



## FIXED REACH (FXR) TOP LOADING ARM



SIMPLE  
PROVEN  
DESIGNS

WIDE  
COMPATIBILITY

APPLICATIONS  
FOR TRUCK  
OR RAILCAR

Also available in both  
boom supported and  
unsupported style



### Fixed Reach (FXR) Top Loading Arm

StandardLine Loading Arms Systems raise the bar in quality and performance for the industry. Get OPW's best-in-class loading systems in pre-engineered sizes, materials and feed orientations with delivery in 20 days or less.

Top Loading railcars and trucks continue to provide an efficient and cost effective method to load and unload in many situations.

A loading system should have sufficient horizontal range to reach the farthest compartment without re-spotting the vehicle. Sufficient vertical movement and drop-pipe lengths to service vehicles of varying heights is also necessary. A properly designed top loading system can provide protection and achieve this requirement. Top loading arms can also be used for tight-fill, vapor recovery, marine and other applications when used with specially designed and engineered components, such as vapor plates, tapered hatch plugs, and inflatable hatch seals.

Special top loading arm designs can also be supplied with a wide range of valves, fittings, and instrumentation equipment.

### Key Features

- 3000 Series Swivel Joints
- Simple, Proven Design
- Carbon Steel/Aluminum Construction
- Low-Temperature Fluorocarbon Seals
- Wide Compatibility
- 790 EZ Adjust Counterbalance
- Safe, Easy Spring Adjustment
- Integral Upward, Downward Travel Stops
- 5-Year Warranty
- Available with Loading Valve
- Safety Closure will automatically close if left unattended
- Remote Control Linkage allows operator to actuate valve while on truck

| Technical Features                                                    |                                       |
|-----------------------------------------------------------------------|---------------------------------------|
| <b>Materials</b>                                                      | Carbon Steel/Aluminum                 |
| <b>Seals</b>                                                          | Low-Temp Fluorocarbon                 |
| <b>Working Pressure</b>                                               | 80 PSI (5.5 Bar)                      |
| <b>Test Pressure</b>                                                  | 120 PSI (8.2 Bar)                     |
| <b>Operating Temperature</b>                                          | -20°F to 140°F (-29°C to 60°C)        |
| <b>Up/Down Angular Movement</b>                                       | +70° to -20° (from horizontal)        |
| <b>Typical Horizontal Spacing</b>                                     | 24" (610 mm)                          |
| <b>Typical Vertical Spacing</b>                                       | 15" (381 mm)                          |
| <b>Typical Reach (radius)</b>                                         | 60" to 108"<br>(1,524 mm to 2,743 mm) |
| <b>Nominal Diameter</b>                                               | 3" and 4"                             |
| <b>Typical Flow Rates<br/>(Velocities &lt; 15 ft/sec (7.5 M/sec))</b> | 300-600 GPM<br>(2000-3500 LPM)        |

| Material of Construction                           |                              |
|----------------------------------------------------|------------------------------|
| <b>Inlet Flange</b>                                | 150 ANSI ASTM A105           |
| <b>Inlet Swivel</b>                                | Carbon Steel ASTM A536       |
| <b>Primary Arm Piping</b>                          | Sch 40 Aluminum ASTM B241    |
| <b>Apex/Drop Tube Swivel<br/>(p/n 3640FT-0402)</b> | Aluminum<br>ASTM B26 A356 T6 |

Orientation .....



**(UR)** Upfeed/RH



**(DR)** Downfeed/RH



**(UL)** Upfeed/LH



**(DL)** Downfeed/LH

### Fixed Reach (FXR) Loader Dimensions\*

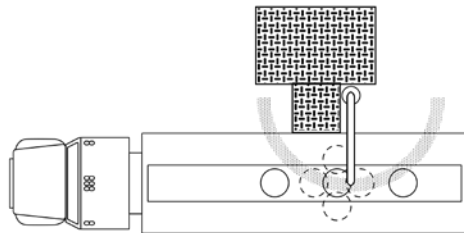
StandardLine Terminal Configuration



This simple arm incorporates only three swivel planes of rotation and is designed for use in top-loading installations where the vehicle is located at a fixed distance from the riser pipe. The two swivel planes at the inlet permit both up-and-down and side-to-side movement of the assembly, and the third swivel plane allows the drop pipe to remain vertical.

| FXR Specs |                   |         |
|-----------|-------------------|---------|
|           | 3"                | 4"      |
| <b>A</b>  | 7 5/8"            | 9 1/4"  |
| <b>B</b>  | 96" / 108" / 120" |         |
| <b>C</b>  | 6 7/8"            | 12 3/4" |
| <b>D</b>  | 48" / 72"         |         |
| <b>E</b>  | 10 1/2"           | 11 3/4" |

### Operating Envelope: Fixed Reach Arm



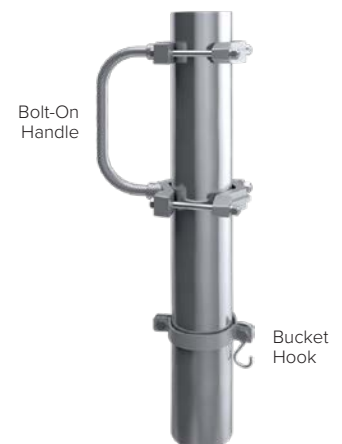
① **Loading Valve**  
0 - No Loading Valve  
1 - Aluminum Loading Valve with Remote

② **Assembly, Testing & Boxing (ATB)**  
0 - No ATB  
1 - ATB included  
2 - ATB, Export

| Additional Information                              |                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Weld Procedure</b>                               | Per the ASME Boiler & Pressure Vessel Code Section IX                                                                                                                                                                                                                                  |
| <b>Radiograph/X-Ray</b>                             | Per OPW Standard, 5% random/factory lot                                                                                                                                                                                                                                                |
| <b>Testing</b>                                      | All assembled Loading Arms shall be tested to 1.5X the rated design pressure.                                                                                                                                                                                                          |
| <b>Surface Treatments</b>                           | All Carbon Steel/Ductile Iron components to be protected with a 2-part paint process. Aluminum components to be unpainted.                                                                                                                                                             |
| <b>Lubricant</b>                                    | OPW 880 High-Performance Synthetic Lubricant                                                                                                                                                                                                                                           |
| <b>Gasketing</b>                                    | KlingerSil C5400                                                                                                                                                                                                                                                                       |
| <b>Warranty</b>                                     | Standard warranty of three years after date of invoice shall apply. LYNX API Coupler warranty to be three years after shipment from factory. 790 Counter-balance warranty to be five years after shipment from factory.                                                                |
| <b>Freight</b>                                      | All shipments are F.O.B Factory Lebanon, OH. Full freight is allowed on surface transportation within continental United States and Canada.                                                                                                                                            |
| <b>Factory Assembly, Testing &amp; Boxing (ATB)</b> | If this option is selected, Loading Arm would be fully assembled, tested and shipped in protective wooden crate.<br><b>Note:</b> It may be necessary to ship Loading Arm in sections to accommodate crating, shipping and rigging. Arm will be shipped as fully assembled as possible. |

| Top loading Accessories** |         |         |
|---------------------------|---------|---------|
| Part                      | 3" P/N  | 4" P/N  |
| Bolt-On Handle, Alum.     | BOH-S-3 | BOH-S-4 |
| Bucket Hook               | BH-3    | BH-4    |

\*\* Accessories ordered separately



\* Required to accommodate StandardLine Offering. 48" Drop Dimension shown. 72" also available. Other options are available upon request.