



JLA2543

LPG LOADING ARM FOR LOADING / UNLOADING



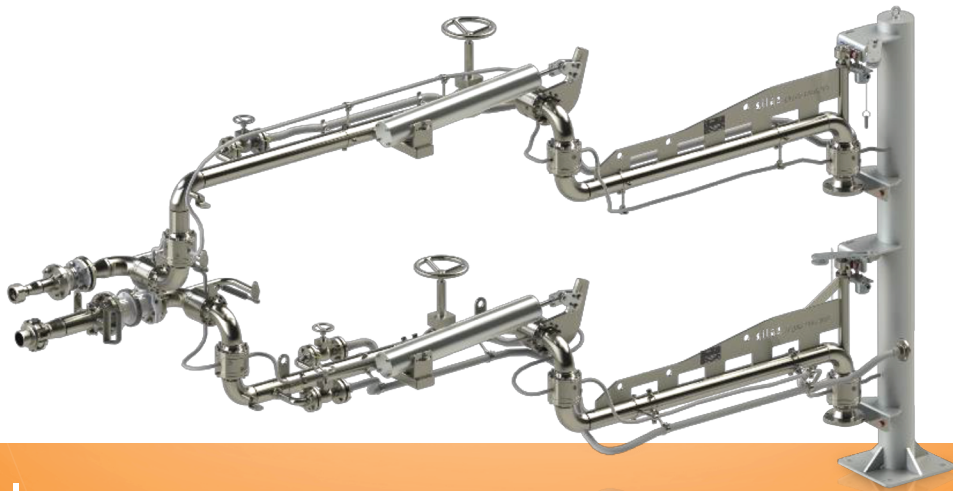
www.jetax.com

JETAX FIELD EQUIPMENTS DEVELOPMENT AND DESIGN LLC



JLA2543

LPG LOADING ARM FOR LOADING / UNLOADING

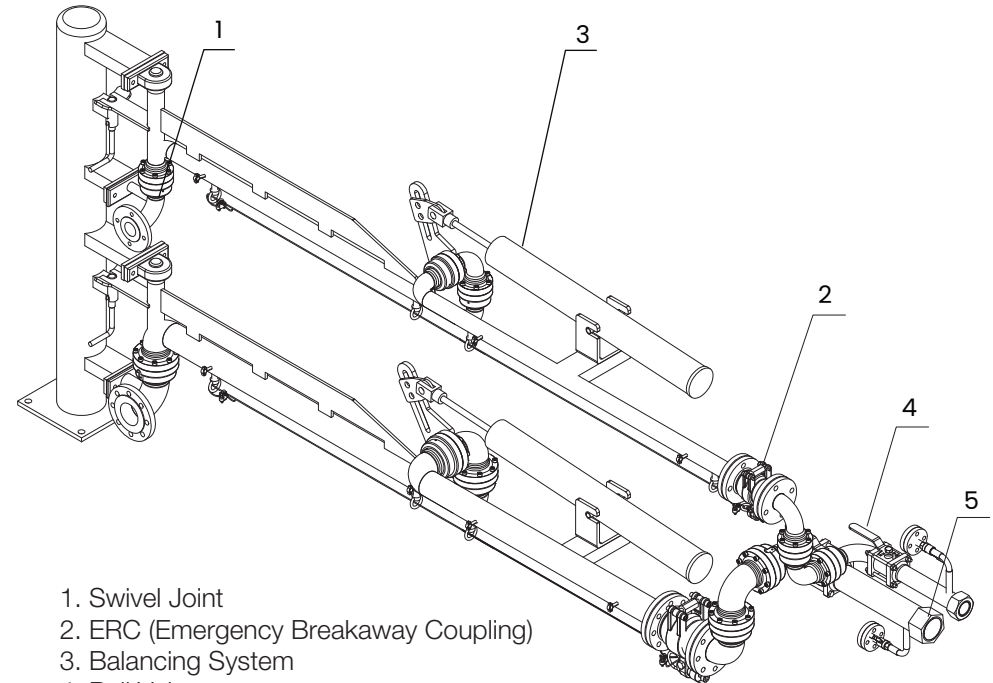


Introduction of product technical performance

- Jetax Loading arm JLA2543 is designed to transfer LPG between the railway or truck tank and storage & transportation piping.
- It consists of flange, elbow, swivel joint, main seal, pipeline, emergency break away coupling, ball valve, spring cylinder (balance device) and structure parts.
- It Move along with the railway & truck tank in the regular moving range of the tank during the loading and Can be operated manually.
- Jetax bottom loading arm is designed and manufactured as different work site of client's, so it can satisfy the site condition. The perfect design of structure and size can make operate and maintenance easy.

Technical Specifications:

Diameter	DN 50 (2")	DN 80 (3")
Flow Rate (M³/h)	50	80
Pipe Material	SS316L	
Design Temperature (°C)	-20° to 70°C	
Design Pressure (Bar)	25	
Testing Pressure (Bar)	37.5	
Base plate Material	Carbon Steel	
Flange Standard	ASME B16.5 300LB	
Retraction Position	Right hand or customized	



1. Swivel Joint
2. ERC (Emergency Breakaway Coupling)
3. Balancing System
4. Ball Valve
5. NPT Female Thread



JLA2543

LPG LOADING ARM FOR LOADING / UNLOADING



Swivel Joint for Gas Applications

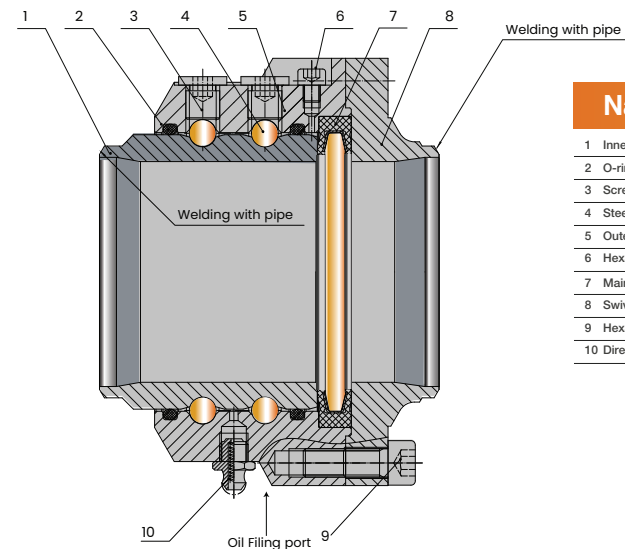
swivel joint is a mechanical connection that allows one part to rotate relative to another without disconnecting the fluid or gas flow. It is commonly used to transfer fluids or gases between stationary and rotating or moving components



Technical Specifications:

Swivel Joint for Gas Applications (LPG / CNG / NG)

Material:	Stainless Steel (SS316) or Galvanized Carbon Steel with anti-corrosion coating. Brass may be used for small diameters.
Pressure Range:	Typically 10 - 25 bar, some models rated up to 40+ bar.
Temperature Range:	-40°C to +120°C (higher/lower ranges available for specific gas types, e.g., cryogenic LPG)
Size (Diameter):	Common sizes: 1" to 4"
Connection Type:	Flanged (ANSI/DIN) or Threaded (NPT/BSPT)
Sealing Material:	PTFE, Viton, or NBR - compatible with petroleum gases
Rotation:	360° continuous rotation with gas-tight sealing
Explosion Protection:	ATEX or IECEx certified for hazardous areas (Zone 1 / Zone 2)
Compliance:	Meets ANSI / ASME / API / ISO / EN standards
Maintenance:	Low-maintenance or maintenance-free design (grease-free)
Testing:	Hydrostatic pressure test + Helium or gas leak test before delivery

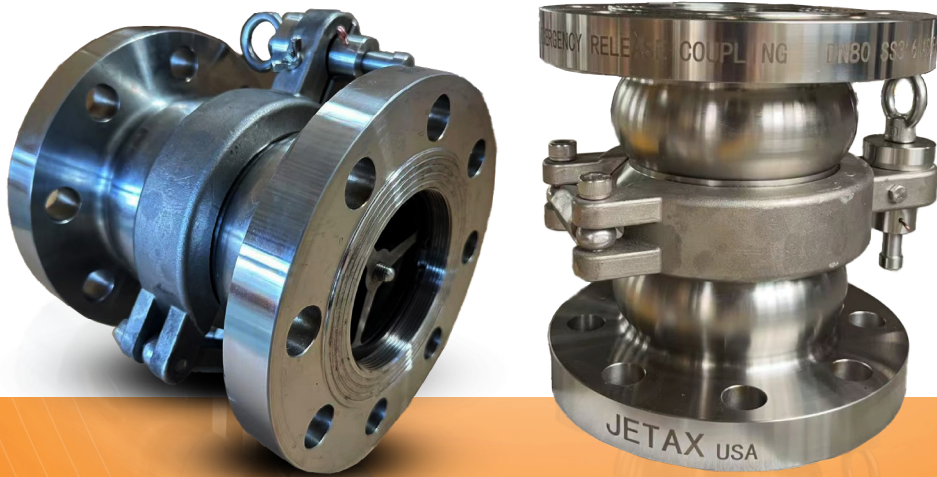


Name	Material
1 Inner ring	SS316
2 O-ring(Ø96.6X4)	PTFE+Graphite+Carbon fiber
3 Screw plug	SS316
4 Steel ball SØ9.525(3/8")64	SteGCr15el ball SØ9.525(3/8")64
5 Outer ring	SS316
6 Hexagon socket head screws M6X8	SS316
7 Main seal	PTFE-GF-CF+SS spring clip
8 Swivel flange	SS316
9 Hexagon docket head screws M10X30	SS316
10 Direct injection oil filling cup M10X1	SS316



JLA2543

LPG LOADING ARM FOR LOADING / UNLOADING



Emergency Release Coupler

ERC stands for Emergency Release Coupler. It is a safety device used in LPG/LNG loading arms to protect the system in case of emergency situations.

ERC is installed between the loading arm and the flexible hose or tank connection.

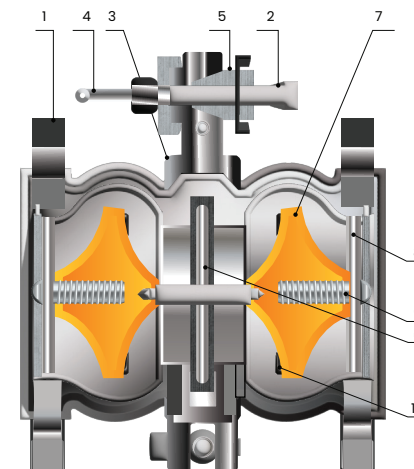
If there's unexpected movement (e.g., the truck drives away prematurely) or excessive tension, the ERC automatically disconnects.

It features self-sealing valves that prevent any product leakage

Technical Specifications:

Parameters	Specifications
Type	Emergency Release Coupler (Self-Sealing Type)
Material	Stainless Steel (e.g., SS316) or Carbon Steel with corrosion-resistant coating
Connection Sizes	Common sizes: 1.5", 2", 3", 4" (custom sizes available upon request)
Working Pressure	Up to 25 bar (362 psi) or as per system design
Test Pressure	1.5 times working pressure (e.g., 37.5 bar)
Temperature Range	-40°C to +70°C (can vary depending on seals)
Sealing Mechanism	Double self-sealing valves (spring-loaded) to prevent leakage upon disconnection
Breaking Force Setting	Adjustable to activate at a preset force (e.g., 150-300 kgf)
Leakage Rate	Less than 0.01% volume after disconnection
Standards Compliance	EN 1474, API 2510, ISO 16904 (or relevant standards)
Explosion Proof	Certified for use in hazardous areas (ATEX / IECEx certifications optional)
Visual Indicators	Optional visual or mechanical indicator for successful disconnection
Maintenance	Easy to inspect and replace seals
Installation Orientation	Suitable for vertical or horizontal installation

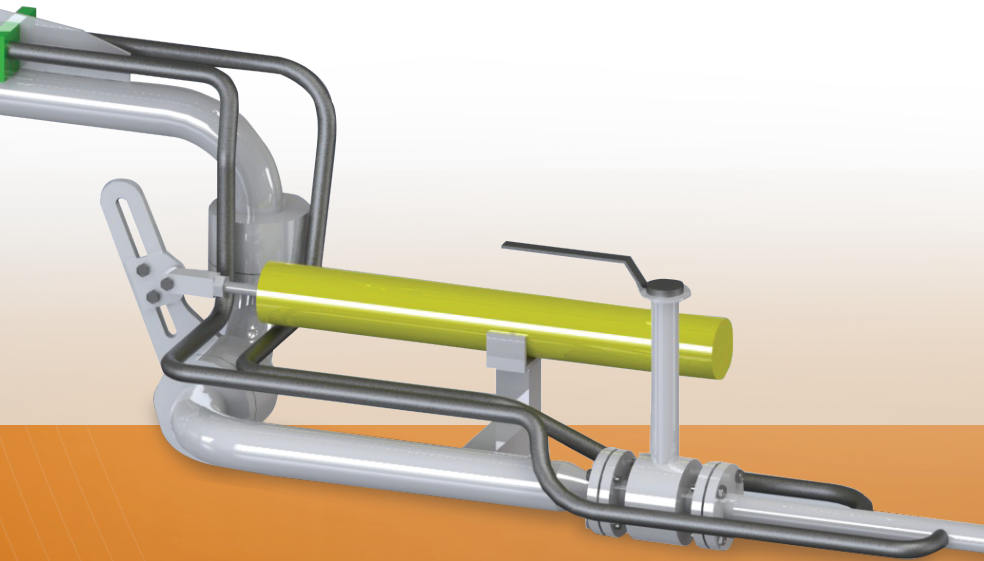
Break Away Coupling:



Name	Material
1 VALVE BODY 1	SS316L
2 VALVE BODY 2	SS316L
3 CLAMP	CARBON STEEL
4 BREAK AWAY RING	RUBBER
5 SAFETY PIN	CARBON STEEL
6 MAIN SEAL	RUBBER
7 VALVE CORE	CARBON STEEL
8 SPRING FIX PLATE	CARBON STEEL
9 SPRINGS	CARBON STEEL
10 SEALER	PTFE



LPG LOADING ARM FOR LOADING / UNLOADING



Spring cylinder balancing

The product is equipped with reset or retraction locking device, which will retract the loading arm and lock it when the arm is not working. On one hand, for saving arm's occupied space. On the other hand, for safety, for example, preventing damage to the arm in a hard wind. It also equipped with inner arm locking, when in working state, the inner arm locking can prevent the loading arm moving and maintain stability.



Ball Valves

These ball valves are designed for use in loading arms applications, featuring manual operation with stainless steel 316 body and ball for corrosion resistance and durability. Suitable for moderate pressures and temperatures in compliance with ASTM and ANSI standards.

Parameters

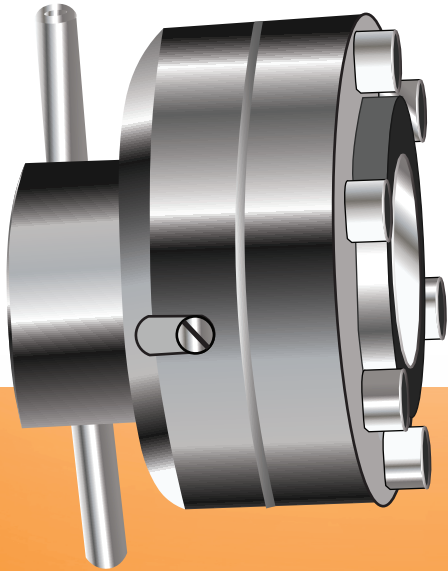
Specifications

Valve Type	Ball Valve (Manual Operation)
Applicable Sizes	0.5 to 4 inch
Material	Stainless Steel 316
Operating Pressure	Standard ANSI Ratings (up to 150 PSI typical)
Operating Temperature	-20°C to 200°C (typical range for SS316 valves)
Standards	American Standards (ASTM, ANSI)



JLA2543

LPG LOADING ARM FOR LOADING / UNLOADING



NPT Female Thread

NPT threads, with their characteristic tapered design that creates a mechanical seal to prevent leaks (often without requiring additional sealants), are extensively used throughout fluid and gas systems including gas pipelines (LPG and natural gas), high-pressure applications, and critical connection points like valves, loading arms, emergency release couplers (ERCs), and pipe/hose interfaces where they provide durable, pressure-resistant joints that maintain system integrity under demanding operational conditions.

Equipment apply standard:

Jetax loading arms are manufacturing and testing complies with regulations, codes and standards, and be in line with the relevant requirements of the latest effective world standards and industry standards and technical specifications (OCIMF, ASTM, ASME, API, ISO, AWS, ANSI)

Technical Specifications:

Parameters	Specifications
Thread Standard	ANSI/ASME B1.20.1 - National Pipe Thread (NPT)
Thread Type	Tapered Internal Female thread
Material	Carbon Steel, Stainless Steel (SS304, SS316), Brass, or Alloy Steel
Thread Size Range	1/8" to 6" nominal pipe size (NPS) or larger upon request
Thread Pitch	Varies with size (standard pitch per ANSI B1.20.1)
Thread Angle	60 degrees
Taper Rate	1:16 (approx. 3/4" taper per foot)
Surface Finish	Smooth, suitable for sealing
Sealing Method	Mechanical seal from thread taper; often assisted by thread sealant (Teflon tape, pipe dope)
Operating Pressure	Up to ANSI pressure ratings for piping system (depends on material and size)
Temperature Range	Varies by material, typically -60°C to +450°C
Application	Fluid and gas piping, high-pressure and hazardous environments, LPG, LNG, oil & gas industries
Corrosion Resistance	Depends on material (e.g., SS316 offers good corrosion resistance)
Certification	Compliant with ASTM, ANSI/ASME, ISO standards



JETAX FIELD EQUIPMENTS DEVELOPMENT AND DESIGN LLC

Email: info@jetax.com | Website: www.jetax.com | Phone : +1 907 4445311

Address: 8300 Duben Ave, Anchorage, AK 99504, United States of America