

SyrDos™ CKP

High-precision dosing of small and smallest quantities in the high-pressure range



The SyrDos™ CKP is a syringe dosing device consisting of two pump drives. These can be controlled independently or in combination, which allows for a variety of modes of operation.

In tandem mode, for example, feeding is continuous and almost bumpless. Feed rates from 1.56 $\mu\text{l}/\text{min}$ to 156 ml/min, depending on syringe type and speed are possible.

SyrDos™ CKP syringe dosing devices allow to dose precisely, even against a pressure up to 90 bar.



- ✓ Large pressure and volume range
- ✓ High chemical resistance
- ✓ Continuous, high-precision dosing
- ✓ Syringe body exchangeable
- ✓ Components connected without adhesive
- ✓ Different types of conveyors

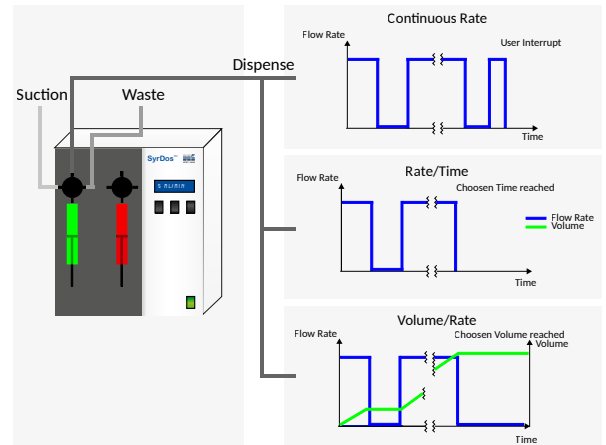
Areas of Application

- » High precision dosing and dispensing of minimal quantities
- » Low pressure surge, continuous dosing of liquids with the combination of both syringe modules
- » Dosing against pressure
- » Mixing of liquids

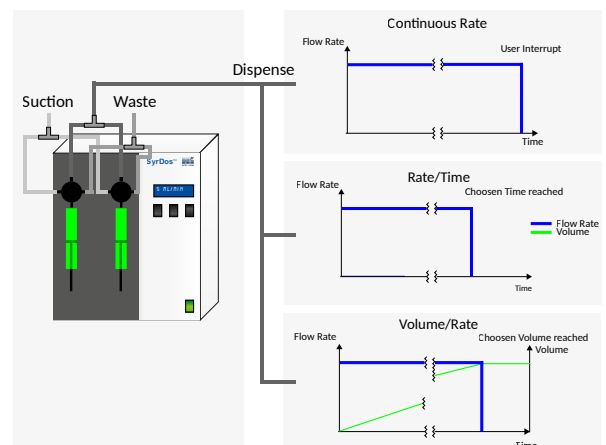
Dosing Modes

- » Continuous dosing with set flow rate
- » Dosing over a defined period with set flow rate
- » Dosing of a specific volume with set flow rate

Single Mode



Tandem Mode



SyrDos™ Characteristics

The selection of chemically resistant materials, such as borosilicate glass, PTFE, PPS-UHMWPE or Al_2O_3 allows dosing of a wide range of different liquid substances.

Syringes for the SyrDos™ are available with volumes between 50 µl and 25 ml.

By interconnection of both pump drives in tandem mode, a continuous dosing can be achieved. Using a special algorithm, pressure peaks during the switching process in tandem mode are minimized.

By using the RS-232 or the analogue interface, the SyrDos™ can be controlled remotely, by example via a process control system. Likewise the control of the valve ports is freely selectable and thus allows for a large range of setting options.

An optional pressure sensor allows monitoring the process pressure during dosing and to define a maximal cut-off pressure.

The valve ports have a 1/4"-28 UNF respectively 10-32 UNF thread, which by means of a fitting allows for pipes to be attached.

Using an optional dispensing switch the SyrDos™ can be operated by hand or foot. In doing so, a configurable volume is dispensed by pressing the switch.

The pump can easily be integrated into a LabVision® project with the SyrDos™ device component.

Available Valves

| | |
|---------------------|--|
| 3 port valve | Wetted parts made of ceramic Nominal pressure 45 bar Connection 10-32 UNF |
| 4 port valve | Wetted parts made of PTFE and PCTFE Nominal pressure 15 bar Connection 1/4"-28 UNF |

Specifications

- » High pressure valve up to 45 bar (90 bar test pressure)
- » Feed rates from 1.56 µl/min to 156 ml/min
- » Valve connections 1/4"-28 UNF resp. 10-32 UNF
- » Wetted parts made of Borosilicate glass, depending on the valve PTFE/PCTFE or Al_2O_3
- » Degree of protection IP20
- » Pressure monitoring (sensor required)
- » Remote control via RS-232 or analogue interface 0...5 V/4...20 mA
- » Dimensions (WxHxD): 225 x 270 x 195 mm (without valve and cable)
- » Weight approx. 10 kg

