

FL150 series variable reach

Top Loading Arms are articulated, self-supported pipelines used to transfer fluids from depots to road or railway tankers through the manhole on the top of the tanker. Variable reach type allows a wider loading coverage.



Standards and regulations

- 94/9/EC Directive (ATEX)
- 2006/42/EC Directive (Machinery)
- 97/23/EC Directive (PED)
- API - ASTM - ANSI - TTMA standards

Technical specifications

- Design temperature:
-15 / +65°C
- Design pressure: 10 bar
- Test pressure: 15 bar
- Max flow rate (*):
 - 2" ▶ 830 l/min
 - 3" ▶ 1900 l/min
 - 4" ▶ 2400 l/min
 - 6" ▶ 3500 l/min

(*) As per CLC/TR 50404 recommendation

Components description (standard version)

- Right-hand layout, bottom inlet, ANSI 150 inlet flange
- Double swivel style F-50 in 42CrMo4 carbon steel + FKM seals
- Compression spring balancing unit
- Loading valve in aluminum alloy, stay-open type
- Loading valve remote control lever
- Main pipe in aluminum alloy
- Intermediate swivel style F-40 in aluminum alloy+ FKM
- Intermediate pipe in aluminum alloy
- Drop pipe swivel style F-40 in aluminum alloy + FKM seals
- Drop pipe in aluminum alloy
- Drip bucket in aluminum alloy



Options

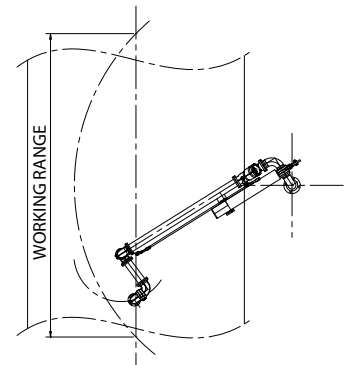
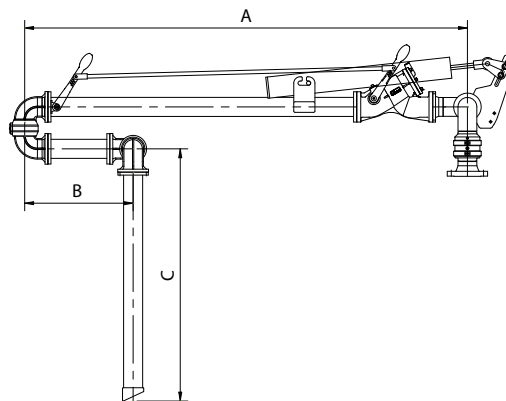
- Different pipe lengths
- Diameters: from 2" to 6"
- Other materials: CS (42CrMo4) - KCS - SS
- Other seals: HNBR - FFKM - PTFE
- Base flange: PN16 or other standards
- Layout: Left-hand
- Inlet: Top vertical
- Hold-open loading valve
- Telescopic main pipe
- Telescopic drop pipe
- Drop tube with "T" or flow deflector
- Split type swivels
- Special configurations for extended temperature (-60/+200 °C)
- Fluid heating systems
- Custom color coding

Accessories

- Check valve
- Vacuum breaker valve
- Sight glass
- Loading valve switch
- Vertical position switch
- Parking position switch
- Mechanical lock in working position
- Mechanical lock in parking position
- Overfill sensor with handle
- Pump start/stop button
- Up-down pneumatic actuation
- Valve pneumatic actuation
- Standpost
- "High-flow" drop pipe

Dimensions in mm

A = 1000-3000 mm (std 2100)
 B = 400-1000 mm (std 600)
 C = 1000-2500 mm (std 1200)



Standard documentation

- Declaration of conformity to applicable directives
- Final Test report
- Owner manual including BOM and spare part lists
- General Assembly Drawing

Documentation on request

- Welding book (WB) including:**
 - Welding Map (WM)
 - Welding qualifications (PQR)
 - Welding Procedures (WPS)
 - Welder Qualification (WQ)
 - Dye penetrant test on socket welds
 - X-ray on butt welds
- Material Identification Map (MIM) including:**
 - 3.1 EN 10204 Certifications for steel
 - 2.2 EN 10204 Certifications for aluminum and rubber materials
- Complete Quality Control Plan (QCP) including:**
 - Welding book (WB)
 - Material Identification Map (MIM)
 - Manufacturing Plan