

Smart Digital GRUNDFOS DDA/DDE

The SMART Digital DDA 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 entire dosing range up to 200 LPH is covered with only a few pump variants..



Key Features and Benefits

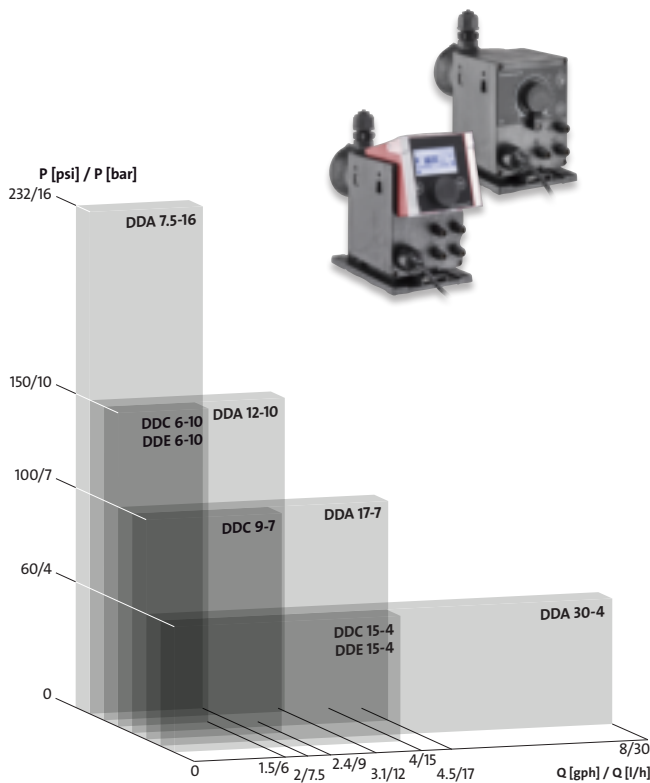
- Flow intelligence: The pump monitors the dosing process of liquids when the FlowControl function is activated, for advanced process reliability with accuracy of 1% of setpoint.
- Auto-deaeration during pump standby
- Ethernet, Modbus, Profibus compatible
- Turn down ratio 3000:1 with constant 100% stroke length
- External stop, dual-level tank control, 2 relay outputs

| Pump type | DDA | | | DDE | | |
|---|-----|----|----|-----|---|---|
| | FCM | FC | AR | PR | P | B |
| Control variant | | | | | | |
| 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) | • | • | • | | | |

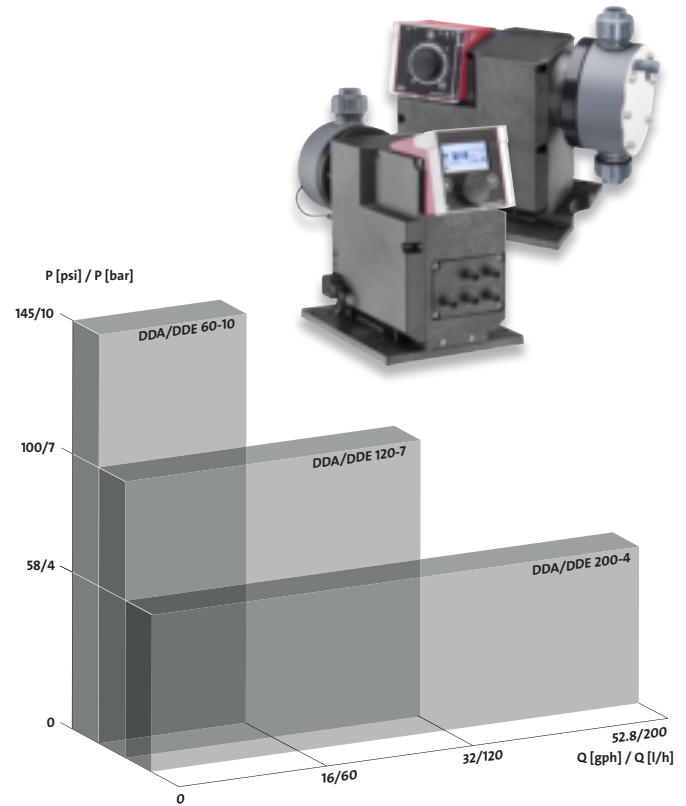
APPLICATIONS

- Disinfection & pH adjustment
- Municipal & process water
- Food and beverage, Clean-in-place
- Ultrafiltration and reverse osmosis
- Pulp and paper, boiler feed water
- Swimming pools & cooling towers
- Coagulation & flocculation
- Chemical industry
- Anywhere chemical treatment and conditioning of water is required

DDA/DDE Performance Range 2.5 mL/hr – 30 LPH



DDA/DDE XL Performance Range 60 LPH – 200 LPH



DDA/DDE Technical Data

| DDA/DDE INFORMATION | |
|---------------------------------------|--|
| Dosing head: | PP, PVC, PVDF and Stainless Steel 1.4401 |
| Gaskets: | EPDM, FKM or PTFE |
| Valve balls: | Ceramics or stainless steel 1.4401 (SS heads only) |
| Connection sets (suction / pressure): | <ul style="list-style-type: none"> • Tubing: 1/4", 3/8", 1/2" • Threaded: 1/2" MNPT for PP, PVC and PVDF; 1/4" FNTP for SS |
| Max Flow, Q: | 0-200 LPH |
| Max Pressure, P: | 232 psi (16 bar) |
| Turndown ratio: | 3000:1 or 1000:1 |
| Liquid viscosity: | max 2500mPas, depending on model and setup |
| Supply voltage: | 100-240 V, 50-60Hz |
| Power consumption: | max 18 W |
| Weight: | 5.3-8.8 lbs (2.4-4 kg), depending on material |
| Sound pressure level: | 60 dB(A) |
| Enclosure rating: | IP65, NEMA 4X |
| Approvals: | NSF61, CSA-US |

DDA/DDE XL Technical Data

| DDA/DDE XL INFORMATION | |
|---------------------------------------|---|
| Dosing head: | PVC, PVDF and Stainless Steel 1.4401 |
| Gaskets: | EPDM, FKM or PTFE |
| Valve balls: | Ceramics or stainless steel 1.4401 (SS heads only) |
| Connection sets (suction / pressure): | Threaded: 3/4" MNPT for PVC and PVDF; 3/4" FNPT for stainless steel |
| Max Flow, Q: | 52.8 gph (200 l/h) |
| Max Pressure, P: | 145 psi (10 bar) |
| Turndown ratio: | 800:1 |
| Liquid viscosity: | max 3000 mPas, depending on model and setup |
| Supply voltage: | 100-240 V, 50-60Hz |
| Power consumption: | max 80 W |
| Weight: | 14.8-33.1 lbs (6.7-15 kg), depending on material |
| Sound pressure level: | 80 dB(A) |
| Enclosure rating: | IP65, NEMA 4X |
| Approvals: | NSF61, CSA-US |

The name Grundfos, the Grundfos logo, and be think innovate are registered trademarks owned by Grundfos Holding A/S or Grundfos A/S, Denmark. All rights reserved worldwide. LSD-SL-000_CA Rev. 06-18