

# STANDARDLINE

## A-Frame Pipe (AFP) Bottom Loading Arm

StandardLine Loading Arms by OPW Engineered 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.

The AFP (A-Frame Pipe) Loader is a popular loading-arm configuration due to its flexibility and convenience of use. Ideal for lower riser heights and when crossover isn't as important (one or two fueling lines). Similar to our AFH Loader, but utilizes piping in place of hose to simplify maintenance.

### Features and Benefits:

- 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 Lynx Bottom Loading Coupler
  - 3-Year Warranty
- 3" and 4" Sizes
- Stores In Upright, Near-Vertical Position
- Low Riser Mounting Heights

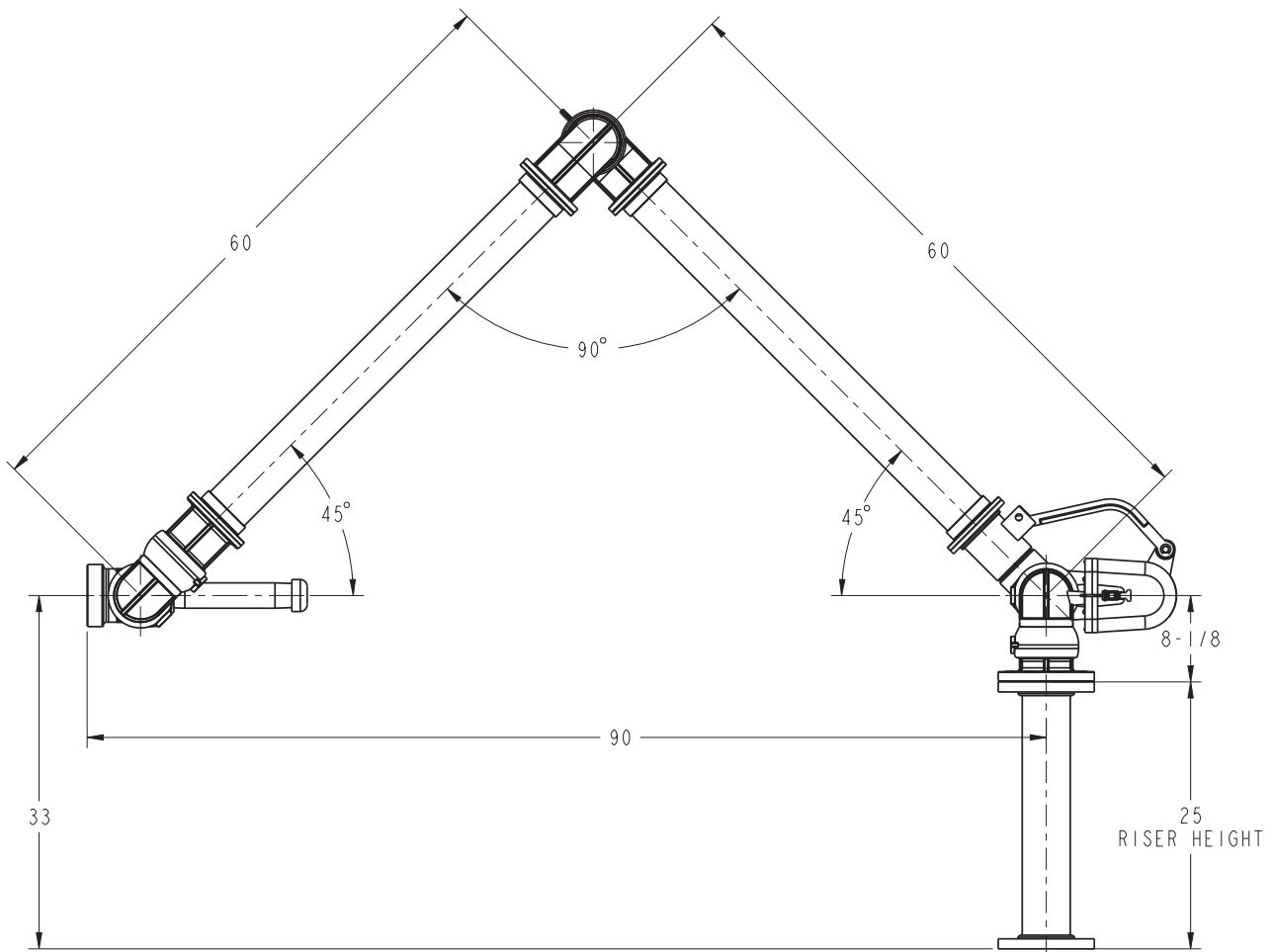


### ALL STANDARDLINE ARMS FEATURE

- Fast Delivery – 20 Days or Less!†
- Menu of Options to customize your arm
- Freight is included across continental U.S. & Canada
- Exclusive 3-Year Warranty included

# A-Frame Pipe (AFP) Loader Dimensions\*

## StandardLine Terminal Configuration\*\*



\* Required to accommodate StandardLine Offering. Other options are available upon request.

\*\* Left-hand configuration shown. Right-hand configuration would be mirror image with riser elevations going up from left to right.  
Contact OPW for layout assistance.

## Build Your Standard AFP Arm

1. Fill in the corresponding code for your selections.
2. Add accessories by filling in the appropriate corresponding number for each option.

Example													
AFP	CA	60	UR	0402	—	0	0	0	0	0	0	0	0


**AFP**    **CA**    **60**

**Arm Style:** \_\_\_\_\_  
 (AFP) A-Frame Pipe


**Material Options:** \_\_\_\_\_  
 (CA) Carbon Steel/Aluminum

**Dimension Options:** \_\_\_\_\_  
 (60) 60" x 60"


**Orientation:** \_\_\_\_\_




(UR) Upfeed/RH



(DR) Downfeed/RH



(UL) Upfeed/LH

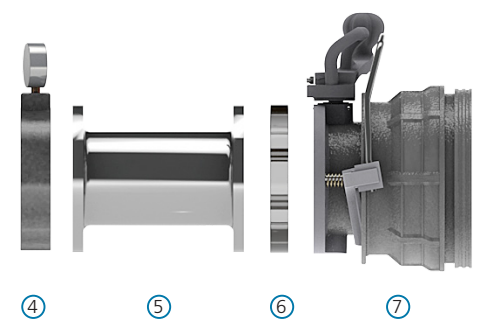


(DL) Downfeed/LH

**Size and Seal Type:** \_\_\_\_\_  
 (0302) 3" with fluorocarbon  
 (0402) 4" with fluorocarbon

0	0	0						
1	2	3	4	5	6	7	8	

- 1 Drop Spool**  
0 - Not Applicable for AFP
- 2 Drop Hose**  
0 - Not Applicable for AFP
- 3 Coupler Swivel**  
0 - Not Applicable for AFP
- 4 Isolation Valve**  
0 - Isolation Valve by Others  
1 - 4" Full Flow (LBV 450VGL)
- 5 Spacer Spool**  
0 - Spacer Spool by Others  
1 - 4" x 8" OAL, TTMA FLG (VSS4)  
2 - 3" x 4" Spacer Spool, 3" MNPT x 4" TTMA (H30734)
- 6 Site Glass**  
0 - Site Glass by Others  
1 - 4" Acrylic (BF4-SG-25)
- 7 API Coupler**  
0 - API Coupler by Others  
1 - 1004D3-0402  
2 - Lynx Coupler (852VG)
- 8 Assembly, Testing & Boxing (ATB)**  
0 - No ATB  
1 - ATB Included  
2 - ATB, Export



Technical Features	
Materials	Carbon Steel/Aluminum
Seals	Low-Temp Fluorocarbon
Working Pressure	80 PSI (5.5 Bar)
Test Pressure	120 PSI (8.2 Bar)
Operating Temperature	-20°F to 140°F (-29°C to 60°C)
Up/Down Angular Movement	+80° to +45° (from horizontal)
Typical Horizontal Spacing	24" (610 mm)
Typical Vertical Spacing	18" (457 mm)
Typical Reach (radius)	60" (1,524 mm)
Nominal Diameter	3" and 4"
Typical Flow Rates (Velocities < 15 ft/sec (7.5 M/sec))	200-600 GPM (757-2271 LPM)
Weight	~275 lbs*

Materials of Construction	
Inlet Flange	4" 150 ANSI ASTM A105
Inlet Swivel	Carbon Steel ASTM A536
Primary Arm Piping	Sch 40 Aluminum ASTM B241
Apex Swivel (p/n 3640FT-0402)	Aluminum ASTM B26 A356 T6
Coupler Swivel (p/n 3655FTH) (2-Plane)	Aluminum ASTM B26 A356 T6
Isolation Valve (LBV450VGL)	Cast Aluminum/Fluorocarbon
Spacer Spool (p/n VSS4)	Cast Aluminum AA601
API Coupler (p/n: 1004D3, Lynx852VG)	Aluminum/Fluorocarbon

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

RECOMMENDED SPARE PARTS LIST**			
Part #	Description	Where Used	Qty/Arm
3000RK-0402	3000 Series Swivel Seal Kit, 4" Fluorocarbon	All Swivels (Counterbalance, Apex, Coupler Swivels)	5
1004D3SRK-0402	Coupler Seal Repair Kit, 4" Fluorocarbon	1004D3-0402 (API Coupler)	1
API850VGSK	Coupler Seal Repair Kit, 4" Fluorocarbon	Lynx852VG (API Coupler)	1

\* Estimated weight for entire Loading Arm (72" Reach). Weight can vary depending on selected options.

\*\* Other seal kits/materials available upon request.

† '20 Days or Less' refers to twenty working days.