



Liquid Transfer Srl

VARIABLE REACH TOP LOADING ARM

Series 1101

Technical specifications

DOC: 1101_01_EN REV: 01-09/2017



The series 1101 variable reach top loading arm are used to fill up the tank truck and the rail tank from the top. The variable working range allows to reach more area of the tank.

Standard Components Configuration

- **Right-hand layout with ANSI 150 inlet flange from the bottom**
- **Double swing base swivel style F-50:** It is used for horizontal and vertical rotations. It is made with two swivel joints with double ball bearing rows and FKM seals.
- **Torsion Spring Balancing unit:** It is used to balance the loading arm.
- **Loading Valve "stay open" or "Hold Open" type** opens and closes flow and has a double stage easy opening and adjustable valve closure velocity, in relation to specific pressure and viscosity of the product being loaded.
- **Main Pipe made of aluminium alloy TTMA flanged**
- **Valve remote control lever**
- **Intermediate and Drop Pipe F-40 style swivels:** are between the intermediate pipe and the one on the drop pipe side has a handle and it is used to keep the drop pipe in vertical position.
- **Drop Pipe made of aluminium alloy TTMA flanged** (Can have deflector or end pipe)
- **Drip can made of aluminium alloy**

Standards and Regulations

- Conformity Declaration of current Directive **PED** for Pressure Equipment
- Conformity Declaration of current Directive **ATEX** for Equipment used in Potentially explosive atmospheres
- Conformity Declaration of current Directive **MACHINERY**
- Customs Declaration of certification for Russia, Kazakhstan, Belarus, **EAC certification**.
- Standard **API-ASTM-ANSI-TTMA**.



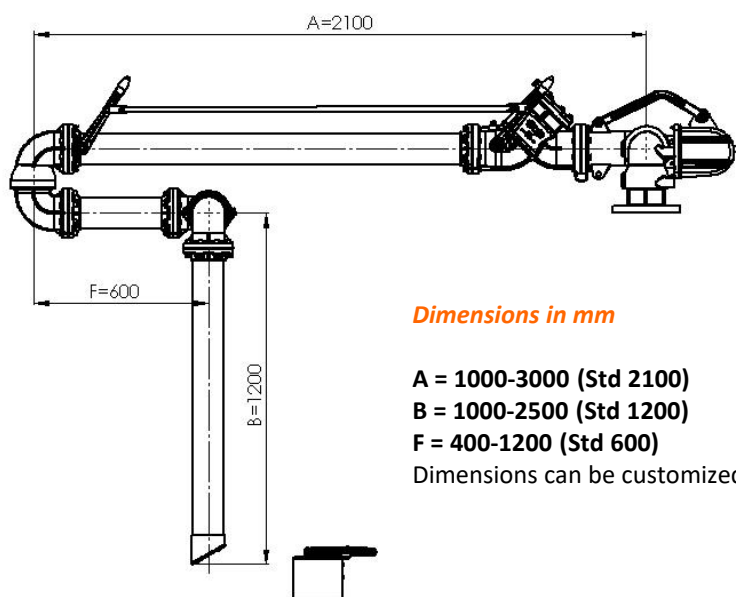
Technical features					
Nominal diameter		2"	3"	4"	6"
Fluid type		Hydrocarbons			
Nominal flow rate [flow speed: 4.5 m/s]	m ³ /h	30	70	120	280
	l/min	500	1200	2000	4700
Max flow rate [flow speed: 5.3 m/s]	m ³ /h	38	82	150	310
	l/min	650	1400	2500	5200
Design temperature		-15°C / +65°C			
Weight (Kg)		70	79	97	173
Design pressure		10 bar			
Test pressure		15 bar			

Accessories

- Check valve
- Vacuum breaker valve
- Flow indicator
- Micro switch loading valve position indicator
- Micro switch to indicate vertical position
- Micro switch to indicate rest position
- Mechanical lock "Hold Down" in working position
- Mechanical Park lock in rest position
- Overfill sensor with handle
- Pump start/stop button
- Stand-post

Options on request

- **Arm material options:** all made of carbon steel, stainless steel AISI 304 or AISI 316.
- **Seals in HNBR, FFKM, PTFE**
- **Left version**
- **Upfeed in-let flange**
- **Base swivel inlet flange PN16**
- **Split Type swivels:** 3-pieces to facilitate maintenance.
- **Compressed spring piston balancing**
- **Loading valve with "hold open"** operation which closes automatically when the lever is released.
- **Chrome plated loading valve inside** for jet fuels.
- **"T" deflector end-pipe** in aluminium alloy
- **Special configurations** for extreme temperatures (-60/+200 °C)
- **Heating system**



Dimensions in mm

A = 1000-3000 (Std 2100)
B = 1000-2500 (Std 1200)
F = 400-1200 (Std 600)
Dimensions can be customized



0560 serie Loading Valve.

Standard documentation

- Declaration of conformity to regulations
- Declaration of material conformities and functional test (CCC)
- Operation and maintenance manual (MUM)

Documentation on request

- **Welding book (WB):**
 - Welding map (WM)
 - Welding qualification (PQR)
 - Welding specifications (WPS)
 - Welder qualification (WQ)
 - Penetrant liquids test
 - Radiographs of welding heads
- **Materials specifications map (MIM):**
 - Certification 3.1 EN 10204 for steel
 - Certification 2.2 EN 10204 for aluminium
- **Quality complete plan (QCP):**
 - Welding dossier (WB)
 - Materials identification map (MIM)
 - Manufacturing plan