

# **DOSING PUMP ACCESSORIES**



### **Cables and plugs**

Cables and plugs are used for the connection of the dosing pump to external control devices, such as process controllers, flow meters, start/stop contacts and level control units.



### Water meters

In-line water meters with potential-free pulse signal for use in flow-proportional dosing applications. If the water meter is connected directly to the pump pulse input, use a control plug.



#### E-BOX 150 PROFIBUS / E-BOX 200 MODBUS

The Grundfos E-Box is a Plug & Play Profibus fieldbus communication interface for the integration of SMART Digital DDA dosing pumps into a Profibus or Modbus network. Fieldbus communication allows to use the DDA dosing pump in industrial automation systems, where advanced remote control and monitoring functions are required.



### Installation kits

A basic installation kit includes an injection unit with spring-loaded nonreturn valve, 6 metres of PE discharge hose, 2 metres of PVC suction hose, 2 metres of PVC deaeration hose and a foot valve with strainer and weight, without or with level indication.



### **Rigid suction lances RSL**

Rigid suction lances are installed at the lower end of the inlet hose. They are available without level indication or with low-level and empty-tank indication. Their immersion depth is adjustable.

Suction lances include a strainer, a nonreturn valve, a hose and pipe connection set, an adjustable tank connection with holes for a deaeration line.

Variants with low-level end empty-tank indication include additionally a Reedswitch unit with two floaters, 5 metres of cable with PE jacket, an M 12 plug to connect a DDA, DDC, DDE or DDI dosing pump.

# Foot valves FV

Foot valves are installed at the lower end of the inlet hose. They are available either without level indication or with low-level and empty-tank indication.

Foot valves include a weight, a strainer, a non-return valve, a hose connection set (4/6 mm, 6/9 mm, 6/12 mm and 9/12 mm) and a pipe connection set (threaded, Rp 1/4", female).

# Adapters for suction lances and foot valves with level indication

These adapters allow the installation of standard suction lances (G 2 thread) and foot valves with level indication (PE cap) on different types of containers.



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#### Injection units

Injection units connect the dosing line with the process line. They ensure a minimum backpressure of 0.7 bar, and avoid backflow of the dosing liquid. In general, they include an injection pipe, a spring-loaded non-return valve with Tantal spring, a hose and pipe connection set.



# Injection units for special applications

Hot-injection units with ball valve can be used for direct injection of dosing liquid into processes with a temperature of up to 120 °C.

Further injection units for special applications are available:

- Injection units with ball valve
- Injection units with lip valve
- Injection units with removable injection pipe



# Multi-function valves MFV

Multi-function valves combine the functions of pressure relief valves and pressure loading valves. In addition, they allow deaeration of the pump and emptying of the discharge line for maintenance.

Loading pressure and relief pressure are adjustable. A multi-function valve is mounted directly on the dosing pump.



# Pressure loading valves PLV

Pressure loading valves are installed in the outlet line after the pressure relief valve, and after the pulsation damper, if fitted. Loading pressure is adjustable.



# Pressure relief valves PRV

Pressure relief valves are installed in the outlet line near the pump, using the 2 inline connections. The side connection leads the relief liquid back into the tank. Relief pressure is adjustable.





# **Pulsation dampers**

Pulsation dampers are used to even out the pulsating flow and pressure produced by positive displacment pumps like diaphragm dosing pumps. They can be installed before and after the pump.



Cylindrical dosing tanks are available transparent or black in seven sizes between 40 and 100 l.

Square tanks are available transparent for 100 l. Square tanks allow the assembly of two dosing pumps. All dosing tanks include a litre scale and are prepared for the assembly of dosing pumps and inlet-side accessories.

# Collecting trays

Collecting trays are available in several sizes to suit the respective dosing tank size. They collect chemicals that might leak out of the tank, and protect the environment. All collecting trays are made of transparent PE.

# Handheld mixers

With a handheld mixer, the liquid in a tank is mixed by moving the stamping plate up and down. The shaft length can be adapted to suit the selected tank, and fixed with a DN 15 through bolt on top of the tank.

# **Electric stirrers**

Electric stirrers are intended for the mixing and dissolving of non-abrasive, non-inflammable and non-explosive liquids. Electric stirrers are designed to match cylindrical Grundfos dosing tanks. With a frequency of 50 Hz they run at approx. 1500 rpm, and are suitable for liquids with low to medium viscosity.



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