# **ELSX™** Rotary Joint

Type ELSXN 2"to 3.5"
Rotating Horizontal Pipe



The extended life ELSX rotary joint is designed to perform in high-pressure, high-speed, and high-vibration applications. Its convex seal design delivers up to 20% more combined pressure and velocity capability (PV) and up to 15% more seal ring wear life in steam applications than the previous generation of extended life joints. Increased carbon guide separation and contact surfaces ensure greater horizontal pipe stability. The ELSX rotary joint enables faster runnability and increased up-time across applications.

#### **Standard ELSX Ratings**

| Media:       | Steam                   |
|--------------|-------------------------|
| Pressure:    | Up to 300 psig (20 bar) |
| Temperature: | Up to 500°F (260°C)     |
| Speed:       | Up to 300 RPM           |
|              |                         |
| Media:       | Thermal Oil             |
| Pressure:    | Up to150 psig (10 bar)  |
| Temperature: | Up to 650°F (343°C)     |
| Speed:       | Up to 300 RPM           |
|              |                         |

## **Overview**



#### **Features**

- Robust convex seal design
- Designed for steam and thermal oil
- Wide carbon guide separation and wide wear surface
- Standard O-ring or preformed packing
- Proprietary preloaded design for thermal oil sealing

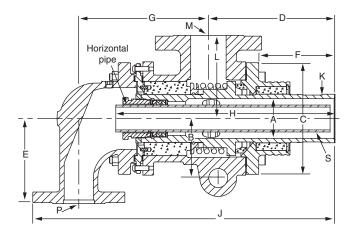


## **Benefits**

- Faster runnability
- Increased up-time
- High combined pressure and velocity capability (PV)
- Extended carbon guide and seal ring wear life and increased horizontal pipe stability
- Application and installation flexibility
- Easy to maintain, no special tools required







# **Flanged Connection - Rotating Pipe**

| Size (K) | М        | P                                 | 5           | A    | В    | c    | D*    | E    | F*   | G     | #     | J*    | Į,   | Units  |
|----------|----------|-----------------------------------|-------------|------|------|------|-------|------|------|-------|-------|-------|------|--------|
| 2" 11/2" | 41/"     | 3/4"-11/4"                        | 1/2"- 1"    | 1.94 | 3.63 | 6.75 | 7.45  | 5.19 | 4.52 | 6.93  | 12.77 | 17    | 5.24 | inches |
|          | 172      |                                   |             | 49   | 92   | 172  | 189   | 132  | 115  | 176   | 324   | 432   | 133  | mm     |
| 21/2"    | 2"       | 11/4"                             | 3/4"- 11/4" | 2.30 | 3.75 | 7.4  | 8.05  | 5.25 | 4.81 | 8.06  | 14.6  | 18.74 | 5.62 | inches |
| 272      | 2        |                                   |             | 58   | 95   | 188  | 205   | 133  | 122  | 205   | 371   | 476   | 143  | mm     |
| 3"       | 21/2"    | 1/4"-2"                           | 1"- 2"      | 2.80 | 4.20 | 7.87 | 8.9   | 6    | 5.35 | 9.15  | 15.44 | 21.3  | 5.87 | inches |
|          |          |                                   |             | 71   | 107  | 200  | 226   | 152  | 136  | 232   | 392   | 541   | 149  | mm     |
| 31/2"    | 21/2"-3" | $1\frac{1}{2}'' - 2\frac{1}{2}''$ | 11/4"-2"    | 3.38 | 4.81 | 9.15 | 10.33 | 6.5  | 6.28 | 12.03 | 19.83 | 25.36 | 6.75 | inches |
|          |          |                                   |             | 86   | 122  | 232  | 262   | 165  | 159  | 306   | 504   | 644   | 171  | mm     |

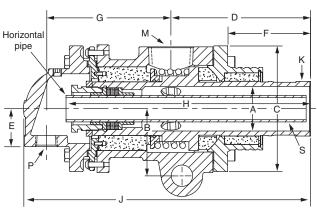
Flanged connections available in 150 and 300 class flanges.

\*These dimensions vary for thermal oil, consult factory.

\*These dimensions will increase with seal ring wear.







#### **Threaded Connections - Rotating Pipe**

| Size (K) | м            | P   | S          | A    | В    | С    | D*   | E    | F*   | G    | H     | J*    | Units  |
|----------|--------------|---|------------|------|------|------|------|------|------|------|-------|-------|--------|
| 2"       | .1/" .1/"    | 3/4" - 11/4"  | 1/2"-1"    | 1.94 | 3.63 | 6.75 | 7.25 | 2.13 | 4.33 | 6.27 | 12    | 15.75 | inches |
| 2        | 174 – 172    |   |            | 49   | 92   | 72   | 184  | 54   | 110  | 159  | 305   | 400   | mm     |
| 21/2"    | 11/4" -21/2" | <sup>3</sup> / <sub>4</sub> " – 1 <sup>1</sup> / <sub>2</sub> " | 3/4"-11/4" | 2.30 | 3.75 | 7.4  | 8.05 | 2.25 | 4.81 | 7.01 | 13.81 | 16.33 | inches |
|          |              |   |            | 58   | 95   | 1.88 | 205  | 57   | 122  | 78   | 351   | 415   | mm     |
| 3″       | 2" - 21/2"   | 11/4" - 11/2"   | 1"- 2"     | 2.80 | 4.20 | 7.87 | 8.72 | 2.38 | 5.16 | 7.8  | 15.29 | 17.96 | inches |
|          |              |   |            | 71   | 107  | 200  | 221  | 60   | 131  | 198  | 388   | 456   | mm     |

<sup>\*</sup>These dimensions vary for thermal oil, consult factory.

Dimensions are for reference only and subject to change.

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<sup>\*</sup>These dimensions will increase with seal ring wear.