

Digital Instrumentation for Dosing

GRUNDFOS DID

The new Grundfos by s::can DID systems are the perfect combination of s::can's state-of-the-art digital sensor technology and Grundfos experience in PID controlling of dosing and disinfection processes. DID systems are designed to perfectly match Grundfos dosing pumps, gas dosing systems and systems for the generation and dosing of chlorine dioxide and hypochlorite.

DID systems are available as compact systems with bypass flow cell or as kits for applications with tank-immersed sensors. The DID is extremely easy to set up due to the pre-assembled and pre-calibrated configurations. Installation is easy due to the Fieldbus-based communication with both controller and sensors.



KEY FEATURES AND BENEFITS

- Automatic setting of water flow and detection of missing water flow in systems with flow cell
- Probe carrier included in systems for tank installation
- 25 feet cable included in systems for tank installation
- Probe guard included in systems for tank installation
- Temperature compensation included for all sensors
- Designed for extra-long maintenance intervals (0.5 to 1 year)
- Pre-calibrated sensors (pH, ORP, conductivity)
- One sensor variant per parameter for all applications and measuring ranges (pH, ORP, conductivity sensors)
- Diaphragm-covered amperometric sensor principle (free and total chlorine, ClO₂, H₂O₂ and PAA)
- Lowered pH dependency for free-chlorine sensors

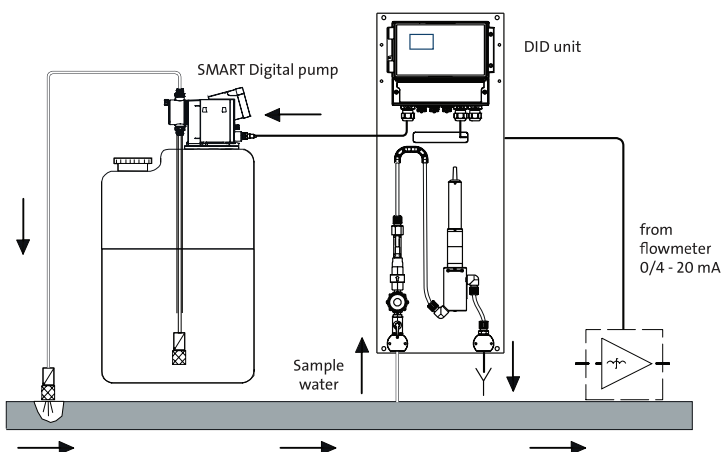
APPLICATIONS

- Drinking water treatment
- Industrial process water and waste-water treatment (effluent disinfection): pH control for dosing acids and alkalis and control of chlorine, chlorine dioxide or ozone
- Food and beverages: disinfection in filling tanks and CIP applications
- Swimming pool water treatment: pH control for dosing acids and alkalis, monitoring & control of residual chlorine

TECHNICAL DATA

CONTROLLER								
ELECTRONICS:	High-speed 32 bit Cortex M4 processor							
DISPLAY:	128 x 64 px graphical display							
MEMORY:	512 MB, industrial grade SLC							
DATA LOGGER:	Internal SD card or USB stick							
OUTPUTS/INPUTS:	1 x or 3 x 4-20 mA outputs 2 x digital inputs 1 x 4-20 mA input 2 x digital outputs 1 alarm relay							
INTERFACES:	RS485 GENibus and Modbus							
HUMIDITY:	5 to 90%, non-condensing							
SUPPLY VOLTAGE:	85 to 264V/47 to 63 Hz							
ENCLOSURE CLASS:	IP 65							
SENSORS								
MEASURED PARAMETER:	Free chlorine	Total chlorine	ClO ₂	H ₂ O ₂	PAA	pH	ORP	Conductivity
OPERATING TEMPERATURE:	41 to 113°F	41 to 113°F	41 to 122°F	41 to 113°F	41 to 113°F	32 to 158°F	32 to 158°F	-4 to 158°F
MAX. OPERATING PRESSURE:	7.25 psi	7.25 psi	14.5 psi	14.5 psi	14.5 psi	145 psi	145 psi	290 psi
MIN. FLOW RATE/FLOW SPEED:	8 gph	8 gph	8 gph	8 gph	8 gph	0.032 f/s	0.032 f/s	-
PH RANGE:	4-9	4-12	4-11	4-11	1-6	0-14	2-12	2-12
RESPONSE TIME T ₉₀ :	2 min	2 min	1 min	5-10 min	5 min at 50°F 1.5 min at 122°F	30 s	30 s	60 s

TYPICAL DOSING AND FLOWMETER SYSTEM SETUP



Visit grundfos.us/pei to learn more about Department of Energy (DOE) pump energy index (PEI) requirements and PEI ratings on specific Grundfos models.