Smart Digital GRUNDFOS DDA/DDC/DDE

The SMART Digital DDA, DDC and DDE models with powerful variable-speed stepper motors bring state-of-the art technology to perfection. Combined expert knowledge and the new patented solutions set future standards. Traditional technologies such as stroke length/stroke frequency adjustment with synchronous motor or solenoid drive become a thing of the past. The click-stop mounting plate provides unique mounting flexibility, and the entire dosing range up to 8 gph is covered with only a few pump variants.

Key Features and Benefits

- Modularity: The included click-stop mounting plate is an example of the unique flexibility offered, with only a few variants
- Simplicity: Easy handling and perfect overview and control ensure simple installation, commissioning and operation
- Flow intelligence: The pump monitors the dosing process of liquids when the FlowControl function is activated, for advanced process reliability with accuracy of 1% of setpoint

DDA Models

- High-end solution for complex and demanding applications
- Flow and pressure up to 8 gph and up to 232 psi
- Auto-deaeration during pump standby
- Flexible Fieldbus control
- Turn-down ratio 3000:1 with constant 100% stroke length

DDC Models

- Optimal price-performance ratio
- Flow and pressure up to 4 gph and up to 145 psi
- Two SlowMode functions (25% and 50%), calibration mode, service display
- External stop, dual-level tank control, 2 relay outputs

DDE Models

- Digital Dosing[™] even for the low budget segment
- Flow and pressure from 0.0015 to 4 gph and up to 145 psi; two models cover entire range
- Control options: manual control 0.1-100 %, pulse in % of stroke volume
- External stop, empty tank control

APPLICATIONS

- Disinfection and pH adjustment
- Drinking water, process water and wastewater
- Food and beverage, Clean-in-place
- Ultrafiltration and reverse osmosis
- Pulp and paper, boiler feed water
- Swimming pool water, cooling towers
- Coagulation, flocculation, precipitation
- Chemical industry, car wash, irrigation
- Anywhere chemical treatment and conditioning of water is required



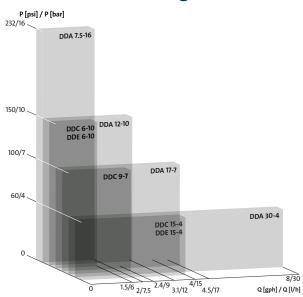
be think innovate

Technical Data & Feature Overview

DDA /DDC /DDE informatio

lation
PP, PVC, PVDF and Stainless Steel 1.4401
EPDM, FKM or PTFE
Ceramics or stainless steel 1.4401 (SS heads only)
 Tubing: 1/4", 3/8", 1/2" Threaded: 1/2" MNPT for PP, PVC and PVDF; 1/4"FNTP for SS
8 gph (30 l/h)
232 psi (16 bar)
3000:1 or 1000:1
max 2500mPas, depending on model and setup
100-240 V, 50-60Hz
max 18 W
5.3-8.8 lbs (2.4-4 kg), depending on material
60 dB(A)
IP65, NEMA 4X
NSF61, CSA-US

Performance Range



Control Variants

Pump type		DDA		D	DC		DDE	
Control variant	FCM	FC	AR	AR	А	PR	Р	В
Operation modes								
Manual speed control								
Pulse control in ml/pulse								
Pulse control (1:n)								
Analog control 0/4-20 mA								
Batch control (pulse-based)								
Dosing timer cycle								
Dosing timer week								
Fieldbus control								
Functions								
Auto deaeration also during pump standby								
FlowControl system with selective fault diagnosis								
Pressure monitoring (min / max)								
Flow measurement								
AutoFlowAdapt								
SlowMode (anti-cavitation)								
Calibration mode								
Scaling of analogue input								
Service information display								
Relay setting: alarm, warning, stroke signal, pump dosing								
Relay setting (additionally): timer cycle, timer week								
Inputs/outputs								
Input for external stop								
Input for pulse control								
Input for analogue 0/4-20 mA control								
Input for low-level signal								
Input for empty tank signal								
Output relay (2 relays)								
Output, analogue 0/4-20 mA								
Input/output for GeniBus								
Input/output for E-box (Profibus DP or additional alarm relays)				1		1		

FCM: Flow Control Measurment FC: Flow Control PR: Pulse Relay P: Pulse input AR: Analog Relay A: Analog B: Basic



Grundfos 2001 Butterfield Rd, Ste 1700 Downers Grove, IL 60515

www.grundfos.us www.grundfos.ca www.grundfos.mx