

**HYDRO DOS®**  
**Dosing pump**  
**Type KD – 2.5 – 15**

**Application and Design**

Membrane dosing pump with stepping motor technology and electronics for injection of dosing solutions suited for:

- Protection against corrosion, lime scale formation, formation of a protective layer for drinking water applications

Dosing of mineral-based dosing products for drinking water treatment according to product requirements as of European standards (EN) and §11 of German Drinking Water Regulation (official approved water treatment substances).

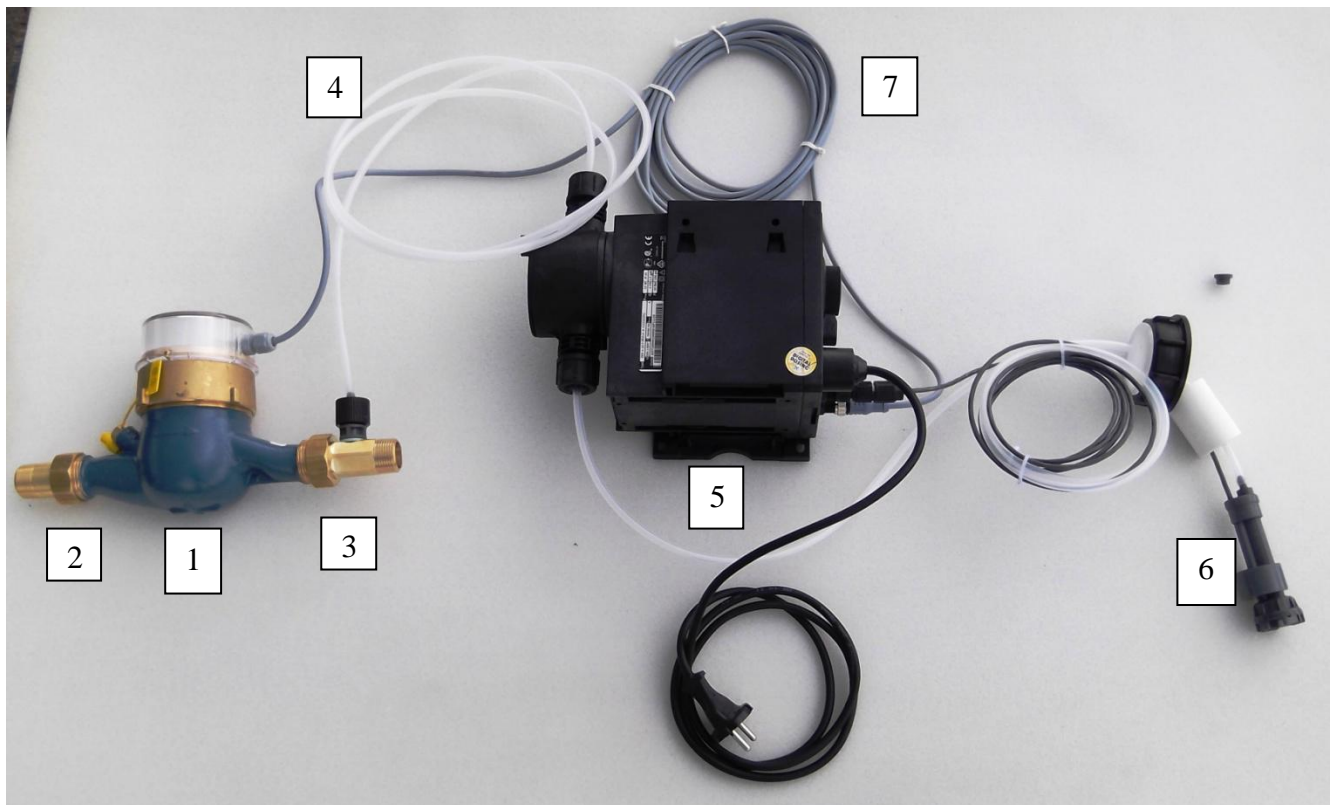


Signalising of failure via status LED:

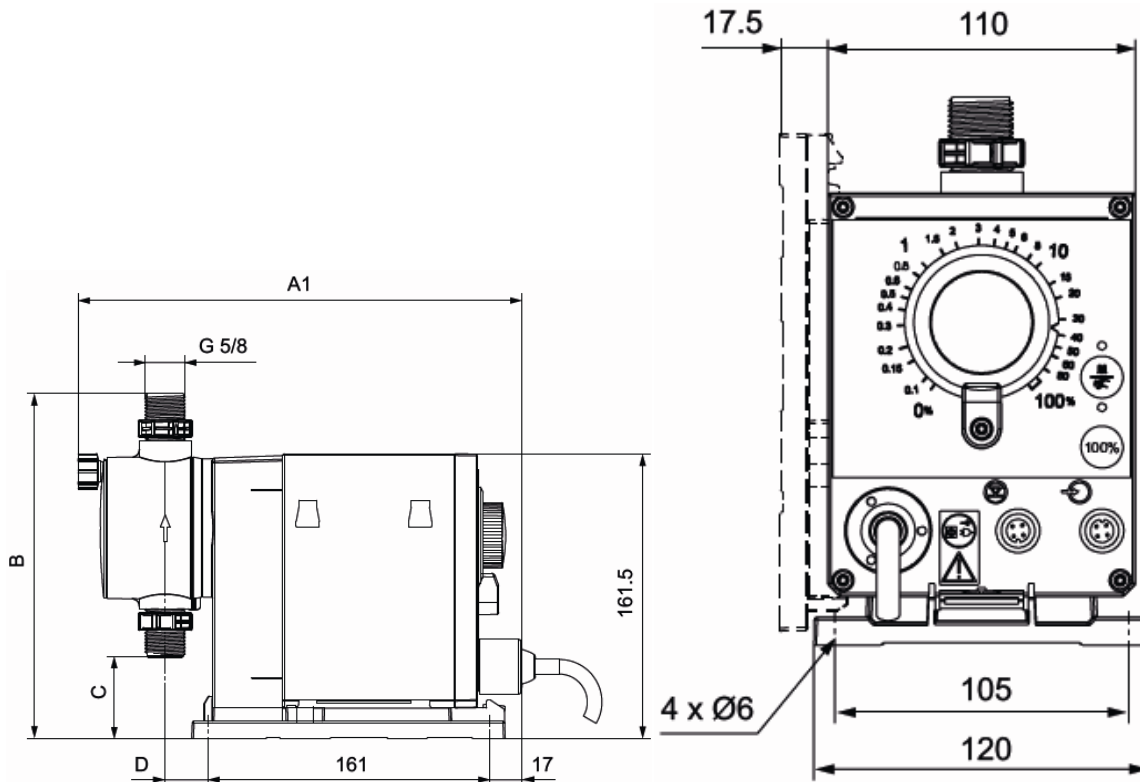
LED colour	Failure
Red	Empty signal
Red (flashing)	Motor blocking

Scope of supply	Notes / Installation conditions
<p>HYDRO DOS® Dosing pump Type KD 2.5 - 15</p> <p>Contact water meter  Water meter screwing (inlet side)  Water meter screwing (outlet side incl. injection unit)  Pressure hose (4 m) PE 4/6  Dosing pump with stepping motor technology  Intake lancet with filling level control  Contact input cable</p> <p><b>Accessories</b></p> <ul style="list-style-type: none"> <li>- Pressure hose PE 4/6 mm – Art.-No. 555.239</li> <li>- Contact input cable – Art.-No. 555.134 or 555.262 (5m)</li> <li>- Safety bund 50 litres – Art.-No. 555.276</li> <li>- Dosing tank in different sizes (on request)</li> <li>- Dosing agent in accordance with application (container)</li> <li>- Measuring instrument in accordance with dosing agent</li> </ul> <p>The selection of the dosing agent and the corresponding measuring instrument is by our department for applications engineering.</p>	<ul style="list-style-type: none"> <li>• Technical data and general technical standards as well as the local installation conditions must be observed.</li> <li>• According to regulations of DIN 1988 part 4 a system separator must be provided as protection against retraction.</li> <li>• A fine filter is to be installed before the system to protect it against unwanted substances flushed in via the upstream piping system.</li> <li>• The ambient temperature and possible radiation heat shall not exceed 40 °C.</li> <li>• The installation site must be frost-resistant.</li> <li>• The installation site has to be free from solvent, colorant, varnish and chemical vapours.</li> <li>• Connection (plug socket 230 V / 50 Hz) must be provided in close vicinity to the system.</li> <li>• The chemical containers which contain the disinfection agent as well as correction agent shall be prepared in separate safety bunds in close vicinity to the system.</li> </ul>

## Photo - Scope of supply

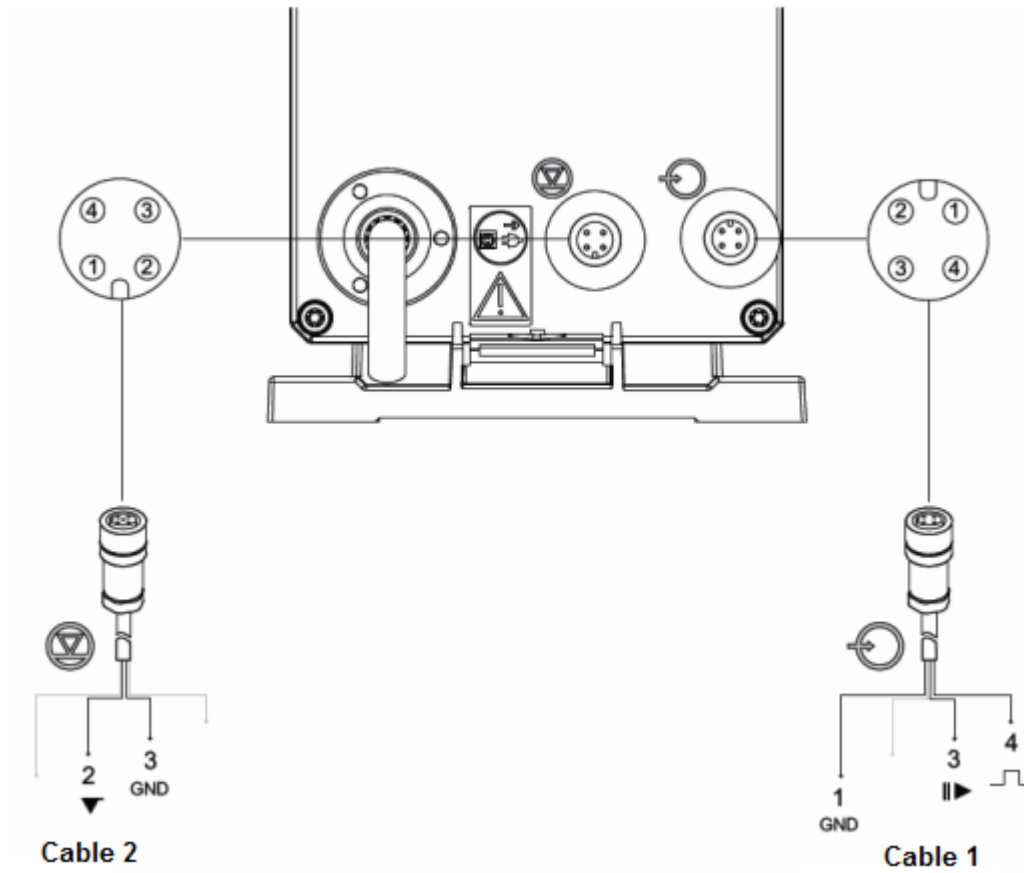




- 1 Contact water meter
- 2 Water meter screwing (input)
- 3 Water meter screwing (output with injection unit)
- 4 Pressure hose (4 m) PE 4/6
- 5 Dosing pump with stepping motor technology
- 6 Intake lance with filling level control
- 7 Contact input cable



Type HYDRO DOS®		KD 2.5	KD 5	KD 10	KD 15
<b>Technical Data</b>					
Impulse interval in l/Impuls	l/Impuls	1	1	2	2
Dosing counter-pressure max. (bar)	bar	10	10	10	10
Start-up limit / capacity (l/h)	l/h	30	70	100	100
Proportional limit / capacity (m³/h)	m³/h	7.2	7.2	14.4	36.0
Nominal flow rate (m³/h)	m³/h	2.5	6	10	15
Flow rate max. (m³/h)	m³/h	5	10	20	30
Pressure drop at max. flow rate (bar)	bar	0,5	0,8	0,8	0,8
Connections		R ¾ "	R 1 "	R 1 ½ "	Flange DN 50
Setting value dosing max.		12 %	12 %	24 %	24 %

## Wiring diagram - KD 2.5 – 15



Cable 1: External stop and contact input						
	Function	Pin assignment				Plug type
		1/brown	2/white	3/blue	4/black	
	External stop	GND (chassis ground)		X		Contact
	Contact	GND			X	Contact
Cable 2: Level input						
	Function	Pin assignment				Plug type
		1/brown	2/white	3/blue	4/black	
	Empty signal		X	GND		Contact

<b>Signal input</b>	Max. load input empty signal / impulse / external stop		12 V, 5 mA
	Min. impulse time	[ms]	5
	Max. impulse frequency	[Hz]	100
	Max. electrical resistance for level signal circuit	[Ω]	1000
	Max. electrical resistance for impulse signal circuit	[Ω]	1000

## Installation schematics for Compact Dosing system KD

