DDC – SMART Digital Series Pumps (0.0015 to 4.00 gph)



The DDC SMART Digital dosing series represents the latest generation in Digital Dosing pumps from Grundfos. Available in three sizes and two control options, the DDC range brings continuity for the well known DME and DDI digital dosing lines.

With its 1000:1 turn down ratio, removable mounting bracket and flexible control panel installation, the DDC product range brings simplicity and flexibility to adapt your pump and cover a great variety of metering applications.

Smooth and Continuous Dosing

The DDC stepper motor technology ensures an optimum mixing ratio at the injection point without the need for additional accessories such as static mixers. It also provides a significant reduction of pressure peaks, preventing mechanical stress on wearing parts such as diaphragm, tubing, and connections, resulting in less maintenance required.

Full Stroke Length at All Times

The pump always operates at full stroke length, irrespective of the capacity set; this ensures maximum volume displacement per stroke, optimum accuracy, easy priming and improved suction.

1000:1 Turndown Ratio

The Digital Dosing range is designed to give you superior flexibility and accuracy even when dosing very small volumes.



Maximum Capacity Setting

With the DDC series you decide what the maximum capacity should be. You can select any value within the performance range of each model and the pump will redefine the injection speed and adjust the operation scale within that range. So you only need a few models to cover multiple applications.

Anti-Cavitation / SlowMode

The variable speed of DDC pumps facilitates a unique anti-cavitation function for high viscosity liquids. This function gives you slower suction speed (50 or 25% of the maximum speed), ensuring optimal priming and pumping of even the most difficult liquids.



Calibration

With Digital Dosing, calibration is easier and faster than ever. Simply place a graduated glass under the pump and activate the calibration program. The pump will perform 100 strokes and indicate how much it thinks it has pumped. Adjust the figure by entering the correct numbers if necessary. After this, the dosage can be adjusted without recalibrating the pump.

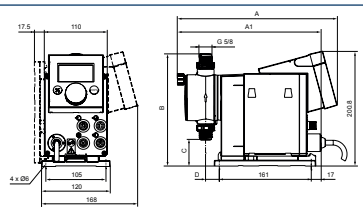
Different Control Options and Materials

Available in two different control options: A /AR. The DDC series has the right pump for each application.



Dimensions [inches (mm)]

	DDC 6	DDC 9	DDC 15
A	11 (280)		11 (280)
B	7.72 (196)		7.89 (200.5)
C	1.83 (46.5)		1.55 (39.5)
D	0.94 (24)		0.94 (24)



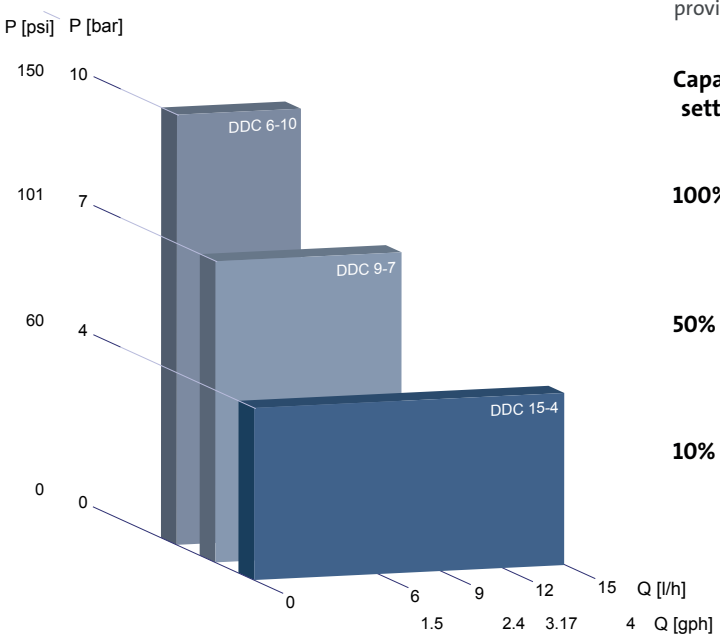
Product Range and Performance Data

Pump type	Capacity	DDC 6-10	DDC 9-7	DDC 15-4
Capacity at Max. Pressure	g/h (l/h)	1.5 (6)	2.4 (9)	4.0 (15)
max. pressure	psi (bar)	150 (10)	100 (7)	60 (4)
Setting range		1000:1	1000:1	1000:1

Stroke frequency	spm	140	200	180
Suction lift: primed/dry	ft (m)	19.6 (6)/6.5 (2)	19.6 (6)/6.5 (2)	19.6 (6)/9.8 (3)
Viscosity*	cps	2500/50	2000/50	2000/300
Power supply	V, Hz	100-240 V 50/60 Hz	100-240 V 50/60 Hz	100-240 V 50/60 Hz
Accuracy	%	+/-1	+ / -1	+ / -1

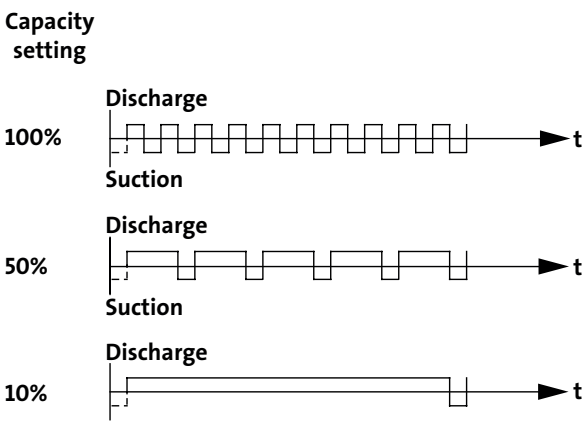
** With Spring-Loaded valves*

Performance Range



Functional Description

DDC's electronically controlled variable-speed (stepper) motor provides optimum control of the stroke speed.



Relation between stroke-frequency adjustment and capacity