

HYDRO DOS® Dosing station Type DA

Application

Compact dosing station used to feed dosing solutions for:

- Corrosion protection, scale and rust protection, protective layer formation for drinking water supply.
- Residual hardness stabilizing, corrosion protection, oxygen bond in closed heating circuits and for steam water feed.
- Hardness stabilizing, corrosion protection, dispersing, biocide for cooling and climatic water range.

Design

Polyethylene dosing tub with integrated intake lancet with two-stage level switch and 2.5 m pressure pipe.

High-efficiency dosing pump with synchronous motor and controller. Setting of dosing volume regulation is realized via stroke adjustment. The pump can be mounted on the dosing tub itself or alternatively on wall bracket.

Signal processing of dosing pump

- Stroke signal / Impulse signal / Pre-empty signal / Failure signal
- Remote-On-Off/ Contact input / Current input
- Pre-empty and empty signal
- internal frequency control

The installation of a manual or electrically operated stirrer on the dosing tub is possible as an option.



Scope of supply

HYDRO DOS® Dosing station type DA consisting of:

- 1 x Dosing tub
- 1 x Dosing pump (incl. fixing material)
- 1 x Electric connection cable with mains plug
- 1 x Intake lancet (2-step)
- 1 x Pressure hose PE 4/6 mm
- 1 x O&M

Accessories

- Wall bracket – Art.-No. 555.143
- Contact output cable – Art.-No. 555.135 or 555.263 (5m)
- Contact input cable – Art.-No. 555.134 or 555.262 (5m)
- Feed / inoculation fitting PVC 1/2" – Art.-No. 555.233
- Hot water inoculation post R 1/2" stainless steel – Art.-No. 599.910
- Overflow valve DN 4/8 PVC/Viton – Art.-No. 555.268
- Manual mixer (dependent on tub size)
- Electric stirrer (dependent on tub size)
- Contact water meter (dependent on flow)
- Safety collection tub (dependent on tub size)
- Dosing material dependent on application (as solution or powder)
- Measuring kit (dependent on dosing material)

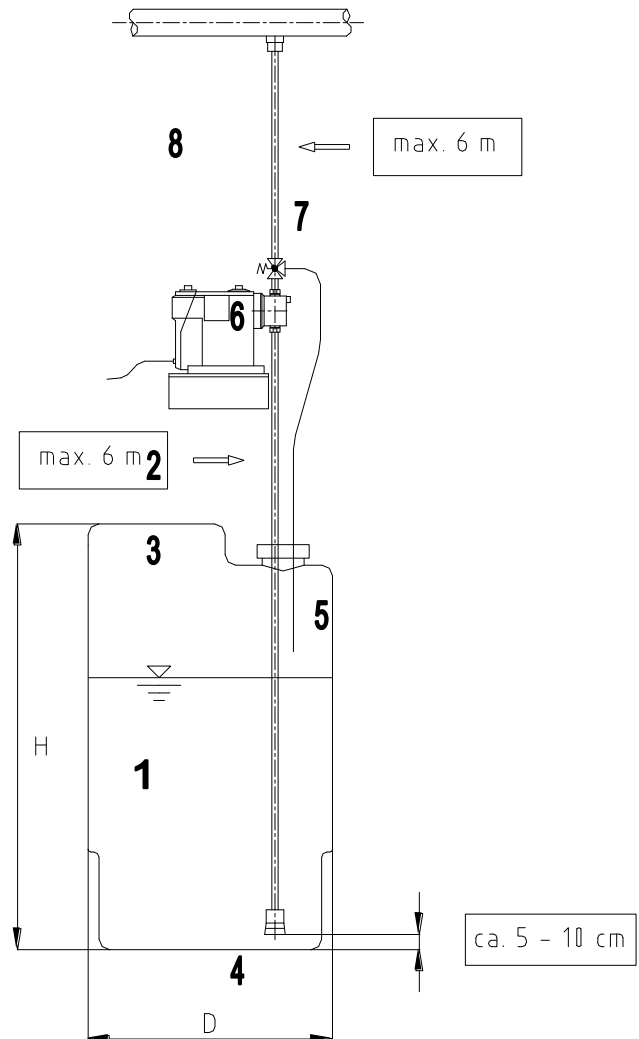
The dosing material and the respective measuring kit is chosen by our technical department.

Information / Installation conditions

- Technical Data and general technical guidelines as well as all local installation regulations shall be observed and guaranteed.
- The regulations as per DIN 1988 part 4 require a safety stop against backflow (system separation).
- A fine filter shall be installed before the system to prevent particles penetrating the pipeline.
- The ambient temperature and any possible radiation heat shall not exceed 40°C.
- The installation site shall be protected against frost.
- The installation area shall be free from vapor from solvents, colour, lacquer and chemicals.
- A mains socket (230 V / 50 Hz) shall be provided adjacent to the plant.
- The packages of required correction and disinfection materials shall be stored in separate safety collection tubs adjacent to the system.

Installation example

- 1 = Dosing tub
- 2 = Dosing pump
- 3 = Wall bracket (Option)
- 4 = Intake lancet with foot valve (incl. 2-step level switch)
- 5 = Ventilation pipe and overflow valve
- 6 = Pressure hose (PE 4/6 mm)
- 7 = Inoculation fitting
- 8 = Pipe where the dosing will fed



Dosing unit types and components

Size of tub	60 l		
Pump	A0	A1	A2
Article	DA-60-SMT 6.0 A0	DA-60-SMT 6.0 A1	DA-60-SMT 6.0 A2
Size of tub	100 l		
Pump	A0	A1	A2
Article	DA-100-SMT 6.0 A0	DA-100-SMT 6.0 A1	DA-100-SMT 6.0 A2
Size of tub	200 l		
Pump	A0	A1	A2
Article	DA-200-SMT 6.0 A0	DA-200-SMT 6.0 A1	DA-200-SMT 6.0 A2

Size of tub	60 l			
Pump	B1	B2	C1	C2
Article	DA-60-SMT 6.0 B1	DA-60-SMT 6.0 B2	DA-60-SMT 7.5 C1	DA-60-SMT 7.5 C2
Size of tub	100 l			
Pump	B1	B2	C1	C2
Article	DA-100-SMT 6.0 B1	DA-100-SMT 6.0 B2	DA-100-SMT 7.5 C1	DA-100-SMT 7.5 C2
Size of tub	200 l			
Pump	B1	B2	C1	C2
Article	DA-200-SMT 6.0 B1	DA-200-SMT 6.0 B2	DA-200-SMT 7.5 C1	DA-200-SMT 7.5 C2

Dosing pumps A0/A1/A2:

- Cost favourable pump type
- Manual control of dosing rate
- Constant and continuous dosing
- Simple contact control
- Fault signal by LEDs (empty signal)
- Two relay outputs to forward failure signals to BMS (at A0 type only)

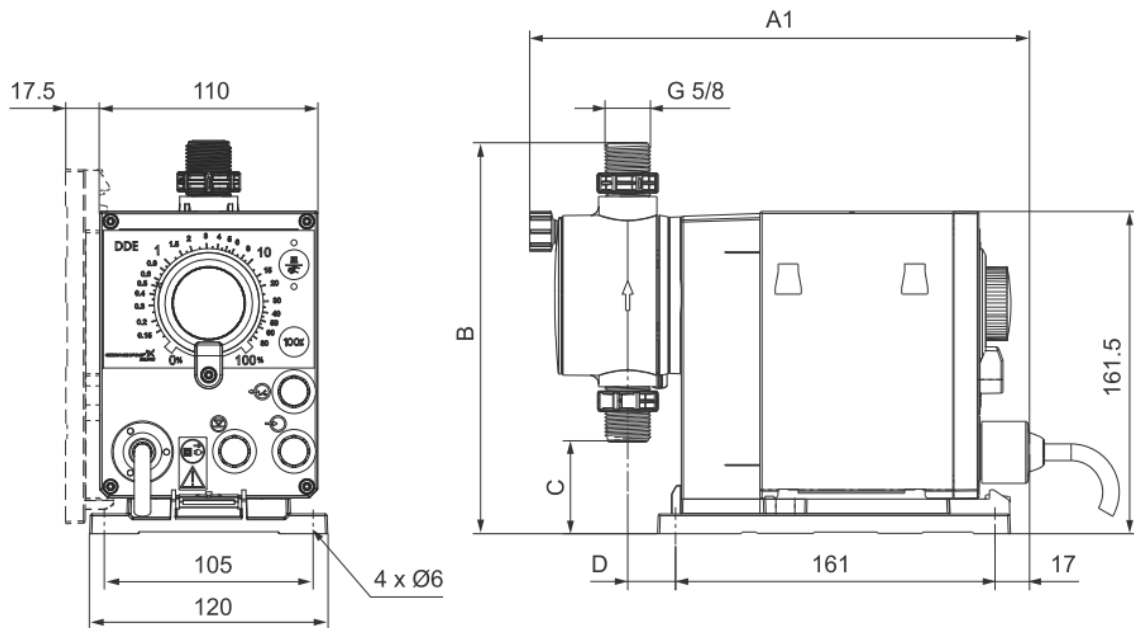
Dosing pumps B1/B2:

- Control panel with LCD-Display and text menu that is operated by wheel
- Direct input of dosing rate in l/h or gph
- Contact to determine failure signals (pre-empty signal, empty signal)
- Two relay contacts to be parameterized (e.g. alarm, caution, stroke signal, pump dosing)
- Two Slow Mode steps to avoid air bubbles

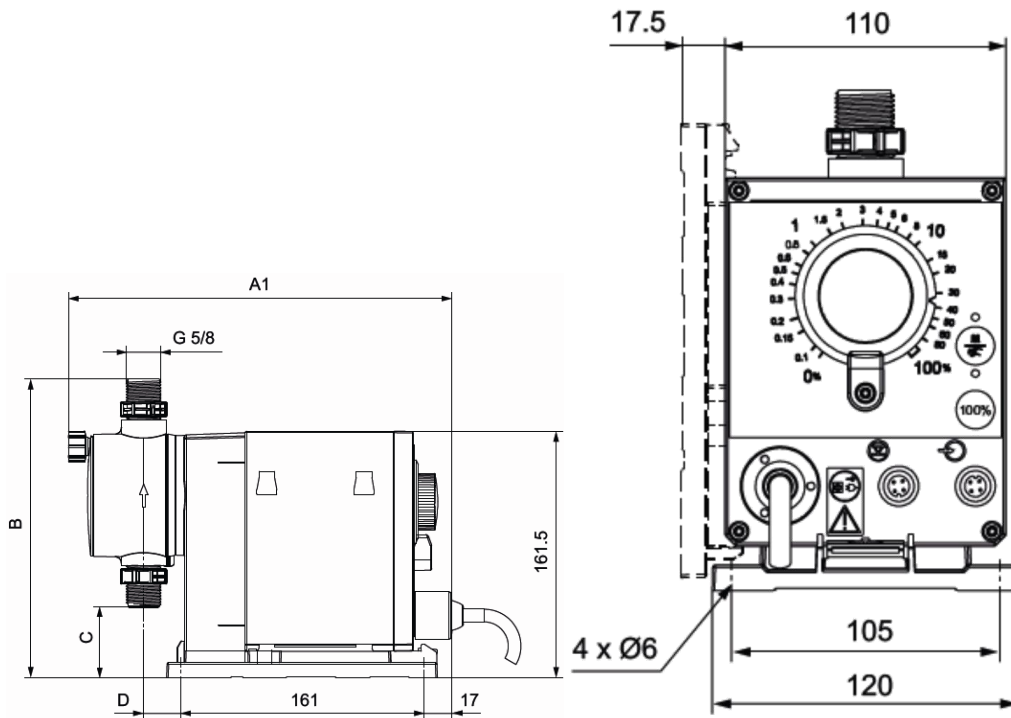
Dosing pumps C1/C2 have the below features additionally to the B1/B2 pumps:

- Flow Control System for failure diagnosis
- Pressure control
- Additional operation modes (Batch, Timer, Repeat, Week Timer)
- Analogous output (4 – 20 mA) for dosing volume flow, pressure or input signal
- Automatic de-airing in Standby

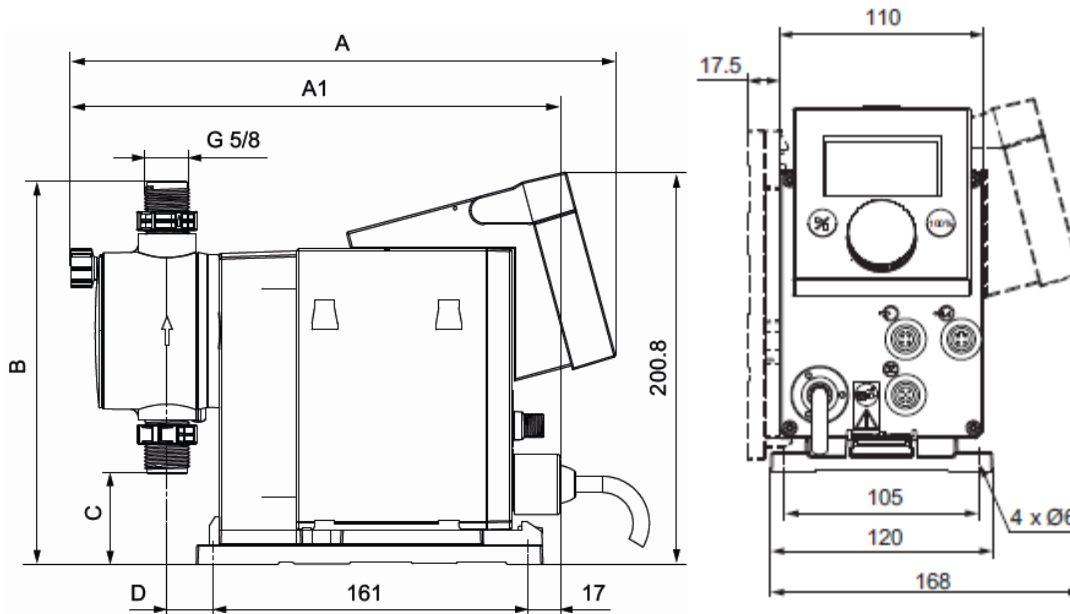
Our C1/C2 pumps are ideal for exacting application



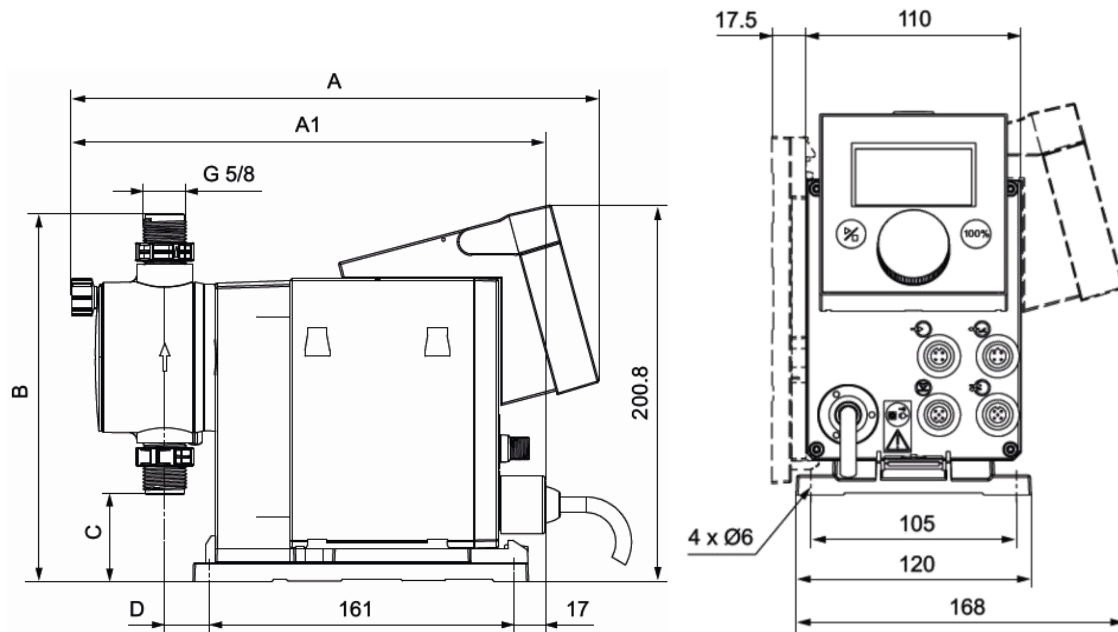
Type HYDRO DOS®		DA		
Tub		DA-60	DA-100	DA-200
Volume	l	60	100	200
Height	mm	840	1010	1240
Diameter	mm	420	450	550
Dosing pump		A0		
Max. dosing rate	l/h	6,0		
Min. dosing volume / stroke	ml	0,0008		
Max. dosing volume / stroke	ml	0,81		
Max. number of strokes	1/min	140		
Max. counter pressure	bar	10		
Intake height at 100% stroke setting	mWC	6		
Mains connection		230 V, 50 Hz		
Power	W	12		
Type of protection		IP 65		
Min./max. operating temperature	°C	0 / 45		
Max. ambient temperature	°C	45		
Max. noise level	dB (A)	60		
Weight	kg	2,4		
Dimensions				
A1	mm	251		
B	mm	196		
C	mm	46,5		
D	mm	24		
Materials				
Dosing head		PP		
Gaskets		EPDM		



Type HYDRO DOS®		DA		
Tub		DA-60	DA-100	DA-200
Volume	l	60	100	200
Height	mm	840	1010	1240
Diameter	mm	420	450	550
Dosing pump		A1		A2
Max. dosing rate	l/h	6,0		
Min. dosing volume / stroke	ml	0,0008		
Max. dosing volume / stroke	ml	0,81		
Max. number of strokes	1/min	140		
Max. counter pressure	bar	10		
Intake height at 100% stroke setting	mWC	6		
Mains connection		230 V, 50 Hz		
Power	W	12		
Type of protection		IP 65		
Min./max. operating temperature	°C	0 / 45		
Max. ambient temperature	°C	45		
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Weight	kg	2,4		
Dimensions				
A1	mm	251		
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Materials				
Dosing head		PP		PVDF
Gaskets		EPDM		PTFE



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Tub		DA-60	DA-100	DA-200
Volume	l	60	100	200
Height	mm	840	1010	1240
Diameter	mm	420	450	550
Dosing pump		B1		B2
Max. dosing rate	l/h	6,0		
Min. dosing volume / stroke	ml	0,0016		
Max. dosing volume / stroke	ml	16,2		
Max. number of strokes	1/min	140		
Max. counter pressure	bar	10		
Intake height at 100% stroke setting	mWC	6		
Mains connection		230 V, 50 Hz		
Power	W	14		
Type of protection		IP 65		
Min./max. operating temperature	°C	-10 / 45		
Max. ambient temperature	°C	45		
Max. noise level	dB (A)	60		
Weight	kg	2,4		
Dimensions				
A	mm	280		
A1	mm	251		
B	mm	196		
C	mm	46,5		
D	mm	24		
Materials				
Dosing head		PP		PVDF
Gaskets		EPDM		PTFE



Type HYDRO DOS®		DA		
Tub		DA-60	DA-100	DA-200
Volume	l	60	100	200
Height	mm	840	1010	1240
Diameter	mm	420	450	550
Dosing pump		C1		C2
Max. dosing rate	l/h	7,5		
Min. dosing volume / stroke	ml	0,0016		
Max. dosing volume / stroke	ml	16,2		
Max. number of strokes	1/min	140		
Max. counter pressure	bar	10		
Intake height at 100% stroke setting	mWC	6		
Mains connection		230 V, 50 Hz		
Power	W	14		
Type of protection		IP 65		
Min./max. operating temperature	°C	-10 / 45		
Max. ambient temperature	°C	45		
Max. noise level	dB (A)	60		
Weight	kg	2,4		
Dimensions				
A	mm	280		
A1	mm	251		
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C	mm	46,5		
D	mm	24		
Materials				
Dosing head		PP		PVDF
Gaskets		EPDM		PTFE