

BOTTOM LOADING ARM

1405 Serie

Technical specifications

silea Liquid Transfer Srl



The Silea 1405 serie is used to bottom load road tankers on loading bays that can carry up to six loading arms that can be simultaneously connected and load the compartments of a tank truck. The arm is equipped with an API RF 1004 4 inch coupler for loading and a same arm equipped with an API RF 1004 Vapour Recovery coupler can be added to the loading bay

Standard configuration

- **Double base swivel F-50 style in carbon steel** : used for horizontal and vertical rotations
- **Carbon steel boom pipe** .
- **Balancing system**: torsion spring or compressed spring piston
- **Intermediate aluminium F-40 style swivel** : It is used to keep the hose in vertical position
- **Vertical flexible conductive hose, compliant to EN 12115 directive**: resistant to hydrocarbons with up to 50% aromatics contents and unleaded gasoline with maximum 15% MTBE in standard version.
- **Bottom end aluminium F-30 style swivel** : used to keep the coupler in horizontal position.
- **4" API RP 1004 Coupler in aluminium alloy with seals in FKM.**

Laws and regulations

- **94/9/CE Directive, named ATEX.**
- **97/23/CE Directive, named PED.**
- **Customs declaration for Russia, Kazakhstan, Belarus, EAC certification.**
- **Standard API-ASTM-ANSI-TTMA.**

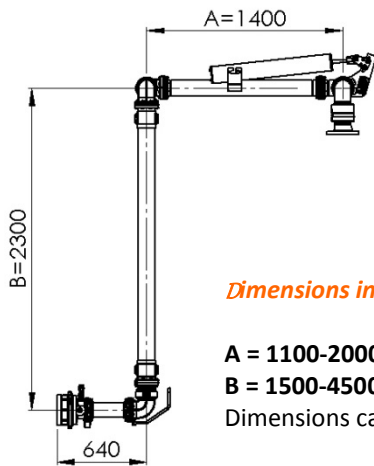


Technical features

Nominal diameter		3"	4"
Fluid type		Hydrocarbons	
Nominal flow rate [flow speed: 4.5 m/s]	m ³ /h	70	120
	l/min	1200	2000
Max flow rate [flow speed: 5.3 m/s]	m ³ /h	82	150
	l/min	1400	2500
Design temperature		-15°C / +65°C	
Weight (Kg)		130	160
Design pressure		10 bar	
Test pressure		15 bar	

Accessories

- Check valve
- ERC Dry-break emergency valve
- Flow indicator
- Loading position Micro-switch
- Park position Micro-switch
- Mechanical park
- Stand-post
- Stainless steel Protection Jacket

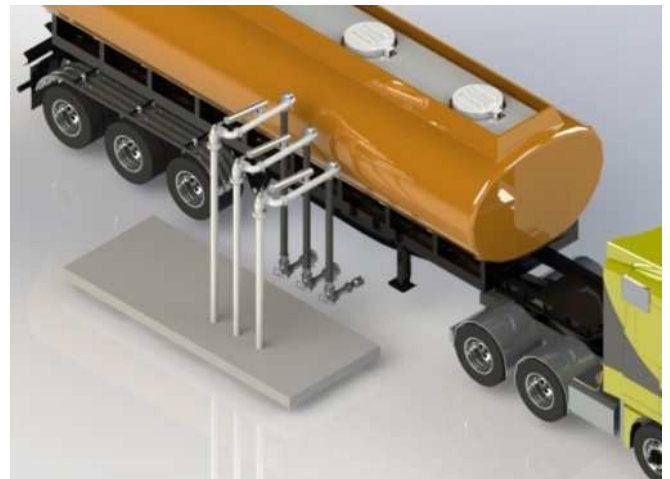


Dimensions in mm

A = 1100-2000 (Std 1400)
B = 1500-4500 (Std 2300)
Dimensions can be customized

Options on request

- **Materiale di costruzione del braccio:** in acciaio per basse temperature, acciaio INOX AISI 304 oppure AISI 316
- **Materiale di costruzione del braccio:** in acciaio al **Arm material:** all made of carbon steel, stainless steel AISI 304 or AISI 316.
- Seals in HNBR, FFKM, PTFE
- Left version
- Upward product inlet
- Connecting flange PN16
- **Split Type junctions:** 3-pieces to facilitate maintenance.
- Coupler 4" semiautomatic API RP 1004
- Coupler Stanag 3756
- Rigid vertical pipe
- Avio fuels version, with hose compliant to EN 1361 Type C Directive
- Special configurations for extreme temperatures (-60/+200 °C)



Standard documentation

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



API RF1004 Coupler

Documentation on request

- **Welding dossier (WB):**
 - Welding map (WM)
 - Welding qualification (PQR)
 - Welding specifications (WPS)
 - Welder qualification (WQ)
 - Penetrant liquids test on fillet welds
 - 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