







# RIGID SUCTION LANCES RSL AND FOOT VALVES FV

## Universally suitable for Grundfos tanks and common containers

#### General

Grundfos offer a comprehensive range of rigid suction lances for a variety of chemical containers.

Rigid suction lances RSL and foot valves FV are installed at the lower end of the inlet hose. They make sure that the liquid to be dosed is extracted safely from the storage tank. All versions have a strainer to prevent dirt from being taken in and a non-return valve to prevent backflow. Foot valves and rigid suction lances are designed for the use in unpressurised containers.

#### Foot valves FV

When using the foot valves with medium-sized pumps (maximum flow rate 60 l/h up to 460 l/h) with hose installation, a rigid pipe should be slipped over the hose to keep the suction line straight and upright in the tank. Small foot valves for pumps up to 60 l/h include a weight.

#### **Rigid suction lances RSL**

Rigid suction lances have a protective plastic pipe and an adjustable connection. With the adjustable connection, the rigid suction lance can be screwed directly into the G 2" internal thread of a Grundfos tank. With a suitable adapter, foot valves with float switch and rigid suction lances can be fixed in various types of containers.

Adapters for jerricans, drums and Intermediate Bulk Containers are available. The overflow line and the deaeration line can be led back into the container via the adjustable connection.

#### Versions with float switch

All rigid suction lances and foot valves for dosing pumps up to 60 l/h are available either without level indication or with low-level and empty-tank indication. Their immersion depth is adjustable.

The switching direction of float switches for foot valves and rigid suction lances can be adjusted. In the factory, float switches are set to close with falling level. They can be set to open with falling level in order to make the signal line failsafe.

#### **Emission protection kits**

Gas emitted by liquid in a container can cause bad odour and corrosion. Emission protection kits help avoid such problems. Rigid suction lances can be retrofitted with emission protection kits.

Two variants are available:

- Emission protection kit with snifting valve: No gas can escape from the container, but air can be drawn in.
- Emission protection kit for use with filter: Gas can escape from the container and air can be drawn in. The kit can be connected to a filter by means of a 4/6 mm hose

#### **Features**

- Reliable extraction of the dosing medium and protection of the dosing pump
- · Filtering of coarse dirt
- · Preventing backflow of the dosing medium
- · Connection to the inlet line of the dosing pump
- Safe connection to Grundfos tanks and common containers
- · Safe positioning in the tank
- Easy handling when exchanging containers
- Flexible adaptation to different container types
- Avoiding bad odour (with optional emission protection kit for rigid suction lances)
- Indication of low level and empty tank (optional)
- Avoiding system dead times due to low-level indication





### **Technical data**

Pump assignment	SMART Digital DDA, DDC, DDE up to 30 l/h DDI 60-10 DMX < 50 l/h, DMH < 50 l/h		Smart Digital DDA , DDE 60 to 200 l/h DDI 150-4, DME 60-10, DME 150-4 l/h DMX > 50 l/h up to 460 l/h, DMH > 50 l/h up to 460 l/h	
Max. flow rate [I/h]	60		460	
Rigid suction lance or foot valve	Rigid suction lance	Foot valve	Rigid suction lance	Foot valve
Level indication	Without level indication With low-level and empty-tank indication	Without level indication With low-level and empty-tank indication	Without level indication With low-level and empty-tank indication	Without level indication
Immersion depth [mm]	400, 500, 690, 820, 980, 1100 or 1200	-	500, 690, 980 or 1200	-

### Adapters of rigid suction lances for different chemical containers

