



*Representative photograph, actual product appearance may vary.*

*Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.*

## LF2S18N5KB6A

**LongFellow® II Linear Position Transducer, 457,2 mm [18.0 in] Electrical Travel, Binder Series 681 termination, Item Number 9810904**

### Features

- Vibration damped element - No wiper bounce in high vibration environments
- Spring-loaded ball joint on wiper assembly - Smooth, easy operation under high side loads
- Extruded wiper carrier guides - Smooth operation under large misalignment
- Precious metal wipers - Insures high performance, low noise, no oxidation
- MystR® plastic elements - Tested up to one billion operations
- High performance bearings - Long life under side load conditions
- Shaft seals - Protect internal components from harsh environments
- High DC level output - Works with simple controllers
- Absolute continuous measurement - Accurate position at power-up

### Typical Applications

- Injection molding machines
- Printing presses
- Meat packing equipment
- Drill presses
- Woodworking machines
- Cranes
- Front-end loaders
- Scales

### Description

The LongFellow® II incorporates design innovations to increase transducer life and provide greater resistance to vibration, while providing a smooth high-quality signal for demanding factory control applications. 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 extrude the full length of the housing to insure smooth operation even under severe side load conditions.

The newly designed internal components provide improvements based on worldwide testing and field experience.

Intrinsically safe for Class I, II and III Division I, Groups A, B, C, D, E, F and G for hazardous (indoor/ outdoor) NEMA 4 locations. V max.=30 V, I max.=100 mA, Ci=0, Li.=0mH.



## LF2S18N5KB6A

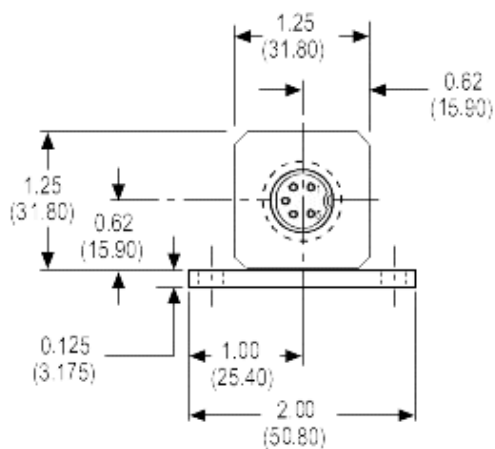
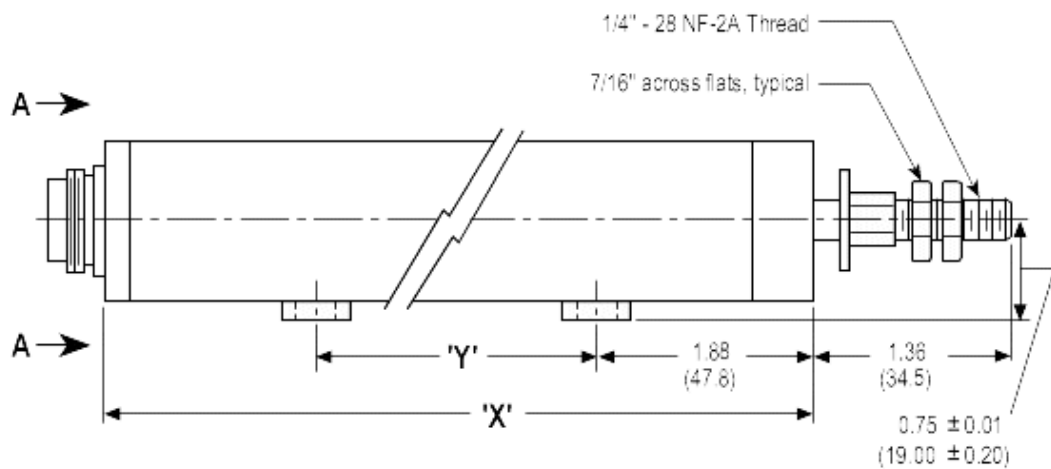
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| Product Specifications      |                                                                                                                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply Voltage              | 30 Vdc max.                                                                                                                                                                                                                   |
| Measurement Type            | Linear                                                                                                                                                                                                                        |
| Housing Size                | 538,2 mm [21.19 in]                                                                                                                                                                                                           |
| Total Mechanical Travel     | 459,8 mm [18.09 in]                                                                                                                                                                                                           |
| Electrical Travel           | 457,2 mm [18.0 in]                                                                                                                                                                                                            |
| Starting Force (max.)       | 0,45 kg [1.0 lb]                                                                                                                                                                                                              |
| Linearity                   | ± 0.1 %                                                                                                                                                                                                                       |
| Backlash                    | 0,025 mm [.001 in]                                                                                                                                                                                                            |
| Bearing Type                | Sleeve                                                                                                                                                                                                                        |
| Shaft Material              | Stainless Steel                                                                                                                                                                                                               |
| Shaft Diameter              | 1/4 in - 28 NF-2A thread                                                                                                                                                                                                      |
| Type of Element             | MystR® conductive plastic film                                                                                                                                                                                                |
| Housing Style               | Anodized Aluminum                                                                                                                                                                                                             |
| Termination                 | Binder Series 681                                                                                                                                                                                                             |
| Wiper Current               | <1 µA                                                                                                                                                                                                                         |
| Resolution                  | Infinite                                                                                                                                                                                                                      |
| Operating Temperature Range | -65 °C to 105 °C [-85 °F to 221 °F]                                                                                                                                                                                           |
| Vibration                   | 20 g / 0,75 mm (rms) 5 hz to 2 khz                                                                                                                                                                                            |
| Shock                       | 50 g 11 ms half sine                                                                                                                                                                                                          |
| Operating Life              | one billion dither operations                                                                                                                                                                                                 |
| Total Resistance            | 5,000 Ohms                                                                                                                                                                                                                    |
| Resistance Tolerance        | ± 20 %                                                                                                                                                                                                                        |
| Insulation Resistance       | 1000 MOhm @ 500 Vdc                                                                                                                                                                                                           |
| Dielectric Strength         | 1000 V rms                                                                                                                                                                                                                    |
| Weight (Ranges)             | 0,770 kg [1.7 lb]                                                                                                                                                                                                             |
| Sealing                     | NEMA 4                                                                                                                                                                                                                        |
| UNSPSC Code                 | 41111945                                                                                                                                                                                                                      |
| UNSPSC Commodity            | 41111945 Linear position sensors                                                                                                                                                                                              |
| Availability                | Global                                                                                                                                                                                                                        |
| Comments                    | Note; Mating Connector, Item Number 3718401, sold separately. Options; Electrical Travel, Total Resistance, Linearity, Rod End Bearing, Ball Joint Assembly, Shaft Thread (M6 x 1 Metric), Din 43650 Connector, Dual Elements |
| Series Name                 | LFII Series                                                                                                                                                                                                                   |

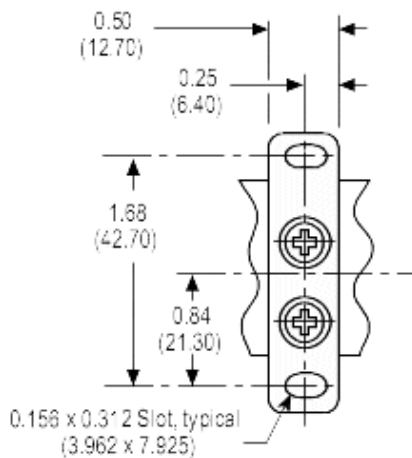


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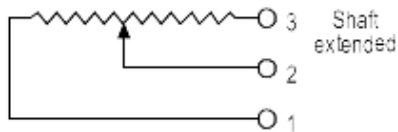


VIEW A-A



MOUNTING FEET (2)

Mounting feet shown above are for standard LF II models only. Mounting feet are not included with water resistant LF II models. Water resistant LF II models are shipped with brackets.

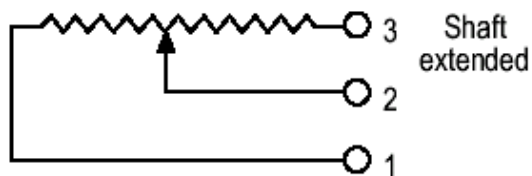


SCHEMATIC

**Honeywell**

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### **⚠ WARNING**

#### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

### **⚠ WARNING**

#### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**