



Liquid Transfer Srl

# LONG REACH TOP LOADING ARM with VAPOUR RECOVERY CONE

## Series 1201 Technical specifications

DOC: 1201RV\_01\_EN REV: 01-09/2017



The 1201 series top loading arms are used to fill tankers from above where it is necessary to have a wide range of action available. This allows maximum covering of the loading points. In addition, the vapor recovery version permits the return of vapors in the line through a dedicated pipe.

### Components (standard configuration)

- **Right-hand layout, bottom inlet, ANSI 150 connecting flange**
- **Carbon steel high resistance swivel style F-20 with carbon steel boom pipe**
- **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.
- **Secondary Pipe made of aluminium alloy TTMA flanged**
- **Valve Remote Control**
- **Drop Pipe Swivel style F-40:** It is used to keep the drop pipe in vertical position. It is supplied with a handle to facilitate the movement of the arm.
- **Drop Pipe made of aluminium alloy, TTMA flanged which holds an aluminium Vapour recovery cone covered with vulcanized rubber resistant to aromatics and high temperatures.** (The drop pipe can have deflector or end pipe)
- **Drip pan 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		3"	4"	6"
Fluid type		Hydrocarbons		
Nominal flow rate (*) [flow speed: 4.5 m/s]	m³/h	70	120	280
	l/min	1200	2000	4700
Max flow rate (*) [flow speed: 5.3 m/s]	m³/h	82	150	310
	l/min	1400	2500	5200
Design temperature		-15°C / +65°C		
Weight (Kg)		120	150	320
Design pressure		10 bar		
Test pressure		15 bar		

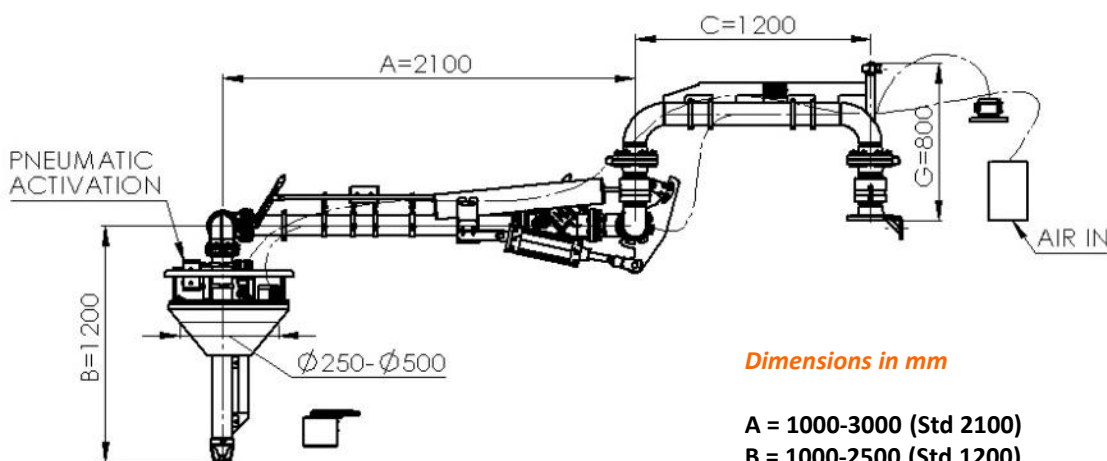
(\*) = In case of telescopic drop pipe series 4010, consider the values of flow rate contained into the specific data sheet.

## Accessories

- Check valve
- Vacuum breaker valve
- Flow indicator
- Micro switch for indication of the position of loading valve
- 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
- Up/Down pneumatic actuation
- Pneumatic Valve Actuation
- Pump start/stop buttons
- Spring loaded Telescopic drop pipe
- Stand-post



4010 series Spring Loaded Telescopic drop pipe.



## Dimensions in mm

A = 1000-3000 (Std 2100)  
B = 1000-2500 (Std 1200)  
C = 1000-2500 (Std 1200)

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)

## 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**
- **Upward inlet 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
- **Steam Jackets or electric tracing**
- **Special configurations** for extreme temperatures (-60/+200 °C)

## 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 file(WB)
  - Materials identification map (MIM)
  - Production program