



# PROPORTIONAL DOSING VALVE PDV04

DP-D-005-000005



## APPLICATION

The PDV04 enables uninterrupted dosing with freely selectable volumes from a quantity of 0.004 cm<sup>3</sup> using the dosing principle with endless pistons.

## DESCRIPTION

The PDV04 proportional dosing valve is an endless dosing valve and consists of an electrically driven piston metering unit.

The parameterization and control of the PDV04 is carried out via the control of the DS dosing system and thus enables continuous or clocked dosing. The standard interface to higher-level controls, e.g. for start or stop, is via digital I/Os. Further interfaces such as Profibus or Profinet are possible.

The compact and space-saving PDV04 proportional dosing system is designed for stationary as well as mobile use, e.g. on robots, and is connected to the D+P DS dosing system via a cable set of up to 20 meters in length.

## ADVANTAGES

The PDV04 is viscosity-, pressure- and temperature-independent and ensures extremely process-safe metering thanks to electronic monitoring of the valve piston by means of an encoder.

In addition, the PDV04 operates electromechanically and does not require a pneumatic connection.

The maintenance-friendly arrangement of the seal packs has also been implemented for the PDV04 in accordance with our new dosing valve series.

TECHNICAL DATA	
<b>Weight</b>	3.8 kg 4.0 kg with spray attachment
<b>Width x height x depth</b>	137 x 210.1 x 110 mm 137 x 226.1 x 127.1 mm with spray attachment
<b>Dosing data</b>	
<b>Max. pumpable viscosity</b>	Oils and greases NLGI class 0–3
<b>Dosing quantity (depending on application and medium)</b>	from 0.004 cm <sup>3</sup>
<b>Tolerance (depending on application and medium)</b>	>1 g ± ~1 % <1 g ± ~7 %
<b>Volume flow</b>	0.007–3.2 cm <sup>3</sup> /s
<b>Inlet pressure</b>	5–30 bar
<b>Connection technology</b>	
<b>Hydraulic</b>	G 1/4" material inlet external thread G 1/4" material outlet external thread
<b>Electric</b>	motor connection: M12 plug 5pin encoder connection: M12 plug 8pin / 5 V DC - 3 V; 424 A
<b>Motor heating</b>	max. 80 °C
<b>Environmental conditions</b>	
<b>Air temperature operation</b>	10–50 °C
<b>Air temperature transport and storage</b>	0–50 °C
<b>Humidity</b>	50– max. 70 %, no condensation
<b>Protection class</b>	IP54
Operation in closed rooms. Protect from direct sunlight, dust and moisture. Installation altitude, max. 2000 meters above sea level.	



# PROPORTIONAL DOSING VALVE PDV04 ACCESSORIES



## SPRAY ATTACHMENT FOR PDV04 WITH ACCESSORIES

DP-D-005-000050

### APPLICATION

The spray attachment is mounted directly on the PDV04 and enables contactless, homogeneous and repeatable application of media with low to high viscosity.

### DESCRIPTION

Volumetric dosing ensures reliable quantity application, regardless of the viscosity of the dosing medium.

The web speed-controlled application, simple dosing quantity adjustment and the optional control of pre- and post-air offer maximum control over the application. The attachment is compatible with all standard nozzles, air caps and nozzle extensions of our spray valves.

The set consists of

- ▶ Spray attachment PDV04                    DP-D-005-000051
- ▶ Atomizing air pressure control        DP-D-005-000052
- ▶ Atomizing air solenoid valve        DP-D-005-000053

### ADVANTAGES

- ▶ Contactless, precise dosing for media with variable viscosity
- ▶ Reliable quantity application regardless of the viscosity of the dosing medium
- ▶ Simple adjustment of the dosing quantities via the control unit
- ▶ Path speed-controlled application for flexible use
- ▶ Compatibility with standard nozzles, air caps and nozzle extensions
- ▶ Versatile use for a wide range of applications



PDV04  
with mounted  
spray  
attachment

### TECHNICAL DATA

<b>Weight</b>	0.2 kg
<b>Width x height x depth</b>	84 x 56.5 x 48 mm
<b>Connection atomizing air</b>	0–6 bar (precision pressure regulator)
<b>Material outlet</b>	nozzles 0.3–2.5 mm
<b>Connection material outlet</b>	M21 x 0.75

# PROPORTIONAL DOSING VALVE PDV04 ACCESSORIES



## CONTROL AND CONNECTION CABLE FOR PDV04

DP-D-005-000012  
 DP-D-005-000017  
 DP-D-005-000018

The control and connection cable is used for signal exchange between the dosing system and the PDV04 proportional dosing valve. The standard length is 5 meters, but can also be customized on request (max. 20 meters).

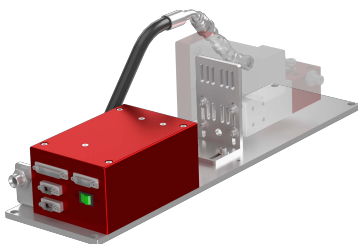
### TECHNICAL DATA

Type	Cable length	Suitable for drag chain
DP-D-005-000012	5 m (standard)	yes
DP-D-005-000017	7 m	yes
DP-D-005-000018	10 m	yes

## OUTLET CHECK VALVE (SPARE PART)

DP-D-011-000006

Spare part for PDV04. The outlet check valve prevents the medium from flowing back into the dosing system and thus ensures the one-way direction of the flow.



## PDV04-ADAPTER

DP-D-005-000100

Exclusively for existing applications with the PDV01 or PDV02 proportional dosing valves. With the adapter, the modern PDV04 can be integrated directly into existing systems. No complex conversions or mechanical adaptations are required. A software update is required for commissioning.