL

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 Current	<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.

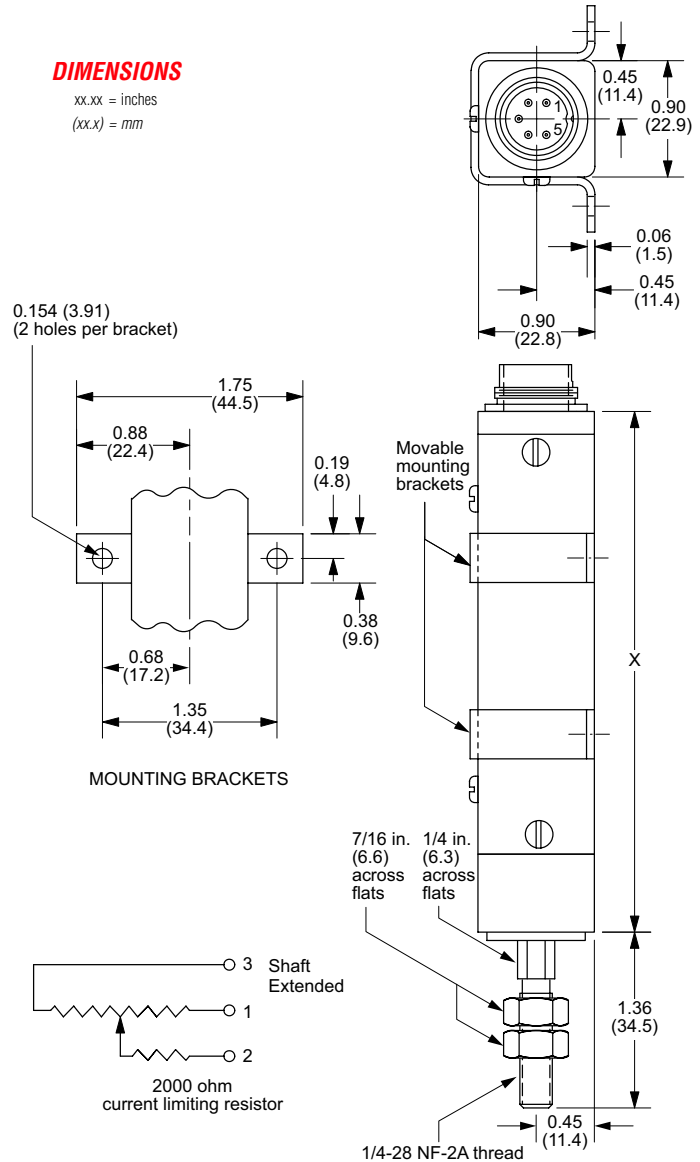
Caution: Excessive Wiper Current can cause Output errors or damage.

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

xx.xx = inches
(xx.x) = mm



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.



36 Route 10 East Hanover, NJ 07936
(800) 631-8083 Local: (973) 887-2550
e-Mail: sales@state-elec.com
http://www.state-elec.com
http://www.potentiometer.com

Rev. 041410