



Liquid Transfer Srl

# NEW FEMALE SEMIAUTOMATIC COUPLER API RP 1004

Series 05132105  
Technical specifications

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The Silea Female Semi-automatic Coupler series 05132105 is designed to achieve a quick and dry coupling, without loss of product, between a Bottom Loading Arm or a hose and the Male Coupler on a tank truck. The difference with the manual type is that the Coupler hooks automatically to the male coupler before opening the flow.

The coupler respects the **API RP 1004** standards and can be used with all compliant couplers.

Compared to the current semi-automatic coupler it has:

- A quick and safe coupling system with a larger contact surface of the teeth.
- Fluid passage section increased by 15% (higher flow rate for a faster loading phase).
- Usable even in the event of an increase in operating pressure.
- Renewed ergonomics thanks to the new handle, now equipped with a grip.
- Maintenance time reduced by up to 60%.
- The possibility of replacing primary seals without disassembling the coupler from the arm.

Technical features		
Nominal diameter/ Coupling	Flange 4" TTMA	
Fluid type	Hydrocarbons	
Design pressure	10 bar (max 15 bar)*	
Working pressure	3-7 bar	
Test pressure	15 bar	
Max coupling pressure	10 bar	
Design temperature	-40°C / +65°C	
Nominal flow rate [flow speed: 4.5 m/s]	120 m <sup>3</sup> /h	2000 l/min
Max flow rate	150 m <sup>3</sup> /h	2500 l/min



(\*) N.B. : To be understood as peak value for short periods in case of system anomalies.

The main component of the Coupler are made in aluminium alloy. Standard seals in fluoroelastomer **FKM-GLT** (Viton® for -40°C/+65°C ) are easy to maintain. The surfaces subject to wear are hard coated.

## 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
- Customs Declaration of certification for Russia, Kazakhstan, Belarus, **EAC certification**.
- Standard **API-ASTM-ANSI-TTMA**.

Options:			
Seals material	Main applications	Working temperature	Codes
FKM-GLFT (Viton®)	Aromatic hydrocarbons; ethanol; lubricating oil	-29°/+65 °C	05132105-G
HNBR NBR Hydrogenated	Bio fuels	-40°/+65 °C	05132105-B
FVMQ Fluorosilicone	Low temperatures	-60°/+65 °C	05132105-FS
FFKM Perfluoroelastomer	Aggressive fluids	-13°/+65 °C	05132105-K
EPDM Synthetic Polymer	Alkali, ketones, extreme temperature	-50°/+150°	05132105-E

Maintenance kit codes		
Seals material	Complete KIT	Gaskets KIT
FKM-GLT (Viton®)	KM05132105V	KG05132105V
FKM-GLFT (Viton®)	KM05132105G	KG05132105G
FVMQ	KM05132105F	KG05132105F
FFKM	KM05132105K	KG05132105K
HNBR	KM05132105B	KG05132105B
EPDM	KM05132105E	KG05132105E

#### Documentation on request

- Materials Identification Map (MIM):
  - Certification 2.2 EN 10204 for aluminium

#### Accessories:

- Valve opening sensor Ex-d II2GD
- Valve opening sensor Ex-ia II2GD
- Park device
- Park device with sensor Ex-d II2GD
- Park device with sensor Ex-ia II2GD

