

Grundfos® SMART Digital S & XL Pumps

- State-of-the-art stepper motor technology provides smooth, continuous dosing
- Up to 1000:1 turndown ratio
- XL series pumps handle flows topping out over 1260 gpd

SMART Digital S and XL pumps combine high-precision dosing with unsurpassed user-friendliness. Stepper-motor technology greatly improves the level of control when compared to traditional metering pumps. Their variable-speed motor remains in contact with the diaphragm throughout the entire discharge/suction cycle, controlling its speed at all times. Modular control panels allow for front or side mounting.

Smooth user-friendly variable-speed dosing

The stepper motor runs continuously, ensuring that the discharge phase extends throughout the period between suction phases. This provides a more even chemical flow. The motor automatically adjusts the dosing speed to provide the right amount of additive at all times. Thanks to the smooth digital dosing, time between service periods is more than doubled. Pumps use a full stroke length every time they pump for added accuracy and efficiency. The stroke speed adjusts automatically to ensure even concentrations.

Choose from a range of models, from basic to advanced

Choose from two size categories: the SMART Digital S series for flows up to 192 gpd and the SMART Digital XL series for flows starting at 392 gpd and topping out at 1267 gpd. Both series offer different models with features ranging from basic to highly advanced.

DDE models are the most economical option, available as both a manually operated and a pulse input model.

DDC models deliver a great price-to-performance ratio. They feature a graphical LCD display with intuitive click-wheel operation, a modular control panel that can be mounted to the front or sides, relays for alarm/stroke signal, service notifications, and both pulse and non-scalable 4-20 mA inputs.

DDA models are advanced high-end pumps for complex and demanding applications. They offer higher pressure outputs at equivalent flow rates, scalable 4-20 mA input control, pulse-based batch control, dosing timer (cycle & weekly), and auto-deaeration during pump standby.

Pumps for General Chemicals

Use with 60% aluminum sulfate (alum), 20% calcium hypochlorite, ferric sulfate, 30% hydrogen peroxide, 10% potassium permanganate and 50% sodium hydroxide (caustic).
Wetted materials: PVC body, Teflon® diaphragm, EPDM O-rings and ceramic check balls.

General

DDC pumps have a great price-to-performance ratio

MODEL	SERIES	GPD	PSI	TURNDOWN RATIO	MAX VISCOSITY (cP)	CONNECTION	PUMPS STOCK #	EACH	REPAIR KITS STOCK #	EACH
DDE PUMPS W/ MANUAL CONTROL										
DDE 6-10	S	36	150	1000:1	50	1/4" OD Tube	47551	\$	79058	\$
DDE 15-4	S	95	60	1000:1	50	1/2" OD Tube	47555		79060	
DDE 60-10	XL	379	145	800:1	100	3/4" NPT(M)	350651		350669	
DDE 120-7	XL	768	101	800:1	100	3/4" NPT(M)	350655		350670	
DDE 200-4	XL	1267	58	800:1	100	3/4" NPT(M)	350659		350671	
DDE PUMPS W/ PULSE INPUT CONTROL										
DDE 6-10	S	36	150	1000:1	50	1/4" OD Tube	47553	\$	79058	\$
DDE 15-4	S	95	60	1000:1	50	1/2" OD Tube	47575		79060	
DDE 60-10	XL	379	145	800:1	100	3/4" NPT(M)	350652		350669	
DDE 120-7	XL	768	101	800:1	100	3/4" NPT(M)	350656		350670	
DDE 200-4	XL	1267	58	800:1	100	3/4" NPT(M)	350660		350671	
DDC PUMPS										
DDC 6-10	S	36	150	1000:1	50	1/4" OD Tube	79043	\$	79058	\$
DDC 9-7	S	57	100	1000:1	50	1/2" OD Tube	79045		79058	
DDC 15-4	S	95	60	1000:1	300	1/2" OD Tube	79047		79060	
DDA PUMPS										
DDA 7.5-16	S	48	150	3000:1	50	1/4" OD Tube	79035	\$	79058	\$
DDA 12-10	S	76	150	1000:1	300	1/2" OD Tube	79037		79060	
DDA 17-7	S	108	100	1000:1	300	1/2" OD Tube	79039		79060	
DDA 30-4	S	192	60	1000:1	150	1/2" OD Tube	79041		79062	
DDA 60-10	XL	379	145	800:1	100	3/4" NPT(M)	350663		350669	
DDA 120-7	XL	768	101	800:1	100	3/4" NPT(M)	350665		350670	
DDA 200-4	XL	1267	58	800:1	100	3/4" NPT(M)	350667		350671	



SMART Digital S Series DDC Pump

DDE pumps are the most economical option



SMART Manual S Series DDE Pump



	S Series	XL Series
Suction lift:	20 feet	10 feet
Accuracy		
DDE models:	±5%	±5%
DDC / DDA models:	±1%	±1.5%
Inputs		
DDE manual control models:	none	none
DDE pulse input models:	external stop, pulse, low-level/empty tank signal	external stop, pulse, 4-20 mA (non-scalable), low-level/empty tank signal, CIU (Profibus DP, Modbus, GRM, Ethernet and others)
Outputs		
DDE manual control models:	none	none
DDE pulse input models:	none	2 relays
DDC models:	2 relays	—
DDA models:	2 relays and 0/4-20 mA	2 relays and 0/4-20 mA
Power:	100-240 VAC, 60 Hz	100-240 VAC, 60 Hz



Alarm (Red)

Warning (Yellow)



Side-Mounted Control Panel

Modular color-changing LCD screen turns red, yellow or green to bring attention to warnings and alarms—even at a distance.

Pumps include:

S Series Pumps: foot valve, injection valve, 3/8" tubing and control cable for pulse and/or 4-20 mA input.

XL Series Pumps: control cable for pulse and/or 4-20 mA input.

Repair kits include: check valves, compression fittings and diaphragm.



Pumps for Chlorine & Acids

Use with 37% hydrochloric acid*, 20% sodium hypochlorite and 98% sulfuric acid*. **Wetted materials:** PVDF body, Teflon diaphragm, FKM O-rings and ceramic check balls.



MODEL	SERIES	GPD	PSI	TURNDOWN RATIO	MAX VISCOSITY (cP)	CONNECTION	PUMPS STOCK #	EACH	REPAIR KITS STOCK #	EACH
DDE PUMPS W/ MANUAL CONTROL										
DDE 6-10	S	36	150	1000:1	50	1/4" OD Tube	47581	\$	79065	\$
DDE 15-4	S	95	60	1000:1	50	1/2" OD Tube	79052		79067	
DDE 60-10	XL	379	145	800:1	100	3/4" NPT(M)	350653		350672	
DDE 120-7	XL	768	101	800:1	100	3/4" NPT(M)	350657		350673	
DDE 200-4	XL	1267	58	800:1	100	3/4" NPT(M)	350661		350674	
DDE PUMPS W/ PULSE INPUT CONTROL										
DDE 6-10	S	36	150	1000:1	50	1/4" OD Tube	47583	\$	79065	\$
DDE 15-4	S	95	60	1000:1	50	1/2" OD Tube	47587		79067	
DDE 60-10	XL	379	145	800:1	100	3/4" NPT(M)	350654		350672	
DDE 120-7	XL	768	101	800:1	100	3/4" NPT(M)	350658		350673	
DDE 200-4	XL	1267	58	800:1	100	3/4" NPT(M)	350662		350674	
DDC PUMPS										
DDC 6-10	S	36	150	1000:1	50	1/4" OD Tube	79044	\$	79059	\$
DDC 9-7	S	57.6	100	1000:1	50	1/2" OD Tube	79046		79059	
DDC 15-4	S	96	60	1000:1	300	1/2" OD Tube	79048		79061	
DDA PUMPS										
DDA 7.5-16	S	48	232	3000:1	50	1/4" OD Tube	79036	\$	79059	\$
DDA 12-10	S	76	150	1000:1	300	1/2" OD Tube	79038		79061	
DDA 17-7	S	108	100	1000:1	300	1/2" OD Tube	79040		79061	
DDA 30-4	S	192	60	1000:1	150	1/2" OD Tube	79042		79063	
DDA 60-10	XL	379	145	800:1	100	3/4" NPT(M)	350664		350672	
DDA 120-7	XL	768	101	800:1	100	3/4" NPT(M)	350666		350673	
DDA 200-4	XL	1267	58	800:1	100	3/4" NPT(M)	350668		350674	

* We recommend hard-piping for all acid applications.

High-end DDA pumps are for more complex applications



SMART Digital XL Series DDA Pump