

APPLICATIONS

- INJECTION MOLDING MACHINES
- PRINTING PRESSES
- MEAT PACKING EQUIPMENT
- DRILL PRESSES
- WOODWORKING MACHINES
- CRANES
- FRONT-END LOADERS
- SCALES
- SEMI CONDUCTOR PROCESSING
- WATER RESISTANT

LONGFELLOW® II METRIC SERIES • LINEAR POSITION TRANSDUCER

The new Longfellow II Metric Series has a rugged long-life design featuring greater resistance to vibration and a smooth high quality signal. It has a solid stainless steel shaft, longer front-end bearings, a vibration-free damped element, a spring-loaded ball joint and a high precision precious metal wiper. Carrier guides extruded the full length of the housing insure smooth operation even under severe side load conditions.

The Longfellow II Metric is a direct drop-in replacement for existing Waters, Data Instruments, Novotechnik, Gefran or Sfernice units. The newly designed internal components provide improvements which were developed after worldwide testing and field experience.

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.
 $V_{max} = 30 \text{ V}$, $I_{max} = 100 \text{ mA}$,
 $C_i = 0$, uF , $L_i = 0 \text{ mH}$.



LONGFELLOW II METRIC SERIES LINEAR POSITION TRANSDUCER

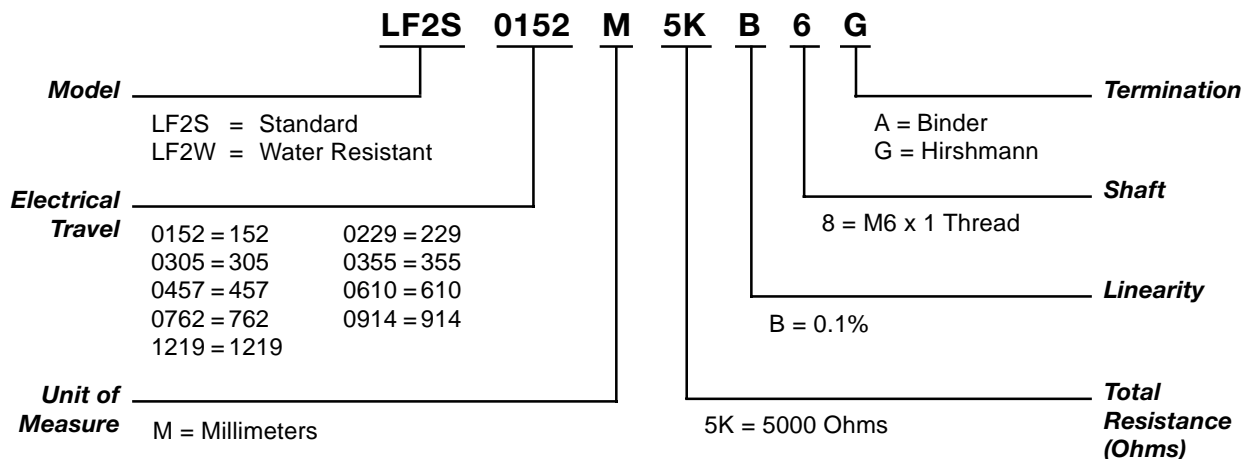
FEATURES

- Vibration damped element
- Spring-loaded ball joint assembly
- Extruded wiper carrier guides
- Precious metal wipers
- MystR® plastic elements
- High DC level output
- High performance bearings
- Absolute continuous measurement
- Shaft seals
- LF2W

BENEFITS

- No wiper bounce in high vibration Environments
- Operation under high side loads
- Smooth operation under large misalignment
- Insures high performance, low noise, no oxidation
- Tested up to one billion operations
- Works with simple controllers
- Long life under side load conditions
- Accurate position at power-up
- Protect internal components from environments
- NEMA 4 and water resistant

HOW TO ORDER



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

TECHNICAL SPECIFICATIONS

MECHANICAL

| | |
|-------------------------|-------------------------------|
| Total Mechanical Travel | 152 to 1219 mm |
| Starting Forces* | 0.45 kg |
| Total Weight | 0.36 to 2 kg |
| Vibration** | 20 g rms/0.75 mm 5-2 Hz |
| Shock | 50 g, 11 ms half sine |
| Backlash | 0.025 mm |
| Life | One Billion Dither Operations |

ELECTRICAL

| | |
|-------------------------------|---|
| Theoretical Electrical Travel | 150 to 1200 mm |
| Independent Linearity | 0.1% over Theoretical Electrical Travel |
| Total Resistance | 5000 Ohms |
| Resistance Tolerance | 20% |
| Operating Temperature | -65° to 105° C -85° to 221° F |
| Resolution | Infinite |
| Insulation Resistance | 1000 M Ohms @ 500 Vdc |
| Dielectric Strength | 1000 V rms |
| Recommended Wiper Current | <1 µA |
| Electrical Connection | DIN 43650 Connector or Equivalent |
| Maximum Applied Voltage | 30 Vdc |

* Starting force for LFIW 2.27 kg MAX
Water resistant LFIW Models are rated to NEMA 4

** For vibration levels up to 50 g rms and higher additional housing clamps are required

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.

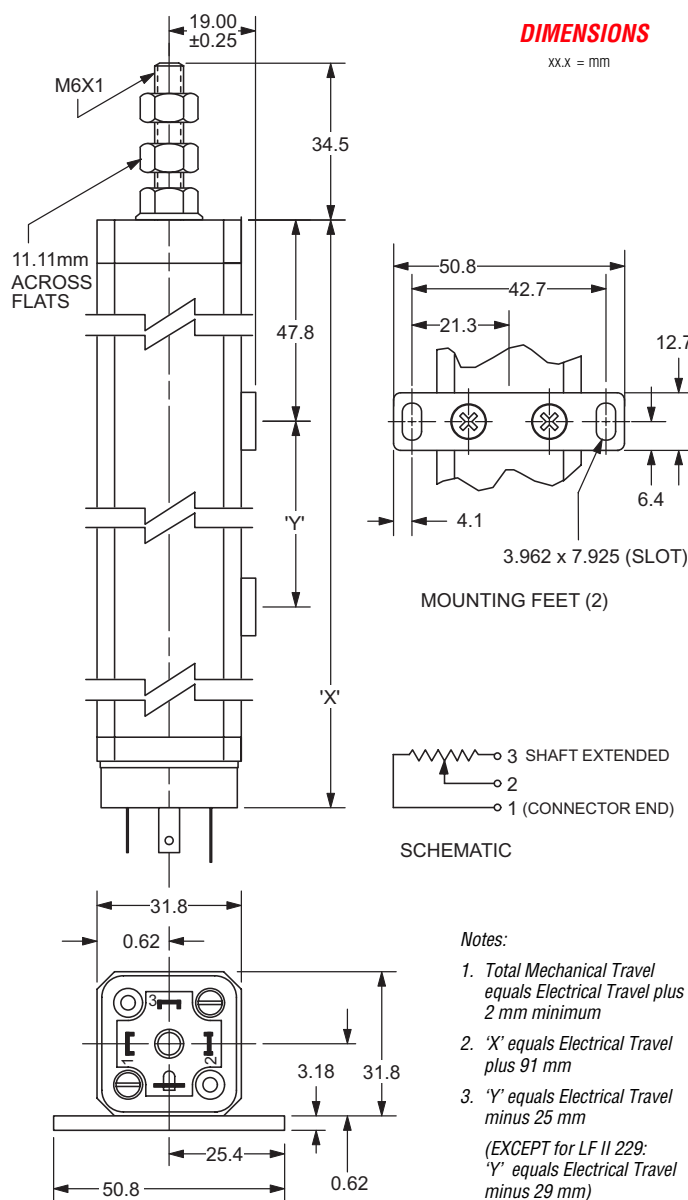
Caution: Zero shaft side load is recommended to achieve maximum life.

SPECIALS AND ACCESSORIES

- Other Electrical Travels
- Ball Joint Assembly
- Other Resistance Values
- Dual Element
- Rod-end Bearings
- Optional Linearity Values

DIMENSIONS

xx.x = mm



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 # 1126000 M.G. 02/02 Rev. B

Honeywell

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