



- Measurement and control equipment
- Sensors
- Dosing technology
- Swimming pool Technology
- Disinfection systems



## PRODUCT CATALOG 2013

Measurement  
Control  
Dosing  
Disinfection

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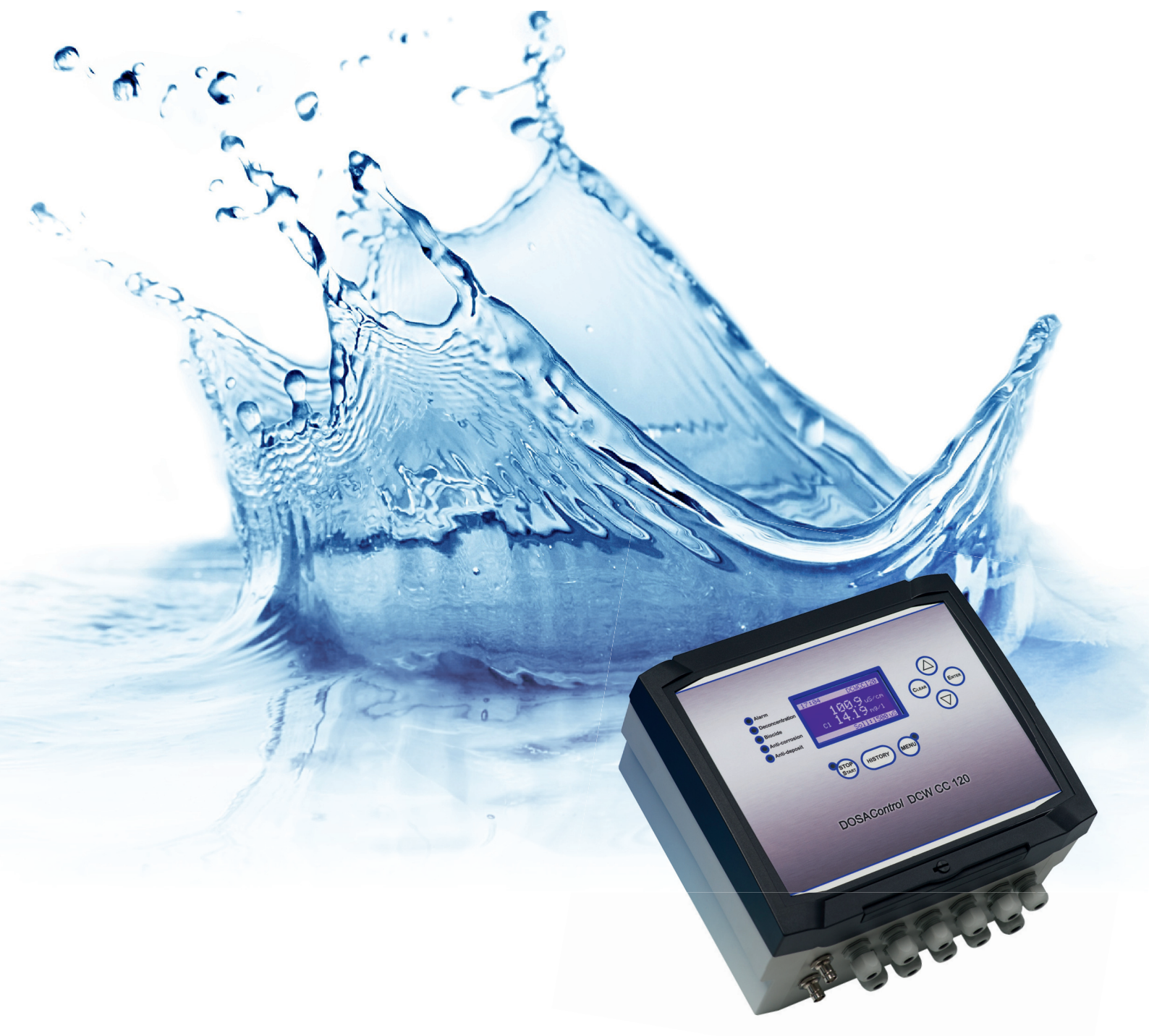
2. **Sensors - DOSASens**

3. **Dosing technology - DOSATec**

4. **Swimming pool Technology – DOSAPool**

5. **Disinfection systems – DOSADes**

**Terms and Conditions**



# I Measurement & control equipment

## 1. Measurement and control equipment - DOSAControl

### 1.1 Wall mounting

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- 1.5 Simulator for pH and ORP
- 1.5 Photometer for free chlorine, total chlorine or chlorine-dioxide

## DOSAControl DCW 100 Series, Controller

1-channel controller for free chlorine, chlorine dioxide or ozone and temperature



### General information

- Mikroprocessor unit with 2-line LCD, backlit
- Residual data storage on power failure
- Programmable switch-on delay
- 2 switch points with adjustable direction of action
- Choice of control modes:
  - ON/OFF controller, option with hysteresis
  - Proportional, proportional-integral controller (P-, PI-controller) as pulse-interval, pulse frequency (PFM) or continuous controller
  - Hysteresis freely adjustable over full range
  - P-range  $X_p$  freely adjustable over full range
- 3 relay outputs as floating contacts, max. Contact loading 250V/6A, max. 550 VA, of which:
  - 2 x control contacts
  - 1 x alarm contact with adjustable time delay
- 1 analogue output 0/4 - 20 mA, as measurement or continuous controller output
- Temperature input for Pt 100 and automatic temperature compensation
- RS 485 interface (optional), various interface protocols, e.g. ProfiBUS DP
- Enclosure in plastic, protection class IP 65
- Dimensions (Width X Height X Depth): 160 x 165 x 85 mm

### Special feature

In conjunction with KCL sensors for free chlorine, KCLD for chlorine dioxide and KCOZ for ozone, the controller is fitted with a fully automatic, electro-chemical operating sensor cleaning system (ASC)!

DOSAControl DCW 100		CL	CLD	O3
Measurement and control range	mg/l Cl <sub>2</sub> mg/l ClO <sub>2</sub> mg/l O <sub>3</sub>	0 ... 20.00	0 ... 4.00	0 ... 4.00
Resolution		0.01	0.01	0.01
Suitable sensors		KCL	KCLD	KCOZ

Order code

DOSAControl DCW 100											
	<table border="1"> <tr> <th>Measurement control parameters</th> <th>Suitable sensors</th> </tr> <tr> <td>CL Free chlorine</td> <td>KCL</td> </tr> <tr> <td>CLD Chlorine dioxide</td> <td>KCLD</td> </tr> <tr> <td>O3 Ozone</td> <td>KCOZ</td> </tr> </table>	Measurement control parameters	Suitable sensors	CL Free chlorine	KCL	CLD Chlorine dioxide	KCLD	O3 Ozone	KCOZ		
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CL Free chlorine	KCL										
CLD Chlorine dioxide	KCLD										
O3 Ozone	KCOZ										
	<table border="1"> <tr> <th>Measurement range</th> </tr> <tr> <td>4 0 ... 4.00 mg/l</td> </tr> <tr> <td>20 0 ... 20.00 mg/l only free chlorine</td> </tr> </table>	Measurement range	4 0 ... 4.00 mg/l	20 0 ... 20.00 mg/l only free chlorine							
Measurement range											
4 0 ... 4.00 mg/l											
20 0 ... 20.00 mg/l only free chlorine											
	<table border="1"> <tr> <th>Connection to the electric supply</th> </tr> <tr> <td>0 230 VAC, +6/-10%, 40/60 Hz</td> </tr> <tr> <td>1 117 VAC, +6/-10%, 40/60 Hz</td> </tr> <tr> <td>2 24 VAC, +6/-10%, 40/60 Hz</td> </tr> </table>	Connection to the electric supply	0 230 VAC, +6/-10%, 40/60 Hz	1 117 VAC, +6/-10%, 40/60 Hz	2 24 VAC, +6/-10%, 40/60 Hz						
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	<table border="1"> <tr> <th>Front panel</th> </tr> <tr> <td>D DOSAControl</td> </tr> <tr> <td>X Customer-specific</td> </tr> </table>	Front panel	D DOSAControl	X Customer-specific							
Front panel											
D DOSAControl											
X Customer-specific											
	<table border="1"> <tr> <th>Fully automated sensor cleaning:</th> </tr> <tr> <td>- No fully automated sensor cleaning system</td> </tr> <tr> <td>ASC Fully automated sensor cleaning system for sensor types KCL and KCLD</td> </tr> </table>	Fully automated sensor cleaning:	- No fully automated sensor cleaning system	ASC Fully automated sensor cleaning system for sensor types KCL and KCLD							
Fully automated sensor cleaning:											
- No fully automated sensor cleaning system											
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	<table border="1"> <tr> <th>Options:</th> </tr> <tr> <td>- None</td> </tr> <tr> <td>RS Serial interface RS 485,</td> </tr> <tr> <td>PB Profibus DP</td> </tr> </table>	Options:	- None	RS Serial interface RS 485,	PB Profibus DP						
Options:											
- None											
RS Serial interface RS 485,											
PB Profibus DP											
	<table border="1"> <tr> <th>Standard cable:</th> </tr> <tr> <td>AK Standard cable, 5 m</td> </tr> </table>	Standard cable:	AK Standard cable, 5 m								
Standard cable:											
AK Standard cable, 5 m											

<b>DCW 100</b>	<b>CL</b>	<b>4</b>	<b>0</b>	<b>D</b>	<b>-</b>	<b>-</b>	<b>AK</b>	(example order)
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Your selection

<b>DCW 100</b>								
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## DOSAControl Series DCW 110, Controller

1-channel controller for:

pH, redox (ORP), conductivity, free chlorine, total chlorine, chlorine dioxide, ozone, hydrogen peroxide, peracetic acid, oxygen



### General information

- Microprocessor unit with large, backlit LCD
- All measurement and operating values are displayed simultaneously on one display
- Operation via buttons
- Data input (according to model)
- Temperature input (0 - 100°C) for Pt100 temperature sensor
- 2 setpoint relay outputs (ON/OFF, PI or PWM)
- 2 proportional outputs for dosing pumps
- 1 relay output for automatic sensor cleaning
- 1 alarm relay output
- 1 current output 0/4-20 mA for the measurement value (set as a control or recorder output)
- 1 current output 0/4-20 mA for temperature (recorder output)
- 2 digital inputs for level measurement
- 1 digital input for stand-by
- 1 digital input for flow monitoring
- 1 contact water meter input for fresh water top-up
- RS 232 interface for connecting a modem, a data logger, a printer or a PC for remote control
- Enclosure in ABS plastic, protection class IP 65
- Dimensions (Width X Height X Depth): 229 x 204 x 116 mm

### Technical specifications

DOSACONTROL DCW 110		PH	RH	CD	O2	MF
Measurement and control range	pH mV mS/cm mg/l O <sub>2</sub> mg/l Cl <sub>2</sub> mg/l ClO <sub>2</sub> mg/l O <sub>3</sub> mg/l H <sub>2</sub> O <sub>2</sub> mg/l PES	0 - 14.00	-1000 to +2000	0 - 299.9	0 - 20	0 - 200.0 0 - 20 0 - 10 0 - 2000 0 - 2000
Resolution		0.01 pH	1 mV	0.01 µS 0.1 µS 1 µS 0.01 mS 0.1 mS	0.01 mg	0.001 mg 0.01 mg 0.1 mg 1 mg
Probes Sensors		pH electrodes	Redox electrodes	div. types	DOSASens	DOSASens

The ETEP and ETE sensor types are suitable for temperature compensation.

## Options

- **DCW 110 COM**

Central unit for data collection from the "DCW 110" controllers in a network. With the PC software "Master Comm", the DCW 110 COM facilitates remote control of up to 32 devices - locally via RS232 interface or remotely via PSTN and GSM modem. It is possible to record the operating status of each controller in real-time, to program it, to display all the events and alarms which have occurred and to print the activity of all the connected devices or to create appropriate graphics and charts of measurement values. It is also possible to output an SMS message via the GSM modem to one or more of the numbers entered. Wall-mountable housing in IP 65. The PC "Master Comm" software is included.

- **DCW 110 LIP-D**

Connects all the controllers fitted with an RS232/422/485 serial interface to an Ethernet network with 10 T-Base speed. Wall-mountable housing IP 65.

- **DCW 110 COMM1U**

GSM modem (mobile phone) for PC with USB port. incl. lead and power supply.

- **DCW 110 COMM2**

Modem for all controllers with serial interface. Operates with PSTN protocol. Wall-mountable housing, protection class IP 65.

- **DCW 110 COMMS5**

External modem for DCW 110, installed in a wall mountable housing, protection class IP 65. Operates with GSM protocol (mobile phone), incl. leads and power supply.

- **DCW 110 COMM6**

GSM modem (mobile phone) with 2 additional digital inputs. When operating an input (NO), the modem sends the corresponding SMS. Wall-mountable housing in IP 65.

- **DCW 110 COMM7**

GSM modem (mobile phone) with 4 additional digital inputs. When operating an input (NO), the modem sends the corresponding SMS. Wall-mountable housing IP 65.

- **DCW 110 COMM8**

GSM modem (mobile phone) with 4 additional digital inputs. When operating an input (NO), the modem sends the corresponding SMS, 4 relay outputs (85 - 264 VAC-50/60 Hz.) programmable via SMS, 4 connection outputs for dosing pumps Version "IS and MF" programmable via SMS. Wall-mountable housing, protection class IP 65.



Order code

DOSAControl DCW 110																	
	<p><b>Measurement and control parameters</b></p> <table> <tr> <td>PH</td> <td>0 – 14.00</td> <td>pH</td> </tr> <tr> <td>RH</td> <td>-1000 to +1000</td> <td>mV</td> </tr> <tr> <td>CD</td> <td>0 - 20,00</td> <td>µS/cm</td> </tr> <tr> <td>O2</td> <td>0 - 20,00</td> <td>mg/l O<sub>2</sub></td> </tr> <tr> <td>MF</td> <td>0 - 200.00 mg/l</td> <td>Cl<sub>2</sub>, ClO<sub>2</sub>, O<sub>3</sub>, H<sub>2</sub>O<sub>2</sub>, PES</td> </tr> </table>	PH	0 – 14.00	pH	RH	-1000 to +1000	mV	CD	0 - 20,00	µS/cm	O2	0 - 20,00	mg/l O <sub>2</sub>	MF	0 - 200.00 mg/l	Cl <sub>2</sub> , ClO <sub>2</sub> , O <sub>3</sub> , H <sub>2</sub> O <sub>2</sub> , PES	
PH	0 – 14.00	pH															
RH	-1000 to +1000	mV															
CD	0 - 20,00	µS/cm															
O2	0 - 20,00	mg/l O <sub>2</sub>															
MF	0 - 200.00 mg/l	Cl <sub>2</sub> , ClO <sub>2</sub> , O <sub>3</sub> , H <sub>2</sub> O <sub>2</sub> , PES															
	<p><b>Connection to the electric supply</b></p> <table> <tr> <td>0</td> <td>230 VAC, +/-10%, 50/60 Hz</td> </tr> <tr> <td>1</td> <td>100 VAC, +/-10%, 60 Hz</td> </tr> <tr> <td>2</td> <td>12 VDC, +/-10%</td> </tr> <tr> <td>3</td> <td>24 VDC, +/-10%</td> </tr> </table>	0	230 VAC, +/-10%, 50/60 Hz	1	100 VAC, +/-10%, 60 Hz	2	12 VDC, +/-10%	3	24 VDC, +/-10%								
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	<p><b>Option</b></p> <table> <tr> <td>0</td> <td>none</td> </tr> <tr> <td>C</td> <td>DCW 110 COM</td> </tr> <tr> <td>D</td> <td>DCW 110 LIP-D</td> </tr> <tr> <td>1U</td> <td>DCW 110 COMM1U</td> </tr> <tr> <td>5</td> <td>DCW 110 COMM5</td> </tr> <tr> <td>6</td> <td>DCW 110 COMM6</td> </tr> <tr> <td>7</td> <td>DCW 110 COMM7</td> </tr> <tr> <td>8</td> <td>DCW 110 COMM8</td> </tr> </table>	0	none	C	DCW 110 COM	D	DCW 110 LIP-D	1U	DCW 110 COMM1U	5	DCW 110 COMM5	6	DCW 110 COMM6	7	DCW 110 COMM7	8	DCW 110 COMM8
0	none																
C	DCW 110 COM																
D	DCW 110 LIP-D																
1U	DCW 110 COMM1U																
5	DCW 110 COMM5																
6	DCW 110 COMM6																
7	DCW 110 COMM7																
8	DCW 110 COMM8																

<b>DCW 110</b>	<b>PH</b>	<b>0</b>	<b>0</b>	(example order)
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Your selection

<b>DCW 110</b>				
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## DOSAControl DCW 120 MF, Measurement- and Control Instrument

1-channel-controller, free programmable for the following parameters:

pH, Redox (ORP), conductivity, temperature, turbidity, dissolved oxygen, nitrate and amperometric sensors for Cl<sub>2</sub>, ClO<sub>2</sub>, O<sub>3</sub>, H<sub>2</sub>O<sub>2</sub>, PAA, Br (mA- and mV-signal).



### General features:

- Microprocessor controller with large LC-Display, background lightened
  - All measurement values and operating conditions completely displayed
  - Complete visualization of controller informations
  - Settings via keypad
  - Residual data storage in case of power failure
  - Signal input for amperometric sensors: 4-20 mA@12/24V isolated
  - Signal input for amperometric sensors: ± 0 – 2000 mV
  - Adjustable polarisation time
  - Direct calibration access
  - 2 Analogue outputs 0/4-20 mA (measurement signal and regulation)
  - Control input NO/NC with adjustable delay
- 1 Relay output for dosing pump (230 VAC) (impulse or cycle)
  - 1 Relay output (control: P, PI, PID)
  - 1 Alarm-Relay output
  - Alarm display: Sensor not connected
  - Alarm display: Sensor failure
  - Alarm display: Water lack
  - Test functions
  - 1 input for flow control (proximity switch, PNP)
  - Hold- and Auto-function
  - Power connection: 90-240 VAC, ±10%, 50/60 Hz
  - Enclosure in ABS, protection IP 65
  - Dimensions (w x h x d): 229 x 204 x 116 mm

### Option:

- RS 485, serial interface (Modbus-protocoll)

### Language:

- 6 languages (English, German, French, Italian, Portuguese, Spanish)

Technical data:

DOSAControl DCW 120		PH	RH	CD	CL <sub>2</sub>
Measuring- and control range	pH mV mS/cm mg/l Cl <sub>2</sub>	0 ...14,00	0 ... ± 1000	>0 ...0,05/2.000	>0 ... 0,5 / 200
Resolution		0,01	1	0,01 0,1 1 / 10	0,001 0,01 0,1
Suitable Measuring cells/ Sensors		pH-Electrodes	Redox/ORP-Electrodes	div. types	DOSASens

DOSAControl DCW 120		CLO <sub>2</sub>	CLT	O <sub>3</sub>	H <sub>2</sub> O <sub>2</sub>
Measuring- and control range	mg/l ClO <sub>2</sub> mg/l ClO <sub>2</sub> <sup>-</sup> mg/l O <sub>3</sub> mg/l H <sub>2</sub> O <sub>2</sub>	>0 ... 0,5 / 200	>0 ... 2,0	>0 ... 0,2 / 10,0	0 ... 200 / 200.000
Resolution		0,001 0,01 0,1	0,01	0,001 0,01	0,1 1 10 / 100
Suitable Measuring cells/ Sensors		DOSASens	DOSASens	DOSASens	DOSASens

DOSAControl DCW 120		PAA	BR	TEMP	Turbidity
Measuring- and control range	mg/l PAA mg/l Br °C FTU NTU	0 ...200 / 20.000	0 ...2,0 / 10,0	0 ... +100	0 ... 100 / 10.000 0 ... 4 / 40 / 400
Resolution		0,1 1 / 10		0,1	
Suitable Measuring cells/ Sensors		DOSASens	DOSASens	DOSATemp	DOSATurb

DOSAControl DCW 120		O <sub>2</sub>	ISE	NO <sub>3</sub>	
Measuring- and control range	mg/l O <sub>2</sub> mg/l mg/l NO <sub>3</sub>	0 ... 20	on request	0 ... 20 / 50	
Resolution		0,1sat.		0,1	
Suitable Measuring cells/ Sensors		DOSALum	DOSAISE	UV-sensor	

You will find the measuring cells, sensors and flow cells in chapter sensors

Order code

DOSAControl DCW 120		Serial Interface
0	without	
1	RS 485	

<b>DCW 120</b>	<b>0</b>	(Order example)
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Your selection

DCW 120			
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## DOSAControl DCW 250

2-channel measurement and control device for pH/Redox (ORP), pH/Free Chlorine or Total Chlorine, pH/Hydrogen Peroxide; pH/Conductivity (inductive), pH/conductivity (conductive)



### Product Description:

- Microprocessor unit with large LCD display with backlit
- All measuring and operating values are displayed simultaneously.
- Operation with an encoder
- Temperature input:  
Pt100 temperature sensor (0 ... 100 ° C) with display (depending on model - see also technical data)
- 2 set point outputs, 230 VAC (ON / OFF, PWM or PFM)
- 1 230 VAC-Alarm-Output
- 2 pulse outputs for pH dosing
- 1 pulse output for dosing pump „Chlorine“
- 2 current outputs 0/4 -20mA for measured values (Set as a recorder output or analog output)
- 1 current output 0/4 -20mA for temperature (Recorder output)
- 2 sensor inputs - see technical data
- 2 digital inputs for pH level measurement
- 1 digital input for level measurement of Chlorine
- 1 digital input for Stand-by
- 1 digital input for flow control (proximity switches)
- Interface RS 485 for connecting a modem or of the optional data acquisition.
- ABS plastic housing, IP 65
- Dimensions: 229 x 204 x 116 mm (WxHxD)

Technical data:

DOSAControl DCW 250		PH/RH	PH/Cl <sub>2</sub>	PH/CD Cond.	PH/CD Induc.	PH/H <sub>2</sub> O <sub>2</sub> .
Measurement and Control range	pH	0 ... 14,00	0 ... 14,00	0 ... 14,00	0 ... 14,00	0 ... 14,00
	mV	0 ... +999				
Resolution	mS/cm		0 ... 200,0	0 ... 30,00	0 ... 1000	
	mg/l Cl <sub>2</sub>					0 ... 200,0
Cells Sensors	mg/l H <sub>2</sub> O <sub>2</sub>					
		0,01 pH	0,01 pH	0,01 pH	0,01 pH	0,01 pH
		-	-	-	-	-
		1 mV	0,001 mg	0,01 µS	0,001 ms	1 mg
			0,01 mg	0,1 µS	0,01 ms	
			0,1 mg	1 µS	0,1 ms	
			1 mg	0,01 mS		
			1 mg	0,1 mS		
		pH-Electrode	pH-Electrode	pH-Electrode	pH-Electrode	pH-Electrode
		-	-	-	-	-
		Redox Electrode	DOSASens	div. typen	DOSASens	DOSASens

Sensor types ETEP and ETE are suitable to compensate temperature.

## Option

- **DCW 250 COM**  
Central unit for data collection from a network involved in "DCW 250" - controls. The DCW 250 COM allows the PC software "Master Comm" remote control (remote control) of up to 32 devices - locally via RS232 or remotely via PSTN or GSM modem. It is possible to capture real-time operating status of each controller to program it to display all the events that occurred / alarms and print the activity of all connected devices, or to create appropriate graphs and data charts. It is also possible to send on the GSM modem an "SMS" message to one or more numbers entered. Wall-mounted housing in IP 65 The PC software "Master Comm" is included.
- **DCW 250 LIP-D**  
Combines all controllers that are equipped with a serial interface RS232/422/485, with an Ethernet Network with 10 Base-T speeds. Wall-mounted housing in IP 65
- **DCW 250 COMM1U**  
GSM modem (mobile phone) for PC with USB port. Incl. Cable and power supply.
- **DCW 250 COMM2**  
Modem for all controllers with serial interface. Works with PSTN protocol. Wall-mounted housing in IP 65.
- **DCW 250 COMM5**  
External modem for DCW 250, installed in a wall-mounted housing, protection class IP 65 Works with GSM protocol (mobile phone), Inclusive cables and power supply.
- **DCW 250 COMM6**  
GSM modem (mobile phone) with 2 additional digital inputs. Upon actuation of an input (NO), the modem sends an appropriate message. Wall-mounted housing in IP 65.
- **DCW 250 COMM7**  
GSM modem (mobile phone) with 4 additional digital inputs. Upon actuation of an input (NO), the modem sends an appropriate message. Wall-mounted housing in IP 65.
- **DCW 250 COMM8**  
GSM modem (mobile phone) with 4 additional digital inputs. Upon actuation of an input (NO), the modem sends a corresponding SMS, 4 relay outputs (85 - 264 VAC-50/60 Hz.) Programmable by SMS, connecting four outputs for dosing off leadership "IS and MF" programmable via SMS. Wall-mounted housing in IP 65.

Order Code:

**A**

DOSAControl DCW 250				€
		<b>Measurement and control parameters</b>		
PH/RH	0 ... 14,00 pH		-1000 ... +1000 mV	
PH/Cl <sub>2</sub> / 2	0 ... 14,00 pH		0 ... 2,000 mg/l Cl <sub>2</sub>	
PH/Cl <sub>2</sub> / 5	0 ... 14,00 pH		0 ... 5,000 mg/l Cl <sub>2</sub>	
PH/Cl <sub>2</sub> / 10	0 ... 14,00 pH		0 ... 10,00 mg/l Cl <sub>2</sub>	
PH/Cl <sub>2</sub> / 20	0 ... 14,00 pH		0 ... 20,00 mg/l Cl <sub>2</sub>	
PH/Cl <sub>2</sub> / 200	0 ... 14,00 pH		0 ... 200,00 mg/l Cl <sub>2</sub>	
PH/H <sub>2</sub> O <sub>2</sub>	0 ... 14,00 pH		0 ... 200,00 mg/l H <sub>2</sub> O <sub>2</sub>	
PH/CD Cond.	0 ... 14,00 pH		0 ... 30 mS	
PH/CD Induc.	0 ... 14,00 pH		0 ... 999,9 mS	
		<b>Electrical Connection</b>		
	0	230VAC, +/-10%, 50/60 Hz		
	1	100 VAC, +/-10%, 60 Hz		
	2	12 VDC, +/-10%		
	3	24 VDC, +/-10%		
		<b>Data transmission</b>		
	0	none		
	1	USB-Port (download on a USB stick)		
	2	Remote control via Ethernet (USB Comm Service (direct PC connection for remote control), E-mail Alert Service, HTTP remote service).		
	3	Remote control by GSM / GPRS internal modem (USB Comm Service (direct PC connection for remote control) and SMS alert service, e-mail alert service, HTTP re-mote service).		
		<b>Option</b>		
	0	none		
	C	DCW 250 COM		
	D	DCW 250 LIP-D		
	1U	DCW 250 COMM1U		
	5	DCW 250 COMM5		
	6	DCW 250 COMM6		
	7	DCW 250 COMM7		
	8	DCW 250 COMM8		

DCW 250	PH/ H	0	0	0	(example order)	€
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Your selection:

DCW 250						€
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## DOSAControl DCW 300 Series

2-channel controller for pH/free chlorine - pH/chlorine dioxide - pH/ozone;  
Redox (ORP) and temperature display



### General information

- Microprocessor unit with LCD, 128 x 64 backlit
- Residual data storage on power failure
- Programmable switch-on delay
- 2 switch points with adjustable direction of action
- Choice of control modes:
  - ON/OFF controller, option with hysteresis
  - Proportional controller (P)
  - Proportional integral controller (PI)
  - Proportional integral differential controller (PID) as pulse-interval, pulse frequency or continuous controller
  - Hysteresis freely adjustable over full range
  - P-range  $X_p$  freely adjustable over full range
- 3 relay outputs as floating-potential contacts, max. Contact loading 250V/6A, max. 550 VA, of which:
  - 2 x control contacts
  - 1 x alarm contact with adjustable time delay
- 3 analogue outputs 0/4 - 20 mA, as measurement value or continuous controller output
- Temperature input for Pt 100 and automatic temperature compensation
- RS 485 interface (optional), various interface protocols, e.g. ProfiBUS DP
- Enclosure in plastic, degree of protection IP 65
- Dimensions (Height X Width X Depth): 160 x 165 x 85 mm

### Special feature

In conjunction with KCL sensors for free chlorine, KCLD for chlorine dioxide and KCOZ for ozone, the controller is fitted with a fully automatic, electrochemical operating sensor cleaning system (ASC)!

### Technical specifications

DOSAControl DCW 300		PH	RH	CL	CLD	O3
Measurement and control range	pH mV mg/l Cl <sub>2</sub> mg/l ClO <sub>2</sub> mg/l O <sub>3</sub>	0.00 ... 14.00	-1500 ... 1500	0 ... 4.00	0 ... 4.00	0 ... 4.00
Resolution		0.01	1	0.01	0.01	0.01
Suitable electrodes and sensors		pH electrodes	Redox electrodes	KCL	KCLD	KCOZ

Order code

DOSAControl DCW 300			
	<b>Measurement and control parameters</b> PH Range: pH 0 - 14.00      pH electrodes RH Range: -1500 to +1500 mV      Redox electrodes CL 0 - 4.00 mg/l Cl <sub>2</sub> KCL CLD 0 - 4.00 mg/l ClO <sub>2</sub> KCLD O3 0 - 4.00 mg/l O <sub>3</sub> KCOZ	<b>Suitable sensors</b>	
	<b>Connection to the electric supply</b> 0 230 VAC, +6%/-10%, 40/60 Hz 1 110 VAC, +6%/-10%, 40/60 Hz 2 24 VAC, +6%/-10%, 40/60 Hz		
	<b>Front panel</b> D DOSAControl X Customer-specific		
	ASC Fully automatic sensor cleaning system for sensor types KCL and KCLD		
	RS Serial interface RS 485 PB Profibus DP		
	AK Standard lead, 5 m		

<b>DCW 300</b>	<b>CL</b>	<b>0</b>	<b>D</b>	<b>-</b>	<b>-</b>	<b>AK</b>	(example order)
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Your selection

<b>DCW 300</b>							
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## DOSAControl 500

5-channel controller for the following parameters:

pH, redox (ORP), conductivity, chlorine (free chlorine, total chlorine, bound chlorine), chlorine dioxide, ozone, hydrogen peroxide, peracetic acid, turbidity, oxygen and temperature



### General information

- Microprocessor unit with large, backlit LCD
- All measurement and operating values are displayed simultaneously on one display
- Controlled via a rotary encoder
- 6 setpoint relay outputs (ON/OFF, PID or PVM)
- 6 proportional outputs for dosing pumps
- 1 relay output for automatic sensor cleaning
- 5 inputs for level measurement
- 5 time clocks for dosing the flocculants or algicide
- Contact water meter input for topping up with fresh water
- Alarm relay output
- Logbook (event data memory)
- RS 485
- Housing made of ABS plastic, degree of protection IP 65
- Dimensions (Width X Height X Depth): 325 x 235 x 125 mm

### Options

- 6 analogue outputs 0/4 - 20 mA
- Ethernet Web Server Ethernet + RS485 + USB
- GSM/GPRS + RS485 + USB

## Technical specifications

Series DOSAControl DCW 500		PH	RH	CD	CL
Measurement and control range	pH mV mS/cm mg/l Cl <sub>2</sub>	0 ... 14.00	0 ... +1000	0 ... 300,0	0 ... 200,0
Resolution		0.01	1	0.01 0.1 1	0.001 0.01 0.1
Suitable measurement cells/sensors		pH electrodes	Redox electrodes	div. Types	DOSASens

Series DOSAControl DCW 500		CLO <sub>2</sub>	O <sub>3</sub>	H <sub>2</sub> O <sub>2</sub>	PES
Measurement and control range	mg/l ClO <sub>2</sub> mg/l O <sub>3</sub> mg/l H <sub>2</sub> O <sub>2</sub> PES	0 ... 20.00	0 ... 10.00	0 ... 2000	0 ... 2000
Resolution		0.001 0.01	0.001 0.01	0.1 1	0.1 1
Suitable measurement cells/sensors		DOSASens	DOSASens	DOSASens	DOSASens

Series DOSAControl DCW 500		O <sub>2</sub>	NTU	TEMP	
Measurement and control range	mg/l O <sub>2</sub> NTU °C	0 - 20.00	0 - 30.0	0 - 100.0	
Resolution		0.01	0.1	0.1	
Suitable measurement cells/sensors		DOSASens	on request	DOSATemp	

See under heading Sensors for measurement cells, sensors and fittings

## Order code

Series DOSAControl DCW 500		
0	<b>Option outputs</b>	
1	6 analogue outputs 0/4 - 20 mA	
0	<b>Data transfer</b>	
1	Data transfer and remote control via Ethernet + network DOSAControl DCW 500 internal Ethernet web server Ethernet + 485 + USB	
2	Data transfer and remote control via internal GSM/GPRS modem DOSAControl DCW 500 GSM/GPRS + RS485 +	
0	<b>Connection to the electric supply</b>	
1	230 VAC, +/-10%, 50/60 Hz	
1	110 VAC, +/-10%, 50/60 Hz	

<b>DCW 500</b>	<b>1</b>	<b>2</b>	<b>0</b>	(example order)
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## Your selection

DCW 500				
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## DOSAControl DC 96 Series

1-channel controller for free chlorine, chlorine dioxide or ozone and temperature



### General information

- Microprocessor unit with 2-line LCD, backlit
- Residual data storage on power failure
- Programmable switch-on delay
- 2 switch points with adjustable direction of action
- Choice of control modes:
  - ON/OFF controller, option with hysteresis
  - Proportional, proportional-integral controller (P-, PI-controller) as pulse-interval, pulse frequency (PFM) or continuous controller
  - Hysteresis freely adjustable over full range
  - P-range  $X_p$  freely adjustable over full range
- 3 relay outputs as floating contacts, max. Contact loading 250V/6A, max. 550 VA, of which:
  - 2 x control contacts
  - 1 x alarm contact with adjustable time delay
- 1 analogue output 0/4 - 20 mA, as measurement or continuous controller output
- Temperature input for Pt 100 and automatic temperature compensation
- RS 485 interface (optional), choice of various interface protocols, e.g. ProfiBUS DP
- Enclosure in plastic, protection class IP 65
- Dimensions (Width X Height X Depth): 96 x 96 x 135 mm

### Special feature

In conjunction with KCL sensors for free chlorine, KCLD for chlorine dioxide and KCOZ for ozone, the controller is fitted with a fully automatic, electro-chemical operating sensor cleaning system (ASC)!

DOSAControl DC 96		CL	CLD	O3
Measurement and control range	mg/l Cl <sub>2</sub> mg/l ClO <sub>2</sub> mg/l O <sub>3</sub>	0 - 4,00	0 - 4,00	0 - 4,00
Resolution		0.01	0.01	0.01
Suitable sensors		KCL	KCLD	KCOZ

Order code

<b>DOSAControl DC 96</b>		
	<b>Measurement and control parameters Suitable sensors</b>	
CL	0 - 4.00 mg/l Cl <sub>2</sub> KCL	
CLD	0 - 4.00 mg/l ClO <sub>2</sub> KCLD	
O3	0 - 4.00 mg/l O <sub>3</sub> KCOZ	
	<b>Connection to the electric supply</b>	
0	230 VAC, +6/-10%, 40/60 Hz	
1	117 VAC, +6/-10%, 40/60 Hz	
2	24 VAC, +6/-10%, 40/60 Hz	
	<b>Front panel</b>	
D	DOSAControl	
X	customer-specific	
ASC	fully automated sensor cleaning system for sensor types KCL and KCLD	
RS	Serial interface RS 485,	
PB	Profibus DP	
AK	Standard lead, 5 m	

<b>DC 96</b>	<b>CL</b>	<b>0</b>	<b>D</b>	<b>-</b>	<b>-</b>	<b>AK</b>	(example order)
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Your selection

<b>DC 96</b>							
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## DOSAControl JC digital Series

1 channel controller for pH, redox (ORP), conductivity, free chlorine, total chlorine, chlorine dioxide, ozone, dissolved oxygen and temperature



### General information

- Microprocessor unit with LCD backlit
- Residual data storage on power failure
- Programmable switch...on delay
- ON/OFF control mode with two limits and adjustable control hysteresis
- Digital outputs as floating potential relay, max. contact load 230V/5A
  - 2 x limit switch contacts
- Analog outputs:
  - 1 x 0/4 – 20 mA, programmable
- Digital inputs for flow monitor
- Temperature input for NTC 10 kΩ and automatic temperature compensation,
- Enclosure ABS plastic, protection IP 40  
Dimensions (Width X Height X Depth): 96 x 96 x 85 mm

### Technical specifications

Series JC digital		PH	RH	CD	CL
Measurement and control range	pH mV μS/cm mS/cm mg/l Cl <sub>2</sub>	0 ... 14.00	0 ... +1000	0 ... 2000.0 0 ... 200.0	0 ... 200.0
Resolution		0.01	1	0.01 0.1 1	0.001 0.01 0.1
Suitable probes/sensors		pH electrodes	Redox electrodes	div. types	DOSASens

Series JC digital		CLO2	O2	O3	TEMP
Measurement and control range	mg/l ClO <sub>2</sub> mg/l O <sub>2</sub> mg/l O <sub>3</sub> °C	0 ... 200.0	0 ... 20.00	0 ... 20.00	0 ... 100.0
Resolution	0.01	0.001 0.01 0.1	0.01	0.01	0.1
Suitable probes/sensors		DOSASens	MFOX 39 MFOX 41	DOSASens	ETEHL P

Sensor type ETEP (NTC) is suitable for temperature compensation.  
For probes, sensors and fittings, see under heading sensors

Order code

Series JC digital			
		Measurement and control parameters	Suitable sensors
PH	0 ... 14.00		pH electrodes
RH	0 ... +1000 mV		Redox electrodes
CD 2	0 ... 2,000 µS/cm		DOSACon series C
CD 20	0 ... 20.00 µS/cm		DOSACon series C
CD 200	0 ... 200.0 µS/cm		DOSACon series C
CD 2000	0 ... 2000 µS/cm		DOSACon series C
CD 20.0	0 ... 20.00 mS/cm		DOSACon series C
CD 200.0	0 ... 200.0 mS/cm		DOSACon series C
CL 2	0 ... 2,000 mg/l Cl <sub>2</sub>		DOSASens
CL 5	0 ... 5.00 mg/l Cl <sub>2</sub>		DOSASens
CL 10	0 ... 10.00 mg/l Cl <sub>2</sub>		DOSASens
CL 20	0 ... 20.00 mg/l Cl <sub>2</sub>		DOSASens
CL 200	0 ... 200.0 mg/l Cl <sub>2</sub>		DOSASens
CLO2 2	0 ... 2,000 mg/l ClO <sub>2</sub>		DOSASens
CLO2 20	0 ... 20.00 mg/l ClO <sub>2</sub>		DOSASens
CLO2 200	0 ... 200.0 mg/l ClO <sub>2</sub>		DOSASens
O2	0 ... 20.00 mg/l O <sub>2</sub>		DOSASens
O3 2	0 ... 2,000 mg/l O <sub>3</sub>		DOSASens
O3 10	0 ... 10.00 mg/l O <sub>3</sub>		DOSASens
TEMP	0 ... 100.0°C		DOSATemp ETEHLP
		<b>Connection to the electric supply</b>	
	0	230 VAC, +/-10%, 50/60 Hz	
	1	110 VAC, +/-10%, 50/60 Hz	
	2	24 VAC, +/-10%	

JC D	PH	0	(example order)
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Your selection

JC D			
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## DOSAControl JDigital Series

1 channel controller for pH, redox (ORP), conductivity, free chlorine, total chlorine, chlorine dioxide, ozone, dissolved oxygen and temperature



### Product description

- Mikroprocessor unit with LCD,backlit
- Residual data storage on power failure
- Programmable switch-on delay
- ON/OFF control mode with two limits and adjustable control hysteresis
- Digital outputs as floating potential relay, max. contact load 230V/5A:
  - 2 x limit switch contact
- Analogue outputs:
  - 1 x 0/4 - 20 mA, programmable
- Digital inputs for flow monitor
- Temperature input for NTC 10 kΩ and automatic temperature compensation,
- Housing made of ABS plastic, protection class IP 40  
Dimensions (Width X Height X Depth): 96 x 48 x 140 mm

### Technical specifications

Series JDigital		PH	RH	CD	CL
Measurement and control range	pH mV μS/cm mS/cm mg/l Cl <sub>2</sub>	0 ... 14,00	0 ... +1000	0 ... 2000,0 0 ... 200,0	0 ... 200,0
Resolution		0,01	1	0,01 0,1 1	0,001 0,01 0,1
Suitable measurement cells/sensors		pH electrodes	Redox electrodes	div. Types	DOSASens

Series JDigital		CLO2	O2	O3	TEMP
Measurement and control range	mg/l ClO <sub>2</sub> mg/l O <sub>2</sub> mg/l O <sub>3</sub> °C	0 ... 200,0	0 ... 20,00	0 ... 20,00	0 ... 100,0
Resolution	0,01	0,001 0,01 0,1	0,01	0,01	0,1
Suitable measurement cells/sensors		DOSASens	MFOX 39 MFOX 41	DOSASens	ETEHL P

Sensor type ETEP (NTC) is suitable for temperature compensation.  
See under heading Sensors for measurement cells, sensors and fittings

Order code

Series JDigital			
		Measurement and control parameters	Suitable sensors
PH	0 ... 14,00		pH electrodes
RH	0 ... +1000 mV		Redox electrodes
CD 2	0 ... 2,000 µS/cm		DOSACon Series C
CD 20	0 ... 20,00 µS/cm		DOSACon Series C
CD 200	0 ... 200,0 µS/cm		DOSACon Series C
CD 2000	0 ... 2000 µS/cm		DOSACon Series C
CD 20.0	0 ... 20,00 mS/cm		DOSACon Series C
CD 200.0	0 ... 200,0 mS/cm		DOSACon Series C
CL 2	0 ... 2,000 mg/l Cl <sub>2</sub>		DOSASens
CL 5	0 ... 5,00 mg/l Cl <sub>2</sub>		DOSASens
CL 10	0 ... 10,00 mg/l Cl <sub>2</sub>		DOSASens
CL 20	0 ... 20,00 mg/l Cl <sub>2</sub>		DOSASens
CL 200	0 ... 200,0 mg/l Cl <sub>2</sub>		DOSASens
CLO2 2	0 ... 2,000 mg/l ClO <sub>2</sub>		DOSASens
CLO2 20	0 ... 20,00 mg/l ClO <sub>2</sub>		DOSASens
CLO2 200	0 ... 200,0 mg/l ClO <sub>2</sub>		DOSASens
O2	0 ... 20,00 mg/l O <sub>2</sub>		DOSASens
O3 2	0 ... 2,000 mg/l O <sub>3</sub>		DOSASens
O3 10	0 ... 10,00 mg/l O <sub>3</sub>		DOSASens
TEMP	0 ... 100,0°C		DOSATemp ETEHLP
		<b>Connection to the electric supply</b>	
	0	230 VAC, +/-...10%, 50/60 Hz	
	1	110 VAC, +/-...10%, 50/60 Hz	
	2	24 VAC, +/-...10%	

<b>JD</b>	<b>PH</b>	<b>0</b>	(example order)
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Your selection

<b>JD</b>			
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## DOSAControl TU 7685 Turbidity meter

### 1-channel controller for turbidity



Measurement cell  
TU 810



Flow cell  
TU 910

#### General information

- Microprocessor unit with LCD, backlit
- Residual data storage on power failure
- Programmable switch-on delay
- Choice of turbidity measurement range  
0 - 4 NTU, 0 - 40 NTU, 0 - 400 NTU, 0 - 4000 NTU
- Choice of control modes:
  - Proportional mode with pulse frequency (PFM) or Pulse width (PWM) and adjustable control hysteresis
  - ON/OFF mode with two limits and adjustable control hysteresis
- Digital outputs as floating potential relay, max. contact load 230V/5A:
  - 2 x limit switch contacts
  - 1 x alarm contact
- Analogue outputs:
  - 1 x 0/4 - 20 mA, programmable
- Temperature input for Pt 100 and automatic temperature compensation
- Panel mount aluminum housing, protection IP 40  
Dimensions (Length X Height X Depth): 96 x 96 x 155 mm

#### Turbidity cells

- Nephelometric measurement principle with infrared light in the range 890 nm, 90° scattered light method in accordance with ISO 7027 (EN 27027). The measurement of infrared light guarantees a long service life for the cell and long periods of operation between calibrations.
- Factory calibrated and ready to use!
- Fast response time of 10 seconds
- Lead lengths up to 100 m possible due to integrated pre-amplifier
- Measurement range: 0 - 4.000 NTU – 0 - 10 g/l
- Max. operating pressure: 6.0 bar at 25°C
- Operating temperature 0 - 50° C
- Lead connector with IP 65 protection

#### Flow measurement cell TU 810 TU 910 + flow cell TU 910

The turbidity cell TU 810 can be mounted in a flow cell for integration into a flow system. The flow cell is fitted with a flow-rate adjustment valve for precise adjustment of the flow rate, and hose connectors (6/8 mm) for a quick and easy installation in the bypass.

Order code

<b>Turbidity meter TU 7685</b>		
<b>Version</b>		
P	Control panel mounting	
W	Wall mounting housing	
<b>Electrical connection:</b>		
0	230 VAC, +/-10%, 50 Hz	
1	110 VAC, +/-10%, 60 Hz	
2	24 VDC, +/- 10%, 50 Hz	
	<b>Measurement range</b>	<b>Resolution</b>
4	0 - 4,000 NTU	0.001
40	0 - 40.00 NTU	0.,01
400	0 - 400.0 NTU	0.1
4000	0 - 4000 NTU	1.0
	<b>Turbidity measurement cell</b>	
TU 810	Flow-rate measurement cell	
<b>Material:</b>		
0	PVC	
5	PVDF (Types TU 810 and TU 910 only)	
<b>Connection lead</b>		
10	10 m lead with 7-pin plug	
xx	m lead with 7-pin plug	
	<b>Inline flow cell</b>	
-	without	
TU 910PVC	Flow cell with installation adapter and O-ring (NBR)	

<b>TU 7685</b>	<b>P</b>	<b>0</b>	<b>40</b>	<b>TU 810</b>	<b>0</b>	<b>10</b>	<b>TU 910PVC</b>	(example order)
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Your selection

<b>TU 7685</b>								
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## DOSAControl DINDigital Series

1 channel controller for pH, redox (ORP), conductivity, free chlorine, total chlorine, chlorine dioxide, ozone, dissolved oxygen and temperature;



### General information

- Microprocessor unit with LCD,backlit
- Residual data storage on power failure
- Programmable switch-on delay
- ON/OFF control mode with two limits and adjustable control hysteresis
- Digital outputs as floating potential relay, max. contact load 230V/5A:
  - 2 x limit switch contact
- Analogue outputs:
  - 1 x 0/4 - 20 mA, programmable
- Digital inputs for flow monitor
- Temperature input for NTC 10 kΩ and automatic temperature compensation,
- Enclosure in ABS plastic, degree of protection IP 40  
Dimensions (Width X Height X Depth): 107 x 90 x 58 mm

### Technical specifications

Series DIN DIGITAL		PH	Redox	CD	CI
Measurement and control range	pH mV μS/cm mS/cm mg/l Cl <sub>2</sub>	0 - 14.00	0 to +1000	0 - 2000.0 0 - 200.0	0 - 200.0
Resolution		0.01	1	0.01 0.1 1	0.001 0.01 0.1
Suitable measurement cells/sensors		pH electrodes	ORP electrodes	div. Types	DOSASens

Series DIN DIGITAL		ClO <sub>2</sub>	O <sub>2</sub>	O <sub>3</sub>	TEMP
Measurement and control range	mg/l ClO <sub>2</sub> mg/l O <sub>2</sub> mg/l O <sub>3</sub> °C	0 - 200.00	0 - 20.00	0 - 10.00	0 - 100.0
Resolution		0.001 0.01 0.1	0.01	0.01 0.1	0.1
Suitable measurement cells/sensors		DOSASens	MFOX 39 MFOX 41	DOSASens	ETEHL P

Sensor type ETEP (NTC) is suitable for temperature compensation.  
See under heading Sensors for measurement cells, sensors and fittings

Order code

Series DIN DIGITAL			
		Measurement and control parameters	Suitable sensors
	PH	0 - 14,00	pH electrodes
	RH	0 - +1000 mV	Redox electrodes
	CD 2	0 - 2,000 µS/cm	DOSACon Series C
	CD 20	0 - 20,00 µS/cm	DOSACon Series C
	CD 200	0 - 200,0 µS/cm	DOSACon Series C
	CD 2000	0 - 2000 µS/cm	DOSACon Series C
	CD 20.0	0 - 20,00 mS/cm	DOSACon Series C
	CD 200.0	0 - 200,0 mS/cm	DOSACon Series C
	CL 2	0 - 2,000 mg/l Cl <sub>2</sub>	DOSASens
	CL 5	0 - 5,00 mg/l Cl <sub>2</sub>	DOSASens
	CL 10	0 - 10,00 mg/l Cl <sub>2</sub>	DOSASens
	CL 20	0 - 20,00 mg/l Cl <sub>2</sub>	DOSASens
	CL 200	0 - 20,000 mg/l Cl <sub>2</sub>	DOSASens
	CLO2 2	0 - 2,000 mg/l ClO <sub>2</sub>	DOSASens
	CLO2 20	0 - 20,00 mg/l ClO <sub>2</sub>	DOSASens
	CLO2 200	0 - 200,0 mg/l ClO <sub>2</sub>	DOSASens
	O2	0 - 20,00 mg/l O <sub>2</sub>	DOSASens
	O3 2	0 - 2,000 mg/l O <sub>3</sub>	DOSASens
	O3 10	0 - 10,00 mg/l O <sub>3</sub>	DOSASens
	TEMP	0 - 100,0°C	DOSATemp ETEHLP
		<b>Connection to the electric supply</b>	
	0	230 VAC, +/-10%, 50/60 Hz	
	1	110 VAC, +/-10%, 50/60 Hz	
	2	24 VAC, +/-10%	

<b>DIN</b>	<b>PH</b>	<b>0</b>	(example order)
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Your selection

<b>DIN</b>			
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## Simulator for pH and redox (ORP)



### General information

The pH or mV simulator is an easy-to-use, accurate test unit for servicing work. You can use it to check the operation of the measurement and control unit and the electrodes.

The tester is protected by a rubber housing for field use

- Pushbuttons for pH / mV-range
- pH accuracy  $\pm 0.05$ ; mV range  $\pm 2$
- USA/NIST pH buffer standard simulation
- 16 different control points
- 1 G $\Omega$  input resistance
- Large, bright LED display
- Splash-proof keypad
- Rubber cover and stand
- Energy-saving device
- operates with 4 x 1.5V AAA batteries
- Measurement output: BNC plug
- pH values: 1.00; 1.68; 4.01; 6.86; 7.00; 9.18; 10.01; 12.45
- mV values: 1800; 900; 390; -390; -900; -1800
- Dimensions (Width X Length X Height): 75 x 155 x 50 mm
- Weight: 200 g (with packaging)

Order code

DOSASim simulator for pH and redox (ORP)	
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## Photometer for free chlorine, total chlorine or chlorine dioxide according to DPD



### General information

The new microprocessor-based, portable, waterproof colorimeters measure chlorine (free and total), pH and chlorine dioxide to give fast, accurate, reproducible results.

The versatile, carefully designed user interface of the photometers make them easy to use. Information and self-diagnostics are displayed on a large LCD. Each photometer is supplied with reagents and cells in a rugged carrying case for rapid testing in the Field

- Measurement method: photometric
- Light source: light emitting diode at 525 nm; Detector: Silicon photodiode
- Autoranging
- Cells: borosilicate glass with screw caps, fill line, height x diameter: 51 x 25 mm, volume: 10 ml
- Energy-saving unit works with 4 x 1.5V AAA batteries
- Splash-proof keypad
- Dimensions (Width X Length X Height): 68 x 155 x 46 mm
- Weight: 200 g; with carrying case: 1.25 K

Photometer C 103		Measurement range 1	Measurement range 2	
Measurement ranges	mg/l ClO <sub>2</sub>	0 – 3.79	3.8 – 11.4	
Resolution	mg/l ClO <sub>2</sub>	0.01	0.1	
Accuracy	mg/l ClO <sub>2</sub>	0.02	0.2	

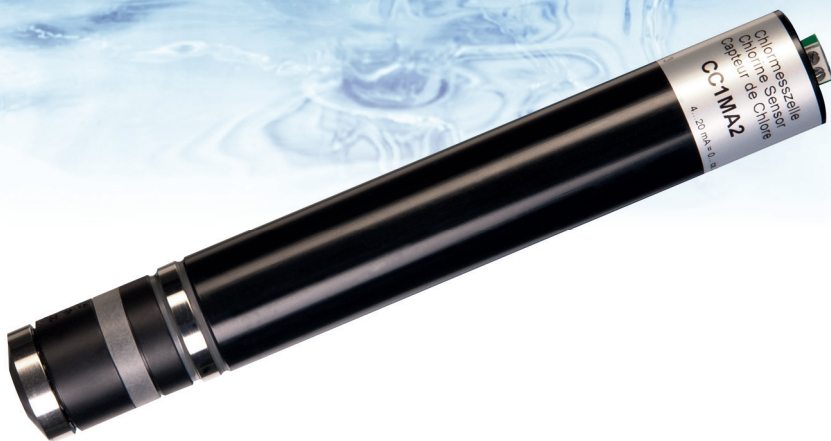
Photometer C 301		Measurement range 1	Measurement range 2	pH
Measurement ranges	mg/l Cl <sub>2</sub> mg/l Cl <sub>2</sub> pH	0 - 1.99	2.0 - 6.0	5,9 – 8,2
Resolution	mg/l Cl <sub>2</sub>	0.01	0.1	0.1 pH
Accuracy	mg/l Cl <sub>2</sub>	0.02	0.2	±0.01 pH

Order code

DOSAControl photometer C 103	
DOSAControl photometer C 301	

Order code

Accessories	
Reagents: 1 kit (100 tests) free chlorine	
Reagents: 1 kit (500 tests) free chlorine	
Reagents: 1 kit (100 tests) total chlorine	
Reagents: 1 kit (500 tests) total chlorine	
Reagents: 1 kit (100 tests) glycine	



## | Sensors

## 2. Sensors - DOSASens

### 2.1. Electrodes

- 2.1.1 pH-electrodes Type PH..-2
- 2.1.1 pH-electrodes Type HG
- 2.1.1 pH-electrodes Type PHRT-2
- 2.1.1 pH-electrodes Type HPGT-2
  
- 2.1.2 ORP-electrodes Type PFGR
- 2.1.2 ORP-electrodes Type PFGK
- 2.1.2 ORP-electrodes Type MVRTHT-2
- 2.1.2 ORP-electrodes Type PRGT-2
- 2.1.2 ORP-electrodes Type MV-2
  
- 2.1.3 Electrode cable
- 2.1.3 Buffer Solutions

### 2.2. Conductivity / Temperature

- 2.2.1 DOSACon C-E conductivity probes Series ECDC
- 2.2.1 DOSACon C-E conductivity probes Series ECDI
- 2.2.1 DOSACon C-E conductivity probes Series EICD
- 2.2.1 DOSACon C-E conductivity probes Series ECDHPT
- 2.2.1 DOSACon I ECDIND PT conductivity probes
- 2.2.1 DOSACon I-mA conductivity probes
  
- 2.2.2 DOSATemp temperature probes ETE
- 2.2.2 DOSATemp temperature probes CG21

### 2.3. Amperometric Sensors

- 2.3.1 DOSASens chlorine sensor CL2.1
- 2.3.1 DOSASens chlorine sensor CL4.1
- 2.3.1 DOSASens chlorine sensor CS2.3 and CS3
- 2.3.1 DOSASens chlorine sensor CP2.1 and CP3
- 2.3.1 DOSASens chlorine sensor CC1
- 2.3.1 DOSASens chlorine sensor CN1
  
- 2.3.2 DOSASens bromine sensor BR1
  
- 2.3.3 DOSASens Chlorite sensor MST1
  
- 2.3.4 DOSASens chlorine dioxide sensor CD4
- 2.3.4 DOSASens chlorine dioxide Sensor CD7
  
- 2.3.5 DOSASens ozone sensor OZ1
- 2.3.5 DOSASens ozone sensor OZ7
  
- 2.3.6 DOSASens hydrogen peroxide sensor WP7
- 2.3.6 DOSASens hydrogen peroxide sensor WP10



- 2.3.7 DOSASens peracetic acid sensor PES7
- 2.3.7 DOSASens peracetic acid sensor P9
- 2.3.7 DOSASens peracetic acid sensor P10
  
- 2.3.8 DOSASens oxygen sensor MFOX
  
- 2.3.9 DOSASens open chlorine probe AS...
- 2.3.9 DOSASens open chlorine dioxide probe AS...
- 2.3.9 DOSASens open probe KC
- 2.3.9 DOSASens open probe DFDS
  
- 2.3.10 Accessories DOSASens, Sensor cable
  
- 2.3.11 Spare parts amperometric sensors, membrane caps
- 2.3.11 Spare parts amperometric sensors, electrolyte

## **2.4 Probe holder**

- 2.4.1 DOSAFlow flow cell Type *DF 01 LC*
- 2.4.1 DOSAFlow flow cell Type *DF*
- 2.4.1 DOSAFlow cell Type *NPED*
- 2.4.1 DOSAFlow cell Type *DAS1 + DAS1-KC*
  
- 2.4.2 Immersion Housings *ETA* + Accessories for Immersion Housings *ETA*
  
- 2.4.3 Process changeover probe holder

## **2.5 Filter technology**

- 2.5.1 Prefilter *NFIL*

## pH electrodes Type PH ... 2 ..

### Standard electrodes



PHGK-2    PHPK-2

#### General information

Standard electrode with ceramic diaphragm. Small contact surface means no ion loss from the electrolyte. Long-term stability reference system with gel electrolyte and additional KCl reservoir.

- Version with glass barrel for use in process water, wastewater technology and water treatment
- Version with polysulfone barrel; particularly suitable for swimming pools, with relatively long service life.
- pH range:                                      pH 0 - 14
- Pressure range:                              0 - 6.0 bar
- Temperature range:                        -5 to + 80°C
- Barrel length 120 mm, barrel diameter 12 mm
- PG 13.5 thread for process connection with SN 6 plug-in screw head

Order code

pH electrode Type PH ... 2 ..		
<b>Version</b>		
GK	Glass electrode	
PK	Electrode with polysulfone barrel	
2	PG 13.5 – process connection	

<b>PH</b>	<b>GK</b>	<b>-2-</b>	(example order)	
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Your selection

<b>PH</b>		<b>-2-</b>		
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## pH electrodes Type HG ... Combination glass electrodes



### General information

Combination glass electrodes are pH electrodes with an integrated reference system. The gel filler enables the electrodes to be used at pressures up to 6.0 bar. The electrode barrel is sealed. It is therefore not necessary to top up the KCl electrolyte. The conductor system of the integrated reference electrode is protected by a long diffusion path of approx. 180 mm, which significantly increases the service life.

- pH ranges:                      pH 0 - 12 and pH 0 - 14
- Pressure range:                0 - 6.0 bar
- Temperature range:        -15 to + 80°C
- Reference system with long diffusion path. This produces low drift and results in long service lives and long calibration intervals
- Rapid response even when temperatures fluctuate continuously
- The measurements are highly reproducible
- Different barrel lengths available. Barrel diameter 12 mm
- Different standard installation versions available:
  - PG 13.5 for Industrial fittings
  - NSA - plug-in head for laboratory applications
- Cable connection SN 6 screwed plug-in head

### Technical specifications

HGR (open ring junction)	HGK (Ceramic diaphragm)
Open ring junction instead of a diaphragm. Prevents blocking; therefore reliable measurements	Ceramic diaphragm. Small contact surface means no ion loss from the electrolyte. Therefore, very long service life
Suitable for pH range 0 - 12	Suitable for pH range 0 - 14
Pressure range: 0 - 6.0 bar	Pressure range: 0 - 0.6 bar
Temperature range: - 15 to + 60°C	Temperature range: - 15 to + 80°C
Suitable for conductivities > 500 µS/cm	Suitable for conductivities > 100 µS/cm With integrated salt storage available on enquiry. Therefore suitable for measurement in desalinated water with very low conductivities.
<u>Areas of application</u> Media containing solids in municipal and industrial wastewater and process technology	Areas of application: Solid-free media in water treatment, swimming-pool technology and process technology

Order code

pH combination electrodes Type HG			
R	<b>Diaphragm</b>		
	Open ring junction for municipal and industrial wastewater pH range: 0 - 12 Temperature range: -15 to +60°C		
K	Ceramic for drinking water, swimming pool and laboratory pH range: 0 - 14 Temperature range: -15 to +80°C		
	<b>Connection head</b>		
1	NSA plug-in head		
2	PG 13.5 – thread		
	<b>Electrode length</b>		
120	120 mm		
150	150 mm		
225	225 mm		
XXX	Customer-specific special lengths		

<b>HG</b>	<b>R</b>	<b>2</b>	<b>120</b>	(example order)
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Your selection

<b>HG</b>				
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## pH electrodes Type PHRT 2 with dirt-repellant PTFE diaphragm



### General information

Low-maintenance and robust due to large, dirt-repellent, PTFE annular diaphragm. Integrated KCL reservoir allows measurements even at very low conductivities.

- Long-term monitoring or limiting value control of processes under stable process conditions
  - Paper industry
  - Power stations (i. e. flue gas stripping)
  - Refuse incineration plants
- Water treatment
  - Drinking water
  - Boiler feed water
  - Cooling water
  - Fountain water
  - Pure water
- pH range:                      pH 1-12 and pH 0-14
- Pressure range:              0 - 6.0 bar
- Temperature range:        -15 to + 80°C
- Available in three lengths: 120, 150 and 225 mm. Barrel diameter 12 mm
- PG 13.5 thread for process connection with SN 6 plug-in screw head

Order code

pH electrode Type PHRT 2		
Application: Water/wastewater pH range: 1 - 12 Temperature -15 to +80°C		
	<b>Electrode length</b>	
120	120 mm	
150	150 mm	
225	225 mm	

<b>PHRT 2</b>	<b>120</b>	(example order)
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Your selection

<b>PHRT-2</b>		
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Order code

<b>pH electrode Type PHRTHT 2</b>		
Use Process technology pH range: 0 - 14 Temperature- 10 to + 100°C		
	<b>Electrode length</b>	
120	120 mm	
150	150 mm	
225	225 mm	

<b>PHRTHT-2</b>	<b>120</b>	(example order)	
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Your selection

<b>PHRTHT-2</b>			
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**pH electrodes Type HPGT 2**  
with dirt-repellant PTFE diaphragm; steam sterilisable



**General information**

Low-maintenance and robust due to large, dirt-repellent, anti-blocking, PTFE annular diaphragm. Integrated KCL reservoir allows measurements even at very low conductivities.

- Long-term monitoring or limiting value control of processes under stable process conditions
  - Paper industry
  - Power stations (i. e. flue gas stripping)
  - Refuse incineration plants
  - Food industry (e.g. fermenters)
  - Breweries
- Water treatment
  - Drinking water
  - Boiler feed water
  - Cooling water
  - Fountain water
  - Pure water
- pH range: pH 0 - 14
- Pressure range: 0 - 6.0 bar
- Temperature range: -15 to + 130°C, **steam-sterilisable**
- Available in two lengths: 120 and 225 mm. Barrel diameter 12 mm
- PG 13.5 thread for process connection with SN 6 plug-in screw head

Order code

pH electrodes Type HPGT 2		
		Electrode length
	120	120 mm
	225	225 mm

<b>HPGT-2</b>	<b>120</b>	(example order)
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Your selection

<b>HPGT-2</b>		
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## Redox electrodes Type PFGR

### Glass electrodes with open-ring junction



#### General information

The gel-filled redox electrode is mainly used for municipal and industrial wastewater treatment. It is also excellent for use in electroplating technology. The gel filler enables the electrodes to be used at pressures up to 6 bar. The electrode barrel is sealed. It is therefore not necessary to top up the KCl electrolyte. The conductor system of the integrated reference electrode is protected by a long diffusion path of up to

180 mm, which gives the electrode a significantly improved service life.

- Measurement element: Platinum
- Conductor system: Ag/AgCl
- Pressure range: 0 - 6.0 bar
- Temperature range: -5 to +60°C
- Minimum conductivity of medium: > 500 µS/cm
- Reference system with long diffusion path. Electrode drift is therefore only slight and the service life is long.
- The reproducibility of the measurements is exceptionally high
- Different standard installation versions available:
  - PG 13.5 for Industrial fittings
  - NSA - plug-in head for laboratory applications
- Barrel diameter: 12 mm
- Cable connection SN 6 screwed plug-in head

Order code

Redox electrodes Type PFGR			
		<b>Connection head</b>	
	1	NSA plug-in head	
	2	PG 13.5 – thread	
		<b>Electrode length</b>	
	120	120 mm	
	150	150 mm	
	225	225 mm (with PG 13.5 connection head only)	

<b>PFGR</b>	<b>2</b>	<b>120</b>	(example order)
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Your selection

<b>PFGR</b>			
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## Redox electrodes Type PFGK

### Glass electrodes with ceramic diaphragm



#### General information

The gel-filled redox electrode is mainly used for water treatment and swimming pools. The gel filling enables the electrodes to be used at pressures of up to 0.6 bar. The conductor system of the integrated reference electrode is protected by a long diffusion path of approx. 180 mm, which significantly increases the service life.

- Measurement element options:
  - Platinum pin
  - Platinum surface
  - Gold pin
- Conductor system: Ag/AgCl
- Pressure range: 0 - 0.6 bar
- Temperature range: 0 to +80°C
- Minimum conductivity of medium > 100 µS/cm
- Reference system with long diffusion path. Electrode drift is therefore only slight and the service life is long.
- The reproducibility of the measurements is exceptionally high
- Different standard installation versions available:
  - PG 13.5 for Industrial fittings
  - NSA - plug-in head for laboratory applications
- Barrel diameter: 12 mm
- Cable connection SN 6 screwed plug-in head

The choice of a suitable redox electrode mainly depends on the type of measurement medium. The following basic rules might be helpful:

- **Gold electrode for oxidizing media**, i. e. cyanide, or nitrite oxidation, ozone, or hydrogen peroxide measurement.
- **Platinum electrode for reducing media**, i. e. chrome reduction and chlorine dosage in swimming pools.

Order code

Redox electrode Type PFGK			
		<b>Connection head</b>	
	1	NSA plug-in head	
	2	PG 13.5 – thread	
		<b>Electrode length</b>	
	120	120 mm	
	150	150 mm	
	225	225 mm (with PG 13.5 connection head only)	
		<b>Measurement element</b>	
	FBO	Platinum surface, 1 diaphragm	
	NBO	Gold pin, 1 diaphragm	
	SBO	Platinum pin, 1 diaphragm	

<b>PFGK</b>	<b>2</b>	<b>120</b>	<b>FBO</b>	(example order)
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Your selection

<b>PFGK</b>				
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## Redox electrode Type MVRTHT 2 with dirt-repellant PTFE diaphragm



### General information

Low-maintenance and robust due to large, dirt-repellent, PTFE annular diaphragm. Integrated KCL reservoir allows measurements even at very low conductivities.

- Long-term monitoring or limiting value control of processes under stable process conditions
  - Paper industry
  - Power stations (i. e. flue gas stripping)
  - Refuse incineration plants
  - Food industry (e.g. fermenters)
  - Breweries
- Water treatment
  - Drinking water
  - Boiler feed water
  - Cooling water
  - Fountain water
  - Pure water
- Measurement element options:
  - Platinum ring
  - Gold pin
- Measurement range: -1500 to + 1500 mV
- Pressure range: 0 - 6.0 bar
- Temperature range: -15 to + 110°C
- Barrel length 120, 150 or 225 mm, barrel diameter 12 mm
- PG 13.5 thread for process connection with SN 6 plug-in screw head

Order code

Redox electrode Type MVRTHT 2			
	120	<b>Electrode length</b>	
	150	120 mm	
	225	150 mm	
			225 mm
		FAO	<b>Measurement element</b>
		NAO	Platinum ring
			Gold pin

<b>MVRTHT-2</b>	<b>120</b>	<b>FAO</b>	(example order)
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Your selection

<b>MVRTHT-2</b>			
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**Redox electrode Type PRGT 2**  
with dirt-repellant PTFE diaphragm; steam sterilisable



**General information**

Low-maintenance and robust due to large, dirt-repellent, anti-blocking, PTFE annular diaphragm. Integrated KCL reservoir allows measurements even at very low conductivities.

- Long-term monitoring or limiting value control of processes under stable process conditions
  - Paper industry
  - Power stations (i.e. flue gas stripping)
  - Refuse incineration plants
  - Food industry (e.g. fermenters)
  - Breweries
- Water treatment
  - Drinking water
  - Boiler feed water
  - Cooling water
  - Fountain water
  - Pure water
- Measurement range: -1500 to + 1500 mV
- Pressure range: 0 - 6.0 bar
- Temperature range: -15 to + 130°C, **steam-sterilisable**
- Minimum conductivity of medium: > 50 µS/cm
- Barrel length 120 mm or 225 mm, barrel diameter 12 mm
- PG 13.5 thread as process connection with SN6 plug-in screw head

Order code

Redox electrode Type PRGT 2		
		Electrode length
	120	120 mm
	225	225 mm

<b>PRGT-2</b>	<b>120</b>	(example order)
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Your selection

<b>PRGT-2</b>		
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## Redox electrodes Type MV .. 2

### Standard electrodes



MVGK 2



MVPK 2

#### General information

Standard electrode with ceramic diaphragm. Small contact surface means no ion loss from the electrolyte. With long-term stability reference system with gel electrolyte and additional KCl reservoir.

- Version with glass barrel for use in process water, wastewater technology and water treatment
- Version with polysulfone barrel; particularly suitable for swimming pools, with relatively long service life.
- Pressure range: 0 - 6.0 bar
- Temperature range: -5 to + 80°C
- Barrel length 120 mm, barrel diameter 12 mm
- PG 13.5 thread as process connection with SN 6 screwed plug-in head

Order code

Redox electrode Type MV .. -2		
	<b>Version</b>	
GK	Glass electrode Use Water treatment, wastewater, process water, swimming pool	
PK	Electrode with polysulfone barrel Use Swimming pools	

<b>MV</b>	<b>GK</b>	(example order)	
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Your selection

<b>MV</b>			
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## Electrode leads



SN 6/SN 6   SN 6/BNC   SN 6/open

### General information

Coax lead for pH and redox electrodes are available in four different lengths from 0.5 m to 20 m, with 5 mm lead diameter.

Customised lengths are available on request.

One end of the lead is fitted with an SN6 screwed plug to connect to a measurement electrode. To ease installation, the other end of the cable is either pre-assembled with an SN 6 plug or a BNC plug or is left without a connector.

#### Advantages

- Preassembled coax leads ease installation
- Tested by manufacturer, to guarantee reliable operation
- Protection class: IP 65

### General assembly instructions:

- In order to minimise electric interference, use as short electrode lead as possible.
- Make sure that the coax lead is not laid parallel to the power supply cables.
- Use pre-assembled coax leads whenever possible.

Order code

Electrode leads Type AK			
	Length:		
	0.5	m	
	1	m	
	2	m	
	3	m	
	5	m	
	10	m	
	15	m	
	20	m	
		Plug combinations	
	SN 6/SN 6	2 x SN 6 plug	
	SN 6/BNC	SN 6 plug / BNC plug	
	SN 6/open	SN 6 plug / lead end open	

<b>AK</b>	<b>2</b>	<b>SN 6/SN 6</b>	(example order)	
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Your selection

<b>AK</b>				
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## Buffer solutions



### General information

#### pH buffer solutions

- Buffer solutions from pH 4.0 to pH 10.0 for calibrating pH electrodes are available in different quantities.
- The precision of these buffer solutions is  $\pm 0.02$  pH. The shelf life depends on how frequently they are used and how much chemical reagent is carried over.
- Alkaline buffer solutions absorb  $\text{CO}_2$  on contact with air so change their value. The bottles should therefore be closed immediately after use.

#### Redox buffer solutions

- Buffer solutions for calibrating redox-electrodes from 220 mV to 468 mV are available in different quantities.
- The precision of these buffer solutions is  $\pm 5$  mV.

Order code

pH buffer solution		
pH		
pH 4		
pH 7		
pH 9		
pH 10		
Bottle size		
50 ml		
250 ml		
1.00 ml		

<b>pH 4-</b>	50	(example order)
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Your selection

pH		
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Order code

Redox buffer solution		
220 mV 468 mV	Redox value	
	Bottle size 50 ml 250 ml 1000 ml	

<b>220 mV</b>	250	(example order)
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Your selection

mV		
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Order code

Conductivity buffer solution		
84 µS 1,413 µS 12,880 µS	Conductivity value	
	Bottle size 50 ml	

<b>220 mV</b>	250	(example order)
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Your selection

µS		
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Once opened, buffer solutions should be renewed after approx. 3 months.

## DOSACon C-E conductivity cells Series ECDC

### 2 electrode-systems, conductive



#### General information

2-electrode systems with integrated temperature probe for automatic temperature compensation

- Measurement range: >0 mS/cm - 200 mS/cm
- Pressure range: 0 - 7 bar
- Temperature range: 0 - 100° C
- Barrel material: PVDF
- Electrode: Graphite
- ¾" – screw thread,  
½" – screw-in thread available on request
- Cable connection with standard electrical equipment plug including 4.0m lead (other lengths available on request)

Order code

Conductivity cells Series ECDC			
ECDC	Barrel material	Electrode	max. operating pressure/max. operating temperature
	PVDF	Graphite	7,0 bar/60° C//2 bar/100°C
	<b>Integrated temperature probe</b>		
	0	without	
	C	with NTC 10 k	
	CPT	with Pt 100	
		Measurement range	Cell constant K
	/1	max. 20 mS/cm	1.0
	/10	max. 200 mS/cm	10.0

<b>ECDC-</b>	<b>C</b>	<b>/1</b>	(example order)
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Your selection

<b>ECDC-</b>			
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## DOSACon C E conductivity cells Series ECDI

### 2 electrode-systems, conductive



#### Product description

2-electrode systems with integrated temperature probe for automatic temperature compensation

- Measurement range: >0 µS/cm - 5,000 mS/cm
- Pressure range: 0 - 7 bar
- Temperature range: 0 - 100° C
- Barrel material: PVDF
- Electrode: Stainless steel AISI 316
- ¾" – screw thread,  
½" – screw-in thread available on request
- Cable connection with standard electrical equipment plug including 4.0 m lead (other lengths available on request)

Order code

Conductivity cells Series ECDI			
ECDI	<b>Barrel material:</b> PVDF	<b>Electrode:</b> Stainless steel AISI 316	<b>max. operating pressure/max. operating temperature:</b> 7,0 bar/60° C//2 bar/ 100°C
	0 C CPT	<b>Integrated temperature probe:</b> without with NTC 10 k with Pt 100	
	/01 /02 /1	<b>Measurement range:</b> max. 200 µS/cm max. 500 µS/cm max. 5.000 µS/cm	<b>Cell constant K:</b> 0,1 0,2 1,0

<b>ECDI</b>	<b>C</b>	<b>/1</b>	(example order)
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Your selection

<b>ECDI</b>			
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## DOSACon C conductivity cells Series EICD

### 2 electrode-systems, conductive



#### General information

2-electrode systems with integrated temperature probe for automatic temperature compensation

- Measurement range: >0  $\mu\text{S}/\text{cm}$  - 20,000  $\text{mS}/\text{cm}$
- Pressure range: 0 - 15 bar
- Temperature range: 0 - 130° C
- Barrel material: Stainless steel AISI 316
- Electrode: Stainless steel AISI 316
- $\frac{3}{4}$ " – screw-in thread,
- Cable connection with standard electrical equipment plug including 4.0 m lead (other lengths available on request)

Order code

Conductivity cells Series EICD			
EICD	Barrel material	Electrode	max. operating pressure/max. operating temperature
EICD	Stainless steel AISI 316	Stainless steel AISI 316	15.0 bar/130°C
	C	<b>Integrated temperature probe</b>	
	CPT	with NTC 10 k	
		with Pt 100	
		<b>Measurement range</b>	<b>Cell constant K</b>
	/001	max. 20 $\mu\text{S}/\text{cm}$	0.01
	/01	max. 200 $\mu\text{S}/\text{cm}$	0.1
	/1	max. 20,000	$\mu\text{S}/\text{cm}$ 1.0

EICD	C	/1	(example order)
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Your selection

EICD			
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## DOSACon C conductivity cells Series EICDHPT

### 2 electrode-systems, conductive



#### General information

2-electrode systems with integrated temperature probe for automatic temperature compensation Pt 100

- Measurement range: >0  $\mu\text{S}/\text{cm}$  - 20,000  $\text{mS}/\text{cm}$
- Pressure range: 0 - 15 bar
- Temperature range: 0 - 200° C
- Barrel material: Stainless steel AISI 316
- Electrode: Stainless steel AISI 316
- $\frac{3}{4}$ " – screw-in thread,
- Cable connection with standard electrical equipment plug including 4.0 m lead (other lengths available on request)

Order code

Conductivity cells Series EICDHPT			
	Barrel material	Electrode	max. operating pressure/max. operating temperature
EICDHPT	Stainless steel AISI 316	Stainless steel AISI 316	15.0 bar/130°C
		Measurement range	Cell constant K
	/001	max. 20 $\mu\text{S}/\text{cm}$	0.01
	/01	max. 200 $\mu\text{S}/\text{cm}$	0.1
	/1	max. 20,000 $\mu\text{S}/\text{cm}$	1.0

EICDHPT	/1	(example order)	
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Your selection

EICDHPT			
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## DOSACon ECDIND PT conductivity probe inductive



### General information

Conductivity probe with integrated temperature probe Pt100 for automatic temperature compensation

- Measurement range: >0 mS/cm to 300 mS/cm
- pressure range: 0 ... 8 bar
- temperature range: 0 ... 85° C
- Shaft material: PEEK
- G 1 and NPT 3/4"
- 4.0 m connection cable (other lengths on request)

An inductive conductivity probe consists of two coils: A transmitter coil and a receiver coil. Both are integrated in a finger-shaped housing. A bore is guided through the finger and the integrated coils. The liquid closes around the finger. A sinusoidal alternating voltage is applied to the transmitter coil. Therewith, a current arises in the liquid, proportional to conductivity. In turn, this current generates a voltage in the receiver coil. By measurement of this voltage and the knowledge of the cell constant, conductivity is detected. For conductivity compensation, a temperature probe is integrated.

Order Code

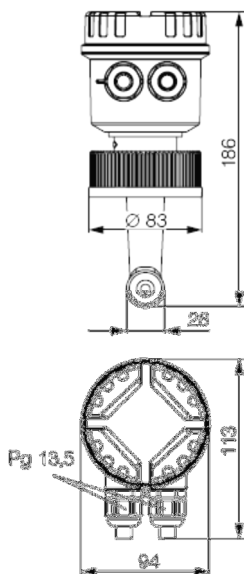
Conductivity probe Series ECDC			
ECDIND	<b>Schaffmaterial</b> PEEK	<b>max. Betriebsdruck/max. Betriebstemperatur:</b> 8,0 bar/85° C	
	<b>Durchflussarmatur</b> PEL-IND PVC	7,0 bar/40° C	

<b>ECDIND</b>	<b>PEL-IND</b>	(example order)	
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Your selection

<b>ECDIND-</b>			
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**DOSACon I-mA conductivity probes DOSACon Inductive**



**General information**

This compact measurement transducer is designed for inductive conductivity measurement in liquids with medium to high conductivities. It is recommended for use in media where heavy precipitation is expected from pollutants, oil, fat or coagulates of gypsum and lime. The integrated Pt 100 temperature probe for automatic temperature compensation guarantees accurate measurement even with strongly fluctuating temperatures. The measurement transducer can be used for temperature ranges up to 70°C and it is resistant to polarisation.

- Measurement range: 0,2 - 1.000 mS/cm
- Pressure range: 0 - 8 bar/40°C, 1 bar/70°C
- Temperature range: 0 - 70° C
- With or without display according to choice
- 4 - 20 mA output for conductivity
- 4 - 20 mA output for temperature
- Power supply:
  - 24 VDC (terminals on unit)
  - 230 VDC with mains power supply and 1.5 m lead
- Process connection: Sleeve nut in PP, 2 1/4" , ND 40
- Housing: PBT (polybutylene therephtalate)
- Barrel material: PP (polypropylene)
- Protection class: IP 65

**Areas of application**

- Water treatment:
  - Desalination control in cooling tower plants
  - Monitoring ion exchange systems
  - Monitoring fountain solutions and separating agents
- Washing processes
  - Car-wash plants
  - Laundries
  - Mordant treatment

Order code

Conductivity probe Type DOSACon /-mA			
	1	<b>Display</b>	
	0	with	
		Without	
	24	<b>Power supply:</b>	
	230	24 VDC	
		230 VAC, with mains power supply	

<b>DOSACon I-mA</b>	<b>1</b>	<b>24</b>	(example order)
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Your selection

<b>DOSACon I-mA</b>			
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## DOSATemp temperature probe Series ETE



### General information

ETE series temperature probes are specially designed for connection to devices from our series of units in order to provide automatic temperature compensation for the measured values.

- Measurement system options: NTC, Pt 100 or mV/°C
- Temperature range: 0 to + 100°C
- Pressure range: 0 - 10.0 bar
- Rapid response even when temperatures fluctuate continuously
- 1/2" standard connection thread and 4 m fixed lead
- Probe body: PVDF

Order code

Temperature probe Series ETE			
	<b>HLP</b>	<b>Temperature probe</b>	
	<b>P</b>	1 mV = 0.1°C	
	<b>PT</b>	with NTC 10 KOhm	
		with Pt 100	
		<b>X</b>	<b>m additional lead</b> (extra charge)

<b>ETE</b>	<b>PT</b>		(example order)
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Your selection

<b>ETE</b>			
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## DOSATemp temperatur probe CG 21 Pt 100

Built-in version with connection thread



### General information

The standard electrode temperature probe complements the electrochemical measurement methods with automatic temperature compensation of the measured values. This particularly applies to applications involving temperatures up to 100°C and strongly fluctuating temperatures. The probe body is made of glass, so it can be used for steam sterilisable applications such as food, beverages and pharmaceuticals.

- Measurement system Pt 100
- Temperature range: -10 to +100°C
- Pressure range: 0 – 6.0 bar (at 80°C)
- Rapid response even when temperatures fluctuate continuously
- Built-in versions with PG 13.5 connection thread for industrial fittings
- SN 6 screwed plug-in head
- Thread length 120 mm, diameter 12 mm

Order code

Temperature probe Type CG 21

**DOSASens chlorine sensor CL 2.1 ...**  
for the measurement of free, inorganic chlorine at constant pH



**Technical specifications:**

<b>CL 2.1</b>	
Area of use	Salt water with up to 30% salt The water must <b>not</b> contain surfactants. The pH must be constant.
Suitable chlorinating agents	NaOCl (= sodium hypochlorite), Ca(OCl)2, chlorine gas, electrolytically generated chlorine by membrane electrolysis (not suitable: membrane-less chlorine electrolysis)
Measuring system	Membrane-covered, amperometric 2-electrode system with integrated electronic
Electronic	Analog version: voltage output ; not galvanically isolated Electronics; analog internal data Processing; mA-version: current output; analog, not galvanically isolated electronics with poti for (restricted) adjustment of measuring range;
Indicator	free chlorine
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h,
pH-range	pH 6 – pH 8, take into account the dissociation curve of HOCl
Run-in time	First start-up approx. 1 h
Response time	T90: approx. 30 sec.
Zero point adjustment	not necessary
Slope calibration	At the device, by analytical determination of the chlorine concentration (DPD-1-method)
Interferences	ClO2: is also measured with factor 9 of its measurement value O3: is also measured
Connection	analog: 4-pol. plug adapter mA: 2-pol plug-on flange (2 x 1 mm <sup>2</sup> )
Material	semipermeable membrane, PVC-U
Dimensions	diameter: approx. 25 mm length: approx. 175 mm (4-pole screw connector) approx. 220 mm (4-20 mA, 2-pol. terminal)
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regularly control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M20 Electrolyte: ECL2.1



## Technical Data:

### CL2.1 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CL2.1N	0.05 – 20.00	0.01	0 ...-2000 mV 1 kΩ	-100 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug

### CL2.1 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CL2.1MA2	0.01 – 2,00	0.01	4...20 mA uncalibrated	8.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal

Order Code

Chlorine sensor CL 2.1						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
	N	0.05	- 20.00	0.01	-100 mV/ppm	
	MA 2	0.01	- 2.00	0.01	8.0 mA/ppm	

CL 2.1 –	MA 2	(example order)		
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Your selection:

CL 2.1 –			
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**DOSASens chlorine sensor CL 4.1 ...**  
for the measurement of free, inorganic chlorine at constant pH



**Technical specifications:**

CL 4.1	
Area of use	Swimming-pool water, drinking water, service and process water. The water must <b>not</b> contain surfactant. The pH must be constant
Suitable chlorinating agents	NaOCl (= sodium hypochlorite), Ca(OCl) <sub>2</sub> , chlorine gas, electrolytically generated chlorine by membrane electrolysis (not suitable: membrane-less chlorine electrolysis)
Measuring system	Membrane-covered, amperometric 2-electrode system with integrated electronic
Electronic	Analog version: voltage output ; not galvanically isolated Electronics; analog internal data processing mA version: current output; analog, not galvanically isolated electronics with poti for (restricted) adjustment of measuring range;
Indicator	free chlorine
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h,
pH-range	pH 6 – pH 8; take into account the dissociation curve of HOCl!
Run-in time	First start-up approx. 1 h
Response time	T90: approx. 30 sec.
Zero point adjustment	not necessary
Slope calibration	at the device, by analytical determination of the chlorine concentration (DPD-1-method)
Interferences	ClO <sub>2</sub> : is also measured with factor 9 of its measurement value O <sub>3</sub> : is also measured
Connection	analog: 4-pole screw connector mA: 2-pol. terminal (2 x 1 mm <sup>2</sup> )
Material	semipermeable membrane , PVC-U
Dimensions	diameter : approx. 25 mm length : approx. 175 mm (4-pole screw connector ) approx. 220 mm (4-20 mA; 2-pol. terminal )
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regularly control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap : M20 Electrolyte : ECL1

**Technical Data:**

**CL4.1 (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CL4.1H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
CL4.1N	0.05 – 20.00	0.01		-100 mV/ppm		
CL4.1L	0.5 – 200.0	0.1		-10 mV/ppm		

**CL4.1 mA (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
EMV-Testing DIN EN 61326-1 RoHS compliant						
CL4.1MA0,5	0.01 – 0.50	0.01	4...20 mA uncalibrated	32.0 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CL4.1MA2	0.01 – 2.00	0.01		8.0 mA/ppm		
CL4.1MA5	0.01 – 5.00	0.01		3.20 mA/ppm		
CL4.1MA10	0.01 – 10.00	0.01		1.6 mA/ppm		
CL4.1MA20	0.01 – 20.00	0.01		0.8 mA/ppm		
CL4.1MA-100	0 – 100	0.1		0.16 mA/ppm		
CL4.1MA-200	0 - 200	0.1		0.08 mA/ppm		

Order Code

Chlorine sensor CL 4.1							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0.005	-	2.000	0.001	-1000 mV/ppm	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	L	0.5	-	200.0	0.1	-10 mV/ppm	
	MA0.5	0.01	-	0.50	0.01	32.0 mA/ppm	
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.01	-	5.00	0.01	3.20 mA/ppm	
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.01	-	20.00	0.01	0.8 mA/ppm	
	MA100	0	-	100	0.1	0.16 mA/ppm	
	MA200	0	-	200	0.1	0.08 mA/ppm	

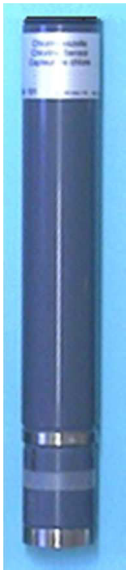
  

CL 4.1 –	MA 2	(example order)	
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Your selection:

<b>CL 4.1 -</b>			
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**DOSASens chlorine sensor CS 2.3... and CS3...**  
for the measurement of free, inorganic chlorine; reduced pH dependence



**Technical specifications**

CS 2.3 and CS3	
Area of use	Swimming-pool water, drinking water and sea water Tensides are partly tolerated.
Suitable chlorinating agents	NaOCl (= sodium hypochlorite), Ca(OCl)2, chlorine gas, electrolytically generated chlorine
Measuring system	Membrane-covered, amperometric 3-electrode system with integrated electronic
Electronic	<p>analog version : voltage output ; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)</p> <p>digital version : electronic is completely galvanically isolated; digital internal data processing; Signal output: optional analog (analog-out/digital) or digital (digital-out/digital)</p> <p>mA version : current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)</p>
Indicator	Free chlorine
Operating temperature	>5 – <45 °C
Temperature compensation	Automatically, by an integrated temperature sensor
max. allowed operating pressure	0.5 bar, no pressure impulses and/or vibrations
Flow rate	Approx. 30 l/h
pH-range	pH 4 – pH 9, reduced pH dependence
Run-in time	First start-up approx. 2 h
Response time	T90: approx. 2 min.
Zero point adjustment	not necessary
Slope adjustment	At the device, by analytical determination of the chlorine concentration, DPD-1-method
Interferences	ClO2: Slope -75 mV/ppm, d. s. 75 % of the ClO2 concentration O3: Slope -80 mV/ppm, d. s. 80 % of the O3 concentration Combined chlorine may increase the measurement value!
Connection	<p>analog-out/analog: 4-pol. Screw plug</p> <p>analog-out/digital: 4-pol. Screw plug</p> <p>digital-out/digital: 5-pol. M12, flange plug</p> <p>4-20 mA: 2-pol terminal (2 x 1 mm<sup>2</sup>)</p>
Material	Microporous hydrophilic membrane, PVC-U, stainless steel 1.4571
Dimensions	<p>Diameter: approx. 25 mm</p> <p>Length: analog-out/analog approx. 175 mm analog-out/digital approx. 195 mm digital-out/digital approx. 205 mm 4-20 mA approx. 220 mm</p>
Storage	<p>Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at &gt;5-&gt;40°C</p> <p>Membrane cap: Used membrane caps cannot be stored!</p> <p>Electrolyte: in the original bottle and protected from sun light storable at least 1 year at &gt;5 - &lt;25 °C</p>

Maintenance	Regular control of the measuring signal: at least once a week Replacement of membrane cap: once a year (depends on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M48.1G Electrolyte: ECS2.1/GEL

## Technical Data:

### CS2.3 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CS2.3HUn	0.005 - 2,000	0.001	0 ...-2000 mV 1 k $\Omega$	-300 mV/ppm	$\pm 5 - \pm 12,5$ VDC 10 - 25 VDC 25 mA	4-pol. plug
CS2.3N	0.05 - 20,00	0.01	0 ...-2000 mV 1 k $\Omega$	-100 mV/ppm	$\pm 5 - \pm 15$ VDC 10 mA	

### CS2.3 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CS2.3MA2	0.01 - 2.00	0.01	4 ... 20 mA uncalibrated	8.0 mA/ppm	12 - 30 VDC R <sub>L</sub> 50 $\Omega$ ...R <sub>L</sub> 900 $\Omega$	2-pol. terminal
CS2.3MA5	0.01 - 5.00	0.01		3.2 mA/ppm		
CS2.3MA10	0.01 - 10.00	0.01		1.6 mA/ppm		
CS2.3MA20	0.01 - 20.00	0.01		0.8 mA/ppm		

### CS3 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CS3H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-300 mV/ppm	±5 - ±12,5 VDC 10 – 25 VDC 25 mA	4-pol. plug
CS3N	0.05 – 20.00	0.01	0 ...-2000 mV 1 kΩ	-100 mV/ppm	±5 - ±15 VDC 10 mA	
CS3L	0.5 – 200.0	0.1	0 ...-2000 mV 1 kΩ	-10 mV/ppm	±5 - ±15 VDC 10 mA	

### CS3 (analog output, analog internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CS3H-A12n	0.005 – ca. 2.000	0.001	0 ...-2000 mV (max. -2500mV) 1 kΩ	-300 mV/ppm	12 VDC (11,5 – 13 VDC ±6 VDC approx. 40 mA)	4-pol. plug
CS3N-A12n	0.05 – ca. 20.00	0.01		-100 mv/ppm		
CS3L-A12n	0.5 – ca. 200.0	0.1		-10 mv/ppm		
CS3H-A24n	0.005 – ca. 2.000	0.001	0 ...-2000 mV (max. -2500mV) 1 kΩ	-300 mV/ppm	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA)	4-pol. plug
CS3N-A24n	0.05 – ca. 20.00	0.01		-100 mv/ppm		
CS3L-A24n	0.5 – ca. 200.0	0.1		-10 mv/ppm		

## CS3 (digital output, digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CS3H-M1-12	0.005 – ca. 2.000	0.001	Modbus RTU	300 mV/ppm	12 VDC (+11.5 – +13 VDC ±6 VDC approx. 40 mA)	5-pol. M12 flange plug
CS3N-M1-12	0.05 – ca. 20.00	0.01		100 mV/ppm		
CS3L-M1-12	0.5 – ca. 200.0	0.1		10 mV/ppm		
CS3H-M1-24	0.005 – ca. 2.000	0.001	Modbus RTU	300 mV/ppm	24 VDC (+22.5 – +26 VDC ±6 VDC approx. 40 mA)	5-pol. M12 flange plug
CS3N-M1-24	0.05 – ca. 20.00	0.01		100 mV/ppm		
CS3L-M1-24	0.5 – ca. 200.0	0.1		10 mV/ppm		

## CS3 4-20 mA (Analogausgang, analoge interne Signalverarbeitung)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS konform					
CS3MA-2	0.01 – 2.00	0.01	4 ... 20 mA uncalibrated	8.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CS3MA-5	0.01 – 5.00	0.01		3.2 mA/ppm		
CS3MA-10	0.01 – 10.00	0.01		1.6 mA/ppm		
CS3MA-20	0.01 – 20.00	0.01		0.8 mA/ppm		
CS3MA-200	0.5 – 200.0	0.1		0.08 mA/ppm		



Order Code

Chlorine sensor CS2.3							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	HUn	0.005	-	2.000	0.001	-300 mV/ppm	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.01	-	5.00	0.01	3.2 mA/ppm	
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.01	-	20.00	0.01	0.8 mA/ppm	

<b>CS 2.3 –</b>	<b>MA 2</b>	(Example order)	
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Your selection:

<b>CS 2.3 –</b>			
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Order Code

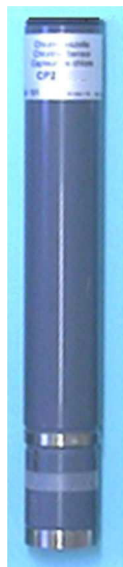
Chlorine sensor CS3							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0.005	-	2.000	0.001	-300 mV/ppm	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	L	0.5	-	200.0	0.1	-10 mV/ppm	
	H-A12n	0.005	-	2.000	0.001	-300 mV/ppm	
	N-A12n	0.05	-	20.00	0.01	-100 mV/ppm	
	L-A12n	0.5	-	200.0	0.1	-10 mV/ppm	
	H-A24n	0.005	-	2.000	0.001	-300 mV/ppm	
	N-A24n	0.05	-	20.00	0.01	-100 mV/ppm	
	L-A24n	0.5	-	200.0	0.1	-10 mV/ppm	
	H-M1-12	0.005	-	2.000	0.001	300 mV/ppm	
	N-M1-12	0.05	-	20.00	0.01	100 mV/ppm	
	L-M1-12	0.5	-	200.0	0.1	10 mV/ppm	
	H-M1-24	0.005	-	2.000	0.001	300 mV/ppm	
	N-M1-24	0.005	-	20.00	0.01	100 mV/ppm	
	L-M1-24	0.5	-	200.0	0.1	10 mV/ppm	
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.01	-	5.00	0.01	3.20 mA/ppm	
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.01	-	20.00	0.01	0.8 mA/ppm	
	MA200	0	-	200	0.1	0.08 mA/ppm	

<b>CS3 –</b>	<b>MA 2</b>	(Example order)	
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Your selection:

<b>CS3 –</b>			
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**DOSASens chlorine sensor CP 2.1... and CP3...**  
for the measurement of total chlorine (= free and combined chlorine);  
greatly reduced pH dependence



**Technical specifications:**

CP 2.1 and CP3																
Area of use	- with electrolyte ECP1.3/GEL: Swimming-pool water/ drinking water - with electrolyte ECP2S/GEL: sea water Tensides are partly tolerated.															
Suitable chlorinating agents	NaOCl (= sodium hypochlorite), Ca(OCl) <sub>2</sub> , chlorine gas, electrolytically generated chlorine															
Measuring system	Membrane-covered, amperometric 3-electrode system with integrated electronic															
Electronic	<table border="0"> <tr> <td>analog version:</td> <td>voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)</td> </tr> <tr> <td>digital version:</td> <td>electronic is completely galvanically isolated; digital internal data processing; Signal output: optional analog (analog-out/digital) or digital (digital-out/digital)</td> </tr> <tr> <td>mA version:</td> <td>current output; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)</td> </tr> </table>	analog version:	voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)	digital version:	electronic is completely galvanically isolated; digital internal data processing; Signal output: optional analog (analog-out/digital) or digital (digital-out/digital)	mA version:	current output; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)									
analog version:	voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)															
digital version:	electronic is completely galvanically isolated; digital internal data processing; Signal output: optional analog (analog-out/digital) or digital (digital-out/digital)															
mA version:	current output; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)															
Indicator	total chlorine (= free chlorine + combined chlorine)															
Operating temperature	>5 – <45 °C															
Temperature compensation	automatically, by an integrated temperature sensor															
max. allowed operating pressure	0.5 bar, no pressure impulses and/or vibrations															
Flow rate	approx. 30 l/h															
pH-range	pH 4 – pH 12, greatly reduced pH dependence (linear decrease at approx. 5% per unit increase in pH)															
Run-in time	First start-up approx. 2 h															
Response time	T90: approx. 2 min.															
Zero point adjustment	not necessary															
Slope adjustment	At the device, by analytical determination of the chlorine concentration, DPD-4-method (DPD-1 + DPD-3)															
Interferences	ClO <sub>2</sub> : measured 100% O <sub>3</sub> : measured with a slope of approx. 130% (factor 1.3 in relation to the slope for chlorine)															
Connection	<table border="0"> <tr> <td>analog-out/analog:</td> <td>4-pol. Plug adapter</td> </tr> <tr> <td>analog-out/digital:</td> <td>4-pol. Plug adapter</td> </tr> <tr> <td>digital-out/digital:</td> <td>5-pol. M12, plug-on flange</td> </tr> <tr> <td>4-20 mA:</td> <td>2-pol terminal (2 x 1 mm<sup>2</sup>)</td> </tr> </table>	analog-out/analog:	4-pol. Plug adapter	analog-out/digital:	4-pol. Plug adapter	digital-out/digital:	5-pol. M12, plug-on flange	4-20 mA:	2-pol terminal (2 x 1 mm <sup>2</sup> )							
analog-out/analog:	4-pol. Plug adapter															
analog-out/digital:	4-pol. Plug adapter															
digital-out/digital:	5-pol. M12, plug-on flange															
4-20 mA:	2-pol terminal (2 x 1 mm <sup>2</sup> )															
Material	Microporous hydrophilic membrane, PVC-U, stainless steel 1.4571															
Dimensions	<table border="0"> <tr> <td>diameter :</td> <td>ca. 25 mm</td> <td></td> </tr> <tr> <td>length:</td> <td>analog-out/analog</td> <td>ca. 175 mm</td> </tr> <tr> <td></td> <td>analog-out/digital</td> <td>ca. 195 mm</td> </tr> <tr> <td></td> <td>digital-out/digital</td> <td>ca. 205 mm</td> </tr> <tr> <td></td> <td>4-20 mA</td> <td>ca. 220 mm</td> </tr> </table>	diameter :	ca. 25 mm		length:	analog-out/analog	ca. 175 mm		analog-out/digital	ca. 195 mm		digital-out/digital	ca. 205 mm		4-20 mA	ca. 220 mm
diameter :	ca. 25 mm															
length:	analog-out/analog	ca. 175 mm														
	analog-out/digital	ca. 195 mm														
	digital-out/digital	ca. 205 mm														
	4-20 mA	ca. 220 mm														

Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regularly control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M48.1 D only for CP2.1HUn M48.1 Electrolyte: ECP1.3/GEL ECP2S/Gel for salt water application

## Technical Data:

### CP2.1 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CP2.1Hun	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±12.5 VDC 10 – 25 VDC 25 mA	4-pol. plug
CP2.1N	0.05 – 20.00	0.01	0 ...-2000 mV 1 kΩ	-100 mV/ppm	±5 - ±15 VDC 10 mA	
CP2.1Up	0.05 – 20.00	0.01	0 ...+2000 mV 1 kΩ	+100 mV/ppm	±5 - ±12.5 VDC 10 – 25 VDC 25 mA	

### CP2.1 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connect ion
CE	EMV-testing DIN EN 61326-1 RoHS compliant					
CP2.1MA0,5	0.05 – 0.50	0.01	4 ... 20 mA uncalibrated	32.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CP2.1MA2	0.01 – 2.00	0.01		8.0 mA/ppm		
CP2.1MA5	0.01 – 5.00	0.01		3.2 mA/ppm		
CP2.1MA10	0.01 – 10.00	0.01		1.6 mA/ppm		
CP2.1MA20	0.01 – 20.00	0.01		0.8 mA/ppm		

**CP3 (analog output, analog internal signal processing)**

analog-out / analog

A galvanical isolation at the measuring / control device is necessary!

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connect ion
CP3H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. screw
CP3N	0.05 – 20.00	0.01	0 ...-2000 mV 1 kΩ	-100 mV/ppm	±5 - ±15 VDC 10 mA	
CP3Up	0.05 – 20.00	0.01	0 ...+2000 mV 1 kΩ	+100 mV/ppm	±5 - ±15 VDC 10 mA	

**CP3 (analog output, analog internal signal processing)**

analog-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connect ion
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CP3H-A12n	0.005 – ca. 2.000	0.001	0 ...-2000 mV (max. -2500mV) 1 kΩ	-1000 mV/ppm	12 VDC (11.5 – 13 VDC ±6 VDC approx. 40 mA)	4-pol. screw
CSPN-A12n	0.05 – ca. 20.00	0.01		-100 mv/ppm		
CP3H-A24n	0.005 – ca. 2.000	0.001	0 ...-2000 mV (max. -2500mV) 1 kΩ	-1000 mV/ppm	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA)	4-pol. screw
CP3N-A24n	0.05 – ca. 20.00	0.01		-100 mv/ppm		

**CP3 (Digitalausgang, digitale interne Signalverar)**

digital-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connect ion
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CP3H-M1-12	0.005 – ca. 2.000	0.001	Modbus RTU	1000 mV/ppm	12 VDC (+11.5 – +13 VDC ±6 VDC Ca. 40 mA)	5-pol M12 Flange screw
CP3N-M1-12	0.05 – ca. 20.00	0.01		100 mV/ppm		
CP3H-M1-24	0.005 – ca. 2.000	0.001	Modbus RTU	1000 mV/ppm	24 VDC (+22.5 – +26 VDC ±6 VDC Ca. 40 mA)	5-pol M12 Flange screw
CP3N-M1-24	0.05 – ca. 20.00	0.01		100 mV/ppm		

### CP3 4-20mA 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A galvanical isolation at the measuring / control device is necessary!

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connect ion
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CP3MA-0,5	0.05 – 0.50	0.01	4 ... 20 mA uncalibrated	32.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CP3MA-2	0.01 – 2.00	0.01		8.0 mA/ppm		
CP3MA-5	0.01 – 5.00	0.01		3.2 mA/ppm		
CP3MA-10	0.01 – 10.00	0.01		1.6 mA/ppm		
CP3MA-20	0.01 – 20.00	0.01		0.8 mA/ppm		

Order code

Chlorine sensor CP2.1							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	HUn	0.005	-	2.000	0.001	-1000 mV/ppm	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	Up	0.05	-	20.00	0.01	+100 mV/ppm	
	MA0.5	0.05	-	0.50	0.01	32.0 mA/ppm	
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.01	-	5.00	0.01	3.2 mA/ppm	
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.01	-	20.00	0.01	0.8 mA/ppm	

<b>CP 2.1 –</b>	<b>MA 2</b>	(example order)	
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Your selection

<b>CP 2.1 –</b>			
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Order Code

Chlor-Sensor CP3							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0.005	-	2.000	0.001	-1000 mV/ppm	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	H-A12n	0.005	-	2.000	0.001	-1000 mV/ppm	
	N-A12n	0.05	-	20.00	0.01	-100 mV/ppm	
	H-A24n	0.005	-	2.000	0.001	-1000 mV/ppm	
	N-A24n	0.05	-	20.00	0.01	-100 mV/ppm	
	H-M1-12	0.005	-	2.000	0.001	1000 mV/ppm	
	N-M1-12	0.05	-	20.00	0.01	100 mV/ppm	
	H-M1-24	0.005	-	2.000	0.001	1000 mV/ppm	
	N-M1-24	0.005	-	20.00	0.01	100 mV/ppm	
	MA0,5	0.05	-	0.50	0.01	32.0 mA/ppm	
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.01	-	5.00	0.01	3.2 mA/ppm	
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.01	-	20.00	0.01	0.8 mA/ppm	

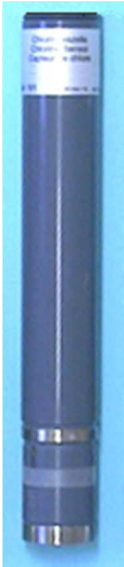
<b>CP3 –</b>	<b>MA 2</b>	(Example order)	
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Your selection:

<b>CP3 –</b>			
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## DOSASens chlorine sensor CC 1 ...

For the measurement of free, organic chlorine (iso-cyanuric acid);  
greatly reduced pH dependence



### Technical specifications:

<b>CC 1</b>	
Area of use	- with electrolyte ECC1/GEL: swimming-pool water/drinking water - with electrolyte ECC1S/GEL: sea water Tensides are partly tolerated.
Suitable chlorinating agents	NaOCl (= sodium hypochlorite), Ca(OCl) <sub>2</sub> , chlorine gas, electrolytically generated chlorine und organic chlorine compounds on a iso-cyanuric-acid basis (tested for up to 500 mg/l iso-cyanuric acid)
Measuring system	Membrane-covered, amperometric 3-electrode system with integrated electronic
Electronic	analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog) mA version: current output; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	Free chlorine
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	0.5 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 4 – pH 12; greatly reduced pH dependence
Run-in time	First start-up approx. 2 h
Response time	T90: approx. 2 min.
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination of the chlorine concentration, DPD-1-method
Interferences	ClO <sub>2</sub> : is measured 100% O <sub>3</sub> : is measured
Connection	analog: 4-pol. plug adapter mA: 2-pol terminal (2 x 1 mm <sup>2</sup> )
Material	Microporous hydrophilic membrane, PVC-U, stainless steel 1.4571
Dimensions	Diameter: approx. 25 mm Length: analog-out/analog approx. 175 mm 4-20 mA approx. 220 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap: Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M48.1 Electrolyte: ECC1/GEL ECC1S/GEL for brine water

## Technical Data:

### CC1 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CC1HUn	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±12,5 VDC 10 – 25 VDC 25 mA	4-pol. plug
CC1N	0.05 – 20.00	0.01	0 ...-2000 mV 1 kΩ	-100 mV/ppm	±5 - ±15 VDC 10 mA	

### CC1 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CC1MA2	0.01 – 2.00	0.01	4 ... 20 mA uncalibrated	8.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CC1MA5	0.01 – 5.00	0.01		3.2 mA/ppm		
CC1MA10	0.01 – 10.00	0.01		1.6 mA/ppm		

Order Code

Chlorine sensor CC1							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	HUn	0.005	-	2.000	0.001	-1000 mV/ppm	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.01	-	5.00	0.01	3.2 mA/ppm	
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm	

<b>CC1 –</b>	<b>MA 2</b>	(Example order)	
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Your selection:

<b>CC1 –</b>			
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**DOSASens chlorine sensor CN1...**  
to verify the absence of free chlorine; pH dependent



**Technical specifications:**

<b>CN1</b>	
Area of use	To verify the absence of chlorine in water with drinking-water quality (e. g. reverse osmosis)
Suitable chlorinating agents	NaOCl (= sodium hypochlorite), Ca(OCl) <sub>2</sub> , chlorine gas, electrolytically generated chlorine
Measuring system	Membrane-covered , amperometric 3-electrode system with integrated electronic
Electronics	digital version:            electronic is completely galvanically isolated; digital internal data processing; Signal output: optional analog (analog-out/digital) or digital (digital-out/digital)
Indicator	Free chlorine
Operating temperature	>5 – <40 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	0.5 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 6.5 – pH 9 (pH dependence)
Run-in time	First start-up: ~ 24 h After maintenance (replacement of electrolyte): ~ 6 h
Response time	T90: approx. 2 min.
Zero point adjustment	Not necessary
Slope adjustment	1.        Ensure constant chlorine content in the sample water; make DPD-1-analysis 2.        If no chlorine may be present in the sample water , use external calibration EKV-1 and DPD-1-analysis
Interferences	ClO <sub>2</sub> ; O <sub>3</sub> ; combined chlorine may increase the measurement value; reducing agents may lead to slope loss
Connection	Analog:                    4-pol. screw plug Digital:                    5-pol. M12 flange plug
Material	Microporous hydrophilic membrane , PVC, stainless steel 1.4571
Dimensions	Diameter:                approx. 25 mm Length:                    analog-out/analog                approx. 175 mm analog-out/digital                approx. 195 mm digital-out/digital                approx. 205 mm
Storage	Probe:                    Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap :        Used membrane caps cannot be stored! Electrolyte:             in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrankappe:        M48.1G Elektrolyt:              ECN1/Gel

### CN1 (analog output, analog internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
<b>CE</b>	EMV-Testing DIN EN 61326-1 RoHS compliant					
<b>CN1H-A12n</b>	0.005 – ca. 2.000	0.001	0 ...-2000 mV (max. -2500mV) 1 kΩ	-1000 mV/ppm	12 VDC (11.5 – 13 VDC ±6 VDC approx. 40 mA)	4-pol. plug
<b>CN1N-A12n</b>	0.05 – ca. 20.00	0.01		-100 mv/ppm		
<b>CN1H-A24n</b>	0.005 – ca. 2.000	0.001	0 ...-2000 mV (max. -2500mV) 1 kΩ	-1000 mV/ppm	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA)	4-pol. plug
<b>CN1N-A24n</b>	0.05 – ca. 20.00	0.01		-100 mv/ppm		

### CN1 (digital output, digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
<b>CE</b>	EMV-Testing DIN EN 61326-1 RoHS compliant					
<b>CN1H-M1-12</b>	0.005 – ca. 2.000	0.001	Modbus RTU	1000 mV/ppm	12 VDC (+11,5 – +13 VDC ±6 VDC approx. 40 mA)	5-pol M12 Flange plug
<b>CN1N-M1-12</b>	0.05 – ca. 20.0	0.01		100 mV/ppm		
<b>CN1H-M1-24</b>	0.005 – ca. 2.000	0.001	Modbus RTU	1000 mV/ppm	24 VDC (+22,5 – +26 VDC ±6 VDC approx. 40 mA)	5-pol M12 Flange plug
<b>CN1N-M1-24</b>	0.05 – ca. 20.00	0.01		100 mV/ppm		

Order Code

Chlorine sensor CN1							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
H-A12n	0.005	-	2.000		0.001	-1000 mV/ppm	
N-A12n	0.05	-	20.00		0.01	-100 mV/ppm	
H-A24n	0.005	-	2.000		0.001	-1000 mV/ppm	
N-A24n	0.05	-	20.00		0.01	-100 mV/ppm	
H-M1-12	0.005	-	2.000		0.001	1000 mV/ppm	
N-M1-12	0.05	-	20.00		0.01	100 mV/ppm	
H-M1-24	0.005	-	2.000		0.001	1000 mV/ppm	
N-M1-24	0.005	-	20.00		0.01	100 mV/ppm	

<b>CN1 -</b>	<b>H-A12N</b>	(example order)	
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Your selection:

<b>CN1 -</b>			
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## DOSASens bromine sensor BR1...

### For the measurement of bromine



#### Technical specifications:

<b>BR1</b>	
Area of use	Drinking water; swimming-pool water; process water;
Suitable bromine agents	Hypobromous acid (HOBr) 1-Bromo-3-chloro-5,5-dimethyl-hydantoin (BCDMH)
Measuring system	Membrane-covered, amperometric potentiostatic 3-electrode system with integrated electronic
Electronic	<p>analog version: voltage output; not galvanically isolated electronics; analog internal data processing; Signal output: analog (analog-out/analog)</p> <p>digital version: electronic is completely galvanically isolated; digital internal data processing; Signal output: optional analog (analog-out/digital) or digital (digital-out/digital)</p> <p>mA version: current output; analog, not galvanically isolated electronics with poti for (restricted) adjustment of measuring range Signal output: analog (analog-out/analog)</p>
Indicator	Hypobromous acid HOBr
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	0.5 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 6.5 – pH 9.5; Signal wird mit steigendem pH-Wert geringer
Run-in time	First start-up approx. 2 h
Response time	T90: approx. 2 min.
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination of the bromine concentration Recommendation: DPD1-method
Interferences	Cl <sub>2</sub> : is measured ClO <sub>2</sub> : is measured O <sub>3</sub> : is measured
Connection	<p>analog-out/analog: 4-pol. plug adapter</p> <p>analog-out/digital: 4-pol. plug adapter</p> <p>digital-out/digital: 5-pol. M12 flange plug</p> <p>4-20 mA: 2-pol terminal (2 x 1 mm<sup>2</sup>)</p>
Material	Microporous hydrophilic membrane, PVC-U, stainless steel 1.4571
Dimensions	<p>Diameter: approx. 25 mm</p> <p>Length: analog-out/analog approx. 175 mm analog-out/digital approx. 195 mm digital-out/digital approx. 205 mm 4-20 mA approx. 220 mm</p>
Storage	<p>Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at &gt;5-&gt;40°C</p> <p>Membrane cap: Used membrane caps cannot be stored!</p> <p>Electrolyte: in original bottle and protected from sun light at least 1 year at &gt;5 - &lt;25 °C</p>

Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M48.1 Electrolyte: EBR1/Gel

## Technical Data:

### **BR1 (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
BR1N	0.05 – 20.00	0.01	0 ...-2000 mV 1 k $\Omega$	-100 mV/ppm	$\pm 5 - \pm 15$ VDC 10 mA	4-pol. plug

### **BR1 (analog output, analog internal signal processing)**

analog-out / digital

- The power supply is galvanically isolated inside of the sensor
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
BR1N-A12n	0.05 – 20.00	0.01	0 ...-2000 mV (max. -2500mV) 1 k $\Omega$	-100 mV/ppm	12 VDC (11.5 – 13 VDC $\pm 6$ VDC approx. 40 mA)	4-pol. plug
BR1N-A24n	0.05 – 20.00	0.01	0 ...-2000 mV (max. -2500mV) 1 k $\Omega$	-100 mV/ppm	24 VDC (22.5 – 26 VDC $\pm 12$ VDC approx. 20 mA)	4-pol. plug

## BR1 (digital output, digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside of the sensor
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
BR1N-M1-12	0.05 – 20.00	0.01	Modbus RTU	100 mV/ppm	12 VDC (+11.5 – +13 VDC ±6 VDC approx. 40 mA	5-pol M12 Flange plug
BR1N-M1-24	0.05 – 20.00	0.01	Modbus RTU	100 mV/ppm	24 VDC (+22.5 – +26 VDC ±6 VDC approx. 40 mA	5-pol M12 Flange plug

## BR1 4-20mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
BR1MA-2	0.05 – 2.00	0.1	4 ... 20 mA uncalibrated	8.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
BR1MA-5	0.05 – 5.00	0.1		3.2 mA/ppm		
BR1MA-10	0.05 – 10.00	0.1		1.6 mA/ppm		

Order Code

Bromine sensor BR1							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	N	0.05	-	20.00	0.01	-100 mV/ppm	
	N-A12n	0.05	-	20.00	0.01	-100 mV/ppm	
	N-A24n	0.05	-	20.00	0.01	-100 mV/ppm	
	N-M1-12	0.05	-	20.00	0.01	100 mV/ppm	
	N-M1-24	0.05	-	20.00	0.01	100 mV/ppm	
	MA2	0.05	-	2.00	0.1	8.0 mA/ppm	
	MA5	0.05	-	5.00	0.1	3.2 mA/ppm	
	MA10	0.05	-	10.00	0.1	1.6 mA/ppm	

BR1 –	MA 2	(example order)	
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Your selection:

BR1 –			
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## DOSASens chlorite sensor MST1N...

For the measurement of chlorite



### Technical specifications:

<b>MST1N</b>	
Area of use	Drinking water, swimming-pool water, process water
Suitable chlorine dioxide agents	Acid/chorite method; chlorine/chlorite-method; (chlorite/oxidizer-method in test)
Measuring system	Membrane-covered , amperometric potentiostatic 3-electrode system with integrated electronic
Electronic	Digital version: electronic is completely galvanically isolated; digital internal signal processing; output signal: analog or digital
Indicator	Chlorite
Operating temperature	>5 – <40 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	approx. 0,3°C/min.
Flow rate	approx. 30 l/h
pH-range	pH 6 – pH 9
Run-in time	First start-up approx. 24 h
Response time	T90: approx. 1 min
Zero point adjustment	usually not required
Slope adjustment	At the device, by analytical determination of the chlorite concentration
Interferences	Mn <sup>2+</sup> , Nitrit, Fe <sup>2+</sup> No interferences to chlorine dioxide, chlorine and chlorate
Connection	analog-out/digital: 4-pol. plug adapter digital-out/digital: 5-pol. M12 flange plug
Material	Microporous hydrophilic membrane , PVC, stainless steel
Dimensions	Diameter: approx. 25 mm Length: analog-out/digital approx. 195 mm digital-out/digital approx. 205 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M48.1 Electrolyte: EMST1N/Gel

## Technical Data:

### MST1N (analog output, analog internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
MST1NL-A12n	0.05 – 2.00	0.01	analog 0 ...-2000 mV (max. -2500mV) 1 kΩ	-100 mV/ppm	12 VDC (11.5 – 13 VDC ±6 VDC approx. 40 mA	4-pol. plug
MST1NL-A24n	0.05 – 2.00	0.01	0 ...-2000 mV (max. -2500mV) 1 kΩ	-100 mV/ppm	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA	4-pol. plug

### MST1N (digital output, digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
MST1NL-M1-12	0.05 – 2.00	0.01	Modbus RTU	100 mV/ppm	12 VDC (+11.5 – +13 VDC ±6 VDC approx. 40 mA	5-pol M12 Flange plug
MST1NL-M1-24	0.05 – 2.00	0.01	Modbus RTU	100 mV/ppm	24 VDC (+22.5 – +26 VDC ±6 VDC approx. 20 mA	5-pol M12 Flange plug



Order Code

Chlorite sensor MST1N							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
N-A12n	0.05	-	2.00		0.01	-100 mV/ppm	
N-A24n	0.05	-	2.00		0.01	-100 mV/ppm	
N-M1-12	0.05	-	2.00		0.01	100 mV/ppm	
N-M1-24	0.05	-	2.00		0.01	100 mV/ppm	

<b>MST1N -</b>	<b>N-A12n</b>	(Example order)	
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Your selection:

<b>MST1N -</b>			
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## DOSASens chlorine dioxide sensor CD4... for the measurement of chlorine dioxide



### Technical specifications:

CD4	
Area of use	Swimming-pool water, drinking water, process water; It must not contain tensides.
Measuring system	Membrane-covered , amperometric 2-electrode system with integrated electronic
Electronic	analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog) mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	chlorine dioxide
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor
Max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 1 – pH 11
Run-in time	First start-up approx. 1 h
Response time	T90: approx. 15 sec.
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination
Interferences	Cl <sub>2</sub> : is measured with factor 0.03 of its measurement value O <sub>3</sub> : is measured
Connection	analog-out/analog: 4-pol. screw-connector connection 4-20 mA: 2-pol terminal (2 x 1 mm <sup>2</sup> )
Material	semipermeable membrane, PVC-U
Dimensions	diameter: approx. 25 mm length: approx. 175 mm (4-pol-screw connector) approx. 220 mm (4-20 mA, 2-pol. terminal)
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M20 Electrolyte: ECD4/W - ECD7/W

## Technical Data:

### CD4 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CD4H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
CD4N	0.05 – 20.00	0.01		-100 mV/ppm		

### CD4 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CD4MA0,5	0.005 – 0.50	0.01	4...20 mA uncalibrated	32.0 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CD4MA2	0.05 – 2.00	0.01		8.0 mA/ppm		
CD4MA5	0.05 – 5.00	0.01		3.20 mA/ppm		
CD4MA10	0.05– 10.00	0.01		1.6 mA/ppm		

Order Code

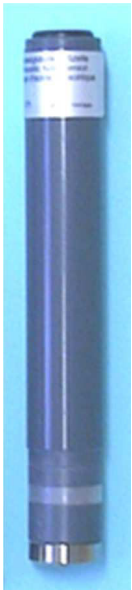
Chlorine dioxide sensor CD4						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
H		0.005	- 2.000	0.001	-1000 mV/ppm	
N		0.05	- 20.00	0.01	-100 mV/ppm	
MA0.5		0.01	- 0.50	0.01	32.0 mA/ppm	
MA2		0.01	- 2.00	0.01	8.0 mA/ppm	
MA5		0.01	- 5.00	0.01	3.20 mA/ppm	
MA10		0.01	- 10.00	0.01	1.6 mA/ppm	

<b>CD4 –</b>	<b>MA 2</b>	(example order)	
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Your selection:

<b>CD4 –</b>			
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**DOSASens chlorine dioxide sensor CD7...**  
for measurement of chlorine dioxide; with surfactant-resistant membrane



**Technical specifications:**

<b>CD7</b>	
Area of use	All types of water treatment (z. B. bottle washer, CIP plant, rinser)
Measuring system	Membrane-covered , amperometric 2-electrode system
Electronic	<p>analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)</p> <p>mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)</p>
Indicator	chlorine dioxide
Operating temperature	>5 – <50 °C
Temperature compensation	automatically, by an integrated temperature sensor temperature changes <5 °C
Max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h,
pH-range	pH 1 – pH 11
Run-in time	First start-up approx. 1 h
Response time	T90: approx. 1.5 min.
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination
Interferences	Cl <sub>2</sub> : not disruptive O <sub>3</sub> : measured with 25 times the sensitivity as ClO <sub>2</sub>
Connection	analog-out/analog: 4-pol. screw connector 4-20 mA: 2-pol terminal (2 x 1 mm <sup>2</sup> )
Material	PVC-U, stainless steel 1.4571
Dimensions	Diameter: approx. 25 mm Length: approx. 175 mm (4-pol-screw connector) approx. 220 mm (4-20 mA, 2-pol. terminal )
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M7L only for CD7L M7N Electrolyte: ECD4/W - ECD7/W

## Technical Data:

### CD7 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CD7H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
CD7N	0.05 – 20.00	0.01		-100 mV/ppm		
CD7L	0 – 200	0.1		-10 mV/ppm		

### CD7 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
CD7MA0,5	0.00 – 0.50	0.01	4...20 mA uncalibrated	32.0 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
CD7MA2	0.00 – 2.00	0.01		8.0 mA/ppm		
CD7MA5	0.00 – 5.00	0.01		3.20 mA/ppm		
CD7MA10	0.00– 10.00	0.01		1.6 mA/ppm		
CD7MA20	0.00 – 20.00	0.01		0.8 mA/ppm		

Order Code

Chlorine dioxide sensor CD7						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
	H	0.005	- 2.000	0.001	-1000 mV/ppm	
	N	0.05	- 20.00	0.01	-100 mV/ppm	
	L	0	- 200	0.1	-10 mV/ppm	
	MA0,5	0.00	- 0.50	0.01	32.0 mA/ppm	
	MA2	0.00	- 2.00	0.01	8.0 mA/ppm	
	MA5	0.00	- 5.00	0.01	3.20 mA/ppm	
	MA10	0.00	- 10.00	0.01	1.6 mA/ppm	
	MA20	0.00	- 20.00	0.01	0.8 mA/ppm	

<b>CD7 –</b>	<b>MA 2</b>	(example order)	
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Your selection:

<b>CD7 –</b>			
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**DOSASens ozone sensor OZ1...**  
for the measurement of dissolved ozone in water



**Technical specifications:**

<b>OZ1</b>	
Area of use	Swimming-pool water, drinking water, process water The water must <b>not</b> contain surfactant!
Measurement principle	Membrane-covered , amperometric 2-electrode system
Electronic	analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog) mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	Ozone
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor
max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 2 – pH 11
Run-in time	First start-up approx. 2 h
Response time	T90: approx. 15 sec.
Zero point adjustment	not necessary
Slope calibration	At the device, by analytical determination
Interferences	Cl <sub>2</sub> : is measured with a factor of 0.03 ClO <sub>2</sub> : is measured with a factor of 0.7
Connection	analog-out/analog: 4-pol. Plug adapter 4-20 mA: 2-pol. terminal (2 x 1 mm <sup>2</sup> )
Material	semipermeable membrane, PVC
Dimensions	diameter: approx. 25 mm length: analog-out/analog approx. 175 mm 4-20 mA approx. 220 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap : M20 Electrolyte : EOZ1

## Technical Data:

### OZ1 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
OZ1H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
OZ1N	0.05 – 20.00	0.01		-100 mV/ppm		

### OZ1 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
OZ1MA0.5	0.01 – 0.50	0.01	4...20 mA uncalibrated	32.0 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
OZ1MA2	0.01 – 2.00	0.01		8.0 mA/ppm		
OZ1MA5	0.01 – 5.00	0.01		3.20 mA/ppm		
OZ1MA10	0.01 – 10.00	0.01		1.6 mA/ppm		

Order code

Ozone sensor OZ1						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
	H	0.005	-	2.000	0.001	-1000 mV/ppm
	N	0.05	-	20.00	0.01	-100 mV/ppm
	MA0.5	0.01	-	0.50	0.01	32.0 mA/ppm
	MA2	0.01	-	2.00	0.01	8.0 mA/ppm
	MA5	0.01	-	5.00	0.01	3.20 mA/ppm
	MA10	0.01	-	10.00	0.01	1.6 mA/ppm

<b>OZ1 -</b>	<b>MA 2</b>	(example order)	
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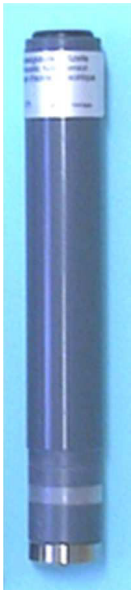
Your selection:

<b>OZ1 -</b>			
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## DOSASens ozone sensor OZ7...

for the measurement of dissolved ozone in water; with tenside-resistant membrane

### Technical specifications:



OZ7	
Area of use	All types of water treatment Tensides are tolerated! (z. B. bottle washer, CIP plant, rinser)
Measurement principle	Membrane-covered, amperometric 2-electrode system
Electronic	analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog) mA version: current output; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	ozone
Operating temperature	>5 – <50 °C
Temperature compensation	automatically, by an integrated temperature sensor changes of temperature: <5 °C per hour
max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 2 – pH 12
Run-in time	First start-up approx. 1 h
Response time	T90: approx. 50 sec.
Zero point adjustment	Not necessary
Slope calibration	At the device, by analytical determination
Interferences	Cl <sub>2</sub> : OZ7H: leads to measurement values increased by 1.5% OZ7N: negligible ClO <sub>2</sub> : OZ7N: leads to a measurement value increased by 6%
Connection	analog-out/analog: 4-pol. Plug adapter 4-20 mA: 2-pol. terminal (2 x 1 mm <sup>2</sup> )
Material	PVC-U, stainless steel 1.4571
Dimensions	Diameter: approx. 25 mm Length: analog-out/analog approx. 175 mm 4-20 mA approx. 220 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap: Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M7N O3 only for OZ7H, OZ7MA0.2, MA0.5 M7D O3 only for OZ7N, OZ7MA2, MA5, MA10 Electrolyte: EOZ7/W



## Technical Data:

### OZ7 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
OZ7H	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 5 mA	4-pol. plug
OZ7N	0.05 – 10.00	0.01		-100 mV/ppm		

### OZ7 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
OZ7MA0.2	0.05 – 0.20	0.01	4...20 mA uncalibrated	80.0 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
OZ7MA0.5	0.05 – 0.50	0.01		32.0 mA/ppm		
OZ7MA2	0.05 – 2.00	0.01		8.0 mA/ppm		
OZ7MA5	0.05 – 5.00	0.01		3.20 mA/ppm		
OZ7MA10	0.05 – 10.00	0.01		1.6 mA/ppm		

Order Code

Ozone sensor OZ7							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0.005	-	2.000	0.001	-1000 mV/ppm	
	N	0.05	-	10.00	0.01	-100 mV/ppm	
	MA0,2	0.05	-	0.50	0.01	80.0 mA/ppm	
	MA0,5	0.05	-	0.50	0.01	32.0 mA/ppm	
	MA2	0.05	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.05	-	5.00	0.01	3.20 mA/ppm	
	MA10	0.05	-	10.00	0.01	1.6 mA/ppm	

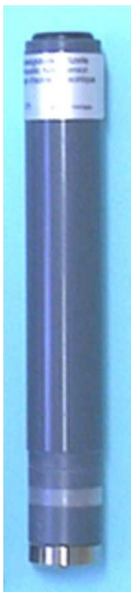
<b>OZ7 –</b>	<b>MA 2</b>	(example order)	
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Your selection:

<b>OZ7 –</b>			
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## DOSASens hydrogen peroxide sensor WP 7 for the measurement for hydrogen peroxide; with tenside-resistant membrane

### Technical specifications:



<b>WP7</b>	
Area of use	All types of water treatment (e. g. bottle washer, CIP plant, rinser)
Measurement principle	Membrane-covered, amperometric 2-electrode system
Electronic	<p>analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)</p> <p>mA version: current output; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)</p>
Indicator	hydrogen peroxide
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor Changes of temperatur <5 °C
max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 2 – pH 12
Run-in time	First start-up approx. 3 h
Response time	T90: approx. 5...10 min.
Zero point adjustment	not necessary
Slope calibration	At the device, by analytical determination
Interferences	<p>Cl<sub>2</sub>: must not be present</p> <p>PES: must not be present</p> <p>O<sub>3</sub>: must not be present</p> <p>Sulphides: poison the measurement system</p> <p>Phenol: aqueous solution &gt;3 % phenol, destroys the membrane system</p>
Connection	<p>analog-out/analog: 4-pol. screw connector</p> <p>4-20 mA: 2-pol. terminal (2 x 1 mm<sup>2</sup>)</p>
Material	PVC-U, stainless steel 1.4571
Dimensions	<p>Diameter: approx. 25 mm</p> <p>Length: analog-out/analog approx. 175 mm 4-20 mA approx. 220 mm</p>
Storage	<p>Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at &gt;5-&gt;40°C</p> <p>Membrane cap: Used membrane caps cannot be stored!</p> <p>Electrolyte: in original bottle and protected from sun light at least 1 year at &gt;5 - &lt;25 °C</p>
Maintenance	<p>Regular control of the measuring signal: at least once a week</p> <p>Replacement of the membrane cap: once a year (depending on the water quality)</p> <p>Replacement of electrolyte: every 3 - 6 months</p>
Spare parts	<p>Membrane cap: M7N</p> <p>M7D nur bei WP77MA-XM</p> <p>Electrolyte: EWP7/W</p>

## Technical Data:

### WP7 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
WP7HUn	0.0 – 200.0	0.1	0 ...-2000 mV 1 kΩ	-10 mV/ppm	±5 - ±12,5 VDC 10 – 25 VDC 25 mA	4-pol. plug
WP7Un	0 – 2000	1		-1 mV/ppm		

### WP7 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
WP7MA-CC	0.0 – 200.0	0.1	4...20 mA uncalibrated	0.08 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
WP7MA-D	0.0 – 500.0	0.1		0.032mA/ppm		
WP7MA-M	0.0 – 1000	1		0.016 mA/ppm		
WP7MA-MM	0.0 – 2000	1		0.008 mA/ppm		
WP7MA-XM	0 – 10000	10		0.0016 mA/ppm		

## Order Code

Hydrogen peroxide sensor WP7							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	HUn	0.0	-	200.0	0.1	-10 mV/ppm	
	Nun	0	-	2000	1	-1 mV/ppm	
	MA-CC	0.0	-	200.0	0.1	0.08 mA/ppm	
	MA-D	0.0	-	500.0	0.1	0.032mA/ppm	
	MA-M	0.0	-	1000	1	0.016 mA/ppm	
	MA-MM	0.0	-	2000	1	0.008 mA/ppm	
	MA-XM	0	-	10000	10	0.0016 mA/ppm	

<b>WP7 –</b>	<b>MA-D</b>	(example order)	
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Your selection:

<b>WP7 –</b>			
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## DOSASens hydrogen peroxide sensor WP 10 for the measurement for hydrogen peroxide; with tenside-resistant membrane

### Technical specifications:



WP10	
Area of use	All types of water treatment, especially for high H <sub>2</sub> O <sub>2</sub> -concentrations. The membrane-system is highly resistant to tensides.
Measurement principle	Membrane-covered, amperometric 2-electrode system
Electronic	digital version: electronic is completely galvanically isolated, digital internal data processing; output signal: analog or digital mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	Hydrogen peroxide
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor Changes of temperature <5 °C / h, T90: approx. 8 min.
max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 2 – pH 11
Run-in time	First start-up approx. 3 h
Response time	T90: approx. 5...10 min.
Zero point adjustment	not necessary
Slope calibration	At the device, by analytical determination
Interferences	Cl <sub>2</sub> : must not be present PES: must not be present O <sub>3</sub> : must not be present Sulphides: poison the measurement system Phenol: aqueous solution >3 % phenol, destroys the membrane system
Connection	analog-out/digital: 4-pol. screw connector digital-out/digital: 5-pol. M12, flange plug 4-20 mA: 2-pol. Terminal (2 x 1 mm <sup>2</sup> )
Material	PVC-U, stainless steel 1.4571
Dimensions	Diameter: approx. 25 mm Length: analog-out/digital approx. 195 mm digital-out/digital approx. 205 mm 4-20 mA approx. 220 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M10G with G-holder Electrolyte: EWP7/W

## Technical Data:

### WP10 (analog output, digital internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
WP10L-A12n	0 – 2% (20000 ppm)	0.001 % (10 ppm)	analog 0 ...-2000 mV (max. -2500mV) 1 kΩ	-1000 mV/% (-0.1 mV/ppm)	12 VDC (11.5 – 13 VDC ±6 VDC approx. 40 mA)	4-pol. plug
WP10-20%-A12n	0 – 20% (200000 ppm)	0.01 % (100 ppm)		-100 mV/% (-0.01 mV/ppm)		
WP10L-A24n	0 – 2% (20000 ppm)	0.001 % (10 ppm)	0 ...-2000 mV (max. -2500mV) 1 kΩ	-1000 mV/% (-0.1 mV/ppm)	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA)	4-pol. plug
WP10-20%-A24n	0 – 20% (200000 ppm)	0.01 % (100 ppm)		-100 mV/% (-0.01 mV/ppm)		

### WP10 (Digital output / digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Typ	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
WP10L-M1-12	0 – 2% (20000 ppm)	0.001 % (10 ppm)	Modbus RTU	1000 mV/% (0.1 mV/ppm)	12 VDC (+11.5 – +13 VDC ±6 VDC approx. 40 mA)	5-pol M12 Flange plug
WP10-20%-M1-12	0 – 20% (200000 ppm)	0.01 % (100 ppm)		100 mV/% (0.01 mV/ppm)		
WP10L-M1-24	0 – 2% (20000 ppm)	0.001 % (10 ppm)	Modbus RTU	1000 mV/% (0.1 mV/ppm)	24 VDC (+22.5 – +26 VDC ±6 VDC approx. 20 mA)	5-pol M12 Flange plug
WP10-20%-M1-24	0 – 20% (200000 ppm)	0.01 % (100 ppm)		100 mV/% (0.01 mV/ppm)		

## WP10 4-20 mA (Analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-testing DIN EN 61326-1 RoHS compliant					
WP10MA-2%	0 – 2% (20000 ppm)	10	4 ... 20 mA uncalibrated	0.0008 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
WP10MA-5%	0 – 5% (50000 ppm)	100		0.00032 mA/ppm		

Order Code

Hydrogen peroxide sensor WP10							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	L-A12n	0	-	20.000	10	-1000 mV/ppm	
	20%-A12n	0	-	200.000	100	-100 mV/ppm	
	L-A24n	0	-	20.000	10	-1000 mV/ppm	
	20%-A24n	0	-	200.000	100	-100 mV/ppm	
	L-M1-12	0	-	20.000	10	1000 mV/ppm	
	20%-M1-12	0	-	200.000	100	100 mV/ppm	
	M1-24	0	-	20.000	10	1000 mV/ppm	
	20%-M1-24	0	-	200.000	100	100 mV/ppm	
	MA-2%	0	-	20.000	10	0.0008 mA/ppm	
	MA-5%	0	-	50.000	100	0.00032 mA/ppm	

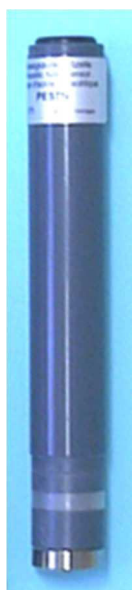
<b>WP10 –</b>	<b>MA 5%</b>	(example order)	
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Your selection:

<b>WP10 –</b>			
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## DOSASens peracetic acid sensor PES 7 for the measurement of peracetic acid; with tenside-resistant diaphragm

### Technical specifications:



PES7	
Area of use	All types of water treatment. Conductivity acids are tolerated, Tensides must not be present. (e. g. bottle washer, CIP plant, rinsler)
Measuring system	Membrane-covered , amperometric 2-electrode system
Electronic	analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog) mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	Peracetic acid
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor Changes in temperature <5 °C
Max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 l/h
pH-range	pH 1 – pH 7
Run-in time	First start-up approx. 1 h
Response time	T90: approx. 3 min.
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination
Interferences	O3: is measured with a factor of 2.500 ClO2: is measured with a factor of 1 H2O2: is measured with a factor of 0.005
Influence of conductivity acids	1 % sulfuric acid or 1 % nitric acid in the water have no influence on the sensor or the measuring behaviour respectively
Connection	analog-out/analog: 4-pol. screw connector 4-20 mA: 2-pol. terminal (2 x 1 mm <sup>2</sup> )
Material	PVC-U, stainless steel 1.4571
Dimensions	Diameter: approx. 25 mm Length: analog-out/analog approx. 175 mm 4-20 mA approx. 220 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months
Spare parts	Membrane cap: M7N M7L only for PES7L and PES7MA-XM Electrolyte: EPS7/W EPS7L/W nur bei PES7L und PES7MA-XM

**Technical Data:**

**PES7 (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
PES7H	0 – 200	0.1	0 ...-2000 mV 1 kΩ	-10 mV/ppm	±5 - ±12.5 VDC 10 – 25 VDC 5 mA	4-pol. plug
PES7N	0 – 2000	1		-1 mV/ppm		
PES7L	0 – 2 % 0 – 20.000	0.001 % 10		-0.1 mV/ppm		

**PES7 4-20 mA (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
PES7MA-CC	0 – 200	0.1	4...20 mA uncalibrated	0.08 mA/ppm	12...30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
PES7MA-D	0 – 500	0.1		0.032 mA/ppm		
PES7MA-M	0 – 1000	1		0.016 mA/ppm		
PES7MA-MM	0 – 2000	1		0.008 mA/ppm		
PES7MA-5M	0 – 5000	1		0.0032 mA/ppm		

Order Code

Peracetic acid sensor PES7							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0	-	200.0	0.1	-10 mV/ppm	
	N	0	-	2000	1	-1 mV/ppm	
	L	0	-	20.000	10	-0.1 mV/ppm	
	MA-CC	0	-	200	0.1	0.08 mA/ppm	
	MA-D	0	-	500	0.1	0.032mA/ppm	
	MA-M	0	-	1.000	1	0.016 mA/ppm	
	MA-MM	0	-	2.000	1	0.008 mA/ppm	
	MA-5M	0	-	5.000	1	0.0032 mA/ppm	

<b>PES7 –</b>	<b>MA-D</b>	(example order)	
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Your selection:

<b>PES7 –</b>			
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## DOSASens Peracetic acid sensor P9... for the measurement of peracetic acid; with tenside-resistant diaphragm



### Technical specifications:

P9	
Area of use	All types of water treatment. Conductivity acids and tensides are tolerated. (e. g. bottle washer, CIP plant, rinser)
Measuring system	Membrane-covered , amperometric 2-electrode system
Electronic	<p>analog version: voltage output; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)</p> <p>Digital version: voltage output; electronic is completely galvanically isolated; digital internal data processing ; Output signal: analog or digital</p> <p>mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)</p>
Indicator	Peracetic acid
Operating temperature	>5 – <60 °C
Temperature compensation	automatically, by an integrated temperature sensor P9: T90: approx. 8 min. P9.2: T90: approx. 3.5 min
Max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 – 100 l/h
pH-range	pH 1 – pH 6
Run-in time	<p>P9: first start-up approx. 1 h</p> <p>P9.2: P9.2H: first start-up approx. 3 h P9.2N: first start-up approx. 1 h P9.2L: first start-up approx. 30 min.</p>
Response time	<p>T90: P9 approx. 5 min. at 10 °C approx. 1.5 min. at 50 °C</p> <p>P9.2 approx. 3.5 min. at 10 °C approx. 45 sec. at 50 °C</p>
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination
Interferences	<p>O3: P9: leads to a 2,500-times higher measuring value P9.2: high increase of the measuring value</p> <p>ClO2: P9: is measured with 100% P9.2: increases the measuring value</p> <p>H2O2: P9: high concentrations reduce the PAA-signal P9.2: is not measured</p>
Influence of conductivity acids	1 % sulfuric acid or 1 % nitric acid or 1% phosphoric acid in the water have no influence to the measuring behaviour
Connection	<p>analog-out/analog: 4-pol. screw connector</p> <p>analog-out/digital: 4-pol. screw connector</p> <p>digital-out/digital: 5-pol. M12, flange plug</p> <p>4-20 mA: 2-pol. terminal (2 x 1 mm<sup>2</sup>)</p>

Material	PEEK, stainless steel		
Dimensions	Diameter:	approx. 25 mm	
	Length:	analog-out/analog	approx. 175 mm
		analog-out/digital	approx. 195 mm
		digital-out/digital	approx. 205 mm
		4-20 mA	approx. 220 mm
Storage	Probe:	Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C	
	Membrane cap :	Used membrane caps cannot be stored!	
	Electrolyte:	in original bottle and protected from sun light at least 1 year at >5 - <25 °C	
Maintenance	Regular control of the measuring signal: at least once a week		
	Replacement of the membrane cap: once a year (depending on the water quality)		
	Replacement of electrolyte: every 3 - 6 months		
Spare parts	Membrane cap:	M9G with G-holder only for P9N and P9L M9N with G-holder	
	Electrolyte:	EPS7/W only for P9N and P9L EPS9H/W only for P9.2H, P9.2N, P9.2MA-CC and P9.2MA-MM EPS9L/W only for P9.2L and P92.MA-2%	

## Technical Data:

### P9 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
P9N	0 – 2.000	1	0 ...-2000 mV 1 kΩ	-1 mV/ppm	±5 - ±12,5 VDC 10 – 25 VDC 10 mA	4-pol. plug
P9L	0 – 2 % 0 – 20.000	0.001 % 10		-0.1 mV/ppm		

### P9 (analog output, digital internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
<b>CE</b>	EMV-Testing DIN EN 61326-1 RoHS compliant					
<b>P9.2H-A12n</b>	0 – 200	0.1	0 ...-2000 mV (max. - 2500mV) 1 kΩ	-10 mV/ppm	12 VDC (11.5 – 13 VDC ±6 VDC approx. 40 mA)	4-pol. plug
<b>P9.2N-A12n</b>	0 – 2.000	1		-1 mV/ppm		
<b>P9.2L-A12n</b>	0 – 2 % 0 – 20.000 ppm	0.001 % 10		-0.1 mV/ppm		
<b>P9.2H-A24n</b>	0 – 200	0,1	0 ...-2000 mV (max. - 2500mV) 1 kΩ	-10 mV/ppm	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA)	4-pol. plug
<b>P9.2N-A24n</b>	0 – 2.000	1		-1 mV/ppm		
<b>P9.2L-A24n</b>	0 – 2 % 0 – 20.000 ppm	0.001 % 10		-0.1 mV/ppm		

### P9 (digital output, digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
<b>CE</b>	EMV-Testing DIN EN 61326-1 RoHS compliant					
<b>P9.2H-M1-12</b>	0 – 200	0.1	Modbus RTU	10 mV/ppm	12 VDC (+11.5 – +13 VDC ±6 VDC approx. 40 mA)	5-pol M12 Flange plug
<b>P9.2N-M1-12</b>	0 – 2.000	1		1 mV/ppm		
<b>P9.2L-M1-12</b>	0 – 2 % 0 – 20.000 ppm	0.001 % 10		0.1 mV/ppm		
<b>P9.2H-M1-24</b>	0 – 200	0,1	Modbus RTU	10 mV/ppm	24 VDC (+22.5 – +26 VDC ±6 VDC approx. 20 mA)	5-pol M12 Flange plug
<b>P9.2N-M1-24</b>	0 – 2.000	1		1 mV/ppm		
<b>P9.2L-M1-24</b>	0 – 2 % 0 – 20.000 ppm	0.001 % 10		0.1 mV/ppm		

**P9 4-20 mA (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
<b>CE</b>	EMV-Testing DIN EN 61326-1 RoHS compliant					
<b>P9.2MA-CC</b>	0 – 200	0.1	4 ... 20 mA uncalibrated	0.08 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
<b>P9.2MA-MM</b>	0 – 2.000	1		0.008 mA/ppm		
<b>P9.2MA-2%</b>	0 – 2 % 0 – 20.000 ppm	0.001 % 10		0.0008 mA/ppm		

Order Code

Peracetic acid sensor P9						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
N	0	-	2.000	1	-1 mV/ppm	
L	0		20.000	10	-0.1 mV/ppm	

<b>P9 –</b>	<b>N</b>	(example order)	
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Your selection:

<b>P9 –</b>			
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Order Code

Peracetic acid sensor P9.2							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
H-A12n	0	-	200		0.1	-10 mV/ppm	
N-A12n	0	-	2.000		1	-1 mV/ppm	
L-A12n	0	-	20.000		10	-0.1 mV/ppm	
H-A24n	0	-	200		0.1	-10 mV/ppm	
N-A24n	0	-	2.000		1	-1 mV/ppm	
L-A24n	0	-	20.000		10	-0.1 mV/ppm	
H-M1-12	0	-	200		0.1	300 mV/ppm	
N-M1-12	0	-	2.000		1	100 mV/ppm	
L-M1-12	0	-	20.000		10	10 mV/ppm	
H-M1-24	0	-	200		0.1	300 mV/ppm	
N-M1-24	0	-	2.000		1	100 mV/ppm	
L-M1-24	0	-	20.000		10	10 mV/ppm	
MA-CC	0	-	200		0.1	0.08 mA/ppm	
MA-MM	0	-	2.000		1	0.008 mA/ppm	
MA-2%	0	-	20.000		10	0.0008 mA/ppm	

<b>P9.2 -</b>	<b>MA 2%</b>	(example order)	
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Your selection:

<b>P9.2 -</b>			
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## DOSASens peracetic acid sensor P10... for the measurement of peracetic acid; with tenside-resistant membrane



### Technical specifications:

P10	
Area of use	All types of water treatment. Conductivity acids and tensides are tolerated. (e. g. bottle washer, CIP plant, rinser)
Measuring system	Membrane-covered , amperometric 2-electrode system
Electronic	Digital version: voltage output; electronic is completely galvanically isolated; digital internal data processing ; Output signal: analog or digital mA version: current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)
Indicator	Peracetic acid
Operating temperature	>5 – <45 °C
Temperature compensation	automatically, by an integrated temperature sensor T90: approx. 8 min.
Max. allowed operating pressure	1.0 bar, no pressure impulses and/or vibrations
Flow rate	approx. 30 – 100 l/h
pH-range	pH 1 – pH 7
Run-in time	first start-up approx. 1 h
Response time	T90: approx. 5 min. at 10 °C, approx. 1.5 min. at 50 °C
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination
Interferences	O3: leads to a 2,500-times higher measuring value ClO2: is measured with 100% H2O2: no interference
Influence of conductivity acids	1 % sulfuric acid or 1 % nitric acid or 1% phosphoric acid in the water have no influence to the measuring behaviour
Connection	analog-out/digital: 4-pol. screw connector digital-out/digital: 5-pol. M12, flange plug 4-20 mA: 2-pol. terminal(2 x 1 mm <sup>2</sup> )
Material	PVC-U, stainless steel 1.4571
Dimensions	Diameter: approx. 25 mm Length: analog-out/digital approx. 195 mm digital-out/digital approx. 205 mm 4-20 mA approx. 220 mm
Storage	Probe: Can be stored frost-free, dry and without electrolyte for an unlimited time at >5->40°C Membrane cap : Used membrane caps cannot be stored! Electrolyte: in original bottle and protected from sun light at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Replacement of the membrane cap: once a year (depending on the water quality) Replacement of electrolyte: every 3 - 6 months

CE	EMV-Testing DIN EN 61326-1 RoHS compliant		
Spare parts	Membrane cap:	P10H-... P10N-... P10-5000-... P10L-... P10MA-MM P10Ma-2"% P10MA-5%	M10H with G-holder M10N with G-holder M10G with G-holder M10G with G-holder M10G with G-holder M10G with G-holder M10G with G-holder
	Electrolyte:	EPS9/W	

### P10 (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
P10H	0 – 200	0.1	0 ...-2000 mV 1 kΩ	-10 mV/ppm	±5 - ±15 VDC 5 mA	4-pol. plug
P10N	0 – 2.000	1	0 ...-2000 mV 1 kΩ	-1 mV/ppm	±5 - ±15 VDC 5 mA	
P10L	0 – 20.000	10	0 ...-2000 mV 1 kΩ	-0,1 mV/ppm	±5 - ±15 VDC 5 mA	

### P10 (analog output/ digital internal signal processing)

analog-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
P10H-A12n	0 – 200	0.1	analog 0 ...-2000 mV (max. -2500mV) 1 kΩ	-10 mV/ppm	12 VDC (11.5 – 13 VDC ±6 VDC approx. 40 mA)	4-pol. plug
P10N-A12n	0 – 2.000	1		-1 mv/ppm		
P10-5000-A12n	0 – 5.000	1		-0.4 mv/ppm		
P10L-A12n	0-2 % 0 – 20.000	0,0001% (10ppm)		-1000 mV/% (-0,1 mV/ppm)		
P10H-A24n	0 – 200	0.1	0 ...-2000 mV (max. -2500mV) 1 kΩ	-10 mV/ppm	24 VDC (22.5 – 26 VDC ±12 VDC approx. 20 mA)	4-pol. plug
P10N-A24n	0 – 2.000	1		-1 mv/ppm		
P10-5000-A24n	0 – 5.000	1		-0.4 mv/ppm		
P10L-A24n	0-2 % 0 – 20.000	0,0001% (10ppm)		-1000 mV/% (-0.1 mV/ppm)		
P10N-M1-24	0 – 2.000	1		100 mV/ppm		
P10L-M1-24	0-2 % 0 – 20.000	0,0001% (10ppm)		10 mV/ppm		

### P10 (digital output / digital internal signal processing)

digital-out / digital

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

Typ	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
P10H-M1-12	0 – 200	0.1	Modbus RTU	300 mV/ppm	12 VDC (+11.5 – +13 VDC ±6 VDC approx. 40 mA)	5-pol M12 Flange plug
P10N-M1-12	0 – 2.000	1		100 mV/ppm		
P10L-M1-12	0 -2 % 0 – 20.000	0.0001% (10ppm)		10 mV/ppm		
P10H-M1-24	0 – 200	0.1	Modbus RTU	300 mV/ppm	24 VDC (+22.5 – +26 VDC ±6 VDC approx. 40 mA)	5-pol M24 Flange plug
P10N-M1-24	0 – 2.000	1		100 mV/ppm		
P10L-M1-24	0 -2 % 0 – 20.000	0.0001% (10ppm)		10 mV/ppm		

### P10 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
P10MA-MM	0 – 2.000	1	4 ... 20 mA uncalibrated	0.008 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω (12V)... R <sub>L</sub> 900Ω (30V)	2-pol. terminal
P10MA-2%	0 – 2 % (20.000)	10		0.0008 mA/ppm		
P10MA-5%	0 – 5 % (50.000)	100		0.00032 mA/ppm		



Order Code

Peracetic acid sensor P10							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0	-	200	0.1	-10 mV/ppm	
	N	0	-	2.000	1	-1 mV/ppm	
	L	0	-	20.000	10	-0.1 mV/ppm	
	H-A12n	0	-	200	0.1	-10 mV/ppm	
	N-A12n	0	-	2.000	1	-1 mV/ppm	
	L-A12n	0	-	20.000	10	-0.1 mV/ppm	
	H-A24n	0	-	200	0.1	-10 mV/ppm	
	N-A24n	0	-	2.000	1	-1 mV/ppm	
	L-A24n	0	-	20.000	10	-0.1 mV/ppm	
	H-M1-12	0	-	200	0.1	10 mV/ppm	
	N-M1-12	0	-	2.000	1	1 mV/ppm	
	L-M1-12	0	-	20.000	10	0.1 mV/ppm	
	H-M1-24	0	-	200	0.1	10 mV/ppm	
	N-M1-24	0	-	2.000	1	1 mV/ppm	
	L-M1-24	0	-	20.000	10	0.1 mV/ppm	
	MA-MM	0	-	2.000	1	0.008 mA/ppm	
	MA-2%	0	-	20.000	10	0.0008 mA/ppm	
	MA-5%	0	-	50.000	100	0.00032 mA/ppm	

<b>P10 –</b>	<b>MA 2%</b>	(example order)	
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Your selection:

<b>P10 –</b>			
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## DOSASens amperometric sensors

### Oxygen sensor Type MFOX

#### for measuring dissolved oxygen in liquid media



MFOX 39

MFOX 41

#### General information

The polarographic oxygen probes are of robust construction and stable in the long term. The sensors can be fitted with a choice of temperature probes for automatic temperature compensation.

Measurement principle Diaphragm covered, amperometric-polarographic, two-electrode probe according to Clark

#### Technical specifications

MFOX		39	41
Material		PSU, stainless steel (or titanium) ABS	PSU, stainless steel (or titanium) ABS
Dimensions	Ø mm Installed length mm	Ø 18 mm 120 mm	Ø 12 mm 120 mm
Measurement range	mg/l	0.0 - 60.0 mg/l (15°C)	0.0 - 20.0 mg/l
Air saturation	%	0 - 200	0 - 200
Resolution	mg/l	0.1	0.1
Response time		T <sub>90</sub> < 70 s at 25°C	T <sub>90</sub> < 30 s at 25°C
Flow dependence		< 5 % at 25°C	< 6 % at 25°C
Inflow speed	cm/s	> 9 cm/s	> 9 cm/s
Immersion depth	cm	8 cm	6 cm
Operating temperature	°C	-5 ... 45°C	-5 ... 45°C
Inflow	l/h	30 - 40 l/h	30 - 40 l/h
Max. permissible operating pressure	bar	3 bar	1 bar
Process connection with multipolar SMEK plug	PG	PG 16	PG 13.5

Order code

Oxygen sensor Type MFOX			
39	<b>Operating conditions</b>		
	Process water and wastewater technology		
41	Drinking water treatment		
	<b>Connection</b>		
1	5 m fixed lead with open end		
2	10 m fixed lead with open end		
3	20 m fixed lead with open end		
		<b>Temperature probe</b>	
1	Pt 100 platinum measurement resistor		
2	NTC		
		<b>Titanium ring for measurements in seawater:</b>	
		T	for MFOX 39 for MFOX 41

<b>MFOX</b>	<b>41</b>	<b>1</b>	<b>1</b>	(example order)
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Your selection

<b>MFOX</b>				
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**Technical Data:**

**AS2N- CL (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
AS2N-CL	0.03 – 10.00	0.01	0 ...-2000 mV 1 kΩ	-100 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug

**AS2... CL 4-20 mA (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
AS2MA1-CL	0.03 – 1.00	0.01	4 ... 20 mA uncalibrated	16.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
AS2MA2-CL	0.03 – 2.00	0.01		8.0 mA/ppm		
AS2MA5-CL	0.03 – 5.00	0.01		3.2 mA/ppm		
AS2MA10-CL	0.03 – 10.00	0.01		1.6 mA/ppm		
AS2MA20-CL	0.03 – 20.00	0.01		0.8 mA/ppm		

**Technical Data:**

**AS3N- CL (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
AS3H-CL	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
AS3N-CL	0.03 – 10.00	0.01		-100 mV/ppm		

## AS3... CL 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-testing DIN EN 61326-1 RoHS compliant					
AS3MA1-CL	0.03 – 1.00	0.01	4 ... 20 mA uncalibrated	16.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
AS3MA2-CL	0.03 – 2.00	0.01		8.0 mA/ppm		
AS3MA5-CL	0.03 – 5.00	0.01		3.2 mA/ppm		
AS3MA10-CL	0.03 – 10.00	0.01		1.6 mA/ppm		
AS3MA20-CL	0.03 – 20.00	0.01		0.8 mA/ppm		

Order Code

Chlorine sensor AS2							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	N	0.03	-	20.00	0.01	-100 mV/ppm	
	MA1	0.03	-	1.00	0.01	16.0 mA/ppm	
	MA2	0.03	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.03	-	5.00	0.01	3.20 mA/ppm	
	MA10	0.03	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.03	-	20.00	0.01	0.8 mA/ppm	

<b>AS2 –</b>	<b>MA 2</b>	(example order)	
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Your selection:

<b>AS2 –</b>			
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Order Code

Chlorine sensor AS3							
		Measuring range in ppm			Resolution in ppm	Nominal slope	
	H	0.005	-	2.000	0.001	-1000 mV/ppm	
	N	0.03	-	20.00	0.01	-100 mV/ppm	
	MA1	0.03	-	1.00	0.01	16.0 mA/ppm	
	MA2	0.03	-	2.00	0.01	8.0 mA/ppm	
	MA5	0.03	-	5.00	0.01	3.20 mA/ppm	
	MA10	0.03	-	10.00	0.01	1.6 mA/ppm	
	MA20	0.03	-	20.00	0.01	0.8 mA/ppm	

<b>AS3 –</b>	<b>MA 2</b>	(example order)	
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Your selection:

<b>AS3 –</b>			
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## DOSASens chlorine-dioxide sensor AS ...

For the measurement of chlorine dioxide; open probe



### Technical specifications:

AS	
Area of use	Drinking water cold, warm up to max. 70 °C
Chlorine dioxide agents	Chlorite/Chlorine, Chlorite / Acid, Chlorite /Peroxo
Measuring system	Amperometric potentiostatic 3-electrode system
Electronic	<p>analog version : voltage output ; not galvanically isolated electronics; analog internal data processing; signal output: analog (analog-out/analog)</p> <p>mA version : current output ; not galvanically isolated electronics with poti for (restricted) adjustment of measuring range; signal output: analog (analog-out/analog)</p>
Indicator	Chlorine dioxide
Operating temperature	AS2: >5 – <50 °C AS3: >5 – <70 °C
Temperature compensation	Automatically, by an integrated temperature sensor Response time: t90 = approx. 10 min. Max. changes in temperature: 30 °C per hour, quick changes in temperature should be avoided
Max. allowed operating pressure	8 bar
Flow rate	approx. 80 l/h
pH-range	pH 5 – pH 9 Stability of the material: pH 1 – pH 12
Run-in time	First start-up approx. 1 h – 2 days, depends on the water quality
Response time	T90: approx. 30 sec.
Zero point adjustment	Not necessary
Slope adjustment	At the device, by analytical determination , (without chlorine) DPD-1-method
Interferences	Chlorine, Chlorite are measured with less than 2% of their value
Connection	analog-out/analog: 4-pol. screw connector 4-20 mA: 2-pol. Terminal (2 x 1 mm <sup>2</sup> )
Material	AS2: PVC-U AS3: PEEK, PVDF
Dimensions	Diameter: approx. 25 mm Length: analog-out/analog approx. 175 mm 4-20 mA approx. 220 mm
Storage	Probe: filled with electrolyte and and with protection-cap (also filled with electrolyte) 1 year, frost-free <b>OR</b> Frost-free, dry and without electrolyte: Storable for an unlimited time Electrolyte: in the original bottle and protected from sun light storable at least 1 year at >5 - <25 °C
Maintenance	Regular control of the measuring signal: at least once a week Cleaning of the gold electrodes: every 4 - 12 weeks Replacement of electrolyte: every 3 - 6 months Maintenance at factory: after 1 year operating time
Spare parts	Electrolyte: EAS1/Gel

**Technical Data:**
**AS2N-CD (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
AS2H-CD	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
AS2N-CD	0.03 – 10.00	0.01		-100 mV/ppm		

**AS2... CD 4-20 mA (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
AS2MA1-CD	0.03 – 1.00	0.01	4 ... 20 mA uncalibrated	16.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
AS2MA2-CD	0.03 – 2.00	0.01		8.0 mA/ppm		
AS2MA5-CD	0.03 – 5.00	0.01		3.2 mA/ppm		

**Technical Data:**
**AS3...-CD (analog output, analog internal signal processing)**

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
AS3H-CD	0.005 – 2.000	0.001	0 ...-2000 mV 1 kΩ	-1000 mV/ppm	±5 - ±15 VDC 10 mA	4-pol. plug
AS3N-CD	0.03 – 10.00	0.01		-100 mV/ppm		



## AS3... CD 4-20 mA (analog output, analog internal signal processing)

analog-out / analog

A potential-free electrical connection is required because the electronics do not have galvanic isolation.

Type	Measuring range in ppm	Resolution in ppm	Output Output-resistance	Nominal slope	Power supply	Connection
CE	EMV-Testing DIN EN 61326-1 RoHS compliant					
AS3MA1-CD	0.03 – 1.00	0.01	4 ... 20 mA uncalibrated	16.0 mA/ppm	12 – 30 VDC R <sub>L</sub> 50Ω...R <sub>L</sub> 900Ω	2-pol. terminal
AS2MA2-CD	0.03 – 2.00	0.01		8.0 mA/ppm		
AS3MA5-CD	0.03 – 5.00	0.01		3.2 mA/ppm		

Order Code

Chlorine dioxide sensor AS2						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
H		0.005	- 2.000	0.001	-1000 mV/ppm	
N		0.03	- 10.00	0.01	-100 mV/ppm	
MA1		0.03	- 1.00	0.01	16.0 mA/ppm	
MA2		0.03	- 2.00	0.01	8.0 mA/ppm	
MA5		0.03	- 5.00	0.01	3.20 mA/ppm	

<b>AS2 –</b>	<b>MA 1</b>	(example order)	
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Your selection:

<b>AS2 –</b>			
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Order Code

Chlorine dioxide sensor AS3						
		Measuring range in ppm		Resolution in ppm	Nominal slope	
H		0.005	- 2.000	0.001	-1000 mV/ppm	
N		0.03	- 10.00	0.01	-100 mV/ppm	
MA1		0.03	- 1.00	0.01	16.0 mA/ppm	
MA2		0.03	- 2.00	0.01	8.0 mA/ppm	
MA5		0.03	- 5.00	0.01	3.20 mA/ppm	

<b>AS3 –</b>	<b>MA 1</b>	(example order)	
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Your selection:

<b>AS3 –</b>			
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## DOSASens KC potentiostatic sensors

for recording free, inorganic chlorine, chlorine dioxide and ozone; open probe



### Technical specifications

<b>KC ...</b>	
Measurement principle	Potentiostatic two-electrode measurement system, double-gold single rod probe
Area of use	Drinking, service and process water. Legionella control
Suitable chlorinating agents	Sodium hypochlorite (NaOCl), Calcium hypochlorite (Ca(OCl) <sub>2</sub> ), chlorine gas, electrolytically generated chlorine, chlorine dioxide
Measurement range	0.01 – 20.00 ppm, free inorganic chlorine 0.01 – 4.00 ppm, chlorine dioxide, ozone
Operating temperature	5 - 70°C
Max. permissible operating pressure	6 bar
pH – range	pH 5.0 - 9.0
min. inflow	30 - 40 l/h
Material	Glass body with gold electrodes
Cable connection	5-pole screw plug
Process connection	PG 13.5 – thread
Dimensions	Diameter approx: 12 mm Length approx: 120 mm
Measurement unit/controller	DOSAControl DC 96-CL, CLD and O3 DOSAControl DCW 100-CL, CLD and O3 DOSAControl DCW 300-CL, CLD and O3
Special feature	When used with DOSAControl DC96, DCW 100 and DCW 300, the sensor can be fitted with a fully automated, electrochemically operating sensor cleaning device (ASC)

Order code

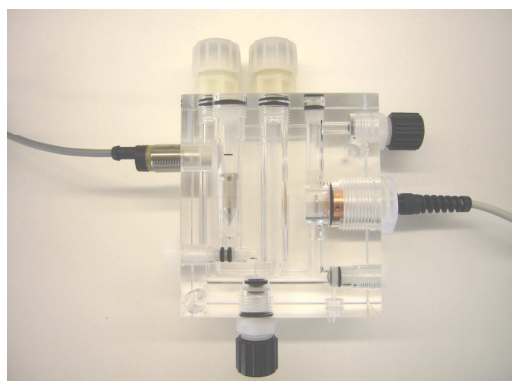
Sensor KC...			
	Measurement parameters	Measurement range	Resolution
L	Free chlorine,	0.01 ... 2.00 ppm	0.01 ppm
LD	Chlorine dioxide,	0.01 ... 4.00 ppm	0.01 ppm
OZ	Ozone,	0.01 ... 4.00 ppm	0.01 ppm

<b>KC</b>	<b>LD</b>	(example order)
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Your selection

<b>KC</b>		
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## DOSASens DFDS20... open amperometric probe Integrated in DOSAFlow made from high quality acrylic (PMMA)



### General information

- open chlorine probe, for measurement of inorganic chlorine
- For holding electrodes:  
- pH, redox (ORP), oxygen, temperature, ...
- High quality made of Perspex (PMMA)
- The flow geometry has been optimised for the above sensors
- Needle valve and floating body for adjusting and displaying the current flow rate
- Inductive proximity switch for monitoring flow rate (optional)

### Technical specifications

DFDS20-...	
Measurement principle	Open probe; amperometric, potentiostatic three-electrode measurement system with integrated electronics
Area of use:	Swimming pool water.
Suitable chlorinating agents	Sodium hypochlorite (NaOCl), Calcium hypochlorite (Ca(OCl) <sub>2</sub> ), electrolytically generated chlorine, also measures bromine, fluorine and iodine
Measurement range	0 – 10 ppm
Operating temperature	5 – 60°C
Max. permissible operating pressure	3.0 bar
pH – range	pH 6 – pH 8,
min. in flow	Ca. 40L/h
Electrodes	Platinum / copper
	Platinum / silver (with brine water)
Cable connection	2-pole 1.5 m
Material:	Acrylic and PVDF
Sensitivity to dirt	Low, due to self-cleaning
Service parts	DFDS balls                      Glass balls
	Pt/Cu DFDS                      Platinum / copper electrode
	Pt/Ag DFDS                      Platinum / silver electrode

Order code

Series DOSASens DFDS20-			
	Equipment	Connections	
6	2 electrodes	2 x plug electrodes	(Platinum / Copper)
7	2 electrodes	2 x PG 13.5	(Platinum / Copper)
12	2 electrodes	2 x PG 13.5 *Salt water	(Platinum / Silver)
	<b>Flow monitor</b>		
A	without		
P1	with ind. proximity switch Type NPN (N.C.), 2 m fixed lead		
P2	with ind. proximity switch Type SEPR (N.O.), 2 m fixed lead		

<b>DFDS20</b>	<b>7</b>	<b>A</b>	(example order)
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Your selection

<b>DFDS20</b>			
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Order code

Series DOSASens DFDS20 - accessories		
	DFDS balls	Glass balls
	Pt/Cu DFDS	Platinum / copper electrode
	Pt/Ag DFDS	Platinum / silver electrode

<b>DFDS20</b>	<b>DFDS balls</b>	(example order)
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Your selection

<b>DFDS20</b>		
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## DOSASens sensor cable

### Sensor cable with 4-pole screw plug



AK-CL ...AG/offen



AK-CL ...AG/AG

Order code

Sensor cable Type AK CL		
	<b>Cable length</b>	
0.5	m	
1	m	
2	m	
3	m	
5	m	
10	m	
15	m	
	<b>Connection</b>	
AG/O	Plug AG/open end	
AG/AG	Plug AG/AG	

AK CL	1	AG/O	(example order)
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Your selection

AK CL			
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### Sensor cable with screw plug DOSASens KC



AK-S5

Order code

Sensor cable Type AK-S for DOSASens – sensors		
	<b>Signal transfer</b>	
5	for sensors of Type KCL, KCLD, or KCOZ	
	<b>Cable length</b>	
5	M	

AK S	5-	5	(example order)
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Your selection

AK S			
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## Membrane caps for DOSASens amperometric sensors

Amperometric sensors should be regularly serviced to maintain their operational reliability and sensitivity. The tables show the service components required for servicing the sensors.



M20



M48.1 with G holder

Order code

Diaphragm caps in grey		
	Sensor type	Abrasive paper Type
M20	Chlorine sensor CL 4.1 Chlorine dioxide sensor CD 4 Ozone sensor OZ 1	S1
M48.1	Chlorine sensor CS 2.3, CP 2.1 (not CP 2.1HUn), CC 1	S1
M48.1G	Chlorine sensor CS 2.3, incl. G holder	S1
M48.1D	Chlorine sensor CP 2.1HUn, incl. pressure compensation diaphragm	S1
M7D	Hydrogen peroxide sensor WP 7 MA XM	S2
M7D O3	Ozone sensor OZ 7 (not OZ 7 H and OZ 7 MA 05)	S2
M7N O3	Ozone sensor OZ 7 H and OZ 7 MA 05	S2
M7N	Chlorine dioxide sensor CD 7 Hydrogen peroxide sensor WP 7 (not for WP 7 MA XM and WP 7 MA CM)	S2
M7L	Per-acetic acid sensor PES 7 (not PES 7 L) Hydrogen peroxide sensor WP 7 MA CM	S2
M90L	Per-acetic acid sensor Pes MZ9	S2
G holder	Chlorine sensor CS 2.3	
<b>M20</b>	(example order)	

\*Scope of supply: Diaphragm cap with abrasive paper

## Spare electrolyte for DOSASens amperometric sensors



Order Code

<b>Elektrolyt</b> (in plastic wash bottle)		
	<b>Sensor type</b>	<b>Contents</b>
EAS 1/G	Chlorine sensor AS 2, AS 3, Gel	50 ml
ECL 1/W	Chlorine sensor CL 4.1	100 ml
ECL 2.1/W	Chlorine sensor CL 2.1	100 ml
ECS 2.1/G	Chlorine sensor CS 2.3, Gel	100 ml
ECP 1.3/G	Chlorine sensor CP 2.1, Gel	100 ml
ECP2S/G	Chlorine sensor CP 2.1, Gel (Brine water)	100 ml
ECC 1/G	Chlorine sensor CC 1	100 ml
ECC 1S/G	Chlorine sensor CC 1 (Brine water)	100 ml
ECD 4/W	Chlorine dioxide sensor CD 4	100 ml
ECD 7/W	Chlorine dioxide sensor CD 7	100 ml
EOZ 1/W	Ozone sensor OZ 1	100 ml
EOZ 7/W	Ozone sensor OZ 7	100 ml
EWP 7/W	Hydrogen peroxide sensor WP 7	100 ml
EPS 7/W	Per-acetic acid sensor PES 7 (not EPS 7-L) and P 9	100 ml
EPS 7L/W	Per-acetic acid sensor PES 7-L	100 ml
<b>ECL 1</b>	(Example order)	

## Flow cell Type DOSAFlow DF 01 LC

Made of high-quality acrylic (PMMA)



### General information

- For electrochemical electrodes with a screw connection in PG13.5, e.g. for: pH, redox (ORP), oxygen, temperature, or sensors with a barrel diameter of 25 mm (1 ¼"), e.g. for: DOSASens sensors
- Very high quality; made of Perspex (PMMA)
- The flow geometry has been optimised for the above sensors
- With floating ball and PVC ball valve for adjusting the optimum flow rate
- Discharge right and left
- Operating temperature: 1 - 50°C at 6 bar
- Max. operating pressure: 8 bar

Order code

Series DOSAFlow DF 01LC				
		<b>Temperature</b>	<b>Max. operating pressure</b>	
	C	Cold water up to 50°C	6 bar	
	H	Hot water up to 75°C	6 bar	
		<b>Wall-mounting plate made of PVC, white:</b>		
	A	without		
	M	with		
		<b>Assembly kit:</b>		
		0	1 ¼" for sensors with d = 25 mm	
		1	PG13.5 for sensors with PG13.5	
			<b>Hose connection kit</b>	
		0	without	
		KC	for cold water up to 50°C	
		KH	for hot water up to 70°C	

<b>DF 01LC -</b>	<b>C</b>	<b>A</b>	<b>0</b>	<b>KC</b>	(example order)
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Your selection

<b>DF 01LC -</b>					
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\*The sensor in the picture is not included in the price!



## Flow cells Type DOSAFlow DF made of high-quality acrylic (PMMA)



DOSAFlow DF 01C



DOSAFlow DF 20C



### General information

- For electrochemical electrodes with a screw connection in PG13,5, e.g. for:
  - pH, redox (ORP), oxygen, temperature, ...
  - or sensors with a barrel diameter of 25 mm (1 1/4"), e.g. for:
    - DOSASens amperometric sensors
- Very high quality made of Perspex (PMMA)
- The flow geometry has been optimised for the above sensors
- Floating ball flow meter and needle valve for adjusting and displaying the current flow rate
- Inductive proximity switch for monitoring flow rate (optional)
- With sampling tap and equipotential bonding pin
- Operating temperatures:
  - Hot water version: 80°C at 8 bar (Type DF ...H)
- Max. operating pressure: 8 bar at 25°C
- Accessories (optional): hose connection kit with 2 shut-off ball valves, 2 hose connectors 1/2" and 2 x 2 m in each case connection hose.

Order code

Series DOSAFlow DF			
	<b>Equipment</b>	<b>Connections</b>	
01	1 Sensor	1 x 1 1/4"	
20	2 Electrodes	2 x PG13,5	
21	2 Electrodes, 1 sensor	2 x PG13,5, 1 x 1 1/4"	
32	3 Electrodes, 2 sensors	3 x PG13,5, 2 x 1 1/4"	
	<b>Temperature</b>	<b>Max. operating pressure</b>	
H	Hot water up to 80°C	8 bar	
	<b>Flow monitor</b>		
A	without		
P1	with ind. proximity switch Type NPN (N.C.), 2 m fixed lead		
P2	with ind. proximity switch Type SEPR (N.O.), 2 m fixed lead		
	<b>Hose connection kit</b>		
0	None		
KC	for cold water up to 50°C		
KH	for hot water up to 80°C		

<b>DF</b>	<b>21</b>	<b>C</b>	<b>P2</b>	<b>0</b>	(example order)
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Your selection

<b>DF</b>					
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\*The sensor in the picture is not included in the price!

## Flow cell Type NPED made of Noryl plastic



### General information

- For electrodes with a connection thread in PG13.5 or with an electrode barrel diameter of 12 mm: pH, re-dox (ORP), oxygen, temperature,
- Material:
  - Flow cell head: Polypropylene (PP)
  - Flow cell cup: Noryl, transparent
- The flow-cell cup can be unscrewed to ease cleaning and maintenance of the electrodes
- The inflow of the electrodes optimised
- 2 versions with integrated flow monitor
- With sampling tap and equipotential bonding pin
- Max. operating pressure:
  - Version PG13.5: max. 6 bar
  - Clamp version: max. 2 bar
- Maximum operating temperature: 50°C
- Scope of supply:
  - Flow cell with mounting bracket, ball valve for flow control, 2 hose connectors 1/2" x 6/8 mm and PE hose

Order code

Series NPED			
		Equipment	Connections
	1	2 electrodes	2 x PG13,5
	2	2 electrodes	2 x Ø 12 mm clamp version
	1-3	3 electrodes	3 x PG13.5
	2-3	3 electrodes	3 x Ø 12 mm clamp version
	4-1	2 electrodes	2 x PG13.5, with FC NO*
	4-2	2 electrodes	2 x Ø 12 mm clamp version with FC NO*
	4/2F-1	2 electrodes	2 x PG13.5, with FC NC*
	4/2F-2	2 electrodes	2 x Ø 12 mm clamp version with FC NC*

<b>NPED</b>	<b>4-1</b>	(example order)
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Your selection

<b>NPED</b>		
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\*FC NO = Flow monitor with switch Normally Open

\*\*FC NC = Flow monitor with switch Normally Closed

## Flow cell Type DAS made of PVC



### General information

- For electrodes with a connection thread in PG13.5 and an electrode length of 120 mm, e.g. for: pH, redox (ORP), oxygen, conductivity (conductive glass electrode), temperature, DOSASens KC
- Maximum operating temperature:
  - PVC: 1 ... 45°C at 6 bar
  - PP: 1 ... 70°C at 6 bar
- Max. operating pressure: 6.0 bar

The flow cells can be mounted in full flow using the screwed connections with PVC glue sockets.

Order code

Series DAS				
DAS 1	<b>Version</b>			
DAS1 KC	1			
	1-KC			
	25	<b>Connection</b>	<b>PVC pipe diameter</b>	
	32	DN 25	32 mm	
	40	DN 32	40 mm	DAS-1 only
		DN 40	50 mm	DAS-1 only
	PVC	<b>Version</b>		
	PP	for cold water at 45°C		
		for hot water at 70°C		
	V	<b>Seals</b>		
	E	FPM (Viton®)		
		EPDM		

<b>DAS 1KC</b>	<b>40</b>	<b>PVC</b>	<b>V</b>	(example order)
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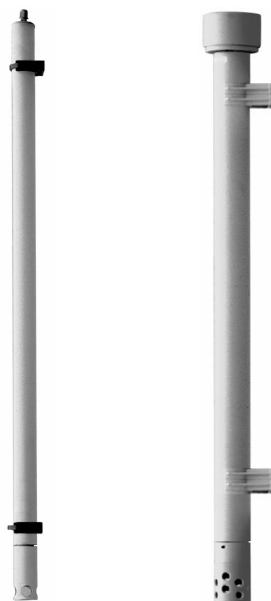
Your selection

<b>DAS 1KC</b>				
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Viton® is a registered trademark of DuPont Dow Elastomers

## Immersion housings Type ETA

made of PP plastic for installation in open tanks and channels



ETA 1

ETA 3

### General information

- For electrochemical electrodes with a connection thread in PG13.5 and an electrode length of 120 mm, e.g. for: pH, redox (ORP), oxygen, conductivity (conductive glass electrodes), temperature
- Choice of 2 types:
  - ETA 1, diameter 40 mm for 1 electrode
  - ETA 3, diameter 63 mm for 3 electrodes
- Material: Polypropylene (PP)
- Max. permissible temperature range: 0 - 80° C
- Cable entry, protection class IP 65
- Scope of delivery includes:
  - 2 pipe clips for wall mounting
  - 1 PG13.5 stopper for ETA 3

Order code

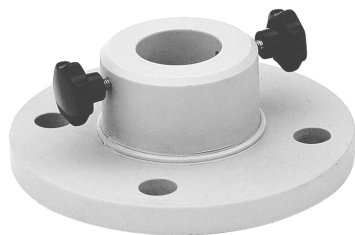
Series ETA				
	<b>Equipment</b>			
1	1 electrode PG13.5			
3	3 electrodes PG13.5			
	<b>Immersion depth</b>	for ETA 1:	for ETA 3:	
5	500 mm			
8	800 mm			
10	1.000 mm			
13	1.300 mm			
15	1.500 mm			
20	2.000 mm			
XX	Customer-specific length			
	<b>Mounting flange for installing in tanks</b>			
0	None			
32	ND 32 for ETA 1			
50	ND 50 for ETA 1 or ETA 3			
65	ND 65 for ETA 3			
XX	Customer-specific size			
	<b>Accessories</b>			
A	None			
N1	Wet holding cup for ETA 1			
N2	Wet holding cup for ETA 3			
S	Electrode spray cleaning			

ETA	3	10	65	N2	(example order)
-----	---	----	----	----	-----------------

Your selection

ETA					
-----	--	--	--	--	--

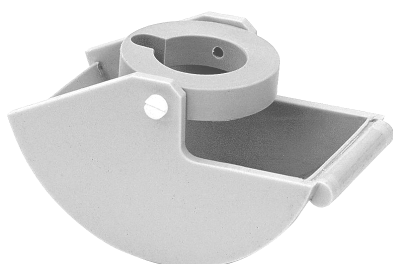
## Accessories for immersion housings Type ETA



### Mounting flange

for installing the immersion housing in the tank from above. With 2 tommy screws for variable immersion depth.

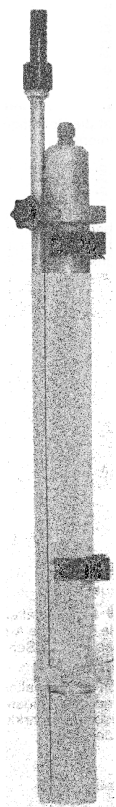
- Different flange sizes available:
  - DN 32 for ETA 1
  - DN 50 for ETA 1 and ETA 3
  - DN 65 for ETA 3
  - Customer-specific size
- Material: Polypropylene (PP)



### Wet holding cup Type N1 and N2

To protect the measurement electrodes from drying-out when the level of the liquid to be measured is below the immersion fitting for a long time.

- Material: Polypropylene (PP)
- Max. permissible temperature range: 0 ... 80° C



### Electrode spray cleaning Type S

For cleaning measurement electrodes.

- Material: Polypropylene (PP)
- Max. permissible temperature range: 0 ... 80° C
- Max. permissible operating pressure: 4 bar

### Operation

A spray crown with spray nozzles is mounted on the electrode guard cage. The spray nozzles periodically rinse the measurement electrodes with water and/or cleaning solution.

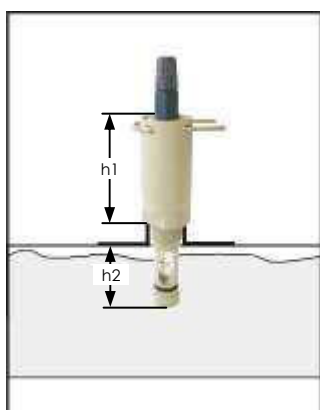
## Process changeover probe holder Type PA



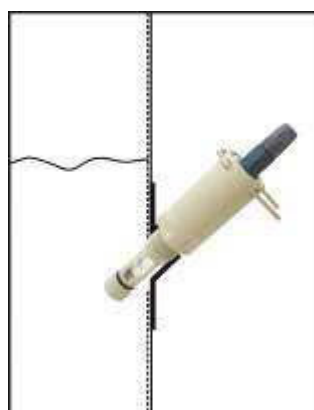
### General information

- For the holding of pH and redox electrodes with PG 13.5-connection thread and electrode length 120 mm
- Easy to install and remove the electrodes under process conditions
- Electrodes cleaned and calibrated without interrupting the process
- Material: Polypropylene (PP) or polyvinyliden fluoride (PVDF)
- Max. permissible operating temperature:
  - PP: 70°C
  - PVDF: 120°C
- Max. permissible operating pressure:
  - PP: 5 bar at 50°C
  - PVDF: 5 bar at 100°C
- Other technical data
  - Diameter: 40 mm
  - Height h1: 80 mm
  - Immersion depth h2: 43 mm
  - Connection thread: thread 3/4"

Type PA process changeover valves are typically installed in pipes and tanks.



Pipe installation



Tank installation

Order code

<b>Series PA</b>		
	<b>Material</b>	
	PP	
	PVDF	

<b>PA</b>	<b>PVDF</b>	(example order)
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Your selection

<b>PA</b>		
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## Prefilter Type NFIL

Made of Noryl plastic



### General information

- Material:
  - Flow cell head: Polypropylene (PP)
  - Flow cell cup: Noryl, transparent
- The fitting cup can be unscrewed for ease of cleaning and maintenance of the filter
- Max. operating pressure: 6 bar
- Maximum operating temperature: 45°C
- Scope of supply:
  - Fitting with mounting bracket, ball valve for flow control, 2 hose connectors 1/2" x 6/8 mm and 4 m PE hose
- NFILS for direct connection to flow cell NPED

Order code

Series NFIL				
			Filter size	Attachment to NPED
/60	60 washable made of PET		60 µ	no
S/60	60 washable made of PET		60 µ	yes
/100	100 PP wound		100 µ	no
S/100	100 PP wound		100 µ	yes

<b>NFIL</b>	<b>S/100</b>	(example order)	
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Your selection

<b>NFIL</b>			
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Order code

Spare filter cartridge for NFIL			
			Filter size
60	60 washable made of PET		60 µ
100	100 PP wound		100 µ

<b>NCA</b>	<b>100</b>	(example order)	
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Your selection

<b>NCA</b>			
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**I Dosing technology**



### 3. Dosing technology DOSATec

#### 3.1 Solenoid diaphragm dosing pumps

- 3.1 Selection table for solenoid diaphragm dosing pumps
- 3.1 Series V
- 3.1 Series VA
- 3.1 Series VMS
- 3.1 Series VMSA
- 3.1 Series K
- 3.1 Series KA
- 3.1 Series KMS
- 3.1 Series KMSA
- 3.1 Series T
- 3.1 Series TA
- 3.1 Series TMS
- 3.1 Series TMSA
- 3.1 Series GMS Polymer
- 3.1 Series GMSDigital Polymer
- 3.1 Series AMS
- 3.1 Series AMSA
- 3.1 Series AMSDigital
- 3.1 Series AMSADigital
- 3.1 Series CMS Polymer
- 3.1 Series CMSDigital Polymer

#### 3.2 Peristaltic Pumps

- 3.2 Series DOSAFlex
- 3.2 Series VPESR

#### 3.3 Motorised diaphragm dosing pumps

- 3.3 Series FM-50
- 3.3 Series D-50
- 3.3 Series D-100
- 3.3 Series D-101
- 3.3 Series D-121
- 3.3 Series PRIUS

#### 3.4 Proportional doser unit

- 3.4 Proportional doser series D 3
- 3.4 Proportional doser series D 25

#### 3.5 Dry-material metering units

- 3.5 Dry material metering unit TG-DOS

### **3.6 Metering station DOSADos**

- 3.6 Information for Metering station DOSADos
- 3.6 Metering station DOSADos 60
- 3.6 Metering station DOSADos 100
- 3.6 Metering station DOSADos 200
- 3.6 Metering station DOSADos 250
- 3.6 Metering station DOSADos 500
- 3.6 Metering station DOSADos 1000

### **3.7 Accessories for Metering pumps**

- 3.7 Injection valve IVN
- 3.7 Injection lance LIN
- 3.7 Foot valve FVAxial
- 3.7 Suction lance SL1
- 3.7 Suction lance SL2
- 3.7 Suction lance SL 1-2
- 3.7 Multi-purpose valve MF
- 3.7 Flow sensor SEFL
- 3.7 Pulsation damper SOIM
- 3.7 Pressure retention and pressure relief valves
- 3.7 Valve block Type AB
- 3.7 Feed tank Series DB-A
- 3.7 Feed tank Series DB-C
- 3.7 Feed tank Series DB-E
- 3.7 Collection tank Series SBO
- 3.7 Accessories for feed tank DB
- 3.7 Standard-Agitator DOSAMix
- 3.7 Wall holders / mounting brackets

### **3.8 Water meter**

- 3.8 Impeller - contact water meter
- 3.8 Woltmann - contact water meter

### **3.9 Static line mixer**

- 3.9 Static line mixer type SRMK made of plastic
- 3.9 Static line mixer type SRME mode of stainless steel
- 3.9 Static line mixer type FSHM made of plastic

### **3.10 Spare parts for solenoid diaphragm dosing pumps**

- 3.10 Selection table pump heads
- 3.10 Pump heads
- 3.10 Suction and pressure valve kits for Solenoid diaphragm dosing pump with self-venting
- 3.10 Suction and pressure valve kits for Solenoid diaphragm dosing pump
- 3.10 Diaphragms

**3.11 Spare parts for motorized diaphragm dosing pumps**

- 3.11 Diaphragm for DOSAMac
- 3.11 Pump head for DOSAMac
- 3.11 Diaphragm retainer for DOSAMac
- 3.11 Distance pieces for DOSAMac
- 3.11 Suction and pressure valve set for DOSAMac

## Selection-Guide for Solenoid Diaphragm Dosing pumps

Preselect within the table for the desired capacity rated in liters/hour (l/h), pressure in bar (bar) and then for the desired installation (socket (S) / wall (W)) and type of control (analogue (A) / digital (D)).

l/h	bar	S	W	A	D	Series
0.5	20	•		•		KA
	20	•			•	KMSA
l/h	bar	S	W	A	D	Series
1	3	•		•		K
	3	•			•	KMS
	5	•		•		K
	5	•			•	KMS
	6			•	•	GP
	6			•		GMSDP
	15			•	•	VA
	15			•		VMSA
	18	•		•		KA
	18	•			•	KMSA
	20			•	•	V
	20			•		VMS
	20	•		•		K
	20	•			•	KMS
l/h	bar	S	W	A	D	Series
2	8	•		•		CMSP
	8	•			•	CMSDP
	10			•	•	VA
	10			•		VMSA
	18			•	•	V
	18			•		VMS
	18			•	•	VA
	18			•		VMSA
	18	•		•		K
	18	•			•	KMS
3	4		•	•		GP
	4		•		•	GMSDP
	15		•	•		VA
	15		•		•	VMSA
	15	•		•		KA
	15	•			•	KMSA
l/h	bar	S	W	A	D	Series
3.2	20		•	•		TA
	20		•		•	TMSA
3.2	25	•		•		AMSA
	25	•			•	AMSAD

l/h	bar	S	W	A	D	Series	
3.4	10		•	•		VA	
	10		•		•	VMSA	
l/h	bar	S	W	A	D	Series	
3.5	10	•		•		KA	
	10	•			•	KMSA	
l/h	bar	S	W	A	D	Series	
4	6	•		•		CMSP	
	6	•			•	CMSDP	
	7			•	•	VA	
	7			•		VMSA	
	10			•	•	V	
	10			•		VMS	
	15	•		•		K	
	15	•			•	KMS	
	15			•	•	V	
	15			•		VMS	
	18			•		V	
	18			•		VMS	
	l/h	bar	S	W	A	D	Series
	5	10		•	•		V
10			•		•	VMS	
10		•		•		K	
10		•			•	KMS	
15				•	•	V	
15				•		VMS	
20				•	•	T	
20				•		TMS	
25		•		•		AMS	
25		•			•	AMSAD	
l/h		bar	S	W	A	D	Series
5.5		4		•	•		VA
	4		•		•	VMSA	
	8	•		•		KA	
	8	•			•	KMSA	
l/h	bar	S	W	A	D	Series	
6	7		•	•		V	
	7		•		•	VMS	
	15	•		•		AMSA	
	15	•			•	AMSAD	

l/h	bar	S	W	A	D	Series
7	3		•	•		VA
	3		•		•	VMSA
	10		•	•		VA
	10		•		•	VMSA
l/h	bar	S	W	A	D	Series
7.5	5	•		•		KA
	5	•			•	KMSA
	5		•	•		VA
	5		•		•	VMSA
l/h	bar	S	W	A	D	Series
8	2		•	•		GP
	2		•		•	GMSDP
	4		•	•		V
	4		•		•	VMS
	8	•		•		K
	8	•			•	KMS
l/h	bar	S	W	A	D	Series
9	5		•	•		VA
	5		•		•	VMSA
l/h	bar	S	W	A	D	Series
10	3		•	•		V
	3		•		•	VMS
	4	•		•		CMSP
	4	•			•	CMSDP
	5		•	•		TA
	5		•		•	TMSA
	5		•	•		V
	5		•		•	VMS
	5	•		•		K
	5	•			•	KMS
	10		•	•		V
	10		•		•	VMS
	15	•		•		AMS
	15	•			•	AMSD
l/h	bar	S	W	A	D	Series
12	5		•	•		V
	5		•		•	VMS
l/h	bar	S	W	A	D	Series
13	2		•	•		VA
	2		•		•	VMSA
	2	•		•		KA
	2	•			•	KMSA
	4		•	•		TA
	4		•		•	TMS
	7	•		•		AMSA
	7	•			•	AMSAD

l/h	bar	S	W	A	D	Series
13,5	1		•	•		VA
	1		•		•	VMSA
l/h	bar	S	W	A	D	Series
15	5		•	•		T
	5		•		•	TMS
l/h	bar	S	W	A	D	Series
16	1		•	•		V
	1		•		•	VMS
l/h	bar	S	W	A	D	Series
17	2		•	•		V
	2		•		•	VMS
l/h	bar	S	W	A	D	Series
18	2	•		•		K
	2	•			•	KMS
l/h	bar	S	W	A	D	Series
20	1		•	•		GP
	1		•		•	GMSDP
	3		•	•		TA
	3		•		•	TMSA
	4		•	•		T
	4		•		•	TMS
	7	•		•		AMS
	7	•			•	AMSD
l/h	bar	S	W	A	D	Series
25	0,5		•	•		GP
	0,5		•		•	GMSDP
	2	•		•		CMSP
	2	•			•	CMSDP
l/h	bar	S	W	A	D	Series
30	3		•	•		T
	3		•		•	TMS
	3	•		•		AMSA
	3	•			•	AMSAD
l/h	bar	S	W	A	D	Series
35	1		•	•		TA
	1		•		•	TMSA
l/h	bar	S	W	A	D	Series
38.5	2	•		•		AMSA
	2	•			•	AMSAD
l/h	bar	S	W	A	D	Series
40	1	•		•		CMSP
	1	•			•	CMSDP
	3	•		•		AMS
	3	•			•	AMSD

l/h	bar	S	W	A	D	Serie
50	1		•	•		T
	1		•		•	TMS
l/h	bar	S	W	A	D	Serie
60	2	•		•		AMS
	2	•			•	AMSD
l/h	bar	S	W	A	D	Serie
100	0		•	•		T
	0		•		•	TMS

## Solenoid diaphragm dosing pump series V

Capacity range 1 ... 17 l/h



### General information

- Capacity range: 1 ... 17 l/h,  
Pressure range: 20 ... 1 bar
- Pump head made of PVDF
- Pumps available in different standard colours.  
Special colours available on request.

### Technical specifications

Model	V CO	V CL	V IS
Dosing system	constant	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %	0 ... 100 %
Stroke length adjustment	-	-	-
Level control	-	•	•
Digital signals	-	-	•
Current signal 0/4mA = 0 pulses 20mA = max. pulses	-	-	-
Pulse division	1:10	1:10	1:10
Pulse multiplication	-	-	-
Additional alarm relays	-	• (optional)-	• (optional)

Technical specifications

<b>Series V</b>		<b>1/20</b>	<b>2/15</b>	<b>2/18</b>	<b>4/10</b>	<b>4/15</b>	<b>4/18</b>	<b>5/10</b>	<b>5/15</b>
Dosing capacity	l/h / bar	1 / 20	2 / 15	2 / 18	4 / 10	4 / 15	4 / 18	5 / 10	5 / 15
Stroke volume	ml/Hub	0.09	0.19	0.19	0.37	0.37	0.37	0.46	0.46
Stroke frequency	l/min	180							
PE hose	mm	4 x 8	4 x 6	4 x 8	4 x 6	4 x 6	4 x 8	4 x 6	4 x 6
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6
Pump head / Valve size	Type	J 3/8"	K 3/8"						
Dispatch weight	kg	2.2							

Technical specifications

<b>Series V</b>		<b>6/7</b>	<b>8/4</b>	<b>10/3</b>	<b>10/5</b>	<b>10/10</b>	<b>12/5</b>	<b>16/1</b>	<b>17/2</b>
Dosing capacity	l/h / bar	6 / 7	8 / 4	10 / 3	10 / 5	10 / 10	12 / 5	16 / 1	17 / 2
Stroke volume	ml/Hub	0.56	0.74	0.93	0.93	0.93	1.11	1.48	1.57
Stroke frequency	l/min	180							
PE hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
Pump head/ Valve size	Type	K 3/8"							
Dispatch weight	kg	2.2							

\* The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!



Order Code

Series V			
<b>Version</b>			
CO	Basic model with manual stroke frequency adjustment, without level monitor.		
CL	With level control		
IS	With level control and contact pulse input for single dosing stroke		
<b>Dosing capacity</b>			
	<b>l/h</b>	<b>bar</b>	
1/20	1	20	
2/15	2	15	
2/18	2	18	
4/10	4	10	
4/15	4	15	
4/18	4	18	
5/10	5	10	
5/10	5	15	
6/7	6	7	
8/4	8	4	
10/3	10	3	
10/5	10	5	
10/10	10	10	
12/5	12	5	
16/1	16	1	
17/2	17	2	
<b>Dosing and suction hose</b>			
PE	Dosing hose: Polyethylene (PE), Suction hose: Polyvinyl chloride (PVC)		
PVDF	Polyvinyliden fluoride (PVDF)		
<b>O-Ring</b>			
V	FPM (Viton®)		
E	EPDM		
<b>Connection to the electric supply</b>			
0	230VAC, +/-15%		
1	115VAC, +/-15%		
2	24 VAC, +/-15%		
3	12 VDC, +/-15%		
<b>Plugs and leads</b>			
0	Europe (Schuko)		
1	Without plug		
<b>Colour</b>			
B	Blau		
G	Grau		
		*other colours available on request	

<b>V</b>	<b>CL</b>	<b>4/10</b>	<b>PE</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>V</b>								
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Viton® is a registered trademark of DuPont Dow Elastomers

The following accessories are included in the scope of delivery for the V series:

- Injection valve made of PVDF
- Foot valve with level switch to indicate when empty made of PVDF (Foot valve Version V CO without signal for empty)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series VA

Capacity range 1 ... 13.5 l/h, with self-ventilating pump head



### General information

- Capacity range: 1 ... 13.5 l/h,  
Pressure range: 18 ... 2 bar
- Pump head made of PVDF
- Pumps available in different standard colours.  
Special colours available on request.

### Technical specifications

Model	VA CO	VA CL	VA IS
Dosing systems	constant	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %	0 ... 100 %
Stroke length adjustment	-	-	-
Level control	-	•	•
Digital signal	-	-	•
Current signal 0/4mA = 0 pulses 20mA = max. pulses	-	-	-
Pulse division	1:10	1:10	1:10
Pulse multiplier	-	-	-
Additional alarm relay	-	• (optional)-	• (optional)

Technical specifications

<b>Series VA</b>		<b>1/15</b>	<b>2/10</b>	<b>2 /18</b>	<b>3/15</b>	<b>3.4/10</b>	<b>4/7</b>	<b>5.5/4</b>
Dosing capacity*	l/h / bar	1 / 15	2 / 10	2 / 18	3 / 15	3.4 / 10	4 / 7	5.5 / 4
Stroke volume	ml/Stroke	0.1	0.19	0.19	0.28	0.33	0.37	0.51
Stroke frequency	l/min	180						
PE hose	mm	4 x 6	4 x 6	4 x 8	4 x 6	4 x 6	4 x 6	4 x 6
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6
Pump head / Valve size	Type	KA 3/8"						
Dispatch weight	kg	2,2						

Technical specifications

<b>Series VA</b>		<b>7/3</b>	<b>7/10</b>	<b>7.5/5</b>	<b>9/5</b>	<b>13/2</b>	<b>13.5/1</b>
Dosing capacity*	l/h / bar	7 / 3	7 / 10	7.5 / 5	9 / 5	13 / 2	13.5 / 1
Stroke volume	ml/Hub	0.65	0.65	0.70	0.84	1.2	1.25
Stroke frequency	l/min	180					
PE hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
Pump head / Valve size	Type	KA 3/8"					
Dispatch weight	kg	2,2					

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series VA			
<b>Version:</b>			
CO	Basic model without level control		
CL	With level control		
IS	With signal input with contact pulse for single stroke		
<b>Dosing capacity</b>			
	<b>l/h</b>	<b>bar</b>	
1/15	1	15	
2/10	2	10	
2/18	2	18	
3/15	3	15	
3.4/10	3.4	10	
4/7	4	7	
5.5/4	5.5	4	
7/3	7	3	
7/10	7	10	
7.5/5	7.5	5	
9/5	9	5	
13/2	13	2	
13.5/1	13.5	1	
<b>Dosing and suction hose</b>			
PE	Dosing hose: Polyethylene (PE), Suction hose: Polyvinyl chloride (PVC)		
PVDF	Polyvinyliden fluoride (PVDF)		
<b>O-Ring</b>			
V	FPM (Viton®)		
E	EPDM		
<b>Electrical connection</b>			
0	230VAC, +/-15%		
1	115VAC, +/-15%		
2	24 VAC, +/-15%		
3	12 VDC, +/-15%		
<b>Plugs and leads</b>			
0	Europe (Schuko)		
1	Without plug		
<b>Colour:</b>			
B	Blue		
G	Grey		
	*other colours available on request		

VA	CL	4/7	PE	V	0	0	B	(example order)
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Your selection:

VA								
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The following accessories are included in the scope of supply for the VA series:

- Injection valve made of PVDF
- Foot valve with level switch to indicate when empty; made of PVDF (Foot valve Version VA CO without signal for empty)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid Diaphragm dosing pump Series VMS

Capacity range 1 ... 17 l/h



**General information:**

- Capacity range: 1 ... 17 l/h,  
Pressure range: 20 ... 2 bar
- Pump head made of PVDF;
- Pumps available in different standard colours.  
More colours available on request.

Model	VMS-MF	VMS-PH	VMS-RH
<b>Dosing</b>	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
<b>Dosing system</b>	constant / proportional	proportional	proportional
<b>Stroke frequency adjustment</b>	proportional to input signal	proportional to measurement value	proportional to measurement value
<b>Stroke length adjustment</b>	-	-	-
<b>Level control</b>	•	•	•
<b>Standby input</b>	•	•	•
<b>Flow sensor input</b>	-	-	-
<b>Additional alarm relay</b>	• (optional)	• (optional)	• (optional)

## Technical specifications

<b>Series VMS</b>		<b>1/20</b>	<b>2/15</b>	<b>2/18</b>	<b>4/10</b>	<b>4/15</b>	<b>4/18</b>	<b>5/10</b>	<b>5/15</b>
Dosing capacity	l/h / bar	1 / 20	2 / 15	2 / 18	4 / 10	4 / 15	4 / 18	5 / 10	5 / 15
Stroke volume	ml/Hub	0.09	0.19	0.19	0.37	0.37	0.37	0.46	0.46
Stroke frequency	l/min	180							
PE hose	mm	4 x 8	4 x 6	4 x 8	4 x 6	4 x 6	4 x 8	4 x 6	4 x 6
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6
Pump head / Valve size	Type	J 3/8"	K 3/8"						
Dispatch weight	kg	2.2							

## Technical specifications

<b>Series VMS</b>		<b>6/7</b>	<b>8/4</b>	<b>10/3</b>	<b>10/5</b>	<b>10/10</b>	<b>12/5</b>	<b>16/1</b>	<b>17/2</b>
Dosing capacity	l/h / bar	6 / 7	8 / 4	10 / 3	10 / 5	10 / 10	12 / 5	16 / 1	17 / 2
Stroke volume	ml/Hub	0.56	0.74	0.93	0.93	0.93	1.11	1.48	1.57
Stroke frequency	l/min	180							
PE hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
Pump head / Valve size	Type	K 3/8"							
Dispatch weight	kg	2.2							

\* The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!



Order Code

Series VMS			
	<b>Version</b>		
MF	Multifunction mode		
PH	integrated pH measurement		
RH	Integrated Redox (ORP) measurement		
	<b>Dosing capacity</b>		
	<b>l/h</b>	<b>bar</b>	
1/20	1	20	
2/15	2	15	
2/18	2	18	
4/10	4	10	
4/15	4	15	
4/18	4	18	
5/10	5	10	
5/10	5	15	
6/7	6	7	
8/4	8	4	
10/3	10	3	
10/5	10	5	
10/10	10	10	
12/5	12	5	
16/1	16	1	
17/2	17	2	
	<b>Dosing and suction hose</b>		
PE	Dosing hose: Polyethylen (PE), Suction hose: Polyvinyl chloride (PVC)		
PVDF	Polyvinyliden fluoride (PVDF)		
	<b>O-Ring</b>		
V	FPM (Viton®)		
E	EPDM		
	<b>Electrical connection</b>		
0	230VAC, +/-15%		
1	115VAC, +/-15%		
2	24 VAC, +/-15%		
3	12 VDC, +/-15%		
	<b>Plugs and leads</b>		
0	Europe (Schuko)		
1	Without plug		
	<b>Colour</b>		
B	Blue		
G	Grey		
	*Other colours available on request		

<b>VMS-</b>	<b>MF</b>	<b>5/10</b>	<b>PE</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>VMS-</b>								
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The following accessories are included in the scope of supply of KMS Series:

- Injection valve (PVDF)
- Foot valve with level switch to indicate empty (PVDF)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose PVC

## Solenoid diaphragm dosing pump Series VMSA

Capacity range 1 ... 13 l/h, with self-ventilating pump head



### General information

- Capacity range: 1 ... 13.5 l/h,  
Pressure range: 18 ... 1 bar
- Pump head made of PVDF;
- Pumps available in different standard colours;  
Special colours available on request.

Model	VMSA-MF	VMSA-PH	VMSA-RH
<b>Dosing</b>	Multifunction mode (constant, pulse division, pulse multiplication, pulse batch, PPM (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
<b>Dosing system</b>	Constant / proportional	proportional	proportional
<b>Stroke frequency adjustment</b>	proportional to input signal	proportional to measurement value	Proportional to measurement value
<b>Stroke length adjustment</b>	-	-	-
<b>Level control</b>	•	•	•
<b>Standby input</b>	•	•	•
<b>Flow sensor input</b>	-	-	-
<b>Additional alarm relay</b>	• (optional)	• (optional)	• (optional)

## Technical specifications

Series VMSA		1/15	2/10	2/18	3/15	3.4/10	4/7	5.5/4
Dosing capacity*	l/h / bar	1 / 15	2 / 10	2 / 18	3 / 15	3.4 / 10	4 / 7	5.5 / 4
Stroke volume	ml/Stroke	0.1	0.19	0.19	0.28	0.33	0.37	0.51
Stroke frequency	1/min	180						
PE hose	mm	4 x 6	4 x 6	4 x 8	4 x 6	4 x 6	4 x 6	4 x 6
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6	4 x 6
Pump head / Valve size	Type	KA 3/8"						
Dispatch weight	kg	2,2						

## Technical specifications

Series VMSA		7/3	7/10	7.5/5	9/5	13/2	13.5/1
Dosing capacity*	l/h / bar	7 / 3	7 / 10	7.5 / 5	9 / 5	13 / 2	13.5 / 1
Stroke volume	ml/Hub	0.65	0.65	0.70	0.84	1.2	1.25
Stroke frequency	1/min	180					
PE hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
PVDF hose	mm	4 x 6	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8
Pump head / Valve size	Type	KA 3/8"					
Dispatch weight	kg	2,2					

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

## Order Code

Series VMSA			
	<b>Version</b>		
MF	Multifunction mode		
PH	Integrated pH measurement		
RH	Integrated Redox (ORP) measurement		
	<b>Dosing capacity</b>		
	<b>l/h</b>	<b>bar</b>	
1/15	1	15	
2/10	2	10	
2/18	2	18	
3/15	3	15	
3.4/10	3.4	10	
4/7	4	7	
5.5/4	5.5	4	
7/3	7	3	
7/10	7	10	
7.5/5	7.5	5	
9/5	9	5	
13/2	13	2	
13.5/1	13.5	1	
	<b>Dosing and suction hose</b>		
PE	Dosing hose: Polyethylen (PE), Suction hose: Polyvinyl chloride (PVC)		
PVDF	Polyvinyliden fluoride (PVDF)		
	<b>O-Ring</b>		
V	FPM (Viton®)		
E	EPDM		

	<b>Electrical connection</b>		
0	230VAC, +/-15%		
1	115VAC, +/-15%		
2	24 VAC, +/-15%		
3	12 VDC, +/-15%		
	<b>Plugs and leads</b>		
0	Europe (Schuko)		
1	Without plug		
		<b>Colour</b>	
	B	Blue	
	G	Grey	
	*other colours available on request		

<b>VMSA-</b>	<b>MF</b>	<b>4</b>	<b>PE</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>B</b>	(Example order)	
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Your selection:

<b>VMSA-</b>									
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The following accessories are included in the scope of supply of VMSA Series:

- Injection valve PVDF
- Foot valve with level switch to indicate empty; PVDF
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series K

Capacity range 1 ... 18 l/h



### General information

- Capacity range: 1 ... 18 l/h,  
Pressure range: 20 ... 2 bar
- Pump head made of PVDF; Acrylic (PMMA) or stainless steel
- Pumps available in different standard colours  
Special colours available on enquiry
- Version available for high-viscosity media up to 8000 CPS

Model	K CO	K CL	K PLUS
Dosing system	constant	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %	0 ... 100 %
Stroke length adjustment	•	•	•
Level control	-	•	•
Digital signal	-	-	•
Current Signal 0/4mA = 0 pulses 20mA = max. pulses	-	-	•
Pulse divider	1:10	1:10	1:10 10:100 100:1000
Pulses multiplier	-	-	1:10
Additional alarm relay	-	-	• (optional)

## Technical specifications

Series K		1/3	1/5	1/20	2/18	4/15	5/10
Dosing capacity	l/h / bar	1 / 3	1 / 5	1 / 20	2 / 18	4 / 15	5 / 10
Stroke volume	Min.	0.03	0.03	0.03	0.06	0.11	0.14
	Max.	0.09	0.09	0.09	0.19	0.37	0.46
Stroke frequency	l/min	180					
Hose connection	mm	4 x 6					
Pump Head / Valve size	PVDF	I 3/8"	I 3/8"	I 3/8"	L 3/8"	L 3/8"	L 3/8"
	Stainless Steel	li 3/8"	li 3/8"	li 3/8"	Li 3/8"	Li 3/8"	Li 3/8"
	Acrylic	A 3/8"	A 3/8"	A 3/8"	B 3/8"	B 3/8"	B 3/8"
up to 8000 CPS	Acrylic**	-	-	-	B-LPV	B-LPV	B-LPV
Dispatch Weight	kg	4.1					
Energy Consumption	W	19					

## Technical specifications

Series K		8/8	10/5	18/2
Dosing capacity	l/h / bar	8 / 8	10 / 5	18 / 2
Stroke volume	Min.	0.22	0.28	0.5
	Max.	0.74	0.93	1.67
Stroke frequency	l/min	180		
Hose connection	mm	4 x 6		6 x 8
Pump head / Valve size	PVDF	L 3/8"	L 3/8"	M 3/8"
	Stainless Steel	Li 3/8"	Li 3/8"	G 1/2"
	Acrylic	B 3/8"	B 3/8"	G 1/2"
up to 8000 CPS	Acrylic**	B-LPV	B-LPV	C-LPV
Dispatch weight	kg	4.1		
Energy Consumption	W	19		

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series K					
Version					
CO	Basic Model without level control				
CL	with level control				
PLUS	with signal input and level control				
	Pump Head	Valves	Dosing capacity		
			l/h	bar	
1/3 PV	Polyvinyliden fluoride (PVDF)	PVDF	1	3	
1/5 PV	"	PVDF	1	5	
1/20 PV	"	PVDF	2	20	
2/18 PV	"	PVDF	2	18	
4/15 PV	"	PVDF	4	15	
5/10 PV	"	PVDF	5	10	
8/8 PV	"	PVDF	8	8	
10/5 PV	"	PVDF	10	5	
18/2 PV	"	PVDF	18	2	
1/3 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	1	3	
1/5 PS	"	PVDF	1	5	
1/20 PS	"	PVDF	1	20	
2/18 PS	"	PVDF	2	18	
4/15 PS	"	PVDF	4	15	
5/10 PS	"	PVDF	5	10	
8/8 PS	"	PVDF	8	8	
10/5 PS	"	PVDF	10	5	
18/2 PS	"	PVDF	18	2	
1/3 AC	Acrylic / PMMA	PVDF	1	3	
1/5 AC	"	PVDF	1	5	
1/20 AC	"	PVDF	1	20	
2/18 AC	"	PVDF	2	18	
4/15 AC	"	PVDF	4	15	
5/10 AC	"	PVDF	5	10	
8/8 AC	"	PVDF	8	8	
10/5 AC	"	PVDF	10	5	
18/2 AC	"	PVDF	18	2	
1/3 SS	Stainless Steel AISI 316	Stainless Steel AISI 316	1	3	
1/5 SS	"	"	1	5	
1/20 SS	"	"	1	20	
2/18 SS	"	"	2	18	
4/15 SS	"	"	4	15	
5/10 SS	"	"	5	10	
8/8 SS	"	"	8	8	
10/5 SS	"	"	10	5	
18/2 SS	"	"	18	2	

2/18 LP	Acrylic for viscous media	PP	2	18	
4/15 LP	“ “	PP	4	10	
5/10 LP	“ “	PP	5	10	
8/8 LP	“ “	PP	8	8	
10/5 LP	“ “	PP	10	5	
18/2 LP	“ “	PP	18	2	
<b>O-Ring</b>					
V	FPM (Viton®)				
E	EPDM				
VT	FPM (Viton®) PTFE				
<b>Connection to the electric supply</b>					
0	230VAC, +/-10%, 50/60 Hz				
1	115VAC, +/-10%, 50/60 Hz				
2	48 VAC, +/-10%, 50/60 Hz				
3	12 VDC, +/-10%				
4	24 VDC, +/-10%				
<b>Plugs and leads</b>					
0	Europa (Schuko)				
1	Open end				
<b>Alarm relay (empty indicator)</b>					
0	without relay				
1	With switchover relay, normally open				
<b>Colour</b>					
B	Blue				
G	Grey				
*other colours available on request					

<b>K</b>	<b>PLUS</b>	<b>10/5 PV</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>K</b>								
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### Scope of Supply

The following accessories are included in the scope of supply of series K:

- Injection valve (PVDF)
- Suction Hose (PVC)
- Foot valve with level switch to indicate empty (PVDF) (Version K-CO foot valve without empty indicator)
- Dosing hose (PVDF)
- Ventilation hose (PVC)

\*\* Hose connection of pump head Acrylic up to 8000 CPS: 16x22 PVC suction hose, 8x12 PE pressure hose. Foot valve made of stainless steel not included in the scope of supply.



## Solenoid diaphragm dosing pump Series KA

Capacity range 0.5 - 13 l/h, with self-ventilating pump head



### General information

- Capacity range: 0.5 - 13 l/h  
Pressure range: 20 - 2 bar
- Pump head made of PVDF; option of Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request

Model	KA CO	KA CL	KA PLUS
Dosing system	constant	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %	0 ... 100 %
Stroke length adjustment	•	•	•
Level control	-	•	•
Digital signal	-	-	•
Current Signal 0/4mA = 0 pulses 20mA = max. pulses	-	-	•
Pulse divider	1:10	1:10	1:10 10:100 100:1000
Pulses multiplier	-	-	1:10
Additional alarm relay	-	-	• (optional)

## Technical specifications

<b>Series KA</b>		<b>0.5/20</b>	<b>1/18</b>	<b>3/15</b>	<b>3.5/10</b>
Dosing capacity	l/h / bar	0.5 / 20	1 / 18	3 / 15	3.5 / 10
Stroke volume	Min.	0.014	0.03	0.08	0.10
	Max.				
	ml/Hub	0.046	0.09	0.28	0.32
Stroke frequency	l/min	180			
Hose connection	mm	4 x 6			
Pump head / Valve size	PVDF	IA 3/8"	LA 3/8"	LA 3/8"	LA 3/8"
	Acrylic	AA 3/8"	AA 3/8"	BA 3/8"	BA 3/8"
Dispatch weight	kg	4.1			
Energy consumption	W	19			

## Technical specifications

<b>Series KA</b>		<b>5.5/8</b>	<b>7.5/5</b>	<b>13/2</b>
Dosing capacity	l/h / bar	5.5 / 8	7.5 / 5	13 / 2
Stroke volume	Min.	0.15	0.21	0.37
	Max.			
	ml/Hub	0.51	0.69	1.20
Stroke frequency	l/min	180		
Hose connection	mm	4 x 6		6 x 8
Pump head/ Valve size	PVDF	LA 3/8"	LA 3/8"	MA 3/8"
	Acrylic	AA 3/8"	AA 3/8"	BA 3/8"
Dispatch weight	kg	4.1		
Energy consumption	W	19		

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series KA							
	<b>Version:</b>						
CO	Basic model without level control						
CL	with level control						
PLUS	with signal input and level control						
		<b>Pump Head</b>	<b>Valves</b>	<b>Dosing capacity</b>			
	0.5/20 PV	Polyvinyliden fluoride (PVDF)	PVDF	0.5	20		
	1/18 PV	" "	PVDF	1	18		
	3/15 PV	" "	PVDF	3	15		
	3/10 PV	" "	PVDF	3.5	10		
	5/8 PV	" "	PVDF	5.5	8		
	7/5 PV	" "	PVDF	7.5	5		
	13/2 PV	" "	PVDF	13	2		
	0.5/20 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	0.5	20		
	1/18 PS	" "	PVDF	1	18		
	3/15 PS	" "	PVDF	3	15		
	3/10 PS	" "	PVDF	3.5	10		
	5/8 PS	" "	PVDF	5.5	8		
	7/5 PS	" "	PVDF	7.5	5		
	13/2 PS	" "	PVDF	13	2		
	0.5/20 AC	Acrylic / PMMA	PVDF	0.5	20		
	1/18 AC	" "	PVDF	1	18		
	3/15 AC	" "	PVDF	3	15		
	3/10 AC	" "	PVDF	3.5	10		
	5/8 AC	" "	PVDF	5.5	8		
	7/5 AC	" "	PVDF	7.5	5		
	13/2 AC	" "	PVDF	13	2		
		<b>O-Ring</b>					
	V	FPM (Viton®)					
	E	EPDM					
	VT	FPM (Viton®)PTFE					
		<b>Connection to the electric supply</b>					
	0	230VAC, +/-10%, 50/60 Hz					
	1	115VAC, +/-10%, 50/60 Hz					
	2	48 VAC, +/-10%, 50/60 Hz					
	3	12 VDC, +/-10%					
	4	24 VDC, +/-10%					
		<b>Plugs and leads</b>					
	0	Europa (Schuko)					
	1	open end					
		<b>Alarm relay (empty indicator)</b>					
	0	without relay					
	1	with switchover relay, normally open					
		<b>Colour</b>					
	B	Blue					
	G	Grey					
		*other colours available on request					

<b>KA</b>	<b>PLUS</b>	<b>13/2 PS</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>KA</b>								
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### **Scope of Supply**

The following accessories are included in the scope of supply of KA series:

- Injection valve (PVDF)
- Foot valve with level switch to indicate empty (PVDF) (Version KA-CO foot valve without empty indicator)
- Suction hose (PVC)
- Dosing hose (PVDF)
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series KMS

Capacity range 1 ... 18 l/h



### General information

- Capacity range: 1 ... 18 l/h,  
Pressure range: 20 ... 2 bar
- Connection for flow monitor (SEFL)
- Pump head made of PVDF; optional Acrylic (PMMA) or stainless steel
- Version available for high-viscosity media up to 8000 CPS

Model	KMS-MF	KMS-PH	KMS-RH
Dosing	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
Dosing system	constant / proportional	proportional	proportional
Stroke frequency adjustment	proportional to input signal	proportional to measurement value	proportional to measurement value
Stroke length adjustment	•	•	•
Level control	•	•	•
Standby input	•	•	•
Flow sensor input	•	-	-
Additional alarm relay	•	• (optional)	• (optional)

Model	KMS-CL	KMS-EN
Dosing	Integrated Chlorine measurement 0,00 – 2,00 ppm oder 0,00 – 10,00 ppm	Integrated timer min., h., day, week
Dosing System	proportional	proportional
Stroke frequency adjustment	proportional to measurement value	-
Stroke length adjustment	•	•
Level control	•	•
Standby input	-	-
Flow sensor input	-	-
Additional alarm relay	• (optional)	-

## Technical Specifications

Series KMS		1/3	1/5	1/20	2/18	4/15	5/10
Dosing capacity	l/h / bar	1 / 3	1 / 5	1 / 20	2 / 18	4 / 15	5 / 10
Stroke volume Min.	ml/Hub	0.03	0.03	0.03	0.06	0.11	0.14
		Max.	0.09	0.09	0.09	0.19	0.37
Stroke frequency	l/min	180					
Hose connection	mm	4 x 6					
Pump head / Valve size	PVDF	I 3/8"	I 3/8"	I 3/8"	L 3/8"	L 3/8"	L 3/8"
	Stainless Steel	li 3/8"	li 3/8"	li 3/8"	Li 3/8"	Li 3/8"	Li 3/8"
	Acrylic	A 3/8"	A 3/8"	A 3/8"	B 3/8"	B 3/8"	B 3/8"
Up to 8000 CPS	Acrylglas**	-	-	-	B-LPV	B-LPV	B-LPV
Dispatch weight	kg	4.1					
Energy consumption	W	19					

## Technical specifications

Series KMS		8/8	10/5	18/2
Dosing capacity	l/h / bar	8 / 8	10 / 5	18 / 2
Stroke volume Min.	ml/Hub	0.22	0.28	0.5
		Max.	0.74	0.93
Stroke frequency	l/min	180		
Hose connection	mm	4 x 6		6 x 8
Pump head / Valve size	PVDF	L 3/8"	L 3/8"	M 3/8"
	Stainless Steel	li 3/8"	li 3/8"	G 1/2"
	Acrylic	B 3/8"	B 3/8"	G 1/2"
Up to 8000 CPS	Acrylic**	B-LPV	B-LPV	C-LPV
Dispatch weight	kg	4.1		
Energy consumption	W	19		

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series KMS				
Version				
MF	Multifunction mode			
PH	integrated pH measurement			
RH	Integrated Redox (ORP) measurement			
CL	integrated Chlorine measurement			
EN	Timer			
	Pump head	Valve	Dosing capacity	
			l/h	bar
1/3 PV	Polyvinyliden fluoride (PVDF)	PVDF	1	3
1/5 PV	"	PVDF	1	5
1/20 PV	"	PVDF	2	20
2/18 PV	"	PVDF	2	18
4/15 PV	"	PVDF	4	15
5/10 PV	"	PVDF	5	10
8/8 PV	"	PVDF	8	8
10/5 PV	"	PVDF	10	5
18/2 PV	"	PVDF	18	2
1/3 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	1	3
1/5 PS	"	PVDF	1	5
1/20 PS	"	PVDF	1	20
2/18 PS	"	PVDF	2	18
4/15 PS	"	PVDF	4	15
5/10 PS	"	PVDF	5	10
8/8 PS	"	PVDF	8	8
10/5 PS	"	PVDF	10	5
18/2 PS	"	PVDF	18	2
1/3 AC	Acrylic / PMMA	PVDF	1	3
1/5 AC	"	PVDF	1	5
1/20 AC	"	PVDF	1	20
2/18 AC	"	PVDF	2	18
4/15 AC	"	PVDF	4	15
5/10 AC	"	PVDF	5	10
8/8 AC	"	PVDF	8	8
10/5 AC	"	PVDF	10	5
18/2 AC	"	PVDF	18	2
1/3 SS	Stainless Steel AISI 316	Stainless Steel AISI 316	1	3
1/5 SS	"	"	1	5
1/20 SS	"	"	1	20
2/18 SS	"	"	2	18
4/15 SS	"	"	4	15
5/10 SS	"	"	5	10
8/8 SS	"	"	8	8
10/5 SS	"	"	10	5
18/2 SS	"	"	18	2

2/18 LP	Acrylic for viscous media	PP	2	18		
4/15 LP	" "	PP	4	10		
5/10 LP	" "	PP	5	10		
8/8 LP	" "	PP	8	8		
10/5 LP	" "	PP	10	5		
18/2 LP	" "	PP	18	2		
		<b>O-Ring</b>				
V	FPM (Viton®)					
E	EPDM					
VT	FPM (Viton®) PTFE					
		<b>Connection to the electric supply</b>				
0	230VAC, +/-10%, 50/60 Hz					
1	115VAC, +/-10%, 50/60 Hz					
2	48 VAC, +/-10%, 50/60 Hz					
3	12 VDC, +/-10%					
4	24 VDC, +/-10%					
		<b>Plugs and leads</b>				
0	Europa (Schuko)					
1	Open end					
		<b>Alarm relay (empty indicator)</b>				
0	ohne Relais					
1	mit Umschaltrelais, anziehend					
		<b>Colour</b>				
B	Blue					
G	Grey					
		*other colours available on request				

<b>KMS</b>	<b>MF</b>	<b>2/18 AC</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)	
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Your selection:

<b>KMS</b>									
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### Scope of Supply

The following accessories are included in the scope of supply of KMS Series:

- Injection valve (PVDF)
- Foot valve with level switch to indicate empty (PVDF)
- Signaling cable
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

\*\* Hose connection of pump head Acrylic up to 8000 CPS: 16x22 PVC suction hose, 8x12 PE pressure hose. Foot valve made of stainless steel not included in the scope of supply.



## Solenoid diaphragm dosing pump Series KMSA

Capacity range 0.5 - 13 l/h, with self-ventilating pump head



### General information

- Capacity range: 0.5 - 13 l/h
- Pressure range: 20 - 2 bar
- Pump head made of PVDF; optional Acrylic (PMMA)
- Pumps available in different standard colours
- Special colours available on request

Model	KMSA-MF	KMSA-PH	KMSA-RH
Dosing	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
Dosing system	constant / proportional	Proportional	proportional
Stroke frequency adjustment	proportional to input signal	proportional to measurement value	proportional to measurement value
Stroke length adjustment	•	•	•
Level Control	•	•	•
Standby input	•	•	•
Flow sensor input	•	-	-
Additional alarm relay	•	• (optional)	• (optional)

Model	KMSA-CL	KMSA-EN
Dosing	Integrated Chlorine measurement 0,00 – 2,00 ppm oder 0,00 – 10,00 ppm	integrated Timer min., h., day, week
Dosing system	proportional	proportional
Stroke frequency adjustment	proportional to measurement value	-
Stroke length adjustment	•	•
Level control	•	•
Standby input	-	-
Flow sensor input	-	-
Additional alarm relay	• (optional)	-

## Technical specifications

<b>Series KMSA</b>		<b>0.5/20</b>	<b>1/18</b>	<b>3/15</b>	<b>3.5/10</b>
Dosing capacity	l/h / bar	0.5 / 20	1 / 18	3 / 15	3.5 / 10
Stroke volum	Min.	0.014	0.03	0.08	0.10
	Max.				
	ml/Hub	0.046	0.09	0.28	0.32
Stroke frequency	l/min	180			
Hose connection	mm	4 x 6			
Pump head / Valve size	PVDF	IA 3/8"	LA 3/8"	LA 3/8"	LA 3/8"
	Acrylic	AA 3/8"	AA 3/8"	BA 3/8"	BA 3/8"
Dispatch weight	kg	4.1			
Energy consumption	W	19			

## Technical specifications

<b>Series KMSA</b>		<b>5.5/8</b>	<b>7.5/5</b>	<b>13/2</b>
Dosing capacity	l/h / bar	5.5 / 8	7.5 / 5	13 / 2
Stroke volum	Min.	0.15	0.21	0.37
	Max.			
	ml/Hub	0.51	0.69	1.20
Stroke frequency	l/min	180		
Hose connection	mm	4 x 6		6 x 8
Pump head / Valve size	PVDF	LA 3/8"	LA 3/8"	MA 3/8"
	Acrylic	AA 3/8"	AA 3/8"	BA 3/8"
Dispatch weight	kg	4.1		
Energy consumption	W	19		

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series KMSA			
<b>Version</b>			
MF	Multifunction mode		
PH	integrated pH measurement		
RH	Integrated Redox (ORP) measurement		
CL	integrated Chlorine measurement		
EN	Timer		
	<b>Pump head</b>	<b>Valves</b>	<b>Dosing capacity</b>
			<b>l/h bar</b>
0.5/20 PV	Polyvinyliden fluoride (PVDF)	PVDF	0.5 20
1/18 PV	" "	PVDF	1 18
3/15 PV	" "	PVDF	3 15
3/10 PV	" "	PVDF	3.5 10
5/8 PV	" "	PVDF	5.5 8
7/5 PV	" "	PVDF	7.5 5
13/2 PV	" "	PVDF	13 2
0.5/20 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	0.5 20
1/18 PS	" "	PVDF	1 18
3/15 PS	" "	PVDF	3 15
3/10 PS	" "	PVDF	3.5 10
5/8 PS	" "	PVDF	5.5 8
7/5 PS	" "	PVDF	7.5 5
13/2 PS	" "	PVDF	13 2
0.5/20 AC	Acrylic / PMMA	PVDF	0.5 20
1/18 AC	" "	PVDF	1 18
3/15 AC	" "	PVDF	3 15
3/10 AC	" "	PVDF	3.5 10
5/8 AC	" "	PVDF	5.5 8
7/5 AC	" "	PVDF	7.5 5
13/2 AC	" "	PVDF	13 2
	<b>O-Ring</b>		
V	FPM (Viton®)		
E	EPDM		
VT	FPM (Viton®) PTFE		
	<b>Connection to the electric supply</b>		
0	230VAC, +/-10%, 50/60 Hz		
1	115VAC, +/-10%, 50/60 Hz		
2	48 VAC, +/-10%, 50/60 Hz		
3	12 VDC, +/-10%		
4	24 VDC, +/-10%		
	<b>Plugs and leads</b>		
0	Europa (Schuko)		
1	Open end		
	<b>Alarm relay (empty indicator)</b>		
0	Without relay		
1	With switchover relay, normally open		

	<b>Colour</b>	
B	Blue	
G	Grey	
	*other colours available on request	

<b>KMSA</b>	<b>MF</b>	<b>1/18 AC</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)	
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Your selection:

<b>KMSA</b>									
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**Scope of Supply**

The following accessories are included in the scope of supply of KMSA Series:

- Injection valve PVDF
- Foot valve with level switch to indicate empty (PVDF)
- Signaling cable
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series T

Capacity range 5 ... 100 l/h



### General information

- Capacity range: 5 ... 100 l/h,  
Pressure range: 20 ... 0 bar
- Pump head made of PVDF;  
Optional: Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request.

Model	T CO	T CL
Dosing system	constant	constant
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %
Stroke length adjustment	-	-
Level control	-	•
Digital signal	-	-
Current Signal 0/4mA = 0 pulses 20mA = max. pulses	-	-
Pulse divider	1:10	1:10
Pulses multiplier	-	-
Additional alarm relay	-	-

### Technical specifications

Series T		5/20	15 / 5	20/4	30/3	50/1	100 / 0
Dosing capacity	l/h / bar	5 / 20	15 / 5	20 / 4	30 / 3	50 / 1	100 / 0
Stroke volume	ml/Hub	0,55	2.1	2.8	4.2	7,0	14,0
Stroke frequency	1/min	120					
PE hose	mm	4 x 6	6 x 8	6 x 8	8 x 12	8 x 12	12 x 18
PVDF hose	mm	4 x 6	6 x 8	6 x 8	8 x 10	8 x 10	12 x 18
Pump Head / Valve size	PVDF	L 3/8"	N 1/2"	N 1/2"	S 3/4"	S 3/4"	T 3/4"
	Acrylic	B 3/8"	D 1/2"	D 1/2"	E 1/2"	E 1/2"	F 1/2"
Dispatch weight	kg	5.7					

\* The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series T									
Version		Pump Head		Valves		Dosing capacity			
CO	CL					l/h	bar		
	CO	Basic Model without level control							
	CL	with level control							
	5/20 PV	Polyvinyliden fluoride(PVDF)	PVDF			5	20		
	15/5 PV	"	PVDF			15	5		
	20/4 PV	"	PVDF			20	4		
	30/3 PV	"	PVDF			40	3		
	50/1 PV	"	PVDF			50	1		
	100/0 PV	"	PVDF			100	0		
	5/20 PS	Polyvinyliden fluoride(PVDF)	PVDF + PVDF hose			5	20		
	15/5 PS	" "	PVDF			15	5		
	20/4 PS	" "	PVDF			20	4		
	30/3 PS	" "	PVDF			30	3		
	50/1 PS	" "	PVDF			50	1		
	100/0 PS	" "	PVDF			100	0		
	5/20 AC	Acrylic / PMMA	PVDF			5	20		
	15/5 AC	"	PVDF			15	5		
	20/4 AC	"	PVDF			20	4		
	30/3 AC	"	PVDF			30	3		
	50/1 AC	"	PVDF			50	1		
	100/0 AC	"	PVDF			100	0		
		<b>O-Ring</b>							
	V	FPM (Viton®)							
	E	EPDM							
		<b>Electric connection</b>							
	0	230VAC, +/-10%, 50/60 Hz							
	1	115VAC, +/-10%, 50/60 Hz							
	2	48 VAC, +/-10%, 50/60 Hz							
	3	12 VDC, +/-10%							
	4	24 VDC, +/-10%							
		<b>Plugs and leads</b>							
	0	Europe (Schuko)							
	1	Open end							
		<b>Alarm relay (empty indicator)</b>							
	0	Without relay							
	1	With switchover relay, normally open							
		<b>Colour</b>							
	B	Blue							
	G	Grey							
		*other colours available on request							

<b>T</b>	<b>CL</b>	<b>100/0 AC</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>T</b>									
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The following accessories are included in the scope of supply of series K:

- Injection valve PVDF
- Foot valve with level switch to indicate empty PVDF (Version T-CO foot valve Without empty indicator)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series TA

Capacity range 3.2 ... 35.0l/h, with self-ventilating pump head



### General information

- Capacity range: 3.2 ... 35.0 l/h,  
Pressure range: 20 ... 1 bar
- Pump head made of PVDF;  
optional: Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours are available on request.

Model	TA CO	TA CL
Dosing system	constant	constant
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %
Level control	-	•
Stroke length adjustment	-	-
Digital signals	-	-
Current signal 0/4mA = 0 pulses 20mA = max. pulses	-	-
Pulse division	1:10	1:10
Pulse multiplication	-	-
Additional alarm relays	-	-

### Technical specifications

Series TA		3.2/20	10/5	13/4	20 / 3	35/1
Dosing capacity	l/h / bar	3.2 / 20	10 / 5	13 / 4	20 / 3	35 / 1
Stroke volume	ml/Stroke	0.44	0.83	1.81	4.17	5.35
Stroke frequency	1/min	120				
PVC hose	mm	4 x 6	6 x 8	6 x 8	8 x 12	8 x 12
PVDF hose	mm	4 x 6	6 x 8	6 x 8	8 x 10	8 x 10
Pump head / Valve size	PVDF	LA 3/8"	NA 1/2"	NA 1/2"	SA 3/4"	TA 3/4"
	Acrylic	BA 3/8"	CA 3/8"	DA 1/2"	EA 1/2"	FA 1/2"
Dispatch weight	kg	5.7				

\*The given dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated.



Order code

Series TA						
Version						
CO	Basic model without level control					
CL	With level control					
		Pump head	Valves	Dosing capacity		
	3/20 PV	Polyvinyliden fluoride(PVDF)	PVDF	3.2	20	
	10/5 PV	" "	PVDF	10	5	
	13/4 PV	" "	PVDF	13	4	
	20/3 PV	" "	PVDF	20	3	
	35/1 PV	" "	PVDF	35	1	
	3/20 PS	Polyvinyliden fluoride(PVDF)	PVDF + PVDF hose	3.2	20	
	10/5 PS	" "	PVDF	10	5	
	13/4 PS	" "	PVDF	13	4	
	20/3 PS	" "	PVDF	20	3	
	35/1 PS	" "	PVDF	35	1	
	3/20 AC	Acrylic / PMMA	ACDF	3.2	20	
	10/5 AC	"	ACDF	10	5	
	13/4 AC	"	ACDF	13	4	
	20/3 AC	"	ACDF	20	3	
	35/1 AC	"	ACDF	35	1	
		O-Ring				
	V	FPM (Viton®)				
	E	EPDM				
		Electric connection				
	0	230VAC, +/-10%, 50/60 Hz				
	1	115VAC, +/-10%, 50/60 Hz				
	2	48 VAC, +/-10%, 50/60 Hz				
	3	12 VDC, +/-10%				
	4	24 VDC, +/-10%				
		Plugs and leads				
	0	Europe (Schuko)				
	1	Open end				
		Alarm relay (empty indicator)				
	0	Without relay				
	1	With switchover relay, normally open				
		Colour				
	B	Blue				
	G	Grey				
		*other colours available on request				

TA	CL	35/1 PV	V	0	0	0	B	(example order)
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Your selection:

TA								
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The following accessories are included in the scope of supply of TA series:

- Impfventil PVDF
- Foot valve with level switch to indicate empty (PVDF) (Version TA-CO: foot valve without empty indicator)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series TMS

Capacity range 5 ... 100 l/h



### General information

- Capacity range: 5 ... 100 l/h,  
Pressure range: 20 ... 0 bar
- Pump head made of PVDF;  
Optional: Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request.

Model	TMS-MF	TMS-PH	TMS-RH
<b>Dosing</b>	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
<b>Dosing system</b>	constant / proportional	proportional	proportional
<b>Stroke frequency adjustment</b>	proportional to input signal	proportional to measurement value	proportional to measurement value
<b>Stroke length adjustment</b>	-	-	-
<b>Level control</b>	•	•	•
<b>Standby input</b>	•	•	•
<b>Flow sensor input</b>	•	-	-
<b>Additional alarm relay</b>	•	• (optional)	• (optional)

### Technical specifications

Series TMS		5/20	15 / 5	20/4	30/3	50/1	100 / 0
Dosing capacity	l/h / bar	5 / 20	15 / 5	20 / 4	30 / 3	50 / 1	100 / 0
Stroke volume	ml/Stroke	0.55	2.1	2.8	4.2	7.0	14.0
Stroke frequency	1/min	120					
PE hose	mm	4 x 6	6 x 8	6 x 8	8 x 12	8 x 12	12 x 18
PVDF hose	mm	4 x 6	6 x 8	6 x 8	8 x 10	8 x 10	12 x 18
Pump head/ Valve size	PVDF	L 3/8"	N 1/2"	N 1/2"	S 3/4"	S 3/4"	T 3/4"
	Acrylic	B 3/8"	D 1/2"	D 1/2"	E 1/2"	E 1/2"	F 1/2"
Dispatch weight	kg	5.7					

\*The given dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series TMS			
	<b>Version</b>		
MF	Multifunction mode		
PH	Integrated pH measurement		
RH	Integrated chlorine measurement		
	<b>Pump head</b>	<b>Valve</b>	<b>Dosing capacity</b>
			<b>l/h    bar</b>
5/20 PV	Polyvinyliden fluoride (PVDF)	PVDF	5    20
15/5 PV	"	PVDF	15    5
20/4 PV	"	PVDF	20    4
30/3 PV	"	PVDF	40    3
50/1 PV	"	PVDF	50    1
100/0 PV	"	PVDF	100    0
5/20 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	5    20
15/5 PS	" "	PVDF	15    5
20/4 PS	" "	PVDF	20    4
30/3 PS	" "	PVDF	30    3
50/1 PS	" "	PVDF	50    1
100/0 PS	" "	PVDF	100    0
5/20 AC	Acrylic / PMMA	PVDF	5    20
15/5 AC	"	PVDF	15    5
20/4 AC	"	PVDF	20    4
30/3 AC	"	PVDF	30    3
50/1 AC	"	PVDF	50    1
100/0 AC	"	PVDF	100    0
	<b>O-Ring</b>		
V	FPM (Viton®)		
E	EPDM		
	<b>Electric connection</b>		
0	230VAC, +/-10%, 50/60 Hz		
1	115VAC, +/-10%, 50/60 Hz		
2	48 VAC, +/-10%, 50/60 Hz		
3	12 VDC, +/-10%		
4	24 VDC, +/-10%		
	<b>Plugs and leads</b>		
0	Europe (Schuko)		
1	Open end		
	<b>Alarm relay (empty indicator)</b>		
0	Without relay		
1	With switchover relay, normally open		

	<b>colour</b>	
B	Blue	
G	Grey	
	*other colours available on request	

<b>TMS</b>	<b>RH</b>	<b>100/0 AC</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)	
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Your selection:

<b>TMS</b>									
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The following accessories are included in the scope of supply of TMS Series:

- Injection valve (PVDF) (except: 100 / 0)
- Foot valve with level switch to indicate empty (PVDF)
- Suction hose (PVC)
- Dosing hose (PVDF)
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series TMSA

Capacity range 3.2 ... 35.0l/h, with self-ventilating pump head



### General information

- Capacity range: 3.2 ... 35.0 l/h,  
Pressure range: 20 ... 1 bar
- Pump head made of PVDF;  
Optional: Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request

Model	TMSA-MF	TMSA-PH	TMSA-RH
Dosing	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
Dosing system	constant / proportional	proportional	proportional
Stroke frequency adjustment	proportional to input signal	proportional to measurement value	proportional to measurement value
Stroke length adjustment	-	-	-
Level Control	•	•	•
Standby input	•	•	•
Flow-sensor input	•	-	-
Additional alarm relay	•	• (optional)	• (optional)

### Technical specifications

Series TMSA		3.2/20	10/5	13/4	20 /3	35/1
Dosing capacity	l/h / bar	3.2 / 20	10 / 5	13 / 4	20 / 3	35 / 1
Stroke volume	ml/Stroke	0.44	0.83	1.81	4.17	5.35
Stroke frequency	1/min	120				
PVC hose	mm	4 x 6	6 x 8	6 x 8	8 x 12	8 x 12
PVDF hose	mm	4 x 6	6 x 8	6 x 8	8 x 10	8 x 10
Pump head/ Valve size	PVDF	LA 3/8"	NA 1/2"	NA 1/2"	SA 3/4"	TA 3/4"
	Acrylic	BA 3/8"	CA 3/8"	DA 1/2"	EA 1/2"	FA 1/2"
Dispatch weight	kg	5.7				

\*The given dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series TMSA						
	<b>Version</b>					
MF	Multifunction mode					
PH	Integrated pH measurement					
RH	Integrated Redox (ORP) measurement					
		<b>Pump head</b>	<b>Valves</b>	<b>Dosing capacity</b>		
	3/20 PV	Polyvinyliden fluoride (PVDF)	PVDF	3.2	20	
	10/5 PV	" "	PVDF	10	5	
	13/4 PV	" "	PVDF	13	4	
	20/3 PV	" "	PVDF	20	3	
	35/1 PV	" "	PVDF	35	1	
	3/20 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	3.2	20	
	10/5 PS	" "	PVDF	10	5	
	13/4 PS	" "	PVDF	13	4	
	20/3 PS	" "	PVDF	20	3	
	35/1 PS	" "	PVDF	35	1	
	3/20 AC	Acrylic / PMMA	ACDF	3.2	20	
	10/5 AC	"	ACDF	10	5	
	13/4 AC	"	ACDF	13	4	
	20/3 AC	"	ACDF	20	3	
	35/1 AC	"	ACDF	35	1	
		<b>O-Ring</b>				
	V	FPM (Viton®)				
	E	EPDM				
			<b>Electric connection</b>			
		0	230VAC, +/-10%, 50/60 Hz			
		1	115VAC, +/-10%, 50/60 Hz			
		2	48 VAC, +/-10%, 50/60 Hz			
		3	12 VDC, +/-10%			
		4	24 VDC, +/-10%			
			<b>Plugs and leads</b>			
		0	Europe (Schuko)			
		1	Open end			
			<b>Alarm relay (empty indicator)</b>			
		0	Without relay			
		1	With switchover relay, normally open			
			<b>Colour</b>			
		B	Blue			
		G	Grey			
			*other colours available on request			

<b>TMSA</b>	<b>MF</b>	<b>35/1 PV</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>TMSA</b>								
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The following accessories are included in the scope of supply of TMSA Series:

- Injection valve PVDF
- Foot valve with level switch to indicate empty (PVDF)
- Suction hose (PVC)
- Dosing hose (PVDF)
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series G Polymer

Capacity range 1 ... 25 l/h for viscous liquids up to 50,000 cps



### General information

- Capacity range: 1 ... 25 l/h,  
Pressure range: 6 ... 0.5 bar
- Pump head made of Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request.

Model	G Polymer
Dosing system	constant
Stroke frequency adjustment	0 ... 100 %
Stroke length adjustment	-
Level Control	-
Digital signals	-
Current signal 0/4mA = 0 pulses 20mA = max. pulses	-
Pulse division	1:10
Pulse multiplication	-
Additional alarm relay	-

### Technical specifications

Series G Polymer		1/6	3/4	8/2	20/1	25/0,5
Dosing capacity	l/h / bar	1 / 6	3 / 4	8 / 2	20 / 1	25 / 0,5
Stroke volume	ml/Hub	0.14	0.42	1.11	2.78	3.47
Stroke frequency	1/min	120				
Suction hose**	mm	20 x 27	20 x 27	20 x 27	20 x 27	20 x 27
Pressure hose**	mm	16 x 22	16 x 22	16 x 22	16 x 22	16 x 22
Connection Intake side	Inch	1"				
Connection Pressure side	Inch	3/4"				
Pump head	Type	BP	CP	DP	EP	FP
Dispatch weight	kg	9				

\* The dosing rates specified are valid for a maximum viscosity of 50,000 cps.  
The operating pressure varies according to the viscosity!

\*\* PVC-fabric tube

Order Code

Series G Polymer			
CO	<b>Version</b>		
	Basic model without level control		
	<b>Dosing capacity</b>		
	<b>l/h</b>	<b>bar</b>	
	1/6	1 6	
	3/4	3 4	
	8/2	8 2	
	20/1	20 1	
	25/0,5	25 0.5	
	<b>O-Ring</b>		
	V	FPM (Viton®)	
	<b>Electric connection</b>		
	0	100-230VAC, +/-10%, 50/60 Hz	
	<b>Plugs and leads</b>		
	0	Europe (Schuko)	
	1	Open end	
	<b>Alarm relay (empty indicator)</b>		
	0	Without relay	
	1	With switchover relay, normally open	
	<b>Colour</b>		
	B	Blue	
	G	Grey	

<b>GP-</b>	<b>CO</b>	<b>20/1</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>GP-</b>									
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## Solenoid diaphragm dosing pump Series GMS Digital Polymer

Capacity range 1 ... 25 l/h for viscous liquids up to 50,000 cps



### General information

- Capacity range: 1 ... 25 l/h,  
Pressure range: 6 ... 0.5 bar
- Pump head made of Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request.

Model	GMS-MF	GMS-PH	GMS-RH
<b>Dosing</b>	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
<b>Dosing system</b>	constant / proportional	proportional	proportional
<b>Stroke frequency adjustment</b>	proportional to input signal	proportional to measurement value	proportional to measurement value
<b>Stroke length adjustment</b>	-	-	-
<b>Level control</b>	•	•	•
<b>Standby input</b>	•	• (optional)	• (optional)
<b>Flow-sensor input</b>	•	-	-
<b>Additional alarm relay</b>	•	• (optional)	• (optional)

### Technical specifications

Series GMS Polymer		1/6	3/4	8/2	20/1	25/0,5
Dosing capacity	l/h / bar	1 / 6	3 / 4	8 / 2	20 / 1	25 / 0,5
Stroke volume	ml/Stroke	0.14	0,42	1,11	2,78	3,47
Stroke frequency	1/min	120				
Suction hose**	mm	20 x 27	20 x 27	20 x 27	20 x 27	20 x 27
Pressure hose**	mm	16 x 22	16 x 22	16 x 22	16 x 22	16 x 22
Connection Intake side	inch	1"				
Connection Pressure side	inch	3/4"				
Pump head	Type	BP	CP	DP	EP	FP
Dispatch weight	kg	9				

\* The dosing rates specified are valid for a maximum viscosity of 50,000 cps.  
The operating pressure varies according to the viscosity!

\*\* PVC-fabric tube

Order Code

Series GMSDIGITAL Polymer			
<b>Version</b>			
MF	Multifunction mode		
PH	integrated pH measurement		
RH	Integrated Redox (ORP) measurement		
<b>Dosing capacity</b>			
	<b>l/h</b>	<b>bar</b>	
1/6	1	6	
3/4	3	4	
8/2	8	2	
20/1	20	1	
25/0.5	25	0.5	
<b>O-Ring</b>			
V	FPM (Viton®)		
<b>Electric connection</b>			
0	100-230VAC, +/-10%, 50/60 Hz		
<b>Plugs and leads</b>			
0	Europe (Schuko)		
1	Open end		
<b>Alarm relay (empty indicator)</b>			
0	Without relay		
1	With switchover relay, normally open (no sur-charge for MF model)		
<b>Colour</b>			
B	Blue		
G	Grey		

<b>GMSDP-</b>	<b>MF</b>	<b>4</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(Example order)
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Your selection:

<b>GMSDP-</b>								
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## Solenoid diaphragm dosing pump Series AMS

Capacity range 5 ... 60 l/h



### General information

- Capacity range: 5 ... 60 l/h,  
Pressure range: 25 ... 2 bar
- Pump head made of PVDF;  
Optional: Acrylic (PMMA) or stainless steel
- Pumps available in different standard colours.  
Special colours available on request.
- Version available for high-viscosity media up to 8000 CPS

Model	AMS CO	AMS CL	AMS PLUS
Dosing system	constant	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %	0 ... 100 %
Stroke length adjustment	•	•	•
Level Control	-	•	•
Digital signals	-	-	•
Current signal 0/4mA = 0 pulses 20mA = max. pulses	-	-	•
Pulse division	1:10	1:10	1:10 10:100 100:1000
Pulse multiplication	-	-	1:10
Additional alarm relay	-	-	• (optional)

### Technical specifications

Series AMS		5/25	10/15	20/7	40/3	60/2
Dosing capacity*	l/h / bar	5 / 25	10 / 15	20 / 7	40 / 3	60 / 2
Stroke volume	ml/Stroke	0.7	1.40	2.80	5.60	8.40
Stroke frequency	1/min	120				
PVC hose	mm	4 x 6	4 x 6	6 x 8	8 x 12	8 x 12
PVDF hose	mm	4 x 6	4 x 6	6 x 8	8 x 10	8 x 10
Pump head/ Valve size	PVDF	L 3/8"	M 3/8"	N 1/2"	S 3/4"	T 3/4"
	Stainless steel	Li 3/8"	Mi 3/8"	Ni 1/2"	Si 1/2"	Ti 1/2"
	Acrylic	B 3/8"	C 3/8"	D 1/2"	E 1/2"	F 1/2"
Up to 8000 CPS	Acrylic **	B-LPV	C-LPV	-	-	-
Dispatch weight	kg	9.0				

\*The given dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series AMS					
<b>Version</b>					
CO	Basic model without level control				
CL	With level control				
PLUS	With signal input and level control				
		<b>Pump head</b>	<b>Valves</b>	<b>Dosing capacity</b>	
				<b>l/h</b>	<b>bar</b>
5/25 PV	Polyvinyliden fluoride (PVDF)	PVDF		5	25
10/15 PV	"	PVDF		10	15
20/7 PV	"	PVDF		20	7
40/3 PV	"	PVDF		40	3
60/2 PV	"	PVDF		60	2
5/25 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose		5	25
10/15 PS	" "	PVDF		10	15
20/7 PS	" "	PVDF		20	7
40/3 PS	" "	PVDF		40	3
60/2 PS	" "	PVDF		60	2
5/25 AC	Acrylic / PMMA	PVDF		5	25
10/15 AC	"	PVDF		10	15
20/7 AC	"	PVDF		20	7
40/3 AC	"	PVDF		40	3
60/2 AC	"	PVDF		60	2
5/25 SS	Stainless Steel AISI 316	Stainless Steel AISI 316		5	25
10/15 SS	" "	" "		10	15
20/7 SS	" "	" "		20	7
40/3 SS	" "	" "		40	3
60/2 SS	" "	" "		60	2
5/25 LP	Acrylic for viscous media	PP		5	25
10/15 LP	" "	PP		10	15
		<b>O-Ring</b>			
V	FPM (Viton®)				
E	EPDM				
		<b>Electric connection</b>			
0	230VAC, +/-10%, 50/60 Hz				
1	115VAC, +/-10%, 50/60 Hz				
2	48 VAC, +/-10%, 50/60 Hz				
3	12 VDC, +/-10%				
4	24 VDC, +/-10%				

	<b>Plugs and leads</b>	
0	Europe (Schuko)	
1	Open end	
	<b>Alarm relay (empty indicator)</b>	
0	Without relay	
1	With switchover relay, normally open	
	<b>Colour</b>	
B	Blue	
G	Grey	
	*other colours available on request	

<b>AMS</b>	<b>PLUS</b>	<b>10/15 PV</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)	
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Your selection

<b>AMS</b>									
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The following accessories are included in the scope of supply of AMS Series:

- Injection valve PVDF
- Foot valve with level switch to indicate empty (Version AMS-CO: Foot valve without empty indicator)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

\*\* Hose connection of pump head Acrylic up to 8000 CPS: 16x22 PVC suction hose, 8x12 PE pressure hose. Foot valve made of stainless steel not included in the scope of supply.

## Solenoid diaphragm dosing pump Series AMSA

Capacity range 3.2 - 38.5 l/h, with self-ventilating pump head



### General information

- Capacity range: 3.2 ... 38.5 l/h,  
Pressure range: 25 ... 2 bar
- Pump head made of PVDF; option of Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request

Model	AMSA CO	AMSA CL	AMSA PLUS
Dosing system	constant	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %	0 ... 100 %
Stroke length adjustment	•	•	•
Level control	-	•	•
Digital signals	-	-	•
Current Signal 0/4mA = 0 pulses 20mA = max. pulses	-	-	•
Pulse division	1:10	1:10	1:10 10:100 100:1000
Pulse multiplication	-	-	1:10
Additional alarm relay	-	-	• (optional)

### Technical specifications

Series AMSA		3.2/25	6/15	13/7	30 / 3	38.5/2
Dosing capacity	l/h / bar	3.2 / 25	6 / 15	13 / 7	30 / 3	38.5 / 2
Stroke volume	ml/Stroke	0.44	0.83	1.81	4.17	5.35
Stroke frequency	1/min	120				
PVC hose	mm	4 x 6	4 x 6	6 x 8	8 x 12	8 x 12
PVDF hose	mm	4 x 6	4 x 6	6 x 8	8 x 10	8 x 10
Pump head / Valve size	PVDF	LA 3/8"	MA 3/8"	NA 1/2"	SA 3/4"	TA 3/4"
	Acrylic	BA 3/8"	CA 3/8"	DA 1/2"	EA, 1/2"	FA 1/2"
Dispatch weight	kg	9.0				

\*The listed dosing rates refer to H<sub>2</sub>O measurements and the pressure indicated!

Order Code

Series AMSA						
<b>Version</b>						
CO	Basic model without level control					
CL	With level control					
PLUS	With signal input and level control					
	<b>Dosierkopf</b>	<b>Ventile</b>	<b>Dosierleistung</b>			
3/25 PV	Polyvinyliden fluoride (PVDF)	PVDF	3.2	25		
6/15 PV	" "	PVDF	6	15		
13/7 PV	" "	PVDF	13	7		
30/3 PV	" "	PVDF	30	3		
38/2 PV	" "	PVDF	38.5	2		
3/25 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose	3.2	25		
6/15 PS	" "	PVDF	6	15		
13/7 PS	" "	PVDF	13	7		
30/3 PS	" "	PVDF	30	3		
38/2 PS	" "	PVDF	38.5	2		
3/25 AC	Acrylic / PMMA	PVDF	3.2	25		
6/15 AC	"	PVDF	6	15		
13/7 AC	"	PVDF	13	7		
30/3 AC	"	PVDF	30	3		
38/2 AC	"	PVDF	38.5	2		
	<b>O-Ring</b>					
V	FPM (Viton®)					
E	EPDM					
		<b>Connection to the electric supply</b>				
	0	230VAC, +/-10%, 50/60 Hz				
	1	115VAC, +/-10%, 50/60 Hz				
	2	48 VAC, +/-10%, 50/60 Hz				
	3	12 VDC, +/-10%				
	4	24 VDC, +/-10%				
		<b>Plugs and leads</b>				
	0	Europe (Schuko)				
	1	Open end				
		<b>Alarm relay (empty indicator)</b>				
	0	Without relay				
	1	With switchover relay, normally open				
		<b>Colour</b>				
	B	Blue				
	G	Grey				
		*other colours on request				

<b>AMSA</b>	<b>PLUS</b>	<b>38/2 PS</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection:

<b>AMSA</b>									
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### **Scope of Supply**

The following accessories are included in the scope of supply of AMSA Series

- Injection valve PVDF
- Foot valve with level switch to indicate empty (PVDF) (Version AMSA-CO: foot valve without empty indicator)
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)



## Solenoid diaphragm dosing pump Series AMSD<sup>igital</sup>

Capacity range 5 ... 60 l/h



### General information

- Capacity range: 5 ... 60 l/h,  
Pressure range: 25 ... 2 bar
- Pump head made of PVDF; Acrylic (PMMA) or stainless steel
- Pumps available in different standard colours.  
Special colours available on request
- Version available for high-viscosity media up to 8000 CPS

Model	AMSAD-MF	AMSAD-PH	AMSAD-RH
Dosing	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
Dosing system	constant / proportional	proportional	proportional
Stroke frequency adjustment	proportional to input signal	proportional to measurement value	proportional to measurement value
Stroke length adjustment	•	•	•
Level control	•	•	•
Standby input	•	• (optional)	• (optional)
Flow-sensor input	•	-	-
Additional alarm relay	•	• (optional)	• (optional)

### Technical specifications

Series AMSD <sup>igital</sup>		5/25	10/15	20/7	40/3	60/2
Dosing capacity	l/h / bar	5 / 25	10 / 15	20 / 7	40 / 3	60 / 2
Stroke volume	ml/stroke	0.7	1.40	2.80	5.60	8.40
Stroke frequency	per min	120				
PVC hose	mm	4 x 6	4 x 6	6 x 8	8 x 12	8 x 12
PVDF hose	mm	4 x 6	4 x 6	6 x 8	8 x 10	8 x 10
Connection		3/8"		1/2"	3/4"	
Pump head/ Valve size	PVDF	L 3/8"	M 3/8"	N 1/2"	S 3/4"	T 3/4"
	Stainless steel	Li 3/8"	Mi 3/8"	Ni 1/2"	Si 1/2"	Ti 1/2"
	Acrylic	B 3/8"	C 3/8"	D 1/2"	E 1/2"	F 1/2"
up to 8000 CPS	Acrylic	B LPV	C LPV	-	-	-
Dispatch weight	kg	9.0				

\*The given dosing capacities refer to H<sub>2</sub>O dosages at the pressure indicated!

Order code

Series AMSDigital					
<b>Version</b>					
MF	Multifunction mode				
PH	Integrated pH measurement: pH 0 - 14				
RH	Integrated redox measurement: 0 - 1,000 mV				
		<b>Pump head</b>	<b>Valves</b>	<b>Dosing capacity</b>	
				<b>l/h</b>	<b>bar</b>
5/25 PV	Polyvinyliden fluoride (PVDF)	PVDF		5	25
10/15 PV	"	PVDF		10	15
20/7 PV	"	PVDF		20	7
40/3 PV	"	PVDF		40	3
60/2 PV	"	PVDF		60	2
5/25 PS	Polyvinyliden fluoride (PVDF)	PVDF + PVDF hose		5	25
10/15 PS	"	"	PVDF	10	15
20/7 PS	"	"	PVDF	20	7
40/3 PS	"	"	PVDF	40	3
60/2 PS	"	"	PVDF	60	2
5/25 AC	Acrylic / PMMA		PVDF	5	25
10/15 AC	"		PVDF	10	15
20/7 AC	"		PVDF	20	7
40/3 AC	"		PVDF	40	3
60/2 AC	"		PVDF	60	2
5/25 SS	Stainless steel AISI 316		Stainless steel AISI 316	5	25
10/15 SS	"	"	"	10	15
20/7 SS	"	"	"	20	7
40/3 SS	"	"	"	40	3
60/2 SS	"	"	"	60	2
5/25 LP	Acrylic for viscous media		PP	5	25
10/15 LP	"	"	PP	10	15
		<b>O-ring:</b>			
V	FPM (Viton®)				
E	EPDM				
		<b>Electric connection</b>			
0	230 VAC, +/-10%, 50/60 Hz				
1	115 VAC, +/-10%, 50/60 Hz				
2	48 VAC, +/-10%, 50/60 Hz				
3	12 VDC, +/-10%				
4	24 VDC, +/-10%				

0	<b>Plugs and leads</b>	
1	Europe (Schuko)	
1	Open end	
0	<b>Alarm relay (empty indicator)</b>	
1	without relay	
1	with switchover relay, normally open	
B	<b>Colour:</b> Blue	
G	Grey	
	*other colours available on request	

<b>AMSD</b>	<b>MF</b>	<b>10/15 PS</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection

<b>AMSD</b>									
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The following accessories are included in the scope of delivery for the AMSDigital series:

- Injection valve made of PVDF
- Foot valve with level switch to indicate empty made of PVDF
- Suction hose PVC
- Dosing hose PVDF
- Ventilation hose (PVC)

## Solenoid diaphragm dosing pump Series AMSAD<sup>igital</sup>

Capacity range 3.2 ... 38.5 l/h, with self-ventilating pump head



### General information

- Capacity range: 3.2 ... 38.5 l/h  
Pressure range: 25 ... 2 bar
- Pump head made of PVDF; option of Acrylic (PMMA)
- Pumps available in different standard colours.  
Special colours available on request

Model	AMSAD-MF	AMSAD-PH	AMSAD-RH
Dosing	Multifunction mode (constant, pulse division, Pulse multiplication, pulse batch, ppm (mg/l), %, Batch, Volt, mA)	Integrated pH measurement 0.00 – 14.00 pH	Integrated Redox measurement 0 – 2000 mV
Dosing system	constant / proportional	proportional	proportional
Stroke frequency adjustment	proportional to input signal	proportional to measurement value	proportional to measurement value
Stroke length adjustment	•	•	•
Level control	•	•	•
Standby input	•	• (optional)	• (optional)
Flow-sensor input	•	-	-
Additional alarm relay	•	• (optional)	• (optional)

### Technical specifications

Series AMSAD <sup>igital</sup>		3.2/25	6/15	13/7	30 /3	38.5/2
Dosing Capacity	l/h / bar	3.2 / 25	6 / 15	13 / 7	30 / 3	38.5 / 2
Stroke volume	ml/stroke	0.44	0.83	1.81	4.17	5.35
Stroke frequency	per min	120				
PVC hose	mm	4 x 6	4 x 6	6 x 8	8 x 12	8 x 12
PVDF hose	mm	4 x 6	4 x 6	6 x 8	8 x 10	8 x 10
Connection		3/8"		1/2"	3/4"	
Pump head	PVDF	LA	MA	NA	SA	TA
	Acrylic	BA	CA	DA	EA	PO
Dispatch weight	kg	9.0				

\*The given dosing capacities refer to H<sub>2</sub>O dosages at the pressure indicated!

Order code

Series AMSADigital									
<b>Version</b>									
MF	Multifunction mode								
PH	Integrated pH measurement: pH 0 ... 14								
RH	Integrated redox measurement: 0 ... 1,000 mV								
		<b>Pump head</b>	<b>Valves</b>		<b>Dosing Capacity</b>				
	3/25 PV	Polyvinyliden fluoride(PVDF)	PVDF		3.2	25			
	6/15 PV	" "	PVDF		6	15			
	13/7 PV	" "	PVDF		13	7			
	30/3 PV	" "	PVDF		30	3			
	38/2 PV	" "	PVDF		38.5	2			
	3/25 PS	Polyvinyliden fluoride(PVDF)	PVDF + PVDF hose		3.2	25			
	6/15 PS	" "	PVDF		6	15			
	13/7 PS	" "	PVDF		13	7			
	30/3 PS	" "	PVDF		30	3			
	38/2 PS	" "	PVDF		38.5	2			
	3/25 AC	Acrylic / PMMA	PVDF		3.2	25			
	6/15 AC	"	PVDF		6	15			
	13/7 AC	"	PVDF		13	7			
	30/3 AC	"	PVDF		30	3			
	38/2 AC	"	PVDF		38.5	2			
		<b>O-ring</b>							
	V	FPM (Viton®)							
	E	EPDM							
		<b>Electric connection</b>							
	0	230 VAC, +/-10%, 50/60 Hz							
	1	115 VAC, +/-10%, 50/60 Hz							
	2	48 VAC, +/-10%, 50/60 Hz							
	3	12 VDC, +/-10%							
	4	24 VDC, +/-10%							
		<b>Plugs and leads</b>							
	0	Europe (Schuko)							
	1	Open end							
		<b>Alarm relay (empty indicator)</b>							
	0	without relay							
	1	with switchover relay, normally open							
		<b>Colour</b>							
	B	Blue							
	G	Grey							
		*other colours available on request							

<b>AMSAD</b>	<b>MF</b>	<b>38/2 PS</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection

<b>AMSAD</b>									
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The following accessories are included in the scope of delivery for the AMSADigital series

- Injection valve made of PVDF
- Foot valve with level switch to indicate empty (PVDF)
- Suction hose PVC
- Dosing hose PVC
- Ventilation hose PVC

## Solenoid diaphragm dosing pump Series CMS Polymer

Capacity range 2 ... 40 l/h for viscous liquids up to 50,000 cps



### General information

- Capacity range: 2 ... 40 l/h,  
Pressure range: 8 ... 1 bar
- Pump head made of Acrylic
- Pumps available in different standard colours.  
Special colours available on enquiry

Model	CMSP CO	CMSP PLUS
Dosing system	constant	constant / proportional
Stroke frequency adjustment	0 ... 100 %	0 ... 100 %
Stroke length adjustment	•	•
Level control	-	•
Digital signals	-	•
Current signal 0/4mA = 0 pulses 20mA = max. pulses	-	•
Pulse division	1:10	1:10 10:100 100:1000
Pulse multiplication	-	1:10
Additional alarm relay	-	• (optional)

### Technical specifications

Series CMS Polymer		2/8	4/6	10/4	25/2	40/1
Dosing capacity	l/h / bar	2 / 8	4 / 6	10 / 4	25 / 2	40 / 1
Stroke volume	ml/stroke	0.28	0.56	1.4	3.5	5.6
Stroke frequency	per min	120				
Suction hose**	mm	20 x 27	20 x 27	20 x 27	20 x 27	20 x 27
Pressure hose**	mm	16 x 22	16 x 22	16 x 22	16 x 22	16 x 22
Connection suction side	inch	1"				
Connection pressure side	inch	3/4"				
Pump head	Type	BP	CP	DP	EP	FP
Dispatch weight	kg	9				

\* The Dosing capacities specified are valid for a maximum viscosity of 50,000 cps.  
The operating pressure varies according to the viscosity!

\*\* PVC-fabric tube

Order code

Series CMSPolymer			
<b>Version</b>			
CO	Basic model without level control		
PLUS	With signal input and level control		
<b>Dosing Capacity</b>			
	<b>l/h</b>	<b>bar</b>	
2/8	2	8	
4/6	4	6	
10/4	10	4	
25/2	25	2	
40/1	40	1	
<b>O-ring</b>			
V	FPM (Viton®)		
<b>Electric connection</b>			
0	100-230 VAC, +/-10%, 50/60 Hz		
1	48 VAC, +/-10%, 50/60 Hz		
2	12 VDC, +/-10%		
3	24 VDC, +/-10%		
<b>Plugs and leads</b>			
0	Europe (Schuko)		
1	Open end		
<b>Alarm relay (empty indicator)</b>			
0	without relay		
1	with switchover relay, normally open		
<b>Colour</b>			
B	Blue		
G	Grey		

<b>CMSP</b>	<b>PVM</b>	<b>10/4</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection

<b>CMSP</b>								
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## Solenoid diaphragm dosing pump Series CMSDigital Polymer

Capacity range 2 ... 40 l/h for viscous liquids up to 50,000 cps



### General information

- Capacity range: 2 ... 40 l/h,  
Pressure range: 1 ... 8 bar
- Stroke length adjustment continuous from 0 ... 100%
- Display (backlit) and keyboard for adjusting the operating parameters
- Start/stop button
- Switches between external actuation/continuous operation
- Switchover to pulse division/pulse multiplication
- External actuator for proportional dosing via a floating potential contact
- External actuation for proportional dosing via an analogue input 0/4-20 mA, 0-10 V
- Option of version with integrated pH or redox controller for proportional dosing
- Pump head made of Acrylic
- Pumps available in different standard colours.  
Special colours available on enquiry

### Technical specifications

Series CMSD Polymer		2/8	4/6	10/4	25/2	40 /1
Dosing capacity	l/h / bar	2 / 8	4 / 6	10 / 4	25 / 2	40 /1
Stroke volume	ml/Stroke	0.28	0.56	1.4	3.5	5.6
Stroke frequency	per min			120		
Suction hose**	mm	20 x 27	20 x 27	20 x 27	20 x 27	20 x 27
Pressure hose**	mm	16 x 22	16 x 22	16 x 22	16 x 22	16 x 22
Connection suction side	inch	1"				
Connection pressure side	inch	3/4"				
Pump head	Type	BP	CP	DP	EP	FP
Dispatch weight	kg	9				

\* The dosing rates specified are valid for a maximum viscosity of 50,000 cps.  
The operating pressure varies according to the viscosity!

\*\* PVC-fabric tube



Order code

Series CMSDIGITAL Polymer		
	<b>Version</b>	
MF	Constant, ppm and batch dosing, pulse division, pulse multiplication Digital input for contact pulse, stand-by, flow monitor Analogue input for 0/4 - 20 mA or 0 - 10 V, alarm relay (empty signal)	
PH	Integrated pH controller, pH 0 - 14 (pH electrodes and accessories must be ordered separately)	
RH	Integrated redox controller, 0 - 1,000 mV (redox electrodes and accessories must be ordered separately)	
	<b>Dosing capacity</b>	
	<b>l/h    bar</b>	
2	2    8	
4	4    6	
10	10   4	
25	25   2	
40	40   1	
	<b>O-ring</b>	
V	FPM (Viton®)	
E	EPDM	
	<b>Connection to the electric supply</b>	
0	100-230 VAC, +/-10%, 50/60 Hz	
1	48 VAC, +/-10%, 50/60 Hz	
2	12 VDC, +/-10%	
3	24 VDC, +/-10%	
	<b>Plugs and leads</b>	
0	Europa (Schuko)	
1	Open end	
	<b>Alarm relay (signal for empty)</b>	
0	without relay	
1	with switchover relay, normally open with version MF no extra charge	
	<b>Colour:</b>	
B	Blue	
G	Grey	

<b>CMSDP</b>	<b>MF</b>	<b>4</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection

<b>CMSDP</b>								
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## Peristaltic pump Series DOSAFlex

Capacity range 2 ... 10 l/h



### General information

- Pump with direct coupled stepper motor <35 dB
- mA mode, 4 – 20 mA or 20 – 4 mA
- 2 different ranges of capacity range available
- LCD display, 16x2
- Manual mode, T<sub>on</sub>/T<sub>off</sub>, delay, signal
- ppm mode
- Batch mode
- 1 : N or N : 1 mode
- Optional for 10 l/h:

### Technical data

Type DOSAFlex		
Dosing capacity*	l/h / bar	0,002 to 2,000, steplessly adjustable / 3,0 0,010 to 10,000, steplessly adjustable / 2,0
Suction height	m	15
Pump-hose	mm	DOSAExtra 3 x 8 for dosing capacity 0,002 to 2,0 DOSAMed, 6 x 10 for dosing capacity 0,01 to 10,0
Connection		Union fitting, 4 x 6 mm
Power supply	VAC / Hz	110 – 240 / 50 - 60
Consumption	W	20
Fuse	A	1,6
Scope of delivery		Without connecting components
Enclosure		PP, protection IP 65
Dimensions (HxWxD)	mm	210 x 118 x 143
Shipping weight	kg	2,2

\* The listed dosing rates refer to H<sub>2</sub>O measurements at the pressure indicated!

### Scope of supply

Optional: the following installation kit is available for DOSAFlex:

- Dosing valve from PVDF
- Suction hose PVC 4x6 mm
- Foot valve from PVDF
- Delivery hose PE 4x6 mm

Order code

<b>Serie DOSAFlex</b>		
	<b>Dosing capacity</b>	
2/3	0,002 – 2,000 l/h /3 bar	
10/2	0,010 – 10,000 l/h /2 bar	
	<b>Pump hose as spare part</b>	
0	Without	
E	DOSAExtra 2 l/h	
M	DOSAMed 10 l/h	
	<b>Power supply</b>	
0	110 to 240 VAC, 50 to 60 Hz	
	<b>Installations-Kit*</b>	
0	Without	
V	FPM (Viton®)	
E	EPDM	
	<b>Plugs and leads</b>	
0	Europe (Schuko)	
1	Without	
	<b>Colour</b>	
B	Blue	

<b>DOSAFlex</b>	<b>2/3</b>	<b>0</b>	<b>0</b>	<b>V</b>	<b>1</b>	<b>B</b>	(example order)
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Your selection

<b>DOSAFlex</b>								€
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- \* consisting of:
- Dosing valve IVN 1/2", 4x6 mm, PVDF
  - Foot valve type Axial 1/2" with filter a. weight, 4x6 mm, PVDF
  - Suction hose PVC, 4x6 mm
  - Dosing hose PE, 4x6 mm

## Peristaltic pump Series VPESR

Capacity range 2 l/h



### General information

- Capacity range: 2 l/h,  
Pressure range: 0.5 bar
- Thermoplastic hose
- 230 VAC  
Self-priming
- Pumps available in different standard colors.  
Special colors available on request.

### Technical specifications

Series VPESR		
Dosing capacity*	l/h / bar	2.00 / 0.5
Stroke volume	ml/stroke	0.09
PVC hose	mm	4 x 6
Dispatch weight	kg	0.65

\*The listed dosing rates refer to H<sub>2</sub>O measurements at the pressure indicated!

### Scope of supply:

The following accessories are included in the scope of supply for the V series

- Injection valve made of PVDF
- Intake hose PVC
- Foot valve made of PVDF
- Dosing hose PVC

Order code

<b>Series VPESR</b>		
2/0	<b>Dosing capacity</b>	
	<b>l/h</b>	<b>bar</b>
	2	0
PVC	<b>Dosing and intake hose</b>	
	Dosing hose / intake hose Polyvinyl chloride (PVC)	
V E	<b>O-Ring (accessory)</b>	
	FPM (Viton®) EPDM	
0	<b>Electrical connection:</b>	
	230 VAC, +/-15%	
0 1	<b>Plugs and leads</b>	
	Europe (Schuko) without plug	
B G	<b>Color</b>	
	Blue Grey	
		*other colors available on request

<b>VPESR</b>	<b>2/0</b>	<b>PVC</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>B</b>	(example order)
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Your selection

<b>VPESR</b>							
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## Motor driven pump Series DOSAMac FM 50

Capacity range 4.5 - 47 l/h



### General performance characteristics

- Capacity range: 4.5 - 47 l/h  
Pressure range: 10 - 5 bar
- Stroke adjustment continuous from 0 - 100%
- Power supply: 230 V or 400 V, 50/60 Hz
- Dosing head and valve material options:  
- PP, PVC, PVDF or stainless steel SS 316
- Valve ball material options:  
- Pyrex® or stainless steel SS 316
- Diaphragm made of PTFE
- Max. temperatures of dosing media:  
- PP and PVC: 40°C  
- Stainless steel SS 316: 60°C
- Actuator (option):

All pumps can be fitted with a frequency converter actuate with a 4 - 20 mA signal.

### Versions

Series-FM 50	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX®	PP
13	PVC	PTFE/NBR	PYREX®	PVC
13	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX®	PVDF

### Technical specifications

Series FM-50 30		4,5/10	7,0/10	9,5/10	14,0/10
Capacity rate*	l/h	4.5	7.0	9.5	14.0
Pressure, max.	bar	10	10	10	10
Stroke volume	ml/stroke	1.83	2.01	1.93	2.01
Stroke frequency	per min	41	58	82	116
Connection	inch	1/2	1/2	1/2	1/2
Diaphragm	Ø mm	30	30	30	30
Motor power rating	kW	0.09	0.09	0.09	0.09
Dispatch weight	kg	4.5	4.5	4.5	4.5
PP, PVC, PVDF					
SS 316					
		5.5	5.5	5.5	5.5

## Technical specifications

Series FM-50 50		17/5	23/5	34/5	47/5
Capacity rate*	l/h	17	23	34	47
Pressure, max.	bar	5	5	5	5
Stroke volume	ml/stroke	6.91	6.61	6.91	6.75
Stroke frequency	per min	41	58	82	116
Connection	inch	1/2	1/2	1/2	1/2
Diaphragm	Ø mm	50	50	50	50
Motor power rating	kW	0.09	0.09	0.09	0.09
Dispatch weight PP, PVC, PVDF SS 316	kg	4.5 5.5	4.5 5.5	4.5 5.5	4.5 5.5

## Order code

Series FM-50 30					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	4.5	4.5	10		
	7.0	7.0	10		
	9.5	9.0	10		
	14.0	14.0	10		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316®	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring:</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Connection to the electric supply</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0.09 kW			
	1	Monophase 230VAC, 50 Hz, 0,09 kW			
	2	Monophase 240VAC, 50 Hz, 0,09 kW			

<b>FM-50 30</b>	<b>4,5 –</b>	<b>11</b>	<b>V</b>	<b>0</b>	(example order)
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## Your selection

<b>FM-50 30</b>					
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Order code

Series FM-50 50					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	17	17	5		
	23	23	5		
	34	34	5	with Version 12, 13 and 16 only extra charge	
	47	47	5	with Version 12, 13 and 16 only extra charge	
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	Pyrex®	SS 316	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring:</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Connection to the electric supply</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,09 kW			
	1	Monophase 230VAC, 50 Hz, 0,09 kW			
	2	Monophase 240VAC, 50 Hz, 0,09 kW			

<b>FM-50 50</b>	<b>47 –</b>	<b>23</b>	<b>V</b>	<b>1</b>	(example order)
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Your selection

<b>FM-50 50</b>					
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\*The listed dosing rates refer to H<sub>2</sub>O dosages at the pressure indicated!

\*\*Specify 60 Hz mains frequency separately when ordering!! Different pump delivery output!

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Pyrex® is a registered trademark of Corning Incorporated.



## Motor driven pump Series DOSAMac D-50

Capacity range 4.0 - 49 l/h



### General performance characteristics

- Capacity range: 4.0 - 49 l/h  
Pressure range: 14 - 10 bar
- Stroke adjustment continuous from 0 - 100%
- Electrical voltage supply: 230 V or 400 V, 50/60 Hz
- Dosing head and valve material options:  
- PP, PVC, PVDF or stainless steel SS 316
- Valve ball material options:  
- Pyrex® or stainless steel SS 316
- Diaphragm made of PTFE
- Max. temperatures of dosing media:  
- PP and PVC: 40°C  
- Stainless steel SS 316: 60°C
- Actuator (option):

All pumps can be fitted with a frequency converter actuate with a 4 - 20 mA signal.

### Versions

Series D-50	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX®	PP
13	PVC	PTFE/NBR	PYREX®	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX®	PVDF

### Technical specifications

Series D-50 30		4.0/10	7.0/10	11.5/10	14.0/10
Capacity rate*	l/h	4.0	7.0	11.5	14.0
Pressure, max.	bar	10 (Version 11/14 bar)	10 (Version 11/14 bar)	10 (Version 11/14 bar)	10 (Version 11/14 bar)
Stroke volume	ml/stroke	1.90	2.01	2.00	2.01
Stroke frequency	per min	35	58	96	116
Connection	inch	1/2	1/2	1/2	1/2
Diaphragm	Ø mm	30	30	30	30
Motor power rating	kW	0.18	0.18	0.18	0.18
Dispatch weight PP, PVC, PVDF SS 316	kg	8.0 11.0	8.0 11.0	8.0 11.0	8.0 11.0

## Technical specifications

Series D-50 50		14/10	24/10	41/10	49/10
Capacity rate*	l/h	14	24	41	49
Pressure, max.	bar	10	10	10	10
Stroke volume	ml/stroke	6.67	6.90	7.12	7.04
Stroke frequency	per min	35	58	96	116
Connection	inch	1/2	1/2	1/2	1/2
Diaphragm	Ø mm	50	50	50	50
Motor power rating	kW	0.18	0.18	0.18	0.18
Dispatch weight	kg	8.0	8.0	8.0	8.0
PP, PVC, PVDF					
SS 316					

## Order code

Series D-50 30					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	4,0	4,0	10		
	7,0	7,0	10		
	11,5	11,5	10		
	14,0	14,0	10		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring:</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Electric connection</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,18 kW			
	1	Monophase 230VAC, 50 Hz, 0,18 kW			
	2	Monophase 240VAC, 50 Hz, 0,18 kW			
	3	Tri-phase 230/440VAC, 50 Hz**, 0,18 kW, Exd IIBT4			

<b>D-50 30</b>	<b>4.0</b>	<b>11</b>	<b>V</b>	<b>0</b>	(example order)
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## Your selection

<b>D-50 30</b>					
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Order code

Series D-50 50					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	14	14	10		
	24	23	10		
	41	34	10		
	49	47	10		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring:</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Electric connection</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,18 kW			
	1	Monophase 230VAC, 50 Hz, 0,18 kW			
	2	Monophase 240VAC, 50 Hz, 0,18 kW			
	3	Tri-phase 230/440VAC, 50 Hz**, 0,18 kW, Exd IIBT4			

<b>D-50 50</b>	<b>49</b>	<b>23</b>	<b>V</b>	<b>1</b>	(example order)
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Your selection

<b>D-50 50</b>					
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\*The listed dosing rates refer to H<sub>2</sub>O dosages at the pressure indicated!

\*\*Specify 60 Hz mains frequency separately when ordering!! Different pump delivery output!

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Pyrex® is a registered trademark of Corning Incorporated.

## Motor driven pump Series DOSAMac D-100

Capacity range 45 ... 374 l/h



### General performance characteristics

- Capacity range: 45 ... 374 l/h
- Pressure range: 5 ... 1.5 bar
- Stroke adjustment continuous from 0 ... 100%
- Power supply: 230 V or 400 V, 50/60 Hz
- Dosing head and valve material options:
  - PP, PVC, PVDF or stainless steel SS 316
- Valve ball material options:
  - Pyrex® or stainless steel SS 316
- Diaphragm made of PTFE
- Max. temperatures of dosing media:
  - PP and PVC: 40°C
  - Stainless steel SS 316: 60°C
- Actuator (option):

All pumps can be fitted with a frequency converter actuate with a 4 ... 20 mA signal.

### Versions

Series D-100	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX®	PP
13	PVC	PTFE/NBR	PYREX®	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX®	PVDF

### Technical specifications

Series D-100-70		45/5	75/5	124/5	150/5
Capacity range*	l/h	45	75	124	150
Pressure, max.	bar	5	5	5	5
Stroke volume	ml/stroke	21.43	21.55	21.55	21.55
Stroke frequency	per min	35	58	96	116
Connection	inch	1/2	1/2	1/2	1/2
Diaphragm	Ø mm	70	70	70	70
Motor power rating	kW	0.18	0.18	0.18	0.18
Dispatch weight	kg	8.0	8.0	8.0	8.0
PP, PVC, PVDF					
SS 316					

Technical specifications

<b>Series D-100-90</b>		<b>69/3</b>	<b>115/3</b>	<b>190/3</b>	<b>230/3</b>
Capacity range*	l/h	69	115	190	230
Pressure, max.	bar	3	3	3	3
Stroke volume	ml/stroke	32.86	33.05	32.99	33.05
Stroke frequency	per min	35	58	96	116
Connection	inch	3/4	3/4	3/4	3/4
Diaphragm	Ø mm	90	90	90	90
Motor power rating	kW	0.18	0.18	0.18	0.18
Dispatch weight PP, PVC, PVDF	kg	8.0	8.0	8.0	8.0
SS 316		12.0	12.0	12.0	12.0

Technical specifications

<b>Series D-100-105</b>		<b>94/1.5</b>	<b>156/1.5</b>	<b>258/1.5</b>	<b>298/1.5</b>
Capacity range*	l/h	94	156	258	298
Pressure, max.	bar	1.5	1.5	1.5	1.5
Stroke volume	ml/stroke	44.76	44.83	44.79	42.82
Stroke frequency	per min	35	58	96	116
Connection	inch	3/4	3/4	3/4	3/4
Diaphragm	Ø mm	105	105	105	105
Motor power rating	kW	0.18	0.18	0.18	0.18
Dispatch weight PP, PVC, PVDF	kg	8.5	8.5	8.5	8.5
SS 316		12.0	12.0	12.0	12.0

Technical specifications

<b>Series D-100-120</b>		<b>106/1.5</b>	<b>177/1.5</b>	<b>292/1.5</b>	<b>374/1.5</b>
Capacity range*	l/h	106	177	292	374
Pressure, max.	bar	1.5	1.5	1.5	1.5
Stroke volume	ml/stroke	50.48	50.86	50.69	53.74
Stroke frequency	per min	35	58	96	116
Connection	inch	1	1	1	1
Diaphragm	Ø mm	120	120	120	120
Motor power rating	kW	0.18	0.18	0.18	0.18
Dispatch weight PP, PVC, PVDF	kg	10.0	10.0	10.0	10.0
SS 316		14.0	14.0	14.0	14.0

Order code

Series D-100-70					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	45	45	5		
	75	75	5		
	124	124	5		
	150	150	5		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring</b>			
		V	FPM (Viton®)		
		E	EPDM		
			<b>Connection to the electric supply</b>		
		0	Tri-phase 400-440VAC, 50/60 Hz**, 0,18 kW		
		1	Monophase 230VAC, 50 Hz, 0,18 kW		
		2	Monophase 240VAC, 50 Hz, 0,18 kW		
		3	Tri-phase 230/440VAC, 50 Hz**, 0,18 kW, Exd IIBT4		

<b>D-100-70</b>	<b>45</b>	<b>12</b>	<b>V</b>	<b>0</b>	(example order)
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Your selection

<b>D-100-70</b>					
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Order code

Series D-100-90					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	69	69	3		
	115	115	3		
	190	190	3		
	230	230	3		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Connection to the electric supply</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,18 kW			
	1	Monophase 230VAC, 50 Hz, 0,18 kW			
	2	Monophase 240VAC, 50 Hz, 0,18 kW			
	3	Tri-phase 230/440VAC, 50 Hz**, 0,18 kW, Exd IIBT4			

<b>D-100-90</b>	<b>69</b>	<b>11</b>	<b>V</b>	<b>1</b>	(example order)
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Your selection

<b>D-100-90</b>					
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Order code

Series D-100-105					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	94	94	1.5		
	156	156	1.5		
	258	258	1.5		
	298	298	1.5		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring</b>			
		V	FPM (Viton®)		
		E	EPDM		
		<b>Connection to the electric supply</b>			
		0	Tri-phase 400-440VAC, 50/60 Hz**, 0,18 kW		
		1	Monophase 230VAC, 50 Hz, 0,18 kW		
		2	Monophase 240VAC, 50 Hz, 0,18 kW		
		3	Tri-phase 230/440VAC, 50 Hz**, 0,18 kW, Exd IIBT4		

<b>D-100-105</b>	<b>94</b>	<b>23</b>	<b>V</b>	<b>1</b>	(example order)
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Your selection

<b>D-100-105</b>					
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Order code

Series D-100 120					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	106	106	1.5		
	177	177	1.5		
	292	292	1.5		
	374	374	1.5		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-ring</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Connection to the electric supply</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,18 kW			
	1	Monophase 230VAC, 50 Hz, 0,18 kW			
	2	Monophase 240VAC, 50 Hz, 0,18 kW			
	3	Triphase 230/440VAC, 50 Hz**, 0,18 kW, Exd IIBT4			

<b>D-100-120</b>	<b>106</b>	<b>23</b>	<b>V</b>	<b>1</b>	(example order)
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Your selection

<b>D-100-120</b>					
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\*The listed dosing rates refer to H<sub>2</sub>O dosages at the pressure indicated!

\*\*Specify 60 Hz mains frequency separately when ordering! Different pump delivery output!

Viton® is a registered trademark of DuPont Dow Elastomers

Pyrex® is a registered trademark of Corning Incorporated.

## Motor driven pump Series DOSAMac D-101

Capacity range 90 ... 408 l/h



### General performance characteristics

- Delivery range: 90 ... 408 l/h
- Pressure range: 8 ... 3 bar
- Stroke adjustment continuous from 0 ... 100%
- Power supply: 230 V or 400 V, 50/60 Hz
- Dosing head and valve material options:
  - PP, PVC, PVDF or stainless steel SS 316
- Valve ball material options:
  - Pyrex® or stainless steel SS 316
- Diaphragm made of PTFE
- Max. temperatures of dosing media:
  - PP and PVC: 40°C
  - Stainless steel SS 316: 60°C
- Actuator (option):

All pumps can be fitted with a frequency converter actuate with a 4 - 20 mA signal.

### Versions

Series D-101	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX®	PP
13	PVC	PTFE/NBR	PYREX®	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX®	PVDF

### Technical specifications

Series D-101-70		90/8	123/8	154/8
Capacity range*	l/h	90	123	154
Pressure, max.	bar	8	8	8
Stroke volume	ml/stroke	21.43	21.35	21.39
Stroke frequency	per min	70	96	120
Connection	inch	1/2	1/2	1/2
Diaphragm	Ø mm	70	70	70
Motor power rating	kW	0.25	0.25	0.25
Dispatch weight	kg	8.0	8.0	8.0
PP, PVC, PVDF		11.5	11.5	11.5
SS 316				

Technical specifications

<b>Series D-101-90</b>		<b>148/5</b>	<b>202/5</b>	<b>255/5</b>
Capacity range*	l/h	148	202	255
Pressure, max.	bar	5	5	5
Stroke volume	ml/stroke	35.24	35.07	34.42
Stroke frequency	per min	70	96	120
Connection	inch	3/4	3/4	3/4
Diaphragm	Ø mm	90	90	90
Motor power rating	kW	0.25	0.25	0.25
Dispatch weight PP, PVC, PVDF SS 316	kg	10.0 13.5	10.0 13.5	10.0 13.5

Technical specifications

<b>Series D-101-105</b>		<b>201/3</b>	<b>275/3</b>	<b>331/3</b>
Capacity range*	l/h	201	275	331
Pressure, max.	bar	3	3	3
Stroke volume	ml/stroke	47.86	47.74	45.97
Stroke frequency	per min	70	96	120
Connection	inch	3/4	3/4	3/4
Diaphragm	Ø mm	105	105	105
Motor	kW	0.25	0.25	0.25
Dispatch weight PP, PVC, PVDF SS 316	kg	11.0 14.5	11.0 14.5	11.0 14.5

Technical specifications

<b>Series D-101-120</b>		<b>225/3</b>	<b>308/3</b>	<b>408/3</b>
Capacity range*	l/h	225	308	408
Pressure, max.	bar	3	3	3
Stroke volume	ml/stroke	53.57	53.47	56.67
Stroke frequency	per min	70	96	120
Connection	inch	1	1	1
Diaphragm	Ø mm	120	120	120
Motor power rating	kW	0.25	0.25	0.25
Dispatch weight PP, PVC, PVDF SS 316	kg	12.0 18.0	12.0 18.0	12.0 18.0

Order Code

Series D-101-70			
		<b>Dosing capacity</b>	
		<b>l/h</b>	<b>bar</b>
90		90	8
123		123	8
154		154	8
		<b>Pump Head</b>	<b>Valve balls</b>
	11	SS 316	SS 316
	12	PP	Pyrex®
	13	PVC	Pyrex®
	16	PVC	SS 316
	23	PVDF	Pyrex®
		<b>Valve seating</b>	
		SS 316	
		PP	
		PVC	
		PVC	
		PVDF	
		<b>O-Ring</b>	
	V	FPM (Viton®)	
	E	EPDM	
		<b>Electric connection</b>	
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,25 kW	
	1	Monophase 230VAC, 50 Hz, 0,25 kW	
	2	Monophase 240VAC, 50 Hz, 0,25 kW	
	3	Tri-phase 230/400VAC, 50 Hz, 0,25 kW, Exd IIBT4	
	4	Monophase 230VAC, 50 Hz, 0,37 kW	
	5	Monophase 240VAC, 50 Hz, 0,37 kW	
	6	Tri-phase 230/400VAC, 50 Hz, 0,37 kW, Exd IIBT4	

<b>D-101-70</b>	<b>90</b>	<b>12</b>	<b>V</b>	<b>0</b>	(example order)
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Your selection

<b>D-101-70</b>					
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Order Code

Series D-101-70					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	90	90	8		
	123	123	8		
	154	154	8		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-Ring</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Electric connection</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,25 kW			
	1	Monophase 230VAC, 50 Hz, 0,25 kW			
	2	Monophase 240VAC, 50 Hz, 0,25 kW			
	3	Tri-phase 230/400VAC, 50 Hz, 0,25 kW, Exd IIBT4			
	4	Monophase 230VAC, 50 Hz, 0,37 kW			
	5	Monophase 240VAC, 50 Hz, 0,37 kW			
	6	Tri-phase 230/400VAC, 50 Hz, 0,37 kW, Exd IIBT4			

<b>D-101-70</b>	<b>90</b>	<b>12</b>	<b>V</b>	<b>0</b>	(Example order)
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Your selection

<b>D-101-70</b>					
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Order Code

Series D-101-70					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	90	90	8		
	123	123	8		
	154	154	8		
		<b>Pump Head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-Ring</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Electric Connection</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,25 kW			
	1	Monophase 230VAC, 50 Hz, 0,25 kW			
	2	Monophase 240VAC, 50 Hz, 0,25 kW			
	3	Tri-phase 230/400VAC, 50 Hz, 0,25 kW, Exd IIBT4			
	4	Monophase 230VAC, 50 Hz, 0,37 kW			
	5	Monophase 240VAC, 50 Hz, 0,37 kW			
	6	Tri-phase 230/400VAC, 50 Hz, 0,37 kW, Exd IIBT4			

<b>D-101-70</b>	<b>90</b>	<b>12</b>	<b>V</b>	<b>0</b>	(example order)
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Your selection

<b>D-101-70</b>					
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Bestellcode

Series D-101-120					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	225	225	3		
	308	308	3		
	408	408	3		
		<b>Pump head</b>	<b>Valve balls</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-Ring</b>			
	V	FPM (Viton®)			
	E	EPDM			
		<b>Electric connection</b>			
	0	Tri-phase 400-440VAC, 50/60 Hz**, 0,25 kW			
	1	Monophase 230VAC, 50 Hz, 0,25 kW			
	2	Monophase 240VAC, 50 Hz, 0,25 kW			
	3	Tri-phase 230/400VAC, 50 Hz, 0,25 kW, Exd IIBT4			
	4	Monophase 230VAC, 50 Hz, 0,37 kW			
	5	Monophase 240VAC, 50 Hz, 0,37 kW			
	6	Tri-phase 230/400VAC, 50 Hz, 0,37 kW, Exd IIBT4			

<b>D-101-120</b>	<b>225</b>	<b>23</b>	<b>V</b>	<b>1</b>	(Example order)
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Your selection

<b>D-101-120</b>					
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\*The listed dosing rates refer to H<sub>2</sub>O dosages at the pressure indicated!

\*\*Specify 60 Hz mains frequency separately when ordering!! Different pump delivery output!

Viton® is a registered trademark of DuPont Dow Elastomers

Pyrex® is a registered trademark of Corning Incorporated.

## Motor driven pump Series DOSAMac D-121

Capacity range 322 ... 574 l/h



### General performance characteristics

- Capacity range : 323 ... 574 l/h
- Pressure range: 3 bar
- Stroke adjustment continuous from 0 ... 100%
- Power supply: 230 V or 400 V, 50/60 Hz
- Dosing head and valve material options:  
- PP, PVC, PVDF or stainless steel SS 316
- Valve ball material options:  
- Pyrex® or stainless steel SS 316
- Diaphragm made of PTFE
- Max. temperatures of dosing media:  
- PP and PVC: 40°C  
- Stainless steel SS 316: 60°C
- Actuator (option):  
All pumps can be fitted with a frequency converter  
actuate with a 4 ... 20 mA signal.

### Versions

Series D-121	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX®	PP
13	PVC	PTFE/NBR	PYREX®	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX®	PVDF

### Technical specifications

Series D-121-120		322/8	438/3	574/3
Capacity rate*	l/h	322	438	574
Pressure, max.	bar	3	3	3
Stroke volume	ml/stroke	76.67	76.05	79.72
Stroke frequency	per min	70	96	120
Connection	inch	1	1	1
Diaphragm	Ø mm	120	120	120
Motor power rating	kW	0.37	0.37	0.37
Dispatch weight	kg	12.0	12.0	12.0
PP, PVC, PVDF				
SS 316				



Order Code

Serie D-121-120					
		<b>Dosing capacity</b>			
		<b>l/h</b>	<b>bar</b>		
	322	322	3		
	438	438	3		
	574	574	3		
		<b>Pump head</b>	<b>Valve size</b>	<b>Valve seating</b>	
	11	SS 316	SS 316	SS 316	
	12	PP	Pyrex®	PP	
	13	PVC	Pyrex®	PVC	
	16	PVC	SS 316	PVC	
	23	PVDF	Pyrex®	PVDF	
		<b>O-Ring</b>			
	V	FPM (Viton®)			
	E	EPDM			
			<b>Electric connection</b>		
		0	Tri-phase 400-440VAC, 50/60 Hz**, 0,25 kW		
		1	Monophase 230VAC, 50 Hz, 0,25 kW		
		2	Monophase 240VAC, 50 Hz, 0,25 kW		
		3	Tri-phase 230/400VAC, 50 Hz, 0,25 kW, Exd IIBT4		
		4	Monophase 230VAC, 50 Hz, 0,37 kW		
		5	Monophase 240VAC, 50 Hz, 0,37 kW		
		6	Tri-phase 230/400VAC, 50 Hz, 0,37 kW, Exd IIBT4		

<b>D-121-120</b>	<b>322</b>	<b>12</b>	<b>V</b>	<b>1</b>	(Example order)
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Your selection

<b>D-121-120</b>					
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\*The listed dosing rates refer to H<sub>2</sub>O dosages at the pressure indicated!

\*\*Specify 60 Hz mains frequency separately when ordering!! Different pump delivery output!

Viton® is a registered trademark of DuPont Dow Elastomers

Pyrex® is a registered trademark of Corning Incorporated.

## Motor driven pump Series PRIUS

Capacity range 21 ... 530 l/h



### General information:

- Capacity range: 21 ... 530 l/h
- Pressure range: 10 ... 5 bar
- Stroke adjustment constant from 0 to 100%
- Power supply:
  - 0.18Kw - 220-240/380-420 - 50 Hz
  - 0.37Kw - 220-240/380-420 - 50 Hz
  - 0.18Kw - 440-480 - 60 Hz
  - 0.37Kw - 440-480 - 60 Hz
- Ambient temperature: 0 - 40 ° C
- Dosing head material options:
  - PVDF: 0 - 65 ° C
  - PVC: 0 - 40 ° C
  - AISI 316L: 0 - 40 ° C
- Manual ventilation valve
- Housing made of aluminium (epoxy-coating)
- Diaphragm made of PTFE
- Suction height max.: 3 m



Technical specifications

<b>Series PRIUS 50 Hz, 94 Strokes</b>		<b>24/10</b>	<b>54/7</b>	<b>78/7</b>
Dosing capacity*	l/h	24	54	78
Pressure, max.	bar	10	7	7
Stroke volume	ml/Stroke	4.26	9.57	13.83
Stroke frequency	1/min	94		
Pump head	PVDF	NM	TM	TM
	PVC	-	-	-
	AISI 316L	NM	TM	TM
Motor	kW	0.18	0.37	0.37
Electric connection		220-240/380-420 V - 50 Hz		
Gear reduction		15 : 1		
Dispatch weight approx.	kg	17.0	18.0	18.0

Technical specifications

<b>Series PRIUS 50 Hz, 94 Hübe</b>		<b>125/5</b>	<b>270/5</b>
Dosing capacity*	l/h	125	270
Pressure, max.	bar	5	5
Stroke volume	ml/Stroke	22.16	47.87
Stroke frequency	1/min	94	
Pump head	PVDF	TM	-
	PVC	-	UM
	AISI 316L	TM	UM
Motor	kW	0.37	0.37
Electric connection		220-240/380-420 V - 50 Hz	
Gear reduction		15 : 1	
Dispatch weight approx.	kg	20.0	21.0

Technical specifications

<b>Series PRIUS 50 Hz, 175 Strokes</b>		<b>60/10</b>	<b>110/7</b>	<b>160/7</b>
Dosing capacity*	l/h	60	110	160
Pressure, max.	bar	10	7	7
Stroke volume	ml/Stroke	5.71	10.48	15.24
Stroke frequency	l/min	175		
Pump head	PVDF	NM	TM	TM
	PVC	-	-	-
	AISI 316L	NM	TM	TM
Motor	kW	0.18	0.37	0.37
Electric connection		220-240/380-420 V - 50 Hz		
Gear reduction		8 : 1		
Dispatch weight approx.	kg	17.0	18.0	18.0

Technical specifications

<b>Series PRIUS 50 Hz, 175 Strokes</b>		<b>240/5</b>	<b>530/5</b>
Dosing capacity*	l/h	240	530
Pressure max.	bar	5	5
Stroke volume	ml/Stroke	22.86	50.48
Stroke frequency	l/min	175	
Pump head	PVDF	TM	-
	PVC	-	UM
	AISI 316L	TM	UM
Motor	kW	0.37	0.37
Electric connection		220-240/380-420 V - 50 Hz	
Gear reduction		8 : 1	
Dispatch weight approx.	kg	20.0	21.0

Technical specifications

<b>Series PRIUS 60 Hz, 87 Strokes</b>		<b>21/10</b>	<b>46/7</b>	<b>65/7</b>
Dosing capacity*	l/h	21	46	65
Pressure, max.	bar	10	7	7
Stroke volume	ml/Stroke	4.02	8.81	12.45
Stroke frequency	1/min	87		
Pump head	PVDF	NM	TM	TM
	PVC	-	-	-
	AISI 316L	NM	TM	TM
Motor	kW	0.18	0.37	0.37
Electric connection		440-480 - 60 Hz		
Gear reduction		20 : 1		
Dispatch weight approx.	kg	17.0	18.0	18.0

Technical specifications

<b>Series PRIUS 60 Hz, 87 Strokes</b>		<b>115/5</b>	<b>230/5</b>
Dosing capacity*	l/h	115	230
Pressure, max.	bar	5	5
Stroke volume	ml/Stroke	22.03	44.06
Stroke frequency	1/min	87	
Pump head	PVDF	TM	-
	PVC	-	UM
	AISI 316L	TM	UM
Motor	kW	0.37	0.37
Electric connection		440-480 - 60 Hz	
Gear reduction		20 : 1	
Dispatch weight approx.	kg	20.0	21.0

Technical specifications

<b>Series PRIUS 60 Hz, 175 Strokes</b>		<b>57/10</b>	<b>97/7</b>	<b>140/7</b>
Dosing capacity*	l/h	57	97	140
Pressure, max.	bar	10	7	7
Stroke volume	ml/Stroke	5.43	9.24	13.33
Stroke frequency	l/min	175		
Pump head	PVDF	NM	TM	TM
	PVC	-	-	-
	AISI 316L	NM	TM	TM
Motor	kW	0.18	0.37	0.37
Electric connection		440-480 - 60 Hz		
Gear reduction		10 : 1		
Dispatch weight approx.	kg	17.0	18.0	18.0

Technical specifications

<b>Series PRIUS 60 Hz, 175 Strokes</b>		<b>230/5</b>	<b>520/5</b>
Dosing capacity*	l/h	230	520
Pressure, max.	bar	5	5
Stroke volume	ml/Stroke	21.90	49.52
Stroke frequency	l/min	175	
Pump head	PVDF	TM	-
	PVC	-	UM
	AISI 316L	TM	-
Motor	kW	0.37	0.37
Electric connection		440-480 - 60 Hz	
Gear reduction		10 : 1	
Dispatch weight approx.	kg	20.0	21.0

Order Code

Series PRIUS 50 Hz, 94 Strokes			
	Dosing capacity		
	l/h	bar	Pump head
24 PVDF	24	10	PVDF
54 PVDF	54	7	PVDF
78 PVDF	78	7	PVDF
125 PVDF	125	5	PVDF
24 AISI 316L	24	10	AISI 316L
54 AISI 316L	54	7	AISI 316L
78 AISI 316L	78	7	AISI 316L
125 AISI 316L	125	5	AISI 316L
270 AISI 316L	270	5	AISI 316L
270 PVC	270	5	PVC
		<b>O-Ring</b>	
	V	FPM (Viton®)	
	E	EPDM	

<b>PRIUS 50 Hz, 94</b>	<b>125 PVDF</b>	<b>V</b>	(Example order)
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Your selection

<b>PRIUS 50 Hz, 94</b>			
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Order Code

Series PRIUS 50 Hz, 175 Strokes			
	Dosing capacity		
	l/h	bar	Pump head
60 PVDF	60	10	PVDF
110 PVDF	110	7	PVDF
160PVDF	160	7	PVDF
240 PVDF	240	5	PVDF
530 PVDF	530	5	PVDF
60 AISI 316L	60	10	AISI 316L
110 AISI 316L	110	7	AISI 316L
160 AISI 316L	160	7	AISI 316L
240 AISI 316L	240	5	AISI 316L
530 AISI 316L	530	5	AISI 316L
530 PVC	530	5	PVC
	O-Ring		
	V	FPM (Viton®)	
	E	EPDM	

<b>PRIUS 50 Hz, 175</b>	<b>240 PVDF</b>	<b>V</b>	(Example order)
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Your selection

<b>PRIUS 50 Hz, 175</b>			
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Order Code

Series PRIUS 60 Hz, 87 Strokes			
	Dosing capacity		
	l/h	bar	Pump head
21 PVDF	21	10	PVDF
46 PVDF	46	7	PVDF
65 PVDF	65	7	PVDF
115 PVDF	115	5	PVDF
21 AISI 316L	21	10	AISI 316L
46 AISI 316L	46	7	AISI 316L
65 AISI 316L	65	7	AISI 316L
115 AISI 316L	115	5	AISI 316L
230 AISI 316L	230	5	AISI 316L
230 PVC	230	5	PVC
		<b>O-Ring</b>	
	V	FPM (Viton®)	
	E	EPDM	

<b>PRIUS 60 Hz, 87</b>	<b>115 PVDF</b>	<b>V</b>	(Example order)
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Your selection

<b>PRIUS 60 Hz, 87</b>			
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Order Code

Series PRIUS 60 Hz, 175 Strokes				
	Dosing capacity			
	l/h	bar	Pump head	
57 PVDF	57	10	PVDF	
97 PVDF	97	7	PVDF	
140 PVDF	140	7	PVDF	
230 PVDF	230	5	PVDF	
57 AISI 316L	57	10	AISI 316L	
97 AISI 316L	97	7	AISI 316L	
140 AISI 316L	140	7	AISI 316L	
230 AISI 316L	230	5	AISI 316L	
520 AISI 316L	520	5	AISI 316L	
520 PVC	520	5	PVC	
			<b>O-Ring</b>	
			V FPM (Viton®)	
			E EPDM	

<b>PRIUS 60 Hz, 175</b>	<b>230 PVDF</b>	<b>V</b>	(Example order)
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Your selection

<b>PRIUS 60 Hz, 175</b>			
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## Proportional doser Series D 3



### Technical specifications

Dosing range:	0.03 – 25 %
Water flow rate**:	10 l/h – 3 m <sup>3</sup> /h 0.16 l/min – 50.00 l/h min
Operating pressure:	0.3 – 6 bar*
Concentrate feed:	0.003 – 300 l/h*
* depending on model	
** Please contact us for other fluid drive media	

### Operating principle

When connected to the water mains, the doser only uses the water pressure as the driving force. This is how it draws in the concentrate, doses it at the required dose rate and mixes it with the drive water to the required percentage. The process solution thus prepared flows through the doser.

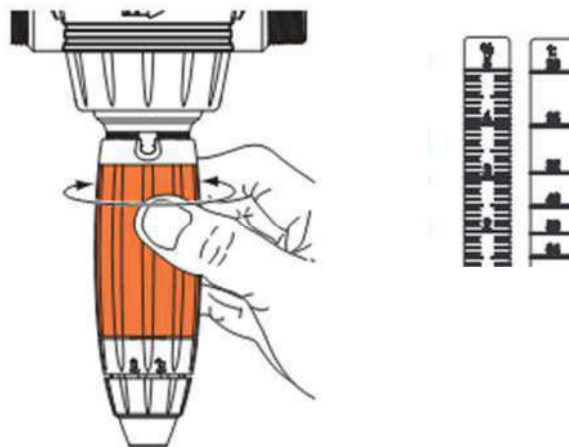
The amount of the product added is always proportional to the water throughput, even when there are flow or pressure fluctuations.

### Proportional dosing with outside setting

Adjusting the dosage:

The tips of the notch of the adjustment collar point to the corresponding value. The amount of concentrate fed in is proportional to the volume of water flowing through the doser:

e.g. adjustment to 1% = 1:100  
= 1 volume of concentrate added to 100 volumes of water.



3 m<sup>3</sup>/h product series (outside setting)

Reference	Dosage	Pressure
D 3 RE 3000	0.03 – 03 %	0.3 - 6 bar
D 3 RE 2	0.2 – 2 %	0.3 - 6 bar
D 3 RE 5	0.5 – 5%	0.3 - 6 bar
D 3 RE 10	1 – 10 %	0.3 - 6 bar
D 3 RE 25*	5 – 10 %	0.3 - 6 bar

\*D 3 RE 25 max. flow rate 2 m<sup>3</sup>/h

Other dosers are available for the treatment of water at flow rates up to 0.7 m<sup>3</sup>/ h; 1.5 m<sup>3</sup>/ h; 2.5 m<sup>3</sup>/ h; 4.5 m<sup>3</sup>/h; 8 m<sup>3</sup>/h; 20 m<sup>3</sup>/h; 30 m<sup>3</sup>/h; 60 m<sup>3</sup>/h etc.

Please contact us concerning accessories and special systems for special models.

## Technical specifications

<b>General information</b>	
Maximum temperature of drive water	40°C
Minimum temperature of drive water	5°C
Dosage	e.g. adjusted to 1% = 1 : 100 = 1 vol. full concentrate + 100 vols. water
Average dosage tolerance*	± 10 %
Repeatability	± 3% (standard API675)
Pressure loss	0.2 - 2.3 bar
<b>Other built-in features</b>	
Built-in motor	no
Inlet / outlet connections	3/4" M : BSP – NPT – Ø 20 x 27 mm
Built-in bypass	Optional
Built-in ventilation	yes
Built-in anti-siphon system	no
<b>Drive</b>	
Motor	Hydraulic differential piston motor
Stroke	0.53 l (1 cycle = 2 clack sounds)
Mixing chamber	Built in
<b>Dosage</b>	
Feed	Internal feed in discharge mixing chamber
Dosing piston	single-acting 10%, double acting from 10% upwards
Intake valve	Spring-loaded cone valve with seal
<b>Intake</b>	
Self-priming	yes
Maximum viscosity of concentrate	200 – 800 cPs at 20°C from 400 cPs, V-kit recommended for dosage > 2%
Maximum intake height / length of intake hose	4 m
Intake filter	yes – with ballast

- Depending on model and operating conditions

### Industries

Environment - Hygiene - Water treatment - Food industry – Automatic car washing – Metal processing – Printing industry – Horticulture etc.

### Key applications

Disinfection – Cleaning – Fertilizing – Pest control – Lubrication – PH/TH regulation – Sanitation – Flocculation – automatic vehicle washing etc.

### Installation

**Regulations:** When connecting the doser to the drinking water mains, follow the applicable standards and regulations.

### To maximise the service life of the doser, we recommend the following:

- Install a filter (60 micron [300 mesh]) upstream of the doser if the water quality requires one.
- Change the dosing seals at least once every year.
- Rinse with clear water as often as possible.
- Adjust the doser with the pressure shut off.
- Install the necessary protective devices (flow limiters/pressure limiters and water hammer arresters etc) in the pipeline system for protection against excess flow, excess pressure and pressure spikes.
- Install dosers in a total by-pass system.

Please contact us for all other installation advice.

### Dimensions D3 RE 2 – D3RE5 /10

- Package dimensions: 55.4 x 16.8 x 14.4 cm
- Package weight: 2.0 kg

### Standard material

Housing:	Special polypropylene, HT
Motorized piston:	polypropylene, polyamide, Vf or HAT Peek, PVDF
Dosing part:	polypropylene, polyethylene, Hastelloy (valve spring)
Intake hose:	PVC or polyethylene

### Available options

( ■ : Options ● : standard ★ : not available for this model or unnecessary)

### Optimised compatibility

- AF: recommended seals for alkaline concentrate
- VF: recommended seals for acid, oil or odour neutralization, Vegetation protection
- K: for high concentration acid (<15%)
- PVDF: Housing
- IE: with external injection
- V: kit for viscous concentrate
- Intake hose: Special material and intake head available

### Optimised installation

- T: For installing a DOSER in a hot water system (60°C)
- BP: Built-in bypass
- ★ Other connections
- Fixing tape
- Please contact us if you have any further questions

These options mean that the doser can be perfectly adapted to any requirements. The options which are needed can be determined with the support of our technical department.

Order code

Type in PP	Dosing rate %	Ratio	Water flow rate (litre/h) min/max pressure	
D3RE3000	0.03 – 0.3	1:3333 - 330	10 – 3000	0.3 - 6bar
D3RE2	0.2 - 2	1:500 – 1:50	10 – 3000	0.3 - 6bar
D3RE5	0.5 - 5	1:200 – 1:20	10 – 3000	0.3 - 6bar
D3RE10	1 – 10	1:100 – 1:10	10 – 3000	0.3 - 6bar
D3RE25IE	5 - 25	1:20 – 1:4	10 – 2000	0.5 - 4bar

Type in PVDF	Dosing rate %	Ratio	Water flow rate (Litre/h) min/max pressure	
D3RE3000 PVDF	0.03 – 0.3	1:3333 – 330	10 – 3000	0.3 - 6bar
D3RE2 PVDF	0.2 – 2	1:500 – 1:50	10 – 3000	0.3 - 6bar
D3RE5 PVDF	0.5 – 5	1:200 – 1:20	10 – 3000	0.3 - 6bar
D3RE10 PVDF	1 – 10	1:100 – 1:10	10 – 3000	0.3 - 6bar
D3RE25IE PVDF	5 - 25	1:20 – 1:4	10 – 2000	0.5 - 4bar

Dosatron proportional dosers are available with 2 types of seal:  
VF seals for acid, AF seals for alkaline products.

PVDF is available as a housing material for aggressive media

Order code

Options
Product intake hose as viscous kit version
An optional by-pass switch is available for series D25 and D3 The intake system can be switched on/off

Accessories
1/2" pressure reducer male thread with pressure gauge
3/4" water filter with Pexitopf washable filter cartridge 80 micron
1/2" backflow preventer BA Micro DVGW tested (max.1000l/h)
1/2" backflow preventer BA compact
1/2" stainless steel water-hammer-arrester

Dosatron® is a registered trademark of Dosatron

## Proportional doser Series D 25



### Technical specifications

Dosing range:	0.07 – 10 %
Water flow rate**:	10 l/h – 2.5 m <sup>3</sup> /h 0.16 l/min – 41.66 l/h min
Operating pressure:	0.3 – 6 bar*
Concentrate feed:	0.007 – 200 l/h*
* depending on model	
** Please contact us for other fluid drive media	

### Operating principle

When connected to the water mains, the doser only uses the water pressure as the driving force. This is how it draws in the concentrate, doses it at the required dose rate and mixes it with the drive water to the required percentage. The process solution thus prepared flows through the doser.

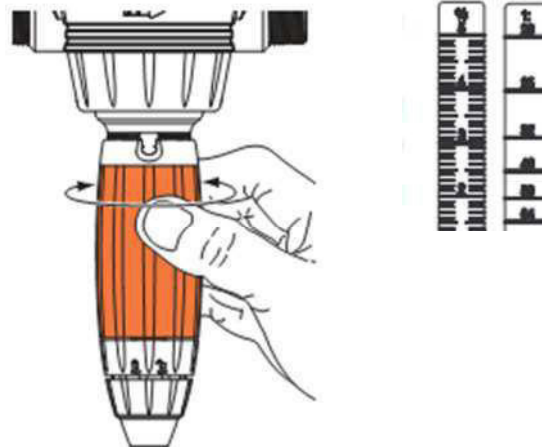
The amount of the product added is always proportional to the water throughput, even when there are flow or pressure fluctuations.

### Proportional dosing with outside setting

The injection rate is determined by turning the regulator screw, where the upper edge of the screw must match the required value on the dosing scale. The injected concentrate is proportional to the volume of water flowing through the doser:

e.g. adjustment to 1% = 1:100

= 1 volume of concentrate added to 100 volumes of water.



### 2.5 m<sup>3</sup>/h product series (fixed)

Reference	Dosage	Pressure
D 25 F	0.8 %	0.3 - 6 bar
D 25 F 1	1 %	0.3 - 6 bar
D 25 F 02	0.2 %	0.3 - 6 bar
D 25 F 2	2 %	0.3 - 6 bar

## 2.5 m<sup>3</sup>/h product series (outside setting)

Reference	Dosage	Pressure
D 25 RE 1500	0.07 – 0.2 %	0.3 - 6 bar
D 25 RE 09	0.1 – 0.9 %	0.3 - 6 bar
D 25 RE 2 / IE	0.2 – 2%	0.3 - 6 bar
D 25 RE 5 / IE	1 – 5 %	0.3 - 6 bar
D 25 RE 10 / IE*	3 – 10 %	0.3 - 6 bar

\*D 25 RE 10 / IE max. flow rate 2 m<sup>3</sup>/h

Other dosers are available for the treatment of water at flow rates up to 0.7 m<sup>3</sup>/ h; 1.5 m<sup>3</sup>/ h; 2.5 m<sup>3</sup>/ h; 4.5 m<sup>3</sup>/h; 8 m<sup>3</sup>/h; 20 m<sup>3</sup>/h; 30 m<sup>3</sup>/h; 60 m<sup>3</sup>/h etc.

Please contact us concerning accessories and special systems for special models.

### Technical specifications

General information	
Maximum temperature of drive water	40°C
Minimum temperature of drive water	5°C
Dosage	e.g. adjusted to 1% = 1 : 100 = 1 vol. full concentrate + 100 vols. water
Average dosage tolerance*	± 5%
Repeatability	± 3% (standard API675)
Pressure loss	0.3-.9 bar depending on model and operating conditions
<b>Other built-in features</b>	
Built-in motor	no
Inlet / outlet connections	3/4" M : BSP – NPT – Ø 20 x 27 mm
Built-in bypass	Optional
Built-in ventilation	yes
Built-in anti-siphon system	no
<b>Drive</b>	
Motor	Hydraulic differential piston motor
Stroke	0.53 l (1 cycle = 2 clack sounds)
Mixing chamber	Built in
<b>Dosage</b>	
Feed	Internal feed in discharge mixing chamber
Dosing piston	Single-acting 10%, double acting from 10% upwards
Intake valve	Spring-loaded cone valve with seal
<b>Intake</b>	
Self-priming	yes
Maximum viscosity of concentrate	200 – 800 cPs at 20°C from 400 cPs, V-kit recommended for dosage > 2%
Maximum intake height / length of intake hose	4 m
Intake filter	yes – with ballast

- Depending on model and operating operations



## Industries

Environment – Hygiene – Water treatment – Food industry – Automatic vehicle washing – Metal processing – Printing industry – Horticulture etc.

## Key applications

Disinfection - Cleaning - Fertilizing - Pest control - Lubrication - PH/TH regulation - Sanitation – Flocculation – automatic vehicle washing etc.

## Installation

**Regulations:** When connecting the doser to the drinking water mains, follow the applicable standards and regulations.

### To maximise the service life of the doser, we recommend the following:

- install a filter (60 micron [300 mesh]) upstream of the doser if the water quality requires one.
- Change the dosing seals at least once every year.
- Rinse with clear water as often as possible.
- Adjust the doser with the pressure shut off.
- Install the necessary protective devices (flow limiters/pressure limiters and water hammer arresters etc) in the pipeline system for protection against excess flow, excess pressure and pressure spikes.
- Install dosers in a total by-pass system.

Please contact us for all other installation advice.

## Dimensions:

- Package dimensions: 52 x 16.8 x 17.5 cm
- Package weight: 1.7 kg

## Standard material

Housing: polyacetal (polyformaldehyde), HAT  
Motorised piston: polypropylene, nylon, stainless steel, Vf or HAT and polyacetal  
Dosing part: polypropylene, polyethylene, Hastelloy (valve spring)  
Intake hose: PVC

## Available options

( ■ : Options ● : standard ★ : not available for this model or unnecessary)

### Optimised compatibility

- AF: recommended seals for alkaline concentrate
- VF: recommended seals for acid, oil or odour neutralisation, Vegetation protection
- PVDF: Housing
- H: Hastelloy piston rod
- IE: with external injection
- V: kit for viscous concentrate
- Intake hose: Special material and intake head available

### Optimised installation

- BP: built-in bypass
- ★ Other connections
- Carrying strap
- Please contact us if you have any further questions

These options mean that the doser can be perfectly adapted to any requirements. The option required can be determined with the support of our technical department.

Order code

Type	Dosing rate %	Ratio	Water flow rate (litre/h) min/max pressure	
D25RE09	0.1 – 0.9	1:1000-1:112	10 – 2500	0.3 - 6bar
D25RE2	0.2 – 2	1:500-1:50	10 – 2500	0.3 - 6 bar
D25RE/IE2	0.2 – 2	1:500-1:50	10 – 2500	0.3 - 6bar
D25RE4	0.5 - 4	1:200-1:25	10 - 2500	0.3 - 6bar
D25RE5	1 – 5	1:100-1:20	10 - 2500	0.3 - 6bar
D25RE/IE5	1 – 5	1:100-1:20	10 – 2500	0.3 - 6bar
D25RE10	3 - 10	1:33-1:10	10 - 2000	0.3 - 4bar
D25RE/IE10	3 – 10	1:33-1:10	10 – 2000	0.3 - 4bar

Type in PVDF	Dosing rate %	Ratio	Water flow rate (Litre/) min/max pressure	
D25RE09 PVDF	0.1 – 0.9	1:1000-1:112	10 – 2500	0.3 - 6bar
D25RE09AO PVDF	0.1 – 0.9	1:1000 – 1:112	10 – 2500	0.3 - 6bar
D25RE2AO PVDF	0.2 – 2	1:500 – 1:50	10 – 2500	0.3 - 6bar
D25RE2 PVDF	0.2 – 2	1:500-1:50	10 – 2500	0.3 - 6 bar
D25RE/IE2 PVDF	0.2 – 2	1:500-1:50	10 – 2500	0.3 - 6bar
D25RE4 PVDF	0.5 - 4	1:200-1:25	10 - 2500	0.3 - 6bar
D25RE5 PVDF	1 – 5	1:100-1:20	10 - 2500	0.3 - 6bar
D25RE/IE5 PVDF	1 – 5	1:100-1:20	10 – 2500	0.3 - 6bar
D25RE10 PVDF	3 - 10	1:33-1:10	10 - 2000	0.3 - 4bar
D25RE/IE10 PVDF	3 – 10	1:33-1:10	10 – 2000	0.3 - 4bar

Dosatronic proportional dosers are available with 2 types of seal:  
VF seals for acid, AF seals for alkaline products.  
PVDF is available as a housing material for aggressive media

Order code

Options
Product intake hose as the viscous kit version
An optional by-pass switch is available for series D25 and D3 The intake system can be switched on/off

Accessories
1/2" pressure reducer male thread with gauge
3/4" water filter with Plectopf washable filter cartridge 80 micron
1/2" backflow preventer BA Micro DVGW buffered (max.1000l/h)
1/2" backflow preventer BA compact
1/2" stainless steel water hammer arrester

Dosatronic® is a registered trademark of Dosatron

## Dry-material doser TG-DOS

Conveyor output 4.2 ... 510.4 l/h



### General information

Dry material dosers are particularly suitable for dispensing bulk, fine dust materials. They consist of a container made of stainless steel or plastic which contains the bulk material conveyed and fed to a screw.

- Conveyor output of up to 510.4 l/h, others available on request
- screw-conveyor in 6 sizes
- choice of 66 delivery ranges
- full screw
- Materials:
  - Housing PP
  - Screw PA
  - Mouthpiece VA
- Drive:
  - Three-phase gear motor
  - 230/400V 50 Hz – 0.25 kW
  - With PTCs
  - Iso class F
  - Suitable for frequency control
- Mouthpiece heater:
  - 230 V/ 50 Hz - 6 Watt
- Controller:
  - Single-phase converter
  - Toshiba VF-S11
  - Time controller for mouthpiece heater



### Versions

Drive speed of gear motor at 50Hz. (possible: 10 – 100 Hz)			18	28	32	47	56	70	93	117	140	175	207
			TG-DOS 1	l/h	PA VA	4,2 13,2	6,6 20,5	7,5 23,4	11,1 34,4	13,2 41,0	16,5 51,2	21,9 68,0	27,6 85,6
TG-DOS 2	l/h	PA VA	12,3 26,8	19,1 41,7	21,9 47,7	32,1 70,0	38,3 83,5	47,9 104,3	63,6 138,6	80,0 174,4	95,7 208,6	119,6 260,8	141,5 208,5
TG-DOS 3	l/h	PA VA	29,1 44,4	45,2 69,0	51,7 78,9	75,9 115,9	90,4 138,1	113,1 172,6	150,2 229,3	189,0 288,5	226,1 345,2	282,6 431,5	334,3 510,4

PA / VA screw-conveyor  
delivery in ltr./ h at 50 Hz

Order Code

Dry material doser TG-DOS			
1 2 3	<b>Size:</b>		
	PA PA screw-conveyor VA VA screw-conveyor for size 1 VA VA screw-conveyor for size 2 VA VA screw-conveyor for size 3	<b>Material of screw-conveyor</b>	
	18 28 32 47 56 70 93 117 140 175 207	<b>Drive speed of gear motor at 50 Hz (possible : 10 - 100 Hz).</b>	
	M Mouthpiece-heater SH Heater controller SF Controller with frequency converter PP4 PP powder funnel 45 l PP9 PP powder funnel 90 l KP Capacitance powder probe SÜ Screw monitor	<b>Additional equipment (multiple selections are possible)</b>	

<b>TG-DOS</b>	<b>2</b>	<b>PA</b>	<b>18</b>	<b>PP4</b>	(example order)
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Your selection:

<b>TG-DOS</b>					
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## Instructions for dosing stations DOSADos

**DOSATRONIC - dosing stations** are pre-assembled complete systems ready for connection. They cover the majority of standard dosing requirements.

DOSADos dosing stations with a capacity of 60 to 1000 litres.

The dosing stations can be assembled from the following components:

- PE dosing tank (60 to 1.000 litres capacity)
- Collection tank (80 to 1.000 litres capacity)
- Mixing element
- Brackets for dosing pump
- Suction lance
- Pressure-relief valve
- Valve block
- Multipurpose valve
- Flow rate sensor
- Dosing pump

Please contact us if you need a different configuration to the standard dosing stations.

- \* The O-rings (FPM or EPDM) and the hose connections are determined by the dosing pump selected.
- \*\* If you choose the option "collection tank", it is not possible to fit the dosing tank with a drainage system!
- \*\*\* Please inform us of the exact dosing medium
- \*\*\*\* When fitting an electric agitator, the dosing pump may be mounted on a wall bracket next to the dosing tank for lack of space.



## Dosing station DOSADos with tank, 60 litre

Order code

C

Dosing station DOSADos 60		
N S	<b>Tank type</b>	
	DB 60, PE, natural DB 60, PE, black	
0 ABN ABS	<b>Collection tank</b>	
	without AB 80, PE, natural AB 80, PE, black	
0 A B C	<b>Mixing element</b>	
	without Hand tamper PVC Manual stirrer PVC Standard stirrer unit Type MIX	
0 S V K T A D	<b>Mounting/bracket for dosing pump</b>	
	without pump other dosing pump if required by customer for V series solenoid diaphragm pumps for K series solenoid diaphragm pumps for T series solenoid diaphragm pumps for AMS series solenoid diaphragm pumps for DOSMac motor driven pump	
0 SL 2	<b>Suction lance*</b>	
	without SL 2	
0 1	<b>Lock for screw lid</b>	
	without lock with lock	
0 1	<b>Tank emptying system</b>	
	without PVC ball valve with hose connection d=16 mm**	
0 1 2 3 4	<b>Accessories</b>	
	without Pressure-relief valve DHV Valve block Multi-purpose valve MF Flow sensor SEFL	
0	<b>Dosing pump choice</b>	
	without Please enter the order code for the selected pump***	



DS 60	N	ABN	0	1	SL2	0	0	1	0	(example order)
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Your selection

DS 60									
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## Dosing station DOSADos with tank, 100 litre

Order code

C

Dosing station DOSADos 100		
<b>Tank type</b>		
N	DB 100, PE, natural	
S	DB 100, PE, black	
<b>Collection tank</b>		
0	without	
ABN	AB 120, PE, natural	
ABS	AB 120, PE, black	
<b>Mixing element</b>		
0	without	
A	Hand tamper PVC	
B	Manual stirrer PVC	
C	Standard stirrer unit Type DOSAMix	
<b>Mounting/bracket for dosing pump</b>		
0	without pump	
S	other dosing pump if required by customer	
V	for V series solenoid diaphragm pumps	
K	for K series solenoid diaphragm pumps	
T	for T series solenoid diaphragm pumps	
A	for AMS series solenoid diaphragm pumps	
D	for DOSMac motor driven pump	
<b>Suction lance*</b>		
0	without	
SL 2	SL 2	
<b>Lock for screw lid</b>		
0	without lock	
1	with lock	
<b>Tank emptying system</b>		
0	without	
1	PVC ball valve with hose connection d=16 mm**	
<b>Accessories</b>		
0	without	
1	Pressure-relief valve DHV	
2	Valve block	
3	Multi-purpose valve MF	
4	Flow sensor SEFL	
<b>Dosing pump choice</b>		
0	without Please enter the order code for the selected pump***	



DS 100	N	ABN	0	1	SL2	0	0	1	0	(example order)
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Your selection

DS 100										
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## Dosing station DOSADos with tank, 200 litre

Order code

C

Dosing station DOSADos 200										
		<b>Tank type</b>								
N	DB 200, PE, natural									
S	DB 200, PE, black									
		<b>Collection tank</b>								
0	without									
ABN	AB 210, PE, natural									
ABS	AB 210, PE, black									
		<b>Mixing element</b>								
0	without									
A	Hand tamper PVC									
B	Manual stirrer PVC									
C	Standard stirrer unit Type DOSAMix									
		<b>Mounting/bracket for dosing pump</b>								
0	without pump									
S	other dosing pump if required by customer									
V	for V series solenoid diaphragm pumps									
K	for K series solenoid diaphragm pumps									
T	for T series solenoid diaphragm pumps									
A	for AMS series solenoid diaphragm pumps									
D	for DOSMac motor driven pump									
		<b>Suction lance*</b>								
0	without									
SL 2	SL 2									
		<b>Lock for screw lid</b>								
0	without lock									
1	with lock									
		<b>Tank emptying system</b>								
0	without									
1	PVC ball valve with hose connection d=16 mm**									
		<b>Accessories</b>								
0	without									
1	Pressure-relief valve DHV									
2	Valve block									
3	Multi-purpose valve MF									
4	Flow sensor SEFL									
		<b>Dosing pump choice</b>								
0	without Please enter the order code for the selected pump***									



DS 200	N	ABN	0	1	SL2	0	0	1	0	(example order)
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Your selection

DS 200										
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## Dosing station DOSADos with tank, 250 litre

Order code

C

Dosing station DOSADos 250										
		<b>Tank type</b>								
N		DB 250, PE, natural								
S		DB 250, PE, black								
		<b>Collection tank</b>								
0		without								
ABN		AB 400, PE, natural								
ABS		AB 400, PE, black								
		<b>Mixing element</b>								
0		without								
A		Hand tamper PVC								
B		Manual stirrer PVC								
C		Standard stirrer unit Type DOSAMix								
		<b>Mounting/bracket for dosing pump</b>								
0		without pump								
S		other dosing pump if required by customer								
V		for V series solenoid diaphragm pumps								
K		for K series solenoid diaphragm pumps								
T		for T series solenoid diaphragm pumps								
A		for AMS series solenoid diaphragm pumps								
D		for DOSMac motor driven pump								
		<b>Suction lance*</b>								
0		without								
SL 2		SL 2								
		<b>Lock for screw lid</b>								
0		without lock								
1		with lock								
		<b>Tank emptying system</b>								
0		without								
1		PVC ball valve with hose connection d=16 mm**								
		<b>Accessories</b>								
0		without								
1		Pressure-relief valve DHV								
2		Valve block								
3		Multi-purpose valve MF								
4		Flow sensor SEFL								
		<b>Dosing pump choice</b>								
0		without Please enter the order code for the selected pump***								



DS 250	N	ABN	0	1	SL2	0	0	1	0	(example order)
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Your selection

DS 250										
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## Dosing station DOSADos with tank, 500 litre

Order code

C

Dosing station DOSADos 500										
		<b>Tank type</b>								
N		DB 500, PE, natural								
S		DB 500, PE, black								
		<b>Collection tank</b>								
0		without								
ABN		AB 500, PE, natural								
ABS		AB 500, PE, black								
		<b>Mixing element</b>								
0		without								
A		Hand tamper PVC								
B		Manual stirrer PVC								
C		Standard stirrer unit Type DOSAMix								
		<b>Mounting/bracket for dosing pump</b>								
0		without pump								
S		other dosing pump if required by customer								
V		for V series solenoid diaphragm pumps								
K		for K series solenoid diaphragm pumps								
T		for T series solenoid diaphragm pumps								
A		for AMS series solenoid diaphragm pumps								
D		for DOSMac motor driven pump								
		<b>Suction lance*</b>								
0		without								
SL 2		SL 2								
		<b>Lock for screw lid</b>								
0		without lock								
1		with lock								
		<b>Tank emptying system</b>								
0		without								
1		PVC ball valve with hose connection d=16 mm**								
		<b>Accessories</b>								
0		without								
1		Pressure-relief valve DHV								
2		Valve block								
3		Multi-purpose valve MF								
4		Flow sensor SEFL								
		<b>Dosing pump choice</b>								
0		without Please enter the order code for the selected pump***								



DS 500	N	ABN	0	1	SL2	0	0	1	0	(example order)
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Your selection

DS 500									
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## Dosing station DOSADos with tank, 1000 litre

Order code

C

Dosing station DOSADos 1000										
		<b>Tank type</b>								
N	DB 1000, PE, natural									
S	DB 1000, PE, black									
		<b>Collection tank</b>								
0	without									
ABN	AB 1000, PE, natural									
ABS	AB 1000, PE, black									
		<b>Mixing element</b>								
0	without									
A	Hand tamper PVC									
B	Manual stirrer PVC									
C	Standard stirrer unit Type DOSAMix									
		<b>Mounting/bracket for dosing pump</b>								
0	without pump									
S	other dosing pump if required by customer									
V	for V series solenoid diaphragm pumps									
K	for K series solenoid diaphragm pumps									
T	for T series solenoid diaphragm pumps									
A	for AMS series solenoid diaphragm pumps									
D	for DOSMac motor driven pumps									
		<b>Suction lance*</b>								
0	without									
SL 2	SL 2									
		<b>Lock for screw lid</b>								
0	without lock									
1	with lock									
		<b>Tank emptying system</b>								
0	without									
1	PVC ball valve with hose connection d=16 mm**									
		<b>Accessories</b>								
0	without									
1	Pressure-relief valve DHV									
2	Valve block									
3	Multi-purpose valve MF									
4	Flow sensor SEFL									
		<b>Dosing pump choice</b>								
0	without Please enter the order code for the selected pump***									



DS 1000	N	ABN	0	1	SL2	0	0	1	0	(example order)
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Your selection

DS 1000										
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## Injection valve IVN



### General information

An injection valve consists of

- Body made of PVDF
- Sleeve nut, clamping ring and hose connection
- Ceramic valve ball
- Valve spring made of Hastelloy® C 276
- O-rings made of Viton®, or EPDM
- Opening pressure 0.3 bar, other pressures available on request

Order code

Injection valve Type IVN			
1/2" 3/4"	<b>Valve size</b>		
	<b>Hose connection [mm]</b>	<b>Connection</b>	
	4/6	1/2"	
	4/8	1/2"	
	6/8	1/2"	
	8/10	1/2"	
	8 / 10	3/4"	
	8/12	1/2"	
	12 / 18	3/4"	
	13/16	3/4"	
		<b>O-ring</b>	
		V FPM (Viton®)	
		E EPDM	

<b>IVN</b>	<b>1/2"</b>	<b>x 4/6</b>	<b>-V</b>	(example order)
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Your selection

<b>IVN</b>					
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## Injection lances LIN



### General information

- Installed length variable, max. 200 mm with PVDF, PVC longer possible, specify when ordering
- With or without shut-off ball valve made of PVC or PVDF
- Materials for sleeve nut, clamping ring, hose connection and injection lance: PVC/PP or PVDF/PVDF.  
Dosing lance:  
- made of PVC up to 40°C  
- or PVDF up to 80°C
- Ceramic valve ball
- Valve spring made of Hastelloy® C 276
- O-rings made of Viton®, or EPDM



Order code

Injection lance Type LIN			
1/2"	<b>Connection size</b> Male thread		
		<b>Hose connection</b>	
	4/6	mm	
	4/8	mm	
	6/8	mm	
	8/10	mm (for PVDF – hose only)	
	8/12	mm	
	12/18	mm	
	PVC	<b>Body</b> Polyvinyl chloride	
	PVDF	Polyvinyliden fluoride	
	V	<b>O-ring:</b> FPM (Viton®)	
	E	EPDM	
	0	<b>Shut-off ball valve</b> without	
	1	PVC	
	2	PVDF	

<b>LIN</b>	1/2"	6/8	PVDF	V	0	(example order)
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Your selection

<b>LIN</b>						
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## Foot valve Type FVAxial; optional with level switch



### General information

A foot valve consists of

- Body made of PVDF
- Union nut, clamping ring and hose connection made of PVDF
- Ceramic valve ball
- O-rings made of Viton®, or EPDM
- Strainer basket filter and weight
- Axial mounted level switch - can be operated as a normally-open (N.O.) or normally-closed (N.C.) contact - with 2 m lead and BNC plug

Order code

Foot valve Type FVA					
	1/2"	Valve size			
		4/6 4/8 6/8 8/10 8/12 12/18	Hose connection [mm]		
			V E	O-ring: FPM (Viton®) EPDM	
				Level switch Without N.O. Normally open contact (N.O.) N.C. Normally closed contact (N.C.)	

<b>FVA</b>	<b>1/2"</b>	<b>4/6</b>	<b>V</b>	<b>N.O.</b>	(example order)
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Your selection

<b>FVA</b>					
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## Suction lance Type SL 1



### General information

For installation in a dosing tank  
or in a screw cap for a delivery container

- Material: PVC
- Hose connection (upwards) vertical
- Immersion depth adjustable
- 1 level switch with lead (2 m) and BNC plug

Order code

SL 1			
55 60 65 70 75 80	<b>Total length [cm]</b>		
	<b>O-ring / sealing rings</b>		
V	FPM (Viton®)		
E	EPDM		
	<b>Hose connection:</b>		
4/6	4 x 6 mm		
4/8	4 x 8 mm		
6/8	6 x 8 mm		
	R	Recirculation/connection venting hose:	
		Cable connection	
	BNC	BNC plug	
	open	Lead end open	

SL1	55	V	4/6	R	BNC	(example order)
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Your selection

SL1						
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## Suction lance Type SL 2



### General information

For installation in a dosing tank  
or in a screw cap for a delivery container

- Material: PVC
- Hose connection, side
- Connection for recirculation/connection venting line
- Immersion depth adjustable
- 1 level switch with lead (2 m) and BNC plug

Order code

SL 2			
	Immersion length [cm]		
	55		
	60		
	65		
	70		
	75		
	80		
	85		
	90		
	95		
	100		
	105		
	110		
	115		
	O-ring / sealing rings		
V	FPM (Viton®)		
E	EPDM		
	Hose connection:		
	4/6	4 x 6 mm	
	4/8	4 x 8 mm	
	6/8	6 x 8 mm	
	8/10	8 x 10 mm	
	8/12	8 x 12 mm	
	Cable connection		
	BNC	BNC plug	
	open	Open lead end	

SL2	90	V	4/6	BNC	(example order)	
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Your selection

SL2						
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## Suction lance Type SL 1-2



### General information

For installation in a dosing tank  
or in a screw cap for a delivery container

- Material: PVC
- Hose connection (upwards) vertical
- Immersion depth adjustable
- 2 level switch with lead (2 m) and BNC plug

Order code

SL 1 2			
55 60 65 70 75 80 85 90	<b>Total length [cm]</b>		
	V E	<b>O-ring / sealing rings</b>	
		FPM (Viton®) EPDM	
	4/6 6/8	<b>Hose connection:</b>	
		4 x 6 mm 6 x 8 mm	
	R	<b>Recirculation/connection venting hose:</b>	
	BNC open	<b>Cable connection</b>	
BNC plug Open lead end			

SL 1 2	55	V	4/6	R	BNC	(example order)	
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Your selection

SL 1 2							
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## Multifunction valve MF



### General information

- Body made of PVDF and therefore highly suitable for most dosing chemicals
- Seals made of Viton® or EPDM
- Connection 3/8" or 1/2"
- The multifunction valve is suitable for dosing pumps with a dosing capacity up to 60 l/h.

### Functions

The multifunction valve combines three different functions in one valve.

- **Pressure retention valve** – for dosing into open tanks or when the dosing position is below the level of the dosing pump (suction elevating principle). The counter pressure can be adjusted from 1 - 5 bar with a rotary switch.
- **Pressure control valve** – for dosing into pressure systems where a higher pressure than the max. permissible operating pressure of the dosing

pump can be expected. Pressure can be adjusted from 1 to 18 bar by a rotary switch. If the adjusted pressure is exceeded, the pressure control valve opens and discharges the dosing media back to the feed tank via a hose connection on the side.

- **Ventilating valve** – for venting the dosing head manually. The valve can be opened for venting by means of the rotary switch for the adjusting the overpressure function

Order code

Multifunction valve MF					
	PVDF	<b>Body</b> Polyvinyliden fluoride			
		3/8 1/2	<b>Connection size</b> 3/8" 1/2"		
			4/6 4/8 6/8 8/10 8/12 4/8	<b>Hose connection</b> mm mm mm mm mm mm	
				V E	<b>O-ring</b> FPM (Viton®) EPDM
				D W	Mounted directly on the dosing pump Wall mounting

<b>MF</b>	<b>PVDF</b>	<b>1/2</b>	<b>x 4/6</b>	<b>V</b>	<b>W</b>	(example order)
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Your selection

<b>MF</b>						
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## Flow sensor SEFL



Flow sensor Type SEFL  
with thread



Flow sensor Type SEFL  
With screw connection

### General information

The Type SEFL flow sensor is for monitoring solenoid diaphragm dosing pumps for correct dosing function.

### Operation

The flow sensor is either directly screwed onto the pressure valve of the solenoid diaphragm-dosing pump or integrated into the dosing line of the dosing system by an additional hose connection.

An integrated magnetic sensor shoots up with every dosing pulse and activates an reed switch. The switch supplies the dosing pulse and through a signal cable it is passed on to the connected dosing pump or to another connected device which can process the signal. If one pulse (or a series of several pulses) fails, i.e. because there is air or gas inside the dosing line, the dosing pump can be stopped or a fault message can be generated.

The flow and the sensitivity of the sensor can be adjusted to the system conditions by an adjustment screw.

- Body made of PVDF; thus perfectly suitable for numerous dosing media
- Seals made of Viton® or EPDM
- Version options:
- with hose connection and wall mounting panel
- 3/8" or 1/2" thread with female thread for direct attachment to the dosing head
- Signal lead, length approx. 1.5 m with BNC plug

Order code

<b>Flow sensor Type SEFL</b>						
		<b>Mounting type</b>				
-		Dosing head				
S		Hose connection and wall mounting panel				
		<b>Connection size</b>				
3/8"		3/8"				
1/2"		1/2"				
		<b>Hose connection</b>				
		4/6	mm			
		4/8	mm			
		6/8	mm			
		8/10	mm			
		8/12	mm			
		13/16	mm			
		12/18	mm			
		<b>O-ring</b>				
		V	FPM (Viton®)			
		D	Dutral			
		More than 4 l dosing rate				
		4+				

<b>SEFL-</b>	<b>S</b>	<b>1/2"</b>	<b>x 4/6</b>	<b>V</b>	<b>-</b>	(example order)	
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Your selection

<b>SEFL-</b>							
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## Pulsation damper SOIM



### General information

Pulsation dampers are used for compensating pressure surges and pressure resistances which can occur on longer dosing lines.

An air/gas bubble builds up in the upper part of the pressure vessel. The gas bubble compensates the pressure surges caused by the oscillating movement of the diaphragms as much as possible and transforms it into a constant dosing flow.

- Material: PVC, PVDF only available for SOIM 3
- Scope of delivery includes:  
holder made of stainless steel for wall mounting

Use the following equation to determine the correct size of the pulsation damper:

$$\text{Volume (l)} = \frac{\text{pressure (bar)} \times \text{quantity to be dosed (l)}}{500}$$

The volume (l) given by the equation must be smaller than or equal to the volume of the pulsation damper SOIM

### Technical specifications

Type SOIM		3	1
Volume	ml	90	500
Diameter D	mm	60	100
Height H1	mm	65	70
Height H2	mm	95	110
Connection	IG	3/8"	1/2"

Order code

Pulsation damper Type SOIM			
90	90 ml	3/8"	
500	500 ml	1/2"	
	<b>Material:</b>		
	PVC	PVC	
	PVDF	PVDF only for SOIM 3	
		<b>Hose size</b>	
	3/8"	4/6 mm	
		4/8 mm	
		6/8 mm	
	1/2"	6/8 mm	
		8/10 mm	
		8/12 mm	
		12/18 mm	
		<b>O-ring:</b>	
	V	FPM (Viton®)	
	E	EPDM	

<b>SOIM</b>	<b>90-</b>	<b>PVC</b>	<b>3/8"</b>	(example order)
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Your selection

<b>SOIM</b>				
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## Pressure retention and pressure relief valves



### General information

Adjustable pressure retention and pressure relief valves are installed in dosing lines etc. They are designed for the following applications:

- They generate a constant counter pressure in dosing lines with open outlet and therefore increase the dosing accuracy.
  - They protect the dosing pump if the system pressure occasionally exceeds the max. permissible operating pressure of the dosing pump.
  - They prevent the dosing tank from leaking through the dosing system if the injection point is lower than the dosing tank or if a vacuum is produced in the dosing line (so called jet suction effect).
  - Nominal diameter DN 6, DN 10 and DN 15
  - Nominal pressure: PN 10
  - Rating: 75 - 500 l/h
  - max. temperature: PVC: 35°C  
PVDF and stainless steel: 50°C
  - Connections 1/4" 3/8" and 1/2"
- Materials
    - Valve: PVC, PVDF, stainless steel Mat. 1.4571
    - Diaphragm: Rubber, PTFE coated
    - Spring: Stainless steel Mat. 1.4571

### Operation

A diaphragm closes the valve by means of a pressure spring. The pressure spring is preloaded to the required max. operating pressure via a cylinder-screw. When this pressure is exceeded, the diaphragm is pushed upwards against the spring and partially opens the valve. Some of the dosing medium escapes to the pressure-free side of the valve, thus limiting the system pressure to the max. operating pressure.

Order code

Pressure retention and pressure relief valve Type DHV			
<b>Connection</b> 1/4"	<b>Nominal diameter</b> DN 6	<b>max. flow rate</b> 75 l/h	
	PVC PVDF SS	<b>Material</b> Stainless steel Mat. 1.4571	
<b>Connection</b> 3/8"	<b>Nominal diameter</b> DN 10	<b>max. flow rate</b> 200 l/h	
	PVC PVDF SS	<b>Material</b> Stainless steel Mat. 1.4571	
<b>Connection</b> 1/2"	<b>Nominal diameter</b> DN 15	<b>max. flow rate</b> 500 l/h	
	PVC PVDF SS	<b>Material</b> Stainless steel Mat. 1.4571	

<b>PRV</b>	<b>1/2"</b>	<b>PVC</b>	<b>(example order)</b>	
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Your selection

<b>PRV</b>					
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## Valve block Type AB

### General information

Valve blocks are suitably pre-assembled fittings, either consisting of an pressure-relief and diaphragm shut-off valve or an pressure-relief and pressure retention valve. The dosing pump is connected between the two fittings via a T-piece. The discharge from pressure relief valve is fed back to the feed tank. The outlet of the pressure retention or diaphragm shut-off valve is connected to the injection point of the dosing system.



### Operation

- They generate a constant counter pressure in the dosing pipes with free outlet and therefore increase the dosing accuracy.
  - They protect the dosing pump if the system pressure occasionally exceeds the max. permissible operating pressure of the dosing pump.
  - They prevent the feed tank from leaking through the dosing system if the injection point is lower than the feed tank or if a vacuum is produced in the dosing pipe (so called jet suction effect).
  - Nominal diameter: DN 6, DN10 and DN 15
  - Nominal pressure: NP 10
  - Rating: 75 - 500 l/h
  - max. temperature: PVC: 35°C, PVDF and stainless steel:
- Materials
    - Valve: PVC, PVDF, stainless steel Mat. 1.4571
    - Diaphragm: Rubber, PTFE coated
    - Spring Stainless steel Mat. 1.4571 50°C
  - Connections: 1/4" 3/8" and 1/2"

Order code

Valve block Type AB..			
ABUM	Pressure-relief and diaphragm shut-off valve		
ABUD	Pressure-relief and pressure retention valve		
<b>Connection</b>	<b>Nominal diameter</b>	<b>max. flow</b>	
1/4"	DN 6	75 l/h	
	PVC PVDF SS	<b>Material</b> Stainless steel Mat. 1.4571	
<b>Connection</b>	<b>Nominal diameter</b>	<b>max. flow</b>	
3/8"	DN 10	200 l/h	
	PVC PVDF SS	<b>Material</b> Stainless steel Mat. 1.4571	
<b>Connection</b>	<b>Nominal diameter</b>	<b>max. flow</b>	
1/2"	DN 15	500 l/h	
	PVC PVDF SS	<b>Material</b> Stainless steel Mat. 1.4571	
<b>ABUM</b>	<b>1/2"</b>	<b>PVC</b>	(example order)

Your selection

<b>AB</b>			
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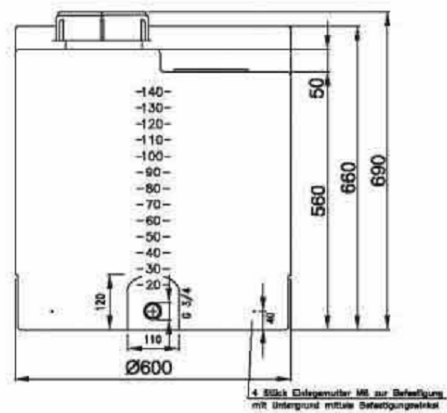
## Dosing tank Series DB-A



### General information

Dosing tanks made from UV-stabilised polyethylene (PE) with handhole and screw lid; lockable (optional)

- Colour: natural or black
- With litre scale sintered onto the tank
- Moulded 3/4" threaded outlet socket (not drilled) with plug and seal (EPDM).
- 4 x moulded insert nuts M6 (outer DB A 35) for installing mounting brackets.



### Technical specifications

Dosing tank Type DB A		35	75	100	140	200	250	300	400	500
	l	35	75	100	140	200	250	300	400	500
Diameter	mm	320	460	460	600	600	670	670	790	790
Diameter Handhole d	DN	DN 70	DN 160							
Height	mm	500	625	785	660	880	885	1.030	985	1.180
Weight	kg	3.0	5.5	6.5	9.0	11.0	13.0	15.5	20.0	23.5

Order code

Dosing tank Type DB A						
		<b>Useable volume</b>				
	35	Litre				
	75	Litre				
	100	Litre				
	140	Litre				
	200	Litre				
	250	Litre				
	300	Litre				
	400	Litre				
	500	Litre				
		<b>Colour</b>				
	N	Natural				
	B	Black				
			<b>Screw lid</b>			
		S	not lockable			
		A	lockable (not A 35)			
			<b>3/4" - PVC-discharge ball valve</b>			
		-	without			
		1	with			
			<b>Mixer</b>			
		-	without			
		HM	Manual stamping mixer			
		HS	Manual stirrer			
			<b>Mounting bracket</b>			
		-	without			
		1	with (4 pieces)			

<b>DB-A</b>	<b>100</b>	<b>N</b>	<b>S</b>	<b>-</b>	<b>HS</b>	<b>-</b>	(example order)
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Your selection

<b>DB-A</b>							
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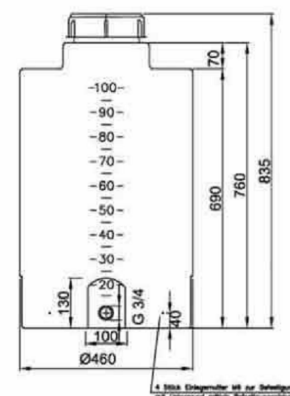
## Dosing tank Series DB-C



### General information

Dosing tanks made from UV-stabilised polyethylene (PE) with handhole and screw lid; lockable (optional)

- Colour: natural or black
- With litre scale sintered onto the tank
- Moulded 3/4" threaded outlet socket (not drilled) with plug and seal (EPDM).
- 4 moulded insert nuts M6 for installing mounting brackets



### Technical specifications

Dosing tank Type DB-C		40	60	75	100	140	200
Useable volume	l	40	60	75	100	140	200
Diameter	mm	420	420	460	460	600	600
Diameter Handhole d	ND	DN 70	DN 160				
Height	mm	425	580	600	760	660	880
Weight	kg	2.7	4.6	5.5	6.5	8.0	11.0

### Technical specifications

Dosing tank Type DB-C		250	300	400	500	800	1000
Useable volume	l	250	300	400	500	800	1000
Diameter	mm	670	670	790	790	1.100	1.100
Diameter Handhole d	ND	DN 160					
Height	mm	880	1.030	980	1.170	1.020	1.240
Weight	kg	13.0	15.5	20.0	23.5	34.0	37.0

Order code

Dosing tank Type DB C	
	<p><b>Useable volume</b></p> <p>40 Litre</p> <p>60 Litre</p> <p>75 Litre</p> <p>100 Litre</p> <p>140 Litre</p> <p>200 Litre</p> <p>250 Litre</p> <p>300 Litre</p> <p>400 Litre</p> <p>500 Litre</p> <p>800 Litre</p> <p>1000 Litre</p>
	<p><b>Colour:</b></p> <p>N Natural</p> <p>B Black</p>
	<p><b>Screw lid</b></p> <p>S not lockable</p> <p>A lockable (not A 35)</p>
	<p><b>3/4" – PVC-discharge ball valve</b></p> <p>- without</p> <p>1 with</p>
	<p><b>Mixer</b></p> <p>- without</p> <p>HM Manual stamping mixer</p> <p>HS Manual stirrer</p>
	<p><b>Mounting bracket</b></p> <p>- without</p> <p>1 with (4 pieces)</p>

<b>DB-C</b>	<b>100</b>	<b>N</b>	<b>S</b>	<b>-</b>	<b>HS</b>	<b>-</b>	(example order)
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Your selection

<b>DB-C</b>							
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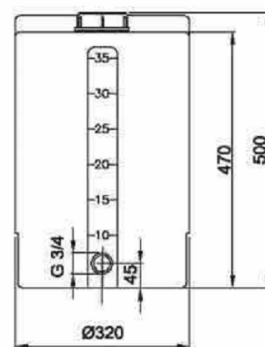
## Dosing tank Series DB-E



### General information

Dosing tanks made from UV-stabilised polyethylene (PE) with handhole and screw lid; lockable (optional)

- Colour: natural or black
- With litre scale sintered onto the tank
- Moulded 3/4" threaded outlet socket (not drilled) with plug and seal (EPDM).



### Technical specifications

Dosing tank Type DB E		35	60	100	200	300	500	750	1000
Useable volume	l	35	60	100	200	300	500	750	1,000
Diameter	mm	320	420	450	550	655	770	970	1,080
Diameter Handhole d	DN	DN 70	DN 160						
Height	mm	500	640	810	1,030	1,110	1,230	1,170	1,260
Weight	kg	2,5	4,4	6,2	10,0	14,0	22,0	32,0	37,0

Order code

Dosing tank Type DB E	
35	litre
60	litre
100	litre
200	litre
300	litre
500	litre
750	litre
1000	litre
<b>Colour</b>	
N	Natural
B	Black
<b>Screw lid</b>	
S	not lockable
A	lockable (not E 35)
<b>3/4" – PVC-discharge ball valve</b>	
-	without
1	with
<b>Mixer</b>	
-	without
HM	Manual stamping mixer
HS	Manual stirrer
<b>Mounfing bracket</b>	
-	without
1	with (4 pieces)

<b>DB-E</b>	<b>100</b>	<b>N</b>	<b>S</b>	<b>-</b>	<b>HS</b>	<b>-</b>	(example order)
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Your selection

<b>DB-E</b>							
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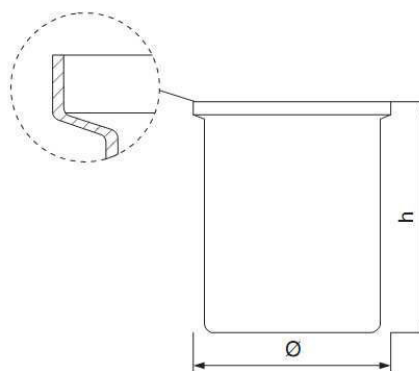
## Safety bunds Series SBO



### General information

Safety bunds made of UV stabilised polyethylene (PE), for housing the Type dosing tank DB-A, DB-C and DB-E

- Colour: natural or black
- With litre scale sintered onto the tank
- Two mounting surfaces on the side for mounting brackets for mounting on the bottom



### Technical specifications

Feed tank Type SBO		60	80	100	120	150	200
Useable volume	l	60	80	100	120	150	200
Diameter	mm	420	500	450	500	650	550
Height	mm	550	540	740	700	540	960
Weight	kg	4.4	5.0	5.7	6.7	7.9	9.0

### Technical specifications

Feed tank Type SBO		210	300	400	500	750	1000
Useable volume	l	210	300	400	500	750	1000
Diameter	mm	655	660	770	860	1.050	1.150
Height	mm	730	995	960	980	980	1.080
Weight	kg	9.3	12.0	16.0	19.0	28.0	34.0

Order code

Feed tank Type SBO		
	<b>Useable volume</b>	
60	Litre	
80	Litre	
100	Litre	
120	Litre	
150	Litre	
200	Litre	
210	Litre	
300	Litre	
400	Litre	
500	Litre	
750	Litre	
1000	Litre	
	<b>Colour</b>	
N	Natural	
B	Black	

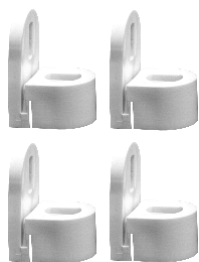
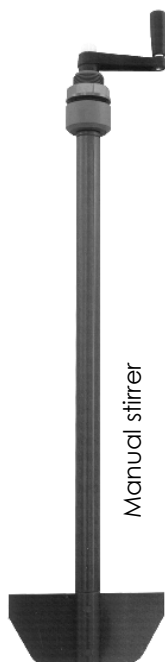
<b>SBO</b>	<b>100</b>	<b>N</b>	
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Your selection

<b>SBO</b>									
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## Accessories for dosing tank DB



Mounting bracket



Screw lid, lockable

<b>Manual stamping mixer</b>		
<b>Manual stirrer</b>		
<b>Mounting bracket</b> (VPE = 4 units)		
<b>Screw lid ND 160, lockable</b>		

Other accessories available on request:

- Threaded couplers
- Threaded nipple
- Flange
- Flange bushing with loose flange etc.

## Standard stirrer unit Type DOSAMix



MIXV8

MIX4S

MIX8

### General information

Standard stirrer units are designed for blending liquids with a max. viscosity of 500 mPas in Series DB feed tanks.

They are fitted with a balanced agitator shaft made of stainless steel, Mat. 1.4571, which is PVC coated. The mixing element made of PVC can be unscrewed.

- Clockwise rotation, pushing away from the drive.
- Operating conditions:
  - pressureless operation
  - Max. temperature of medium 55°C
  - No media which emit gas.
- Two motors are available:
  - 400 V, 50/60 Hz, 3 Ph, or
  - 230 V, 50/60 Hz, 1 Ph, with capacitor,
 each with degree of protection IP 55, Iso. Class F (resistant to tropical conditions)
- A choice of four speeds is available:
  - MIXV H without gearbox, rotation speed 1,400 rpm
  - MIX4S with flange gearbox, rotation speed 400 rpm
  - MIX2 and MIX8 with flange gearbox on the side, choice of rotation speed, 65 rpm with 200 rpm or 400 rpm

### Technical specifications

Standard stirrer unit Type MIX	Motor power rating	Voltage	Speed	Shaft lengths	Propeller Ø	Weight
	KW	V	rpm	mm	mm	kg
MIXV8 MON	0.09	230	1.400	630-730-830-930	70	6
MIXV8 TRI	0.09	400	1.400	630-730-830-930	70	6
MIXV4 MON	0.18	230	1.400	630-730-830-930	90	8
MIXV4 TRI	0.18	400	1.400	630-730-830-930	90	8
MIXV2 MON	0.37	230	1.400	930-1100-1200	90	9
MIXV4 TRI	0.37	400	1.400	930-1100-1200	90	9
MIX4S MON	0.18	230	400	630-730-830-930	200	8
MIX4S TRI	0.18	400	400	630-730-830-930	200	8
MIX2 MON	0.37	230	65 o. 200 o. 400	630-730-830-930	200	9
MIX2 TRI	0.37	400	65 o. 200 o. 400	630-730-830-930	200	9
MIX8 MON	0.09	230	65 o. 200	630-730-830-930	150	6
MIX8 TRI	0.09	400	65 o. 200	630-730-830-930	150	6
MIX4 MON	0.18	230	65 o. 200	630-730-830-930	200	8
MIX4 TRI	0.18	400	65 o. 200	630-730-830-930	200	8

Order code

Standard stirrer unit Type MIX			
		<b>El. power [kW], Rotation speed [rpm ]</b>	
V8	0.09	1.400	
V4	0.18	1.400	
V2	0.37	1.400	
4S	0.18	400	
2	0.37	65/200/400	
8	0.09	65/400	
4	0.18	65/400	
		<b>Power supply</b>	
	1	230 V, 50/60 Hz	
	0	400 V, 50/60 Hz	
		<b>Shaft length [mm]</b>	
	6	630	
	7	730	
	8	830	
	9	930	
	11	1.100 (Type H2 only)	
	12	1.200 (Type H2 only)	
		<b>Rotation speed [rpm]</b>	
		65	
		200	
		400	
		1400	

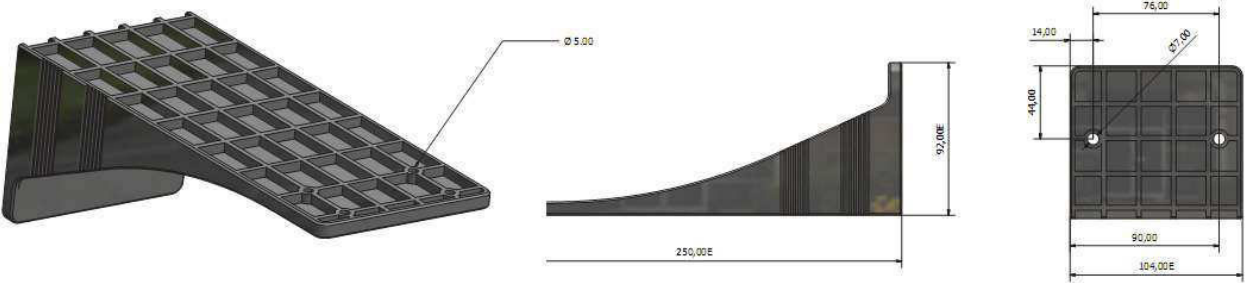
<b>MIX</b>	<b>2</b>	<b>-1</b>	<b>-8</b>	<b>400</b>	(example order)
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Your selection

<b>MIX</b>					
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**Wall holders / mounting brackets  
for solenoid diaphragm dosing pumps**

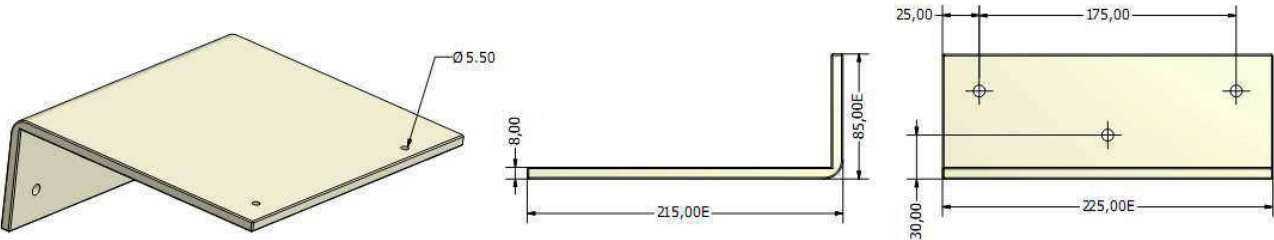
**STF made from PP: For solenoid diaphragm dosing pumps Series: F, FA, FMS and FMSA**



Order code

**STF**

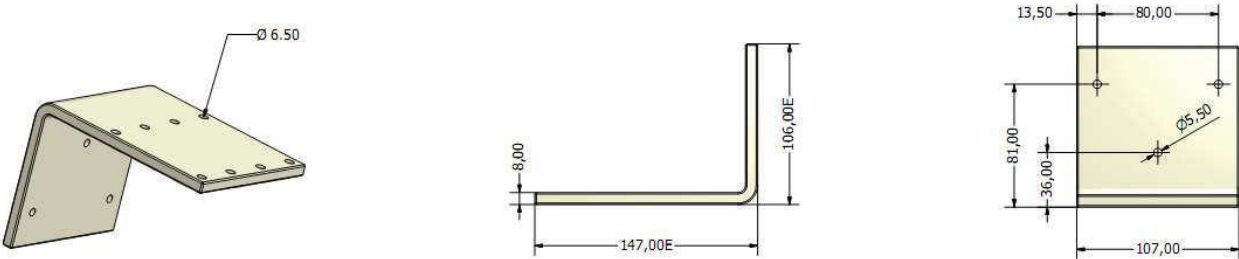
**STT made from PVC: For solenoid diaphragm dosing pumps Series: G, GMS, T and TMS**



Order code

**STT**

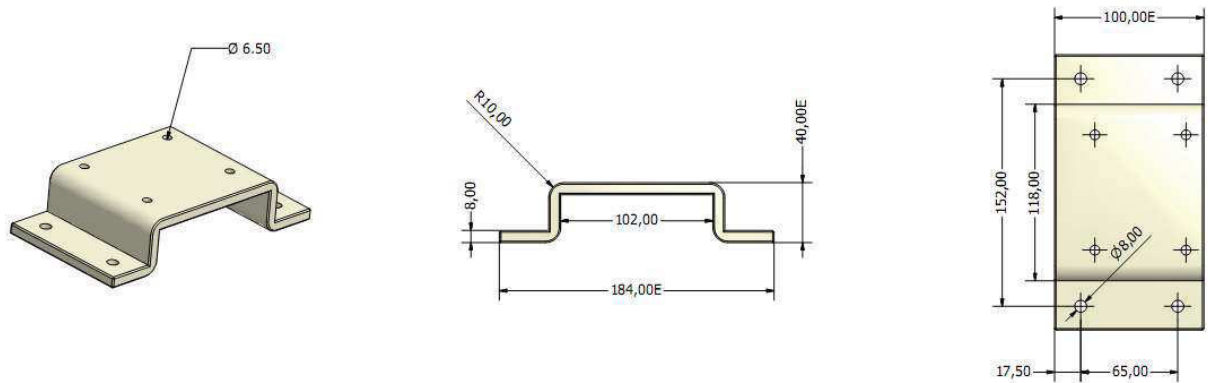
**STK made of PVC: For solenoid diaphragm dosing pumps Series: H, HMS, HA, HMSA, K, KA, KMS and KMSA**



Order code

**STK**

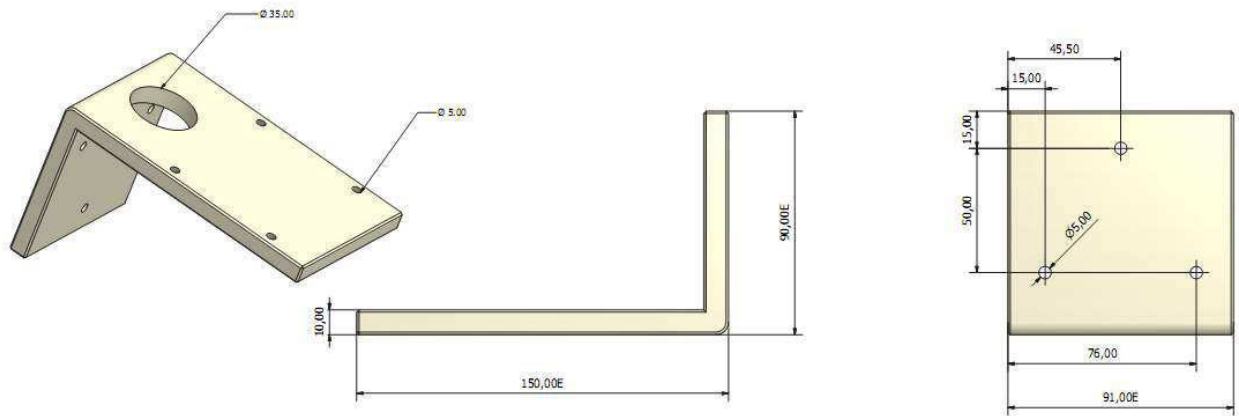
**STK1 made from PVC: For solenoid diaphragm dosing pumps Series: H, HMS, HA, HMSA, K, KA, KMS and KMSA**



Order code

**STK1**

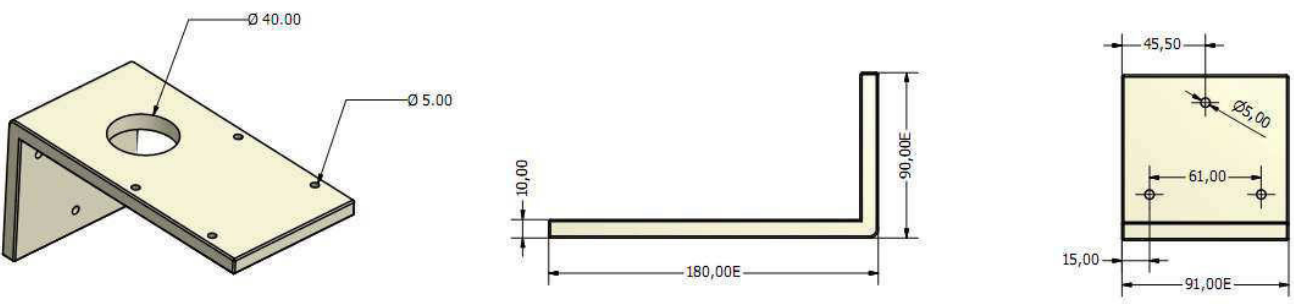
**STK2 made from PVC: For solenoid diaphragm dosing pumps Series: H, HMS, HA, HMSA, K, KA, KMS and KMSA**



Order code

**STK2**

**STK3 made from PVC: For solenoid diaphragm dosing pumps Series: H, HMS, HA, HMSA, K, KA, KMS and KMSA**



Order code

**STK3**

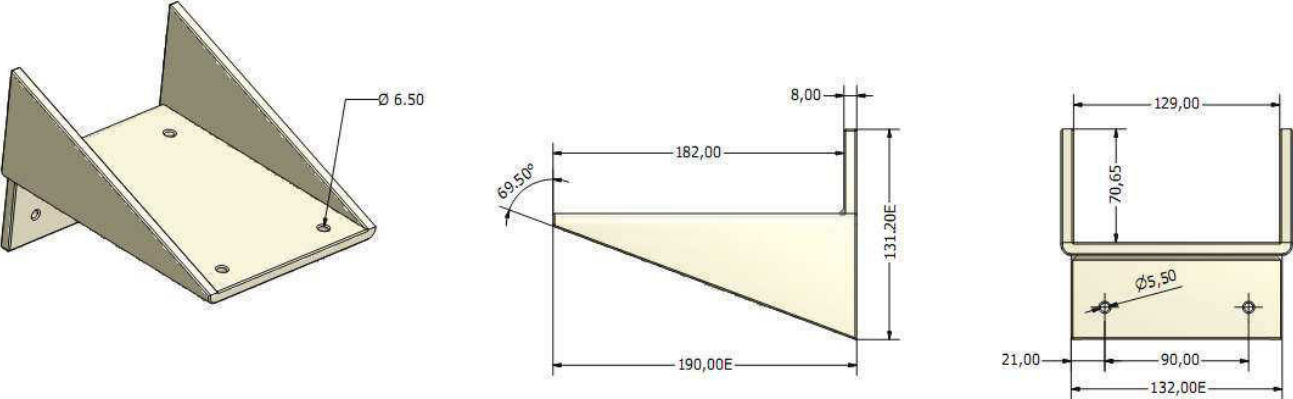
**STK4 made from PVC: For solenoid diaphragm dosing pumps Series: H, HMS, HA, HMSA, K, KA, KMS and KMSA**



Order code

**STK4**

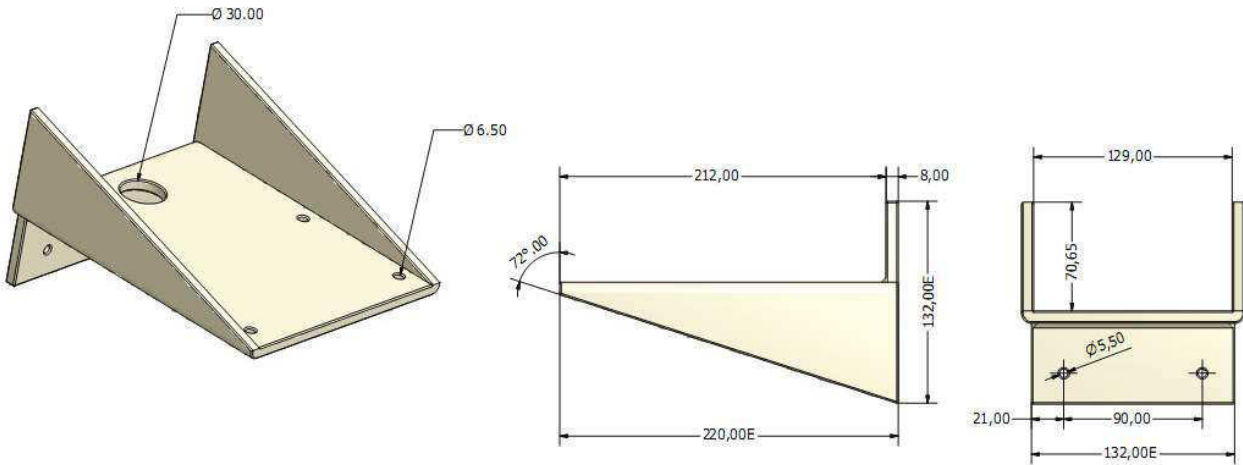
**STAMS made from PVC: For solenoid diaphragm dosing pumps Series: CMS, CMSA, AMS und AMSA**



Order code

**STAMS**

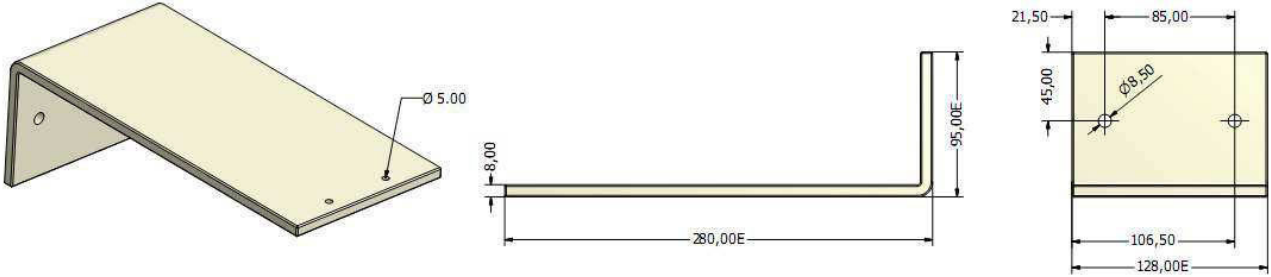
**STAMS2 made from PVC: For solenoid diaphragm dosing pumps Series: CMS, CMSA, AMS und AMSA**



Order code

**STAMS2**

STV made from PVC: For solenoid diaphragm dosing pumps Series: V, VA, VMS und VMSA



Order code

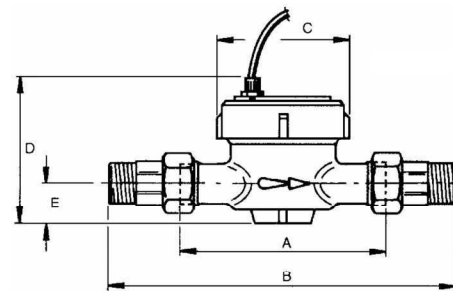
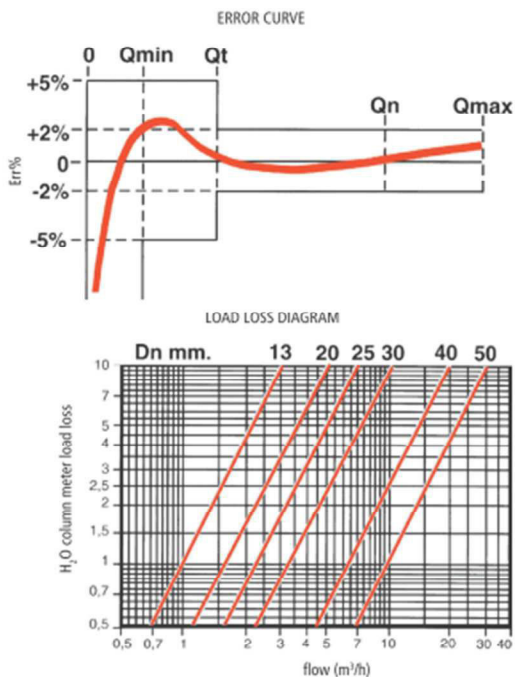
**STV**

## Impeller contact-water meter



### General information

- Impeller water meter made of high-quality brass die-casting, interior parts made of plastics
- Structural dimensions and connection dimensions according to DIN
- Different versions available: wet-running meter (Series CT ... ) and dry-running meter (Series CA ... ), i.e. with dry meter chamber
- With roller type counter, min. reading 0.1 L (DN 50: 0.5 l), max. reading  $10^5$  m<sup>3</sup> and reed contact output, max. contact load 24 V, 100 mA
- Leads available in various standard lengths with BNC plug or open-ended
- Different versions available:
  - for cold water up to 30° C
  - For warm water up to 90° C
  - for desalinated water and condensate (Teflon coated inside and outside)
- Contact-water meter including connection threads and seals
- Certificate of official calibration on request
- Max. voltage 250 VAC, 200 VDC
- Max. current 1.0 A
- Max. power 10 VA
- Insulation voltage 4000 Vac





Technical specifications:

Serie CT .../CA ...		15	20	25	30	40	50
Connection size	DN inch	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 32 1 1/4"	DN 40 1 1/2"	DN 50 2"
Nominal flow Q <sub>n</sub> **	m <sup>3</sup>	1.5	2.5	3.5	5	10	15
Max. flow Q <sub>max</sub>	m <sup>3</sup>	3	5	7	10	20	30
Minimum inflow	l/h	10	15	20	20	25	50
Max. operating pressure	bar	16					
Pressure loss at Q <sub>max</sub>	bar	1					
Pulse interval * Specified in order code	1 Litre	Impulses 1 - 2 - 4	Impulses 1 - 2 - 4	Impulses 1 - 2 - 4	Impulses 1 - 2 - 4	Impulses 1 - 2 - 4	Impulses 1 - 2 - 4
	10 Litre						
	100 Litre						
	1000 Litre						
Installed length without screwed joints	A Mm	110	130	160	160	200	300
Installed length with screwed joints	B mm	190	228	260	280	340	455
Width	C mm	80	80	100	100	110	108
Height	D mm	110	110	132	132	137	131
Weight with screwed joints	kg	0.85	1.1	1.75	2	3.46	6.75

\* Standard design, other pulse sequences available on request

\*\* Nominal flow Q<sub>n</sub> = 1/2 Max. flow Q<sub>max</sub> (according to calibration requirements)

Order Code

Serie CT .../CA ...		15	20	25	30	40	50
	Connection size	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 32 1 1/4"	DN 40 1 1/2"	DN 50 2"
	<b>Price</b>						
<b>CTFI</b>	Wet running meter for cold water up to 30° C						
<b>CTCI</b>	Wet running meter for warm water up to 90° C						
<b>CATFI</b>	Dry running meter for cold water up to 30°C						
<b>CATCI</b>	Dry running meter for hot water up to 90°C						
<b>CTFIT</b>	Teflon coated for cold water up to 30°C						
<b>CTCIT</b>	Teflon coated for hot water up to 90°C						
	Lead length:       *2 m *Standard        5 m 10 m >10 m, pro m						
	Lead connection BNC – Stecker Kabelende offen						

<b>CTFI –</b>	<b>20 – 1 – 4 – 2 – BNC</b>		Example order Wet running meter for cold water up to 30° C, connection size DN 20, 3/4", Impulse interval 4 Impulses/Litre. Lead length 2 m, with BNC – plug connector
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Your selection:

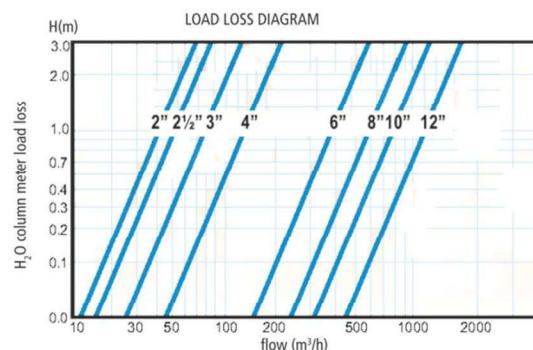
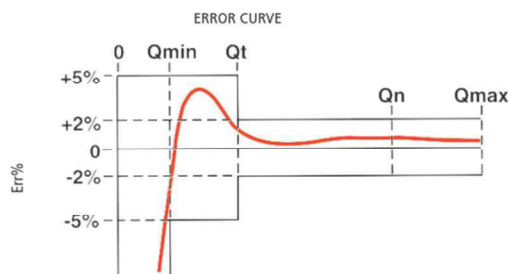
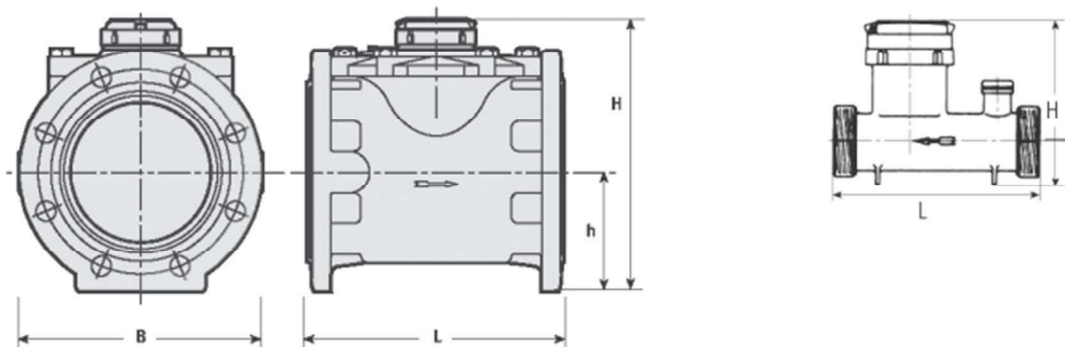
<b>CTFI -</b>			
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## Woltmann – contact-water meter, Series CW



### General information

- Woltmann water meter made of high-quality cast iron, lacquer coated inside and outside, interior parts made of plastic
- Dimensions and flange dimensions from DN 50 to DN 300
- Dry-running meter, i.e. with dry meter chamber
- With roller type counter and reed contact output, max. contact load 24 V, 100 mA
- Leads available in various standard lengths with BNC plug or open-ended
- Operating temperature: warm water up to 130° C;
- max. operating pressure 16 bar
- Certificate of official calibration on request
- Max. voltage 250 VAC, 200 VDC
- Max. current 1.0 A
- Max. power 10 VA
- Insulation voltage 4000 Vac



Technical specifications:

<b>Serie CW</b>		<b>50</b>	<b>65</b>	<b>80</b>	<b>100</b>
Connection size		DN 50	DN 65	DN 80	DN 100
Nominal flow $Q_n^{**}$	m <sup>3</sup>	15	25	40	60
Max. flow $Q_{max}$	m <sup>3</sup>	100	100	170	300
Trägheitsdurchfluss	m <sup>3</sup> /h	0.30	0.40	0.40	0.60
Übergangsdurchfluss	m <sup>3</sup> /h	0.45	0.75	0.8	1,5
Minimum inflow	m <sup>3</sup> /h	1.0	1.4	1.4	2,0
Max. operating pressure	bar	16			
Pressure loss at $Q_{max}$	bar	approx. 1.0			
Pulse interval * Specified in order code	10 Liter	Impulse 1-2-4	Impulse 1-2-4	Impulse 1-2-4	X
	100 Liter	Impulse 1-2-4	Impulse 1-2-4	Impulse 1-2-4	Impulse 1-2-4
	1000 Liter	Impulse 1-2-4	Impulse 1-2-4	Impulse 1-2-4	Impulse 1-2-4
	10000 Liter	X	X	X	Impulse 1-2-4
Display Roller-type counter	min. ltr	1	1	1	10
	max. m <sup>3</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>7</sup>
Installed length, L	mm	200	200	230	250
Installed height, H	mm	214	228	234	250
Flange diameter, B	mm	165	185	200	200
Height, h	mm	70	84	90	106
Weight	kg	12.0	13.0	15.5	19.0

\* Standard design, other pulse sequences available on request

\*\* Nominal flow  $Q_n = \frac{1}{2}$  Max. flow  $Q_{max}$  (according to calibration requirements)

Technical specifications:

<b>Serie CW</b>		<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>
Connection size		DN 150	DN 200	DN 250	DN 300
Nominal flow $Q_n^{**}$	m <sup>3</sup>	150	250	400	600
Max. flow $Q_{max}$	m <sup>3</sup>	410	730	1400	2000
Inertial flow	m <sup>3</sup> /h	1.00	2.00	6.00	7.00
Transition flow	m <sup>3</sup> /h	2.5	7.0	10.0	11.5
Minimum inflow	m <sup>3</sup> /h	3.5	15.0	13.0	40.0
Max. operating pressure	bar	16			
Pressure loss at $Q_{max}$	bar	approx. 1.0			
Pulse interval * Specified in order code	10 Litre	X	X	X	X
	100 Litre	Impulses 1-2-4	X	X	X
	1000 Litre	Impulses 1-2-4	Impulses 1-2-4	Impulses 1-2-4	Impulses 1-2-4
	10000 Litre	Impulses 1-2-4	Impulses 1-2-4	Impulses 1-2-4	Impulses 1-2-4
Display Roller-type counter	min. ltr	10	100	100	100
	max. m <sup>3</sup>	10 <sup>7</sup>	10 <sup>8</sup>	10 <sup>8</sup>	10 <sup>8</sup>
Installed length, L	mm	300	350	450	500
Installed height, H	mm	310	338	438	465
Flange diameter, B	mm	283	340	4096	460
Height, h	mm	130	158	258	330
Weight	kg	12.0	13.0	15.5	19.0

\* Standard design, other pulse sequences available on request

Order Code

A

Serie CW ...		50	65	80	100
		DN 50	DN 65	DN 80	DN 100
<b>CWFA</b>	Dry running meter for cold water up to 60°C				
<b>CWCA</b>	Dry running meter for hot water up to 130°C				
<b>CWFAT</b>	Teflon-coated Dry running meter for cold water up to 60° C				
	Lead length: *2 m *Standard 5 m 10 m >10 m, pro m				
	Lead connection: BNC – plug Lead-end open				

<b>CWFA –</b>	<b>100 – 100 – 4 – 2 – BNC</b>		Example order: Wet running meter for cold water up to 60° C, Connection size DN 100, Impulse interval 4 Impulses/ 100 liter. Lead length 2 m, with BNC – plug connection
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Your selection:

<b>CWFA</b>			
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Order code

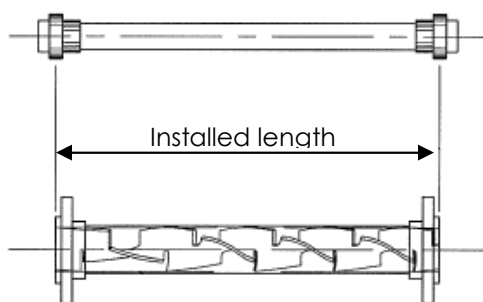
Serie CW ...		150	200	250	300
		DN 150	DN 200	DN 250	DN 300
<b>CWFA</b>	Dry-running meter für kaltes Wasser up to 60° C				
<b>CWCA</b>	Dry-running meter for warm water up to 130° C				
	Lead length: *2 m *Standard 5 m 10 m >10 m, pro m				
	Lead connection: BNC – Plug Lead-end open				

<b>CWFA –</b>	<b>150 – 100 – 4 – 2 – BNC</b>		Example order: Wet running meter for cold water up to 60° C, connection size DN 150, Impulse interval 4 Impulses/ 100 litre Lead length 2 m, mit BNC – plug connection
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Your selection:

<b>CWFA</b>			
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## Static line blender Type SRMK made of plastic for media which are free of solids



### General information

Static line blender for intense blending of two liquid media (without solids) in flow. The mixer insert is a slotted helix. The system operates without moving parts.

- Materials and max. temperatures:
  - PVC up to nominal pressure NP 16, up to max. 40° C
  - PP and PE up to nominal pressure NP 10, up to max. 60° C
  - Stainless steel Mat. 1.4301 up to nominal pressure NP 10, to max. 80°C

Order code

Series SRMK					
PVC	<b>Material</b>				
PP	PVC				
PE	PP				
	PE				
	<b>Connection</b>				
	KB	Glue socket			
	IG	Female thread			
		<b>Nominal diameter ND</b>	<b>Diameter mm</b>	<b>Installed length</b>	
		mm			
		15	20	360	
		20	25	360	
		25	32	390	
		32	40	405	
		40	50	460	
		50	63	475	
		65	75	610	

<b>SRMK</b>	<b>PVC</b>	<b>KB</b>	<b>50</b>	(example order)	
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Your selection

<b>SRMK</b>					
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Order code

Series SRMK					
	Material	Connection			
		FL	Nominal diameter ND mm	Diameter mm	Installed length
PVC	PVC	Flange	15	20	360
PP	PP		20	25	360
PE	PE		25	32	390
			32	40	405
			40	50	460
			50	63	475
			65	75	610
			80	90	750
			100	110	900
			125	140	1.000
			150	160	1.000

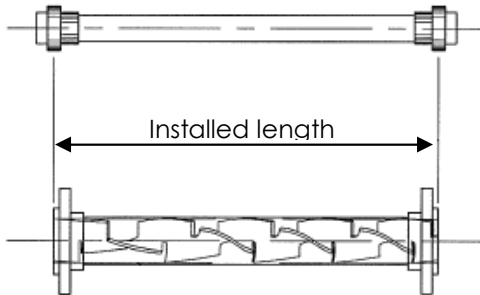
<b>SRMK</b>	<b>PVC</b>	<b>FL</b>	<b>50</b>	(example order)
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Your selection

<b>SRMK</b>				
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## Static line blender Type SRME made of stainless steel

for media which are free of solids



### General information

Static line blender for intense blending of two liquid media (without solids) in flow. The mixer insert is a slotted helix. The system operates without moving parts.

- Materials and max. temperatures:
  - Stainless steel Mat. 1.4301 up to nominal pressure NP 10, to max. 80°C

Order code

Series SRME			
SS	<b>Material</b> Stainless steel 1.4301		
	AG	<b>Connection</b> Male thread	
	IG	Female thread	
		<b>Nominal diameter ND</b>	<b>Installed length mm</b>
		15	360
		20	360
		25	390
		32	405
		40	460
		50	475

<b>SRME</b>	<b>SS</b>	<b>AG</b>	<b>25</b>	(example order)
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Your selection

<b>SRME</b>				
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Order code

Series SRME			
SS	<b>Material</b> Stainless steel 1.4301		
	FL	<b>Connection</b> Flange	
		<b>Nominal diameter ND</b>	<b>Installed length mm</b>
		15	360
		20	360
		25	390
		32	405
		40	460
		50	475
		65	610
		80	750
		100	900

<b>SRME</b>	<b>SS</b>	<b>FL</b>	<b>25</b>	(example order)
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Your selection

<b>SRME</b>				
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## Static line blender Type FSHM for media which contain solids



### General information

Static line blender for intense blending of two liquid media (with solids) in flow. The blending insert consists of deflectors. The system operates without moving parts.

- Materials: PP and PE, Colour: natural
- Max. operating pressure at nominal pressure NP 10,
- Maximum operating temperature: at 60°C
- Connection: loose flange

Order code

Series FSHM					
	PP PE	<b>Material</b> PP PE			
		FL	<b>Connection</b> loose flange		
			<b>Nominal diameter ND</b>	<b>Installed length mm</b>	
			50	475	
			65	610	
			80	750	
			100	900	

<b>FSHM</b>	<b>PVC</b>	<b>FL</b>	<b>50</b>	(example order)	
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Your selection

<b>FSHM</b>					
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Order Code

Series FSHM VA					
	VA	<b>Material</b> Stainless Steel VA 1.4541			
		FL	<b>Connection</b> Fixed flange		
			<b>Nominal diameter DN</b>	<b>Installed length mm</b>	
			50	475	
			65	610	
			80	750	
			100	900	

<b>FSHM</b>	<b>VA</b>	<b>FL</b>	<b>50</b>	(Example order)	
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Your selection:

<b>FSHM</b>					
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## Preselection Guide for Pump Heads

First, search within the table for the desired series name of your metering pump. Then choose the desired material for the type of replacement pump head. As additional information, you will find the pump capacity.

Serie	l/h	bar	Material		
			Acryl	PVDF	SS
			Pumpenkopf		
V/ VMS	1	20		J	
	2	15		K	
	2	18		K	
	4	10		K	
	4	15		K	
	4	18		K	
	5	10		K	
	5	15		K	
	6	7		K	
	8	4		K	
	10	3		K	
	10	5		K	
	10	10		K	
	12	5		K	
16	1		K		
17	2		K		
VA / VMSA	1	15		KA	
	2	10		KA	
	2	18		KA	
	3	15		KA	
	3,4	10		KA	
	4	7		KA	
	5,5	4		KA	
	7	3		KA	
	7	10		KA	
	7,5	5		KA	
	9	5		KA	
	13	2		KA	
13,5	1		KA		
K / KMS	1	20	A	I	A
	2	18	B	L	B
	5	10	B	L	B
	8	8	B	L	B
	10	5	B	L	B
	18	2	G	M	G

Serie	l/h	bar	Material		
			Acryl	PVDF	SS
			Pumpenkopf		
KA/ KMSA	1	18	AA	LA	
	3	15	BA	LA	
	5	8	BA	LA	
	7	5	BA	LA	
	13	2	GA	MA	
T / TMS	5	20	B	L	
	15	5	D	N	
	20	4	D	N	
	30	3	E	S	
	50	1	E	S	
	100	0	F	T	
G / GMSD Polymer	1	6	BP		
	3	4	CP		
	8	2	DP		
	20	1	EP		
	25	0,5	FP		
AMS / AMSD	5	25	B	L	B
	10	15	C	M	C
	20	7	D	N	D
	40	3	E	S	E
	60	2	F	T	F
AMSA / AMSAD	3,2	25	BA	LA	
	6	15	CA	MA	
	13	7	DA	NA	
	30	3	EA	SA	
	38,5	2	FA	TA	
CMS- / CMSD- Polymer	2	8	BP		
	4	6	CP		
	10	4	DP		
	25	2	EP		
	40	1	FP		

## Pump heads for solenoid diaphragm dosing pumps

### Series F (Type PCS) and Series FA (Type PCA) self-venting



Typ PCS



Typ PCA

#### General information

- Pump head made of PP or PVDF
- Suction and delivery valve with hose connection, and manual vent valve. For dosing pumps with self-venting and automatic vent valve  
Connection sizes 3/8"x 4/6 mm hose connection
- O-ring to seal the pump head – housing
- 4-pump head screws made of stainless steel
- Pump head type PCS for dosing pumps Series F and FMS
- Pump head type PCA for dosing pumps series FA and FMSA with self-venting

Order code

Pump head				
PSC	Pump head			
PCS	PCS			
PCA	PCA with self-venting			
	3/8"	Valve size		
		3/8"		
		4x6	Hose connection	
			mm	
		PP	Material pump head	valves
		PVDF+PP	PP	PP
		PVD	PVDF	PP
			PVDF	PVDF
			O-ring	
		V	FPM (Viton)	
		E	EPDM	

PCS	3/8"	4x6	PVDF	V	(example order)
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Your selection

PCS					
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## Pump heads for solenoid diaphragm dosing pump

Series V and Series VA (with self-venting) made of PVDF



Typ J + K

Typ

### General information

- Pump head made of PVDF
- Suction and delivery valve with hose connection, and manual venting valve. For dosing pumps with self-venting and automatic venting valve connection sizes 3/8" x (see table) mm hose connection
- O-ring to seal the pump head – housing
- Pump head type J and K for dosing pumps series V and VMS
- Pump head type KA for dosing pumps series VA and VMSA with self-venting

Order code

Pump head			
J	Pump head		
K	J		
KA	K		
	KA with self-venting		
	3/8"	Valve size	
		3/8"	
		Hose connection	
	4x6	mm	
	4/8	mm	
	6/8	mm	
		PVD	Material pump head valves
			PVDF PVDF
		V	O-ring
		E	FPM (Viton)
			EPDM

KA	3/8"	6/8	PVDF	V	(example order)
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Your selection

PCS					
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## Pump heads for solenoid diaphragm dosing pump

Series H, HA, HMS, HMSA, G, GMS, CMS, CMSA made of PP



### General information

- Pump head made of PP
- Suction and delivery valve with hose connection, and manual venting valve.  
For dosing pumps with self-venting and automatic venting valve  
Connection sizes 3/8" or 1/2" x (see table) mm hose connection
- O-ring to seal the pump head – housing

Order code

Pump head PP				Material
PP	Valve size	Hose connection [mm]	O-ring	PP
<b>A</b>	3/8"	4 x 6 / 4 x 8	Viton / EPDM	
<b>B</b>	3/8"	4 x 6 / 4 x 8	Viton / EPDM	
<b>C</b>	3/8"	4 x 6 / 4 x 8	Viton / EPDM	
<b>D</b>	1/2"	4 x 6 / 4 x 8 / 6 x 8	Viton / EPDM	
<b>E</b>	1/2"	8 x 10 / 8 x 12	Viton / EPDM	
<b>F</b>	1/2"	8 x 10 / 8 x 12	Viton / EPDM	
<b>G</b>	1/2"	6 x 8	Viton / EPDM	

Example order

<b>PP-A</b>	<b>3/8"</b>	<b>4/6</b>	<b>Viton</b>	
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Your selection

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## Pump heads for solenoid diaphragm dosing pump

Series H, HA, HMS, HMSA, K, KA, KMS, KMSA, G, GMS, T, TMS, CMS, CMSA, AMS and AMSA made of acrylic



### General information

- Pump head made of acrylic
- Suction and delivery valve with hose connection, and manual venting valve.  
For dosing pumps with self-venting and automatic venting valve  
Connection sizes 3/8" or 1/2" x (see table) mm hose connection
- O-ring to seal the pump head – housing

Order code

Pump head AC						Material
Standard	self-venting	Viscosity up to 8000 CPS	Valve size	Hose connection mm	O-ring	Acrylic (PMMA)
A			3/8"	4 x 6 / 4 x 8	Viton / EPDM	
B			3/8"	4 x 6 / 4 x 8	Viton / EPDM	
C			3/8"	4 x 6 / 4 x 8	Viton / EPDM	
D			1/2"	6 x 8	Viton / EPDM	
E			1/2"	8 x 10 / 8 x 12	Viton / EPDM	
F			1/2"	8 x 10 / 8 x 12	Viton / EPDM	
G			1/2"	6 x 8	Viton / EPDM	
	AA		3/8"	4 x 6	Viton / EPDM	
	BA		3/8"	4 x 6 / 4 x 8	Viton / EPDM	
	CA		3/8"	4 x 6 / 4 x 8	Viton / EPDM	
	DA		1/2"	6 x 8	Viton / EPDM	
	EA		1/2"	8 x 10 / 8 x 12	Viton / EPDM	
	FA		1/2"	8 x 10 / 8 x 12	Viton / EPDM	
	GA		1/2"	6 x 8	Viton / EPDM	
		B LPV	1/2"	8 x 12 X 16 x 22	Viton / EPDM	
		C LPV	1/2"	8 x 12 X 16 x 22	Viton / EPDM	
		D LPV	1/2"	8 x 12 X 16 x 22	Viton / EPDM	
		E LPV	1/2"	8 x 12 X 16 x 22	Viton / EPDM	
		F LPV	1/2"	8 x 12 X 16 x 22	Viton / EPDM	

Example order

<b>AC A</b>	<b>3/8"</b>	<b>4/6</b>	<b>Viton</b>	
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Your selection

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## Pump heads for solenoid diaphragm dosing pump

Series H, HA, HMS, HMSA, K, KA, KMS, KMSA, G, GMS, T, TMS, CMS, CMSA, AMS and AMSA made of PVDF



### General information

Spare parts kits consisting of:

- Pump head made of PVDF
- Suction and delivery valve with hose connection, and manual venting valve.  
For dosing pumps with self-venting and automatic venting valve Connection sizes 3/8" or 1/2" x (see table) mm hose connection
- O-ring to seal the pump head – housing

Order code

Pump head PVDF					Material
Standard	Self-venting	Valve size	Hose connection mm	O-ring	PVDF
<b>A</b>		3/8"	4 x 8	Viton / EPDM	
<b>B</b>		3/8"	4 x 6 / 4 x 8 / 6 x 8	Viton / EPDM	
<b>C</b>		3/8"	4 x 6 / 4 x 8 / 6 x 8	Viton / EPDM	
<b>D</b>		1/2"	6 x 8	Viton / EPDM	
<b>E</b>		1/2"	8 x 10 / 8 x 12	Viton / EPDM	
<b>F</b>		1/2"	8 x 10 / 8 x 12	Viton / EPDM	
<b>G</b>		1/2"	6 x 8	Viton / EPDM	
	<b>AA</b>	3/8"	4 x 8	Viton / EPDM	
	<b>BA</b>	3/8"	4 x 6 / 4 x 8 / 6 x 8	Viton / EPDM	
	<b>CA</b>	3/8"	4 x 6 / 4 x 8 / 6 x 8	Viton / EPDM	
	<b>DA</b>	1/2"	6 x 8	Viton / EPDM	
	<b>EA</b>	1/2"	8 x 10 / 8 x 12	Viton / EPDM	
	<b>FA</b>	1/2"	8 x 10 / 8 x 12	Viton / EPDM	
	<b>GA</b>	1/2"	6 x 8	Viton / EPDM	

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Order code

Pump head PVDF					Material
Standard	Self-venting	Valve size	Hose connection mm	O-ring	PVDF
I		3/8"	4 x 6	Viton / EPDM	
L		3/8"	4 x 6 / 4 x 8	Viton / EPDM	
M		3/8"	6 x 8	Viton / EPDM	
N		1/2"	6 x 8	Viton / EPDM	
S		3/4"	8 x 10 / 8 x 12	Viton / EPDM	
T		3/4"	12 x 18 / 13 x 16	Viton / EPDM	
	IA	3/8"	4 x 6	Viton / EPDM	
	LA	3/8"	4 x 6 / 4 x 8	Viton / EPDM	
	MA	3/8"	6 x 8	Viton / EPDM	
	NA	1/2"	6 x 8	Viton / EPDM	
	SA	3/4"	8 x 10 / 8 x 12	Viton / EPDM	
	TA	3/4"	12 x 18 / 13 x 16	Viton / EPDM	

Example order

<b>PVDF-S</b>	<b>3/4"</b>	<b>8/12</b>	<b>Viton</b>	
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Your selection

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## Pump heads for solenoid diaphragm dosing pump Series K, KA, KMS, KMSA, T, TMS, CMS and CMSA made of stainless steel



### General information

Spare parts kits consisting of:

- Pump head made of stainless steel
- Suction and delivery valve with hose connection, made of stainless steel
- O-ring to seal the pump head housing

Order code

Pump head SS				Material
Standard	Valve size	Hose connection [mm]	O-ring	Stainless steel
A	3/8"	4 x 6	Viton / EPDM	
B	3/8"	4 x 6	Viton / EPDM	
C	3/8"	4 x 6	Viton / EPDM	
D	1/2"	6 x 8	Viton / EPDM	
E	1/2"	6 x 8	Viton / EPDM	
F	1/2"	6 x 8	Viton / EPDM	
G	1/2"	6 x 8	Viton / EPDM	

Example order

<b>SS-B</b>	<b>3/8"</b>	<b>4 x 6</b>	<b>Viton</b>	
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Your selection

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## Pump heads for Polymer solenoid diaphragm dosing pump Type BP – EP



### General information

Spare parts kits consisting of:

- Pump head made of acrylic
- Suction and delivery valve with hose connection, and manual venting valve made of PVDF
- O-ring to seal the pump head housing

Order code

Pump head AC	O-rings	Material Acrylic
BP	FPM EPDM	
CP	FPM EPDM	
DP	FPM EPDM	
EP	FPM EPDM	
FP	FPM EPDM	

Example order

AC-BP	FPM	
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Your selection

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## Suction and delivery valve kits for solenoid membrane dosing pumps with self-venting pump head



### General information

Each valve kit consists of one intake valve, one pressure valve and one venting valve with:

- body made of PP or PVDF
- Sleeve nut, clamping ring and hose connection
- Ceramic valve ball
- Valve spring made of Hastelloy® C 276
- O-rings made of Viton®, or EPDM

Order code

Kit suction valve, delivery valve and venting valve						
Valve size		Hose size	Body	O-ring	Valve ball	
3/8"	x	4/6 mm	+ PP	+ FPM	+CE	
3/8"	x	4/6 mm	+ PP	+ EPDM	+CE	
3/8"	x	4/6 mm	+ PVDF	+ FPM	+CE	
3/8"	x	4/6 mm	+ PVDF	+ EPDM	+CE	
3/8"	x	4/8 mm	+ PP	+ FPM	+CE	
3/8"	x	4/8 mm	+ PP	+ EPDM	+CE	
3/8"	x	4/8 mm	+ PVDF	+ FPM	+CE	
3/8"	x	4/8 mm	+ PVDF	+ EPDM	+CE	
3/8"	x	6/8 mm	+ PP	+ FPM	+CE	
3/8"	x	6/8 mm	+ PP	+ EPDM	+CE	
3/8"	x	6/8 mm	+ PVDF	+ FPM	+CE	
3/8"	x	6/8 mm	+ PVDF	+ EPDM	+CE	
1/2"	x	6/8 mm	+ PP	+ FPM	+CE	
1/2"	x	6/8 mm	+ PP	+ EPDM	+CE	
1/2"	x	6/8 mm	+ PVDF	+ FPM	+CE	
1/2"	x	6/8 mm	+ PVDF	+ EPDM	+CE	
1/2"	x	8/10 mm	+ PVDF	+ FPM	+CE	
1/2"	x	8/10 mm	+ PVDF	+ EPDM	+CE	
1/2"	x	8/12 mm	+ PP	+ EPDM	+CE	
1/2"	x	8/12 mm	+ PP	+ FPM	+CE	

<b>Kit SDE</b>	<b>3/8 x 4/6 + PVDF + FPM + CE for pump head BA (example order)</b>
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### Note

When ordering dosing valves, please also specify the dosing-pump type or the code letters for the pump head!

Your selection

<b>Kit SDE</b>	
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## Suction and delivery valve kits for solenoid membrane dosing pumps



### General information

Each valve kit consists of one suction valve and one delivery valve with:

- Body made of PP or PVDF, PTFE or stainless steel SS 316 (EN 1.4436)
- Sleeve nut, clamping ring and hose connection
- Valve ball made of ceramic or stainless steel AISI 316 (EN 1.4436)
- Valve spring made of Hastelloy® C 276
- O-rings made of Viton®, or EPDM

Order code

Suction and delivery valve kit						
Valve size		Hose size	Body	O-ring	Valve ball	
3/8"	x	4/6 mm	+ PP	+ FPM	+CE	
3/8"	x	4/6 mm	+ PP	+ EPDM	+CE	
3/8"	x	4/6 mm	+ PTFE	+ FPM	+CE	
3/8"	x	4/6 mm	+ PTFE	+ EPDM	+CE	
3/8"	x	4/6 mm	+ PVDF	+ FPM	+CE	
3/8"	x	4/6 mm	+ PVDF	+ EPDM	+CE	
3/8"	x	4/6 mm	+ SS	+ FPM	+ SS	
3/8"	x	4/6 mm	+ SS	+ EPDM	+ SS	
3/8"	x	4/8 mm	+ PP	+ FPM	+CE	
3/8"	x	4/8 mm	+ PP	+ EPDM	+CE	
3/8"	x	4/8 mm	+ PTFE	+ FPM	+CE	
3/8"	x	4/8 mm	+ PTFE	+ EPDM	+CE	
3/8"	x	4/8 mm	+ PVDF	+ FPM	+CE	
3/8"	x	4/8 mm	+ PVDF	+ EPDM	+CE	
3/8"	x	4/8 mm	+ SS	+ FPM	+ SS	
3/8"	x	4/8 mm	+ SS	+ EPDM	+ SS	
3/8"	x	6/8 mm	+ PP	+ FPM	+CE	
3/8"	x	6/8 mm	+ PP	+ EPDM	+CE	
3/8"	x	6/8 mm	+ PTFE	+ FPM	+CE	
3/8"	x	6/8 mm	+ PTFE	+ EPDM	+CE	
3/8"	x	6/8 mm	+ PVDF	+ FPM	+CE	
3/8"	x	6/8 mm	+ PVDF	+ EPDM	+CE	
3/8"	x	6/8 mm	+ SS	+ FPM	+CE	
3/8"	x	6/8 mm	+ SS	+ EPDM	+CE	

1/2"	x	4/6 mm	+ PP	+ FPM	+CE
1/2"	x	4/6 mm	+ PP	+ EPDM	+CE
1/2"	x	4/6 mm	+ PTFE	+ FPM	+CE
1/2"	x	4/6 mm	+ PTFE	+ EPDM	+CE
1/2"	x	4/6 mm	+ PVDF	+ FPM	+CE
1/2"	x	4/6 mm	+ PVDF	+ EPDM	+CE
1/2"	x	4/6 mm	+ SS	+ FPM	+ SS
1/2"	x	4/6 mm	+ SS	+ EPDM	+ SS
1/2"	x	6/8 mm	+ PP	+ FPM	+CE
1/2"	x	6/8 mm	+ PP	+ EPDM	+CE
1/2"	x	6/8 mm	+ PTFE	+ FPM	+CE
1/2"	x	6/8 mm	+ PTFE	+ EPDM	+CE
1/2"	x	6/8 mm	+ PVDF	+ FPM	+CE
1/2"	x	6/8 mm	+ PVDF	+ EPDM	+CE
1/2"	x	6/8 mm	+ SS	+ FPM	+ SS
1/2"	x	6/8 mm	+ SS	+ EPDM	+ SS
1/2"	x	8/10 mm	+ PVDF	+ FPM	+CE
1/2"	x	8/10 mm	+ PVDF	+ EPDM	+CE
1/2"	x	8/12 mm	+ PP	+ FPM	+CE
1/2"	x	8/12 mm	+ PP	+ EPDM	+CE
1/2"	x	8/12 mm	+ PTFE	+ FPM	+CE
1/2"	x	8/12 mm	+ PTFE	+ EPDM	+CE
1/2"	x	12/16 mm	+ PP	+ FPM	+CE
1/2"	x	12/16 mm	+ PP	+ EPDM	+CE
1/2"	x	13/16 mm	+ PVDF	+ FPM	+CE
1/2"	x	13/16 mm	+ PVDF	+ EPDM	+CE

<b>Kit SD</b>	<b>3/8" x 4/6 + PP + EPDM + CE for Dosing head B</b> (example order)
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**Note**

When ordering dosing valves, please also specify the dosing pump type or the code letters for the dosing head!

**Your selection**

<b>Kit SD</b>	
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**Abbreviations:**

Polypropylene (PP) Black	<b>Body (valve body)/Colour</b> Polyvinyliden fluoride (PVDF) while, milky	Polytetrafluoroethylene (PTFE) Blue
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**O-ring**

Viton® is a registered trademark of DuPont Dow Elastomer  
EPDM

**Valve ball**

CE = ceramic  
SS = stainless steel (EN 1.4436)  
Hastelloy® is a registered trademark of Haynes International Inc.

## Diaphragms for solenoid diaphragm dosing pumps

Series F, FA, FMS, FMSA, H, HA, HMS, HMS, K, KA, KMS, KMSA, G, GMS, T, TMS, CMS, CMSA, AMS, AMSA



### General information

- Diaphragms made of PTFE

Order code

Diaphragms	Pump head type	Material / PTFE
PCS	PCS / PCA / K / KA	
A	A / AA / I / J / JA	
B	B / BA / L / LA	
C	C / CA / M / MA	
D	D / DA / N / NA	
E	E / EA / S / SA	
F	F / FA	
G	G / GA	
N	N / NA (AMS)	
T	T / TA	

Example order

N	E	
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Your selection

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## Diaphragm for DOSAMac motor driven pumps

Series DOSAMac: FM-50, D-50, D-100, D-101 and D-121



### Versions

Series FM-50 D-50 D-100 D-101 D-121	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX	PVC
13	PVC	PTFE/NBR	PYREX	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX	PVDF

### Order code

Diaphragms for Series FM-50, D-50, D-100, D-101 and D-121	
Diaphragm diameter	
30	
50	
70	
90	
105	
120	

<b>Diaphragm</b>	<b>120</b> (example order)
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### Your selection

<b>Diaphragm</b>	
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## Pump head for DOSAMac motor driven pumps

Series DOSAMac: FM-50, D-50, D-100, D-101 and D-121



### Versions

Series FM-50 D-50 D-100 D-101 D-121	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX	PVC
13	PVC	PTFE/NBR	PYREX	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX	PVDF

### Order code

Pump head 11 (SS316) for Series FM-50, D-50, D-100, D-101 and D-121 without valves	
Diaphragm diameter	
30	
50	
70	
90	
105	
120	

<b>Pump head 11</b>	<b>70</b> (example order)
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### Your selection

<b>Pump head 11</b>	
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Order code

<b>Pump head 12 (PP) for Series FM-50, D-50, D-100, D-101 and D-121 without valves</b>		
	<b>Diaphragm diameter</b>	
	30	
	50	
	70	
	90	
	105	
	120	

<b>Pump head 12</b>	<b>70</b> (example order)	
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Your selection

<b>Pump head 12</b>		
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Order code

<b>Pump head 13 (PVC) for Series FM-50, D-50, D-100, D-101 and D-121 without valves</b>		
	<b>Diaphragm diameter</b>	
	30	
	50	
	70	
	90	
	105	
	120	

<b>Pump head 13</b>	<b>70</b> (example order)	
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Your selection

<b>Pump head 13</b>		
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Order code

<b>Pump head 23 (PVDF) for Series FM-50, D-50, D-100, D-101 and D-121 without valves</b>		
	<b>Diaphragm diameter</b>	
	30	
	50	
	70	
	90	
	105	
	120	

<b>Pump head 23</b>	<b>70</b> (example order)	
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Your selection

<b>Pump head 23</b>		
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**Diaphragm shield for DOSAMac motor driven pumps**

Series DOSAMac: FM-50, D-50, D-100, D-101 and D-121



Order code

<b>Diaphragm shield for Series FM-50, D-50, D-100, D-101 and D-121</b>		
	<b>Diaphragm diameter</b>	
	30	
	50	
	70	
	90	
	105	
	120	

<b>Diaphragm shield</b>	<b>70</b> (example order)	
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Your selection

<b>Diaphragm shield</b>		
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## Head lantern for DOSAMac motor driven pumps

Series DOSAMac: FM-50, D-50, D-100, D-101 and D-121



### Versions

Series FM-50 D-50 D-100 D-101 D-121	Pump head	Diaphragm	Valve balls	Valve seating
11	SS 316	PTFE/NBR	SS 316	SS 316
12	PP	PTFE/NBR	PYREX	PVC
13	PVC	PTFE/NBR	PYREX	PVC
16	PVC	PTFE/NBR	SS 316	PVC
23	PVDF	PTFE/NBR	PYREX	PVDF

### Order code

Head lantern for Series FM-50, D-50, D-100, D-101 and D-121	
	<b>Diaphragm diameter</b> 30 50 70 90 105 120

<b>Head lantern</b>	<b>70</b> (example order)
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### Your selection

<b>Head lantern</b>	
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## | Swimming pool Technology

## 4. Swimming-pool technology DOSAPool

### 4.1 pH-Redox

- 4.1 DOSAPool WPHRHD A
- 4.1 DOSAPool WPHRHD PER
- 4.1 DOSAPool VMSA-PH + VMSA-RH

### 4.2 pH-Chlor

- 4.2 DOSAPool WDPHCL CC1N
- 4.2 DOSAPool WDPHCL DFDS

### 4.3 pH-Redox-Chlor

- 4.3 DOSAPool DCW500 + CC1N
- 4.3 DOSAPool DCW500 + CC1N + CP2.1N
- 4.3 DOSAPool DCW500 + CC1N + CP2.1N + flocculation + algicid

## **DOSAPool WPHRHD A + NPED + NFILS/100** **Measurement, control and dosing unit for swimming pools**

Measurement, control and dosing unit for fully automated regulation of **pH and redox** value with automatic dosing of pH-minus and liquid chlorine products. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for pressures up to 1.800 KPa (18 bar).



### **General performance characteristics**

These compact units are preset, pre-assembled on a white mounting plate and delivered ready for connection by customer.

Unit with integrated measurement and control electronics for pH and redox (ORP) value and two solenoid diaphragm pumps for pH-minus and sodium hypochlorite (chlorine bleach) etc. With stand-by input (or flow monitor) and pH-priority function.

Flow rate: 3.0 l/h, 700 KPA (7 bar), other flow rates possible.

Flow cell made of PP/Noryl to hold the pH and redox electrodes with integrated flow-rate switch  
Fine filter made of PP/Noryl. Protect the electrodes against coarse impurities.

Choice of three color schemes for a panel background:

- White, non-printed
- Pool background
- on customer's request

Dimensions: 400 x 600 x 160 mm (W x H x D)

Order Code

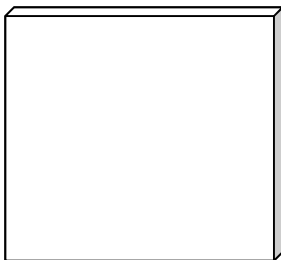
DOSAPool Type WPHRHD A		
3	<b>Solenoid diaphragm dosing pumps, Dosing capacity</b> 3,0 l/h – 7 bar (other dosing capacity available)	
	<b>Panel-Aufdruck</b>	
	W	White, without background
	P	Pool background
	K	Print according to customer's specification
	<b>4 drill-tapping clamp for pipes</b>	
	0	none
	40	DN 40
	50	DN 50
	63	DN 63

<b>WPHRHD A-</b>	<b>3</b>	<b>W</b>	<b>63</b>	(Example order)
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Your selection:

<b>WPHRHD A-</b>				
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Panel background



white



Pool



Customer's specification

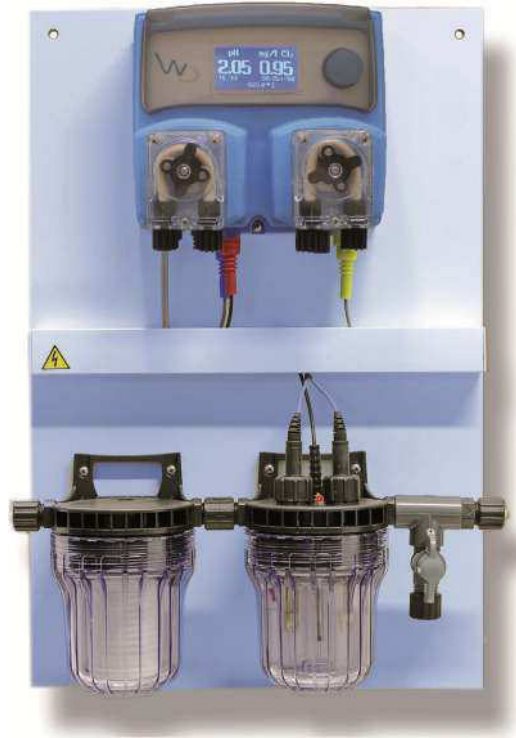
Scope of supply includes,

- 2 AK 0.5 connection lead SN6/BNC, cable length 0.5 m
- 1 pH electrode type: PHPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 redox electrode type: MVPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 pH buffer solution 50 ml, pH 4
- 1 pH buffer solution 50 ml, pH 7
- 1 redox buffer solution 50 ml, 468 mV
- 2 injection valve type: IVN, 1/2" a, hose connection: 4x6 mm, o-rings in Viton®, housing in PVDF
- 2 Foot valve with filter and empty level switch (N.O.), hose connection: 4x6 mm (axial), o-rings in Viton®, housing in PVDF
- 4 Drill-tapping clamps for pipes
- 2 2 m suction hose in PVC
- 2 2 m pressure hose in PE
- 2 2 m connection hose in PE



## **DOSAPool WPHRHD PER + NPED + NFILS/100** **Measurement, control and dosing unit for private swimming pools**

Measurement control and dosing unit for fully automated regulation of **pH and redox** value with automatic dosing of pH-minus and liquid chlorine products. The peristaltic pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for pressures up to 50 KPa (0.5 bar).



### **General performance characteristics**

These compact units are preset, pre-assembled on a white mounting plate and delivered ready for connection by customer.

Unit with integrated measurement and control electronics for pH and redox (ORP) value and two peristaltic pumps to dispense pH-minus and sodium hypochlorite (chlorine bleach) etc.  
With stand-by input (or flow monitor) and pH-priority function.

Flow rate: 2.0 l/h, 50 KPa (0.5 bar)

Flow cell made of PP/Noryl to hold the pH and redox electrodes with integrated flow-rate switch  
Fine filter in PP/Noryl to protect the electrodes against coarse impurities.

Choice of three colour schemes for a panel background:

- White, non-printed
- Pool background
- On enquiry by the customer

Dimensions: 400 x 600 x 160 mm (W x H x D)

Order Code

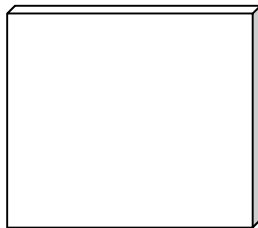
DOSAPool Type WPHRHD PER		
2	<b>Peristaltic pumps, Dosing capacity</b> 2.0 l/h 0.5 bar	
	<b>Panel background</b>	
W	White, no background	
P	Pool	
K	Customer's specifications	
	<b>4 Stück drill-tapping clamp for pipes</b>	
0	ohne	
40	40 mm	
50	50 mm	
63	63 mm	

<b>WPHRHD PER</b>	<b>40</b>	<b>W</b>	<b>63</b>	(example order)
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Your selection

<b>WPHRHD PER</b>				
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Panel background



white



Pool



customer's specification

Scope of supply includes:

- 2 AK 0.5 connection lead SN6/BNC, cable length 0.5 m
- 1 pH electrode type: PHPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 redox electrode type: MVPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 pH buffer solution 50 ml, pH 4
- 1 pH buffer solution 50 ml, pH 7
- 1 redox buffer solution 50 ml, 468 mV
- 2 injection valve type: IVN, 1/2"α, hose connection: 4x6 mm, o-rings in Viton®, housing in PVDF
- 2 Foot valve with filter and empty level switch (N.O.), hose connection: 4x6 mm (axial), o-rings in Viton®, housing in PVDF
- 4 Drill-tapping clamps for pipes
- 2 2 m suction hose in PVC
- 2 2 m pressure hose in PE
- 2 2 m connection hose in PE

## **DOSAPool VMSA-PH + VMSA-RH + NPED + NFILS/100** **Measurement, control and dosing unit for swimming pools**

Measurement control and dosing unit for fully automated regulation of **pH and redox** value with automatic dosing of pH-minus and liquid chlorine products. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for counter pressures of up to 1.800 KPa (18 bar).



### **General performance characteristics**

These compact units are preset, pre-assembled on a white mounting plate and delivered ready for connection.

Unit with two solenoid diaphragm dosing pumps with integrated measurement and control electronics for pH and redox (ORP) value to dispense pH minus and sodium hypochlorite (chlorine bleach) etc. With stand-by input (or flow monitor).

Flow rate (other flow rates up to 1.800 KPa possible): 4.0 l/h, 700 KPa (7bar)

Flow cell made of PP/Noryl to hold the pH and redox electrodes with integrated flow-rate switch  
Fine filter PP/Noryl available to protect the electrodes against coarse impurities

Choice of three colour schemes for a panel background:

- White, non-printed
- Pool background
- on customer's request

Dimensions: 400 x 600 x 160 mm (W x H x D)

Order code

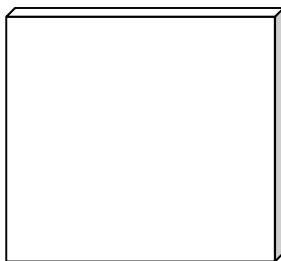
DOSAPool Type VMSA-PH/RH			
4	<b>Solenoid diaphragm dosing pumps, flow rate</b> 4.0 l/h – 700 KPa (other flow rates available)		
	<b>Panel print</b>		
	W	White, without background	
	P	Pool background	
	K	Print according to customer specification	
	<b>4 drill-tapping clamps for pipes</b>		
	0	without	
	40	40 mm	
	50	50 mm	
	63	63 mm	

VMSA-PH/RH	4	W	63	(example order)
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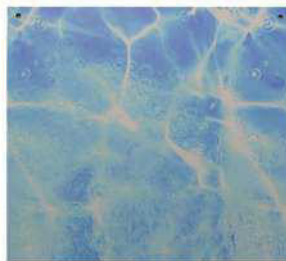
Your selection

VMSA-PH/RH				
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### Panel background



white



Pool



customer specification

Scope of supply includes:

- 2 AK 0.5 connection lead SN6/BNC, cable length 0.5 m
- 1 pH electrode type: PHPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 redox electrode type: MVPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 pH buffer solution 50 ml, pH 4
- 1 pH buffer solution 50 ml, pH 7
- 1 redox buffer solution 50 ml, 468 mV
- 2 injection valve type: IVN, hose connection: 4x6 mm, o-rings in Viton®, housing in PVDF
- 2 Foot valve with filter and empty level switch (N.O.), hose connection: 4x6 mm (axial), o-rings in Viton®, housing in PVDF
- 4 Drill-tapping clamps for pipes
- 2 2 m suction hose in PVC
- 2 2 m pressure hose in PE
- 2 2 m connection hose in PE

## **DOSAPool WDPHCL + CC1N+ DF21C + NFIL/100** **Measurement, control and dosing unit for private swimming pools**

Measurement, control and dosing unit for fully automated regulation of **pH and chlorine** value with automatic dosing of pH-minus and liquid chlorine products. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for pressures up to 1.800 KPa (18 bar).



### **General performance characteristics**

These compact units are preset, pre-assembled on a white mounting plate and delivered ready for connection.

Unit with integrated measurement and control electronics for pH and redox (ORP) value and two solenoid diaphragm pumps to dispense pH-minus and sodium hypochlorite (chlorine bleach) etc. With stand-by input (or flow monitor) and pH-priority function.

Flow rate: 3.0 l/h, 700 KPA (7 bar), other flow rates possible.

Flow cell in acryl with chamber for pH-electrode and chlorine probe (amperometric sensor, type: CC1N) and integrated flow rate monitoring system.  
Fine filter in PP/Noryl to protect the electrodes against coarse impurities

Choice of three color schemes for a panel background:

- White, non-printed
- Pool background
- on customer's request

Dimensions: 500 x 700 x 160 mm (W x H x D)

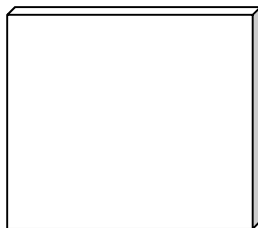
DOSAPool Type WDPHCL CC1N		
3	<b>Solenoid diaphragm dosing pumps in PVDF</b> 3.0 l/h, 700 KPa (other dosing rates available)	
W	<b>Panel background</b> White, no background	
P	Pool	
K	Customer's specifications	
0	<b>4 Stück drill-tapping clamp for pipes</b> none	
40	DN 40	
50	DN 50	
63	DN 63	

<b>WPHRHD PER</b>	<b>40</b>	<b>W</b>	<b>63</b>	(example order)
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Your selection

<b>WPHRHD PER</b>				
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Panel background



white



Pool



customer's specification

Scope of supply includes:

- 1 AK-CL1 connection cable with plugs AG / open
- 1 CC1N chlorine sensor, 0.05 -> 20.00 ppm, -100 mV/ppm
- 1 AK 0.5 connection cable SN6/BNC, cable length 0.5 m
- 1 pH electrode type: PHPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 pH buffer solution 50 ml, pH 4
- 1 pH buffer solution 50 ml, pH 7
- 2 injection valve type: IVN, 1/2" a, hose connection: 4x6 mm, o-rings in Viton®, housing in PVDF
- 2 Foot valve with filter and empty level switch (N.O.), hose connection: 4x6 mm (axial), o-rings in Viton®, housing in PVDF
- 4 Drill-tapping clamps for pipes
- 2 2 m suction hose in PVC
- 2 2 m pressure hose in PE
- 2 2 m connection hose in PE

## **DOSAPool WDPHCL + DFDS7 + NFIL/100**

### **Measurement, control and dosing unit for private swimming pools**

Measurement, control and dosing unit for fully automated regulation of **pH and chlorine** value with automatic dosing of pH-minus and liquid chlorine products. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for pressures up to 1800 KPa (18 bar).



#### **General performance characteristics**

These compact units are preset, pre-assembled on a white mounting plate and delivered ready for connection.

Unit with integrated measurement and control electronics for pH and chlorine value and two solenoid diaphragm pumps for pH-minus and sodium hypochlorite (chlorine bleach) etc. With stand-by input (or flow monitor) and pH-priority function.

Flow rate: 3.0 l/h, 700 KPA (7 bar), other flow rates possible.

Flow cell in acryl with integrated open chlorine sensor (platinum/copper) and flow monitoring. Sensor chamber for pH-electrode. Fine filter in PP/Noryl to protect the electrodes against coarse impurities

Choice of three color schemes for a panel background:

- White, non-printed
- Pool background
- on customer's request

Dimensions: 500 x 700 x 160 mm (W x H x D)

Order Code

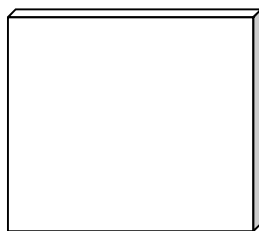
DOSAPool Type WDPHCL DFDS7		
3	<b>Solenoid diaphragm dosing pump, Dosing capacity</b> 3.0 l/h, 700 KPa (7 bar) - other flow rates available	
	<b>Panel background</b>	
W	White, no background	
P	Pool	
K	Customer's specifications	
	<b>4 Stück drill-tapping clamp for pipes</b>	
0	none	
40	DN 40	
50	DN 50	
63	DN 63	

<b>WPHRHD PER</b>	<b>40</b>	<b>W</b>	<b>63</b>	(example order)
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Your selection

<b>WPHRHD PER</b>				
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Panel background



white



Pool



customer's specification

Scope of supply includes:

- 1 AK 0.5 connection cable (SN6/BNC), cable length 0.5 m
- 1 pH electrode PHPK-2, plastic shaft, shaft length = 120 mm, PG 13.5
- 1 integrated open chlorine sensor (platinum/copper)
- 1 pH buffer solution 50 ml, pH 4
- 1 pH buffer solution 50 ml, pH 7
- 2 injection valve type: IVN, 1/2" a, hose connection: 4x6 mm, o-rings in Viton®, housing in PVDF
- 2 Foot valve with filter and empty level switch (N.O.), hose connection: 4x6 mm (axial), o-rings in Viton®, housing in PVDF
- 4 Drill-tapping clamps for pipes
- 2 2 m suction hose in PVC
- 2 2 m pressure hose in PE
- 2 2 m connection hose in PE



## DOSAPool DCW500 + CC1N + DF21 + NFIL/100 Measurement, control and dosing unit for swimming pools

Measurement control and dosing unit for fully automated measurement of the **pH, redox and chlorine** value, and for dosing of pH-minus and liquid chlorine products. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for counter pressures up to 18 bar.



### General performance characteristics

The compact unit is preset, pre-assembled on a white mounting plate and delivered ready for connection.

Unit with integrated measurement and control electronics for pH, redox and chlorine values, and two solenoid diaphragm pumps for pH-minus and sodium hypochlorite (chlorine bleach) etc.

With stand-by input (or flow monitor) and pH-priority controller

Dosing rate (other dosing rates possible):

- 7.5 l/h – 5 bar

Acrylic flow cell with integrated flow monitoring, to hold the pH electrode, redox electrode and chlorine probe.

Fine filter PP/Noryl available to protect the electrodes against coarse impurities

Choice of three colour schemes for a panel background:

- White, non-printed
- Pool
- On enquiry by the customer

Dimensions: 800 x 800 x 160 mm (W x H x D)

Order code

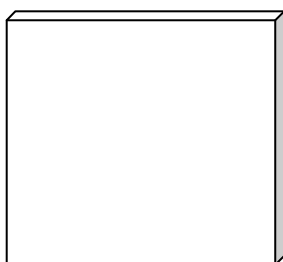
DOSAPool Type DCW 500 CC1N			
75	<b>Solenoid diaphragm dosing pumps, dosing rate</b> 7.5 l/h – 5 bar (other dosing rates available)		
	<b>Panel print</b>		
	W	White without background	
	P	Pool	
	K	Print according to customer specification	
	<b>4 drill-tapping clamp</b>		
	0	without	
	40	40 mm	
	50	50 mm	
	63	63 mm	

<b>DCW 500 CC1N</b>	<b>75</b>	<b>W</b>	<b>63</b>	(example order)
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Your selection

<b>DCW 500 CC1N</b>				
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Panel background



White without background



Pool



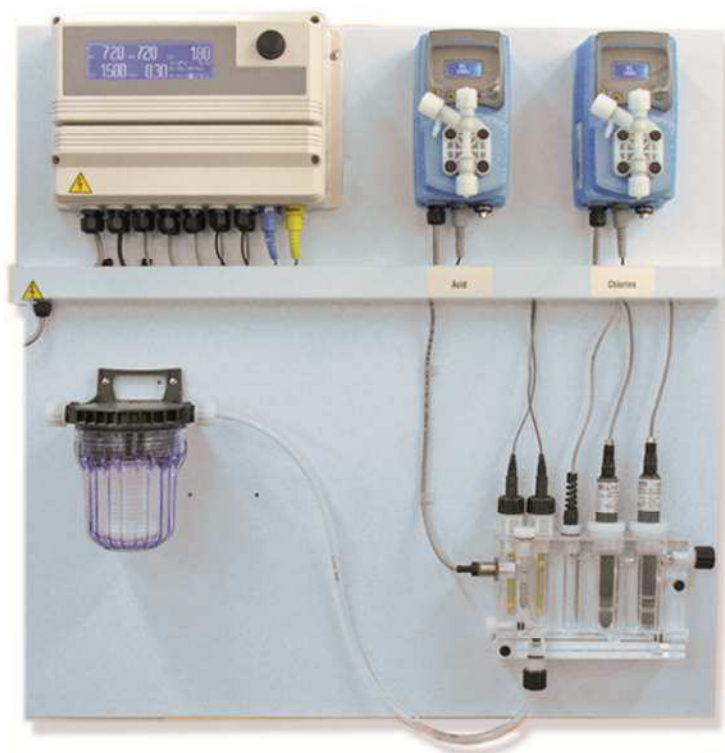
customer specification

Scope of supply includes:

- 1 AK-CL 1 connection lead with plug AG / open
- 1 CC1N chlorine probe, 0.05 -> 20.00 ppm, -100 mV / ppm
- 2 AK 0.5 connection leads SN6/BNC, 0.5 m dia. 5 mm
- 1 PHPK-2 combination pH electrode, plastic barrel, L = 120 mm, PG 13.5
- 1 MVPK-2 redox combination pH electrode, plastic barrel, L = 120 mm, PG 13.5
- 1 pH buffer solution 4 50 ml
- 1 pH buffer solution 7 50 ml
- 1 468mV redox buffer solution 50ml
- 2 IVN injection valves 1/2 "4x6 mm, Viton, PVDF
- 2 foot valves with empty indicator, N.O. Viton axial 1/2 "with 4x6 with filter and weight, PVDF
- 4 Drill-tapping clamps
- 2 2 m suction hoses
- 2 2 m pressure hoses
- 2 2 m connection hoses

## DOSAPool DCW500 CC + CP + DF32 + NFIL/100 Measurement, control and dosing unit for swimming pools

Measurement control and dosing units for fully automated measurement of the **pH, redox and chlorine** value, and for dosing of pH-minus and liquid chlorine products. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for counter pressures up to 18 bar.



### General performance characteristics

The compact unit is preset, pre-assembled on a white mounting plate and delivered ready for connection.

Unit with integrated measurement and control electronics for pH, redox and chlorine values, and two solenoid diaphragm pumps for pH-minus and sodium hypochlorite (chlorine bleach) etc.

With stand-by input (or flow monitor) and pH-priority controller

Dosing rate (other dosing rates possible):

- 7.5 l/h – 5 bar

Acrylic flow cell with integrated flow monitoring, to hold the pH electrode, redox electrode and chlorine probes (free and total chlorine probe)

Fine filter PP / Noryl available to protect the electrodes against coarse impurities

Choice of three colour schemes for a panel background:

- White, non-printed
- Pool
- On enquiry by the customer

Dimensions: 800 x 800 x 160 mm (W x H x D)

Order code

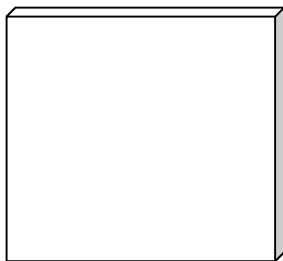
<b>DOSAPool Type DCW 500 CC CP</b>			
75	<b>Solenoid diaphragm dosing pumps, dosing rate</b> 7.5 l/h – 5 bar (other dosing rates available)		
	<b>Panel print</b>		
	W	White without background	
	P	Pool	
	K	Print according to customer specification	
	<b>4 drill-tapping clamp</b>		
	0	without	
	40	40 mm	
	50	50 mm	
	63	63 mm	

<b>DCW 500 CC CP</b>	<b>75</b>	<b>W</b>	<b>63</b>	(example order)
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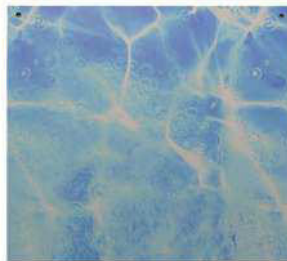
Your selection

<b>DCW 500 CC CP</b>				
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### Panel background



White, without background



Pool



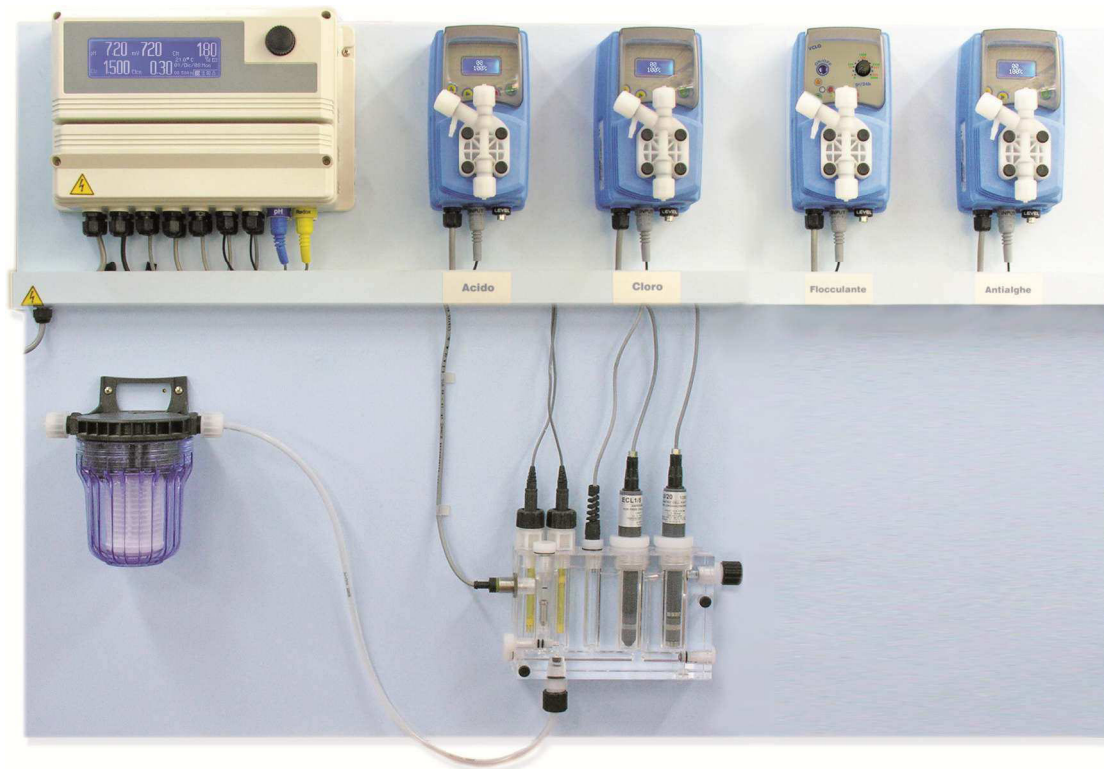
Customer

Scope of supply includes:

- 2 AK-CL 1 connection leads with plug AG / open
- 1 CC1N chlorine probe, 0.05 -> 20.00 ppm, -100 mV / ppm (free chlorine)
- 1 CP2.1N chlorine probe, 0.00 -> 20.00 ppm, -100 mV / ppm (total chlorine)
- 2 AK 0.5 connection leads SN6/BNC, 0.5 m dia. 5 mm
- 1 PHPK-2 combination pH electrode, plastic barrel, L = 120 mm, PG 13.5
- 1 MVPK-2 redox combination pH electrode, plastic barrel, L = 120 mm, PG 13.5
- 1 pH buffer solution 4 50 ml
- 1 pH buffer solution 7 50 ml
- 1 468mV redox buffer solution 50ml
- 2 IVN injection valves 1/2 "4x6 mm, Viton, PVDF
- 2 Foot valves with empty indicator, N.O. Viton axial 1/2 "with 4x6 with filter and weight, PVDF
- 4 Drill-tapping clamps
- 2 2 m suction hoses
- 2 2 m pressure hoses
- 2 2 m connection hoses

## DOSAPool DCW500 FA CC + CP + DF32 + NFIL/100 Dosing and control system for swimming pools

Measurement control system for automated measurement of **pH, redox(ORP), free chlorine, total chlorine and temperature** value with automatic dosing of pH-minus, liquid chlorine, flocculants and anti-algae liquids. The solenoid diaphragm dosing pumps facilitate precise, measurement-value proportional dosing of pool chemicals, even for counter pressures up to 1.700 KPa (17 bar).



### General performance characteristics

These compact units are preset, pre-assembled on a white mounting plate and delivered ready for connection.

- 1 x Dosing pump for acid 3 l/h, 1.000 KPa (10 bar)
- 1 x Dosing pump for chlorine 2 l/h, 1.700 KPa (17 bar)
- 1 x Dosing pump for flocculants with double measurement scale 3.000 gr/24h, 5.000 KPa (5bar)
- 1 x Dosing pump for anti-algae liquids 7 l/h, 600 KPa (6 bar)

With stand-by input (or flow monitor) and pH-priority controller

Flow cell in acryl with integrated flow monitoring. Sensor chamber for pH-, redox-electrode, temperature sensor and two chlorine probes (free and total chlorine probe).

Fine filter PP/Noryl available to protect the electrodes against coarse impurities

Choice of three colour schemes for a panel background:

- White, non-printed
- Pool background
- on customer's request

Dimensions: 1000 x 800 x 160 mm (W x H x D)

Order code

<b>DOSAPool Type DCW 500 FA CC CP</b>		
4	<b>Solenoid diaphragm dosing pumps</b> See "general performance characteristics"	
	<b>Panel print</b>	
W	White without background	
P	Pool background	
K	Print according to customer specification	
	<b>4 drill-tapping clamp for pipes</b>	
0	without	
40	40 mm	
50	50 mm	
63	63 mm	

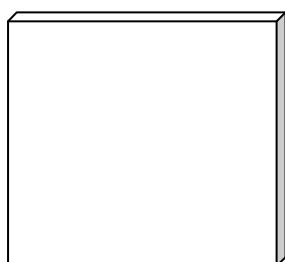
<b>DCW 500 FA CC CP</b>	<b>4</b>	<b>W</b>	<b>63</b>	(example order)
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Your selection

<b>DCW 500 A CC CP</b>				
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Viton® is a registered trademark of DuPont Dow Elastomers

Panel background



White



Pool



Customer specification

Scope of supply includes

Quantity	Article
2	Connection cable AK-CL 1 with plug (AG / open wire)
1	Chlorine probe CC 1N, 0.05 -> 20.00 ppm, -100 mV / ppm (free chlorine)
1	Chlorine probe CP2.1N, 0.00 -> 20.00 ppm, -100 mV / ppm (total chlorine)
2	Connection cable AK 0.5 (SN6/BNC), cable length 0.5 m
1	PH-electrode PHPK-2, plastic shaft, shaft length = 120 mm, PG 13.5.
1	Redox (ORP) combination electrode MVPK-2 in plastic, shaft length = 120 mm, PG 13.5
1	Temperature sensor ETEP, PT 100
1	PH-buffer solution 50 ml, pH 4
1	PH-buffer solution 50 ml, pH 7
1	Redox buffer solution 50ml, 468mV
2	Injection valve type: IVN, ½"m, hose connection: 4x6 mm, O-rings in Viton®, housing in PVDF
6	Drill-tapping clamps
2	Shut-off valves
2	Pressure hoses
2	Connection hoses



## | Disinfection systems

## 5. Disinfection systems – DOSADes

### 5.1 Chlorine dioxide units

- 5.1 DOSAiX 8 g/h
- 5.1 DOSAiXD 5 – 100 g/h
- 5.1 DOSAiXD Batch 60 – 500 g/h
- 5.1 DOSAiX DI 36 – 640 g/h
- 5.1 DOSAiX DP 36 – 640 g/h
- 5.1 DOSAiX CP 260 – 6.128 g/h

### 5.2 DOSALux UV-Units

- 5.2 DOSALux UV-disinfection units Series ALB
- 5.2 DOSALux UV-disinfection units Series LCD + LCDP
- 5.2 DOSALux UV-disinfection units Series RDS80 + RDSP80
- 5.2 DOSALux UV-disinfection units Series DS400 + DSRA400
- 5.2 DOSALux UV-disinfection units Series RLCD + RLCDP
- 5.2 DOSALux UV-disinfection units Series SMPDS + SMPDSRA
- 5.2 DOSALux UV-disinfection units Series Pool-LCD
- 5.2 DOSALux UV-disinfection units Series ABOX
- 5.2 DOSALux UV-disinfection units Series D-LCD
- 5.2 DOSALux UV-disinfection units Series D-TFT

### 5.3 Spare Parts for UV-Sterilizer

- 5.3 DOSALux standard- and high-power UV-lamp
- 5.3 DOSALux medium-pressure and high-power UV-lamp
- 5.3 DOSALux high-power UV-lamp for ABOX® C
- 5.3 DOSALux quartz protection tube QSR
- 5.3 Spare Parts for DOSALux UV-reactors
- 5.3 UV-Sensors for DOSALux UV-disinfection units

### 5.4 DOSAactive Electrolyses unit

- 5.4 DOSAactive Electrolyses unit Series D



## Chlorine dioxide unit Type DOSAiX 8

The compact chlorine dioxide unit **DOSAiX 8** is designed for use in small and medium-sized systems. This unit generates **up to 8 g/h** chlorine dioxide by the acid/chlorite method with a ClO<sub>2</sub> stock solution concentration of 2 g/l. The unit generates the ClO<sub>2</sub> in proportion to the flow rate or measured value.



### General information

- Chlorine dioxide generation according to the tried-and-tested chlorite/acid method
- Safety standard according to DVGW Worksheet W 224
- High operational reliability
- Microprocessor control with menu-driven operating and service functions.
- 3 solenoid diaphragm dosing pumps with self-venting feature
- Reliable restart after power failure
- Direct actuation via contact water meter, IDM, 4-20 mA online chlorine dioxide measurement.

### Applications

- Drinking water disinfection in public buildings, such as hospitals, nursing homes, hotels and sports facilities etc.
- Disinfectant in cooling systems and air-conditioning systems
- Applications in the beverage and food industry (e.g. bottle cleaning equipment and CIP systems etc.)

### Technical specifications

Type DOSAiX 8			
ClO <sub>2</sub> – output:	0.5 – 8 g/h	Inputs for proportional mode:	<ul style="list-style-type: none"> <li>- Contact water meter with reed switch</li> <li>- IDM frequency output up to 10 kHz or current output 4 - 20 mA</li> <li>- PLC or online chlorine dioxide meter with current output 4 - 20 mA</li> </ul>
Chem. consumption:	2 x 200 ml/h		
Maximum operating pressure:	6 bar		
Concentration of ClO <sub>2</sub> stock solution:	2 g/l		
Connection to the electric supply	230 V, 50/60 Hz	Inputs for floating-potential contact:	<ul style="list-style-type: none"> <li>- Pause</li> <li>- High dosage</li> <li>- Shot metering</li> <li>- Manual metering</li> <li>- External perturbation</li> <li>- Empty signal for chemical containers</li> </ul>
Type of enclosure:	IP 54		
Dimensions (HxWxD):	890 x 535 x 345 mm		
Weight:	approx. 33 kg		
Service water connection:	Hose connection 6 x 8 mm	Included in scope of supply:	<ul style="list-style-type: none"> <li>- Injection point made of PVDF, 1/2"</li> <li>- PVDF dosing hose (5 m)</li> <li>- 2 safety spill trays for 30 kg chemical containers</li> </ul>
Relay outputs for (230V, 3A):	Operating signal Warning signal Alarm signal		
<b>Type DOSAiX 8</b>			

## Chlorine dioxide units Series DOSAiXD 5 - 100

The **DOSAiXD 5-100** chlorine dioxide generation and dosing units automatically produce low-concentration chlorine dioxide stock solutions (1-3 g/l) according to the acid/chlorite method.

**With DOSAiXD units, the chlorine dioxide solutions are produced unpressurised and "just in time". Ideal for both batch operation and continuous operation.**

DOSAiXD generate **0- 5g/h to max. 100 g/h** chlorine dioxide **unpressurised** according to the acid/chlorite method. Time-, proportional- or measurement-value controlled dosing is facilitated by the integrated multi-purpose diaphragm dosing pump.



### General information

- Non-pressurised, fast and non-critical chlorine dioxide generation according to the acid/chlorite method with dilute starting chemicals.
- Proven, reliable chemical feed via a peristaltic pump and level controller
- Level controlled water dilution
- Modern, attractive plastic housing for quick wall mounting
- Easily expanded for a multiple disinfection system
- Microprocessor control with menu-driven operating and service functions.
- Chlorine dioxide gases easily neutralised via integrated active carbon filter
- Multi-purpose solenoid diaphragm pump in PVDF
- RS 232 interface with output of all operating conditions, warning signals and error signals.
- Direct actuation via contact water meter or via 4-20 mA (IDM or online chlorine dioxide measurement).
- Online chlorine dioxide measurement and control system can be retrofitted in standard DOSAiXD 50-30 units (P, PI or PID controllers)

### Applications:

- Drinking water disinfection in public buildings, such as hospitals, nursing homes, hotels and sports facilities etc.
- Disinfection in cooling systems and air-conditioning systems
- Applications in the beverage and food industry (e.g. bottle cleaning equipment and CIP systems etc.)

### Scope of supply:

- 1 complete pre-assembled chlorine dioxide unit
- 1 injection valve in PVDF, ½" thread, male
- 1 mounting hardware for wall mounting
- 1 set of warning and information signs

Technical specifications:

C

Type DOSAiXD	5	10	20	30	50	100
ClO <sub>2</sub> – output:	0 – 5 g/h	0 – 10 g/h	0 – 20 g/h	0 – 30 g/h	0 – 50 g/h	0 – 100 g/h
Chem. consumption under full load approx.:	2 x 130 ml/h	2 x 260 ml/h	2 x 520 ml/h	2 x 780 ml/h	2 x 1.300 ml/h	2 x 2.600 ml/h
Concentration of ClO <sub>2</sub> stock solution approx.:	1 g/l	2 g/l	2 g/l	3 g/l	2 g/l	3 g/l
Max. dosage:	5 l/h (10bar)	5 l/h (10bar)	10 l/h (10bar)	10 l/h (10bar)	30 l/h (3 bar)	33 l/h (1.5 bar)
Max. process concentration:	< 8 g/l					
Max. operating pressure:	See max. dosage					
Permitted environmental temperature:	+5 ... +40 °C					
Controller (PLC):	PLC with 2 line, backlit LCD, 16 digit LED displays: 16 green LEDs (inputs) LED displays: 16 red LEDs (outputs) Integrated realtime clock Program memory: EEPROM Data memory: RAM, battery backup Data retention: approx. 10 years Memory test: On switch on					
Connection to the electric supply:	100 - 240 VAC, 47/63 Hz oder 24 VDC / 40 VA max.					
Type of enclosure:	IP 64					
Dimensions (H x W x D):	890 x 520 x 355 mm				+ Wall mounting for dosing pump and PRV*	
Weight approx.:	25 kg	28 kg		33 kg	36 kg	
Service water connection:	(0.3), 2 – 6 bar / hose connection 6 x 8 mm / +5 to+30°C					
Dosing line connection:	PVDF – connection for 6 x 8 mm hose				8 x 10 mm	
Input contact water meter:	Floating potential contact or Hall sensor (turbine)					
Design and external actuation for the dosing pump:	Constant, ppm and batch dosing, pulse division, pulse multiplication Digital input for contact pulse and level switch (empty indicator) Analogue input for 0/4-20 mA, or 0-10 V					
Floating potential relay output for:	Warning signal and alarm signal (230 VAC, 5A)					
Interfaces:	RS232 / optional RS485					
<b>Type DOSAiXD:</b>						

\* PRV = pressure retention valve

## Chlorine dioxide units Series DOSAiXD Batch 60 - 500

The DOSAiXD Batch 60-500 chlorine dioxide and dosing units generate low-concentration chlorine dioxide stock solutions (2-3 g/l) automatically according to the acid/chlorite method. With DOSAiXD units, chlorine dioxide is produced unpressurised. 10 l/h of a 0.2% - or 0.3% chlorine dioxide (20 - or 30 g of chlorine dioxide/h), depending on the type of unit, is generated in a reactor. The level in the batch tank is continuously topped up via the reactor. The unit stores about 50-450 litres of the dilute chlorine dioxide solution, depending on the type of unit.

**Batch units are ideal for intermittent operation and/or supplying several disinfection systems.**

Time, proportional- or measurement-value controlled dosages can be implemented via multipurpose external diaphragm dosing pumps.



### General information

- Pressure-free, fast, non-critical chlorine dioxide generation according to the acid/chlorite method with dilute starting chemicals.
- Proven, reliable chemical feed via peristaltic pump and level control
- Level-controlled water dilution
- Modern, attractive plastic housing for quick wall mounting
- Multiple disinfection system
- Microprocessor control with menu-driven operating and service functions.
- Chlorine dioxide gases easily neutralised via integrated active carbon filters
- Multi-purpose solenoid diaphragm pump in PVDF
- RS 232 interface with output of all operating conditions, warning signals and error signals.
- Direct actuation of dosing pumps via water meter or via 4-20 mA (IDM or online chlorine dioxide measurement).
- Online chlorine dioxide measurement and control system can be retrofitted in standard DOSAiXD 5-30 units (P, PI or PID controllers)



### Applications

- Disinfection in cooling systems and air-conditioning systems
- Applications in the beverage and food industry (e.g. bottle cleaning equipment and CIP systems etc.)

### Scope of supply:

- 1 complete, pre-assembled chlorine dioxide unit
- 1 batch tank (60 to 500 litres)
- 1 diaphragm dosing pump with PRV (Type AMS 20 litres, 7 bar) and mounting bracket
- 1 collection tank (80 to 500 litres)
- 1 injection valve in PVDF, ½" thread male
- 1 mounting hardware for wall mounting
- 1 set of warning and information signs

Technical specifications

Type DOSAiXD Batch	60	120	250	500
ClO <sub>2</sub> – output	0 – 20 g/h	0 – 20 g/h	0 – 30 g/h	0 – 30 g/h
Chem. consumption at full load approx.	2 x 540 ml/h	2 x 540 ml/h	2 x 780 ml/h	2 x 780 ml/h
Concentration ClO <sub>2</sub> stock solution approx.	2 g/l	2 g/l	3 g/l	3 g/l
Max. dosing rate	20 l/h (7 bar)			
Max. process concentrate	< 8 g/l			
Max. operating pressure:	See max. dosing rate			
Batch tank	60 l	140 l	250 l	500 l
Size of batch tank (Ø x H)	420 x 580 mm	600 x 660 mm	670 x 880 mm	790 x 1170 mm
Collection tank	80 l	150 l	400 l	500 l
Size of collect. tank (Ø x H)	500 x 540 mm	650 x 540 mm	770 x 960 mm	860 x 980 mm
Permitted ambient temp.	+5 to +40°C			
Controller (PLC)	PLC with 2 line, backlit LCD, 16 digits LED indicators: 16 green LEDs (inputs) LED indicators: 16 red LEDs (outputs) Integrated real-time clock Program memory: EEPROM Data memory: RAM, battery backup Data retention: approx. 10 years Memory test: on switch-on			
Electrical connection	100 - 240 VAC, 47/63 Hz or 24 VDC / 40 VA max.			
Degree of protection	IP 64			
Dimensions (H x W x D)	890 x 520 x 355 mm			
Weight, approx.	30 kg		35 kg	
Service water connection	(0.3), 2 – 6 bar / hose connection 6 x 8 mm / +5 to +30°C			
Dosing line connection	PVDF – connection for 8 x 10 mm hose			
Input contact water meter	Floating potential contacts or Hall sensor (turbine)			
Version and external actuation of dosing pump	Constant, ppm and batch dosing, pulse division, pulse multiplication Digital pulse input for contact pulse and level switch (empty signal) Analogue input for 0/4-20 mA or 0-10V			
Floating-potential relay outputs for	Warning signal and alarm signal (230 VAC, 5A)			
Interfaces	RS232 / RS485 (optional)			
<b>Type DOSAiXD</b>				

\* PRV = pressure retention valve

## Chlorine dioxide unit Type DOSAiX DI

### ClO<sub>2</sub> – output from 36 to 640 g/h

The compact chlorine dioxide unit **DOSAiX DI** is designed for the production of medium-sized quantities. The unit operates according to the acid/chlorite method with dilute hydrochloric acid (HCl 9%) and sodium chlorite (NaClO<sub>2</sub> 7.5%). The ClO<sub>2</sub> concentration of the stock solution is 20 g/l. The chlorine dioxide generated can be dosed directly into the water system according to quantity or according to measurement value, or transferred to a storage tank.



#### General information

- Microprocessor controller with menu-driven operation and service functions, as well as clear alarm signals via additional LEDs
  - Reliable restart after power failure
  - Direct control via contact water meter, IDM, or online chlorine dioxide measurement.
  - 1 mixing and reaction tank
  - 1 reactor box with viewing window and a gas intake device via an activated carbon filter
  - 2 precise dosing diaphragm solenoid dosing pumps for delivering the reaction chemicals to the reaction tank
  - 1 pressure retention valve
  - 2 dosing monitors for the dosing pumps for monitoring for perfect operation
  - 1 wall-mounting bracket made of PP plastic
- Unit ready for installation with the above components prepared and tested.
- Voltage supply 230 V/50 Hz or 110 V 50/60 Hz
  - Degree of protection: IP 54
  - Temperature range: +5 - +40° C
  - A 1/2", 6x8 mm injection valve made of PVDF for dosing chlorine dioxide solution directly into a pressure line and 5 m PVDF hose included in scope of supply.

#### Technical specifications

E

Series DOSAiX DI		36	54	140	220	400	640
Dimensions	(WxHxD)	750 x 1,000 x 300			900 x 1,350 x 300		
Max. output:	gr/h	36	54	140	220	400	640
Max. pressure:	bar	12	12	8	10	10	7
Chem. consumption:	l/h	0.91	1.35	3.6	5.5	10.0	16.0
Energy consumption:	W/h	70	70	70	90	110	110
Transport weight:	kg	61	61	61	63	63	63
<b>Price:</b>							

Option		110 VAC
		Calibration cylinder Type CA 1 for Model DI and DP 30, 60, 140
		Calibration cylinder Type CA 1 for Model DI and DP 220, 400, 640

## Chlorine dioxide unit Type DOSAiX DP with dilution system

### ClO<sub>2</sub> – output from 36 to 640 g/h

The compact chlorine dioxide unit **DOSAiX DP** is designed for the production of medium-sized quantities. The unit operates according to the acid/chlorite method with dilute hydrochloric acid (HCl 9%) and sodium chlorite (NaClO<sub>2</sub> 7.5%). The ClO<sub>2</sub> concentration of the stock solution is 20 g/l. The chlorine dioxide generated can be dosed directly into the water system according to quantity or according to measurement value, or transferred to a storage tank.



#### General information

- Microprocessor controller with menu-driven operation and service functions, as well as clear alarm signals via additional LEDs
- Reliable restart after power failure
- Direct actuation via contact water meter, IDM, or online chlorine dioxide measurement.
- 1 mixing and reaction tank
- 1 reactor box with viewing window and a gas intake device via an activated carbon filter
- 1 precise dosing diaphragm solenoid dosing pumps for delivering the reaction chemicals to the reaction tank
- 2 pressure retention valves
- 1 pressure retention valve
- 2 dosing monitors for the dosing pumps for monitoring for perfect operation
- 1 wall-mounting bracket made of PP plastic
- Unit ready for installation with the above components prepared and tested.
- Voltage supply 230 V/50 Hz or 110 V 50/60 Hz
- Protection class: IP 54
- Temperature range: +5 to +40° C
- An injection 1/2", 6x8 mm valve made of PVDF for dosing chlorine dioxide solution directly into a pressure line and 5 m PVDF hose included in scope of supply.

#### Technical specifications

Technical specifications		E					
Series DOSAiX DP		36	54	140	220	400	640
Dimensions	(WxHxD)	750 x 1,000 x 300			900 x 1,350 x 300		
Max. output:	gr/h	36	54	140	220	400	640
Max. pressure:	bar	12	12	8	10	10	7
Chem. consumption:	l/h	0.91	1.35	3.6	5.5	10.0	16.0
Energy consumption:	W/h	70	70	70	90	110	110
Transport weight:	kg	61	61	61	63	63	63
<b>Price:</b>							

Option			110 VAC
			Calibration cylinder Type CA 1 for Model DI and DP 30, 60, 140, 640
			Calibration cylinder Type CA 1 for Model DI and DP 220, 400, 640

## Chlorine dioxide unit Type DOSAiX CP

ClO<sub>2</sub> – output from 260 to 6,128 g/h

The compact chlorine dioxide unit **DOSAiX CP** is designed for the production of large amounts. The unit operates according to the acid/chlorite method with concentrated hydrochloric acid (HCl 33%) and sodium chlorite (NaClO<sub>2</sub> 25%). The ClO<sub>2</sub> concentration of the stock solution is 20 g/l. The chlorine dioxide generated can be dosed directly into the water system according to quantity or according to measurement value, or transferred to a storage tank.



### General information

- 1 Microprocessor controller with LCD for plain text messages and a process image with indicator lights to display important messages and alarm signals. Connection to a master PLSA is via a serial interface and a Profibus interface (in preparation).
- 1 mixing and reaction tank
- 1 reactor box with viewing window and a gas intake device via an activated carbon filter
- 2 precise dosing diaphragm solenoid dosing pumps for delivering the reaction chemicals to the reaction tank
- 1 precise dosing membrane solenoid, or motorised dosing pump for delivering mixing water to the reaction tank for the
- 3 pressure retention valves
- 3 dosing monitors for the dosing pumps to monitor for proper operation
- 3 calibration cylinders for precise adjustment of the dosing pumps
- 1 pre-dilution system for rapidly mixing the chlorine dioxide for flow-controlled operation.

The system consists of the following components:

- 1 floating ball flow meter with magnetic switch contact,
  - 1 check valve
  - 1 mixer T-piece
  - 2 shut-off valves
  - 1 wall mounting bracket made of PP plastic, ready for assembly prepared with the above components and tested.
- Voltage supply 230 V/50 Hz or 110 V 50/60 Hz
  - Protection class: IP 54
  - Temperature range: +5 to +40° C



Technical specifications

Series DOSAiX CP		260	500
Dimensions	(WxHxD)	1,000 x 1,500 x 320	
Max. output:	gr/h	260	525
Max. pressure:	bar	8	8
Chem. consumption:	l/h	1.8	3.5
Energy consumption:	W/h	70	70
Transport weight:	kg	65	65
<b>Price:</b>			

Technical specifications

Series DOSAiX CP		1000	1500
Dimensions	(WxHxD)	1,000 x 1,700 x 320	
Max. output:	gr/h	989	1470
Max. pressure:	bar	5	5
Chem. consumption:	l/h	6.6	9.8
Energy consumption:	W/h	70	70
Transport weight:	kg	65	74
<b>Price:</b>			

Technical specifications

Series DOSAiX CP		3000	6000
Dimensions	(WxHxD)	1,000 x 2,000 x 320	
Max. output:	gr/h	3020	6128
Max. pressure:	bar	3	3
Chem. consumption:	l/h	20.8	40.8
Energy consumption:	W/h	70	70
Transport weight:	kg	78	84
<b>Price:</b>			

Optional 110 VAC			

## DOSALux UV disinfection units Series ALB

0.3 - 2.70 m<sup>3</sup>/h



16-107/1-12 ALB

16-403/1-16 ALB

### General information

- Output range\*: 0.30 - 2.70 m<sup>3</sup>/h
- Operating pressure: max. 9 bar
- Water temperature: 2 - 60° C
- High-performance low-pressure UV-C lamps in the 254 nm range, minimum lamp lifetime approx. 9000 hours
- Reactor made of stainless steel material 1.4301 (1.4404 available on request)
- Side inlet and outlet (except 16-107/1-12 ALB)
- Upper maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Single-lamp system with high-quality, centrally mounted quartz protection tube.
- Lamp guide opening with O-ring seal
- Protection class: IP 65

### Technical specifications

Series ALB		16-107/1-12 ALB	16-403/1-16 ALB	16-405/1-30 ALB	16-412/1-40 ALB
Flow rate*	l / min m <sup>3</sup> /h	5 0.30	10 0.60	19 1.14	45 2.70
Connected load	Watt	12	16	30	40
Reactor connection	inch	1/8	1/2	3/4	1
Number of lamps		1	1	1	1
Lamp type		UVL 12	UVL 16	UVL 30	UVL 40
UV-C dose	J/m <sup>2</sup>	> 300	> 300	> 300	> 300
Installed dimensions					
Height H	mm	267	394	524	925
Width W		53	90	90	90

\*The max. Flow rates are based on a transmission power  $T_{1\text{ cm}}$  of 99% of a measured UV-C dose of 300 J/m

### Order code

DOSALux ALB			
	Connected load	Flow rate	
	Watt	m <sup>3</sup> /h	
16-107/1-12	12	0,30	
16-403/1-16	16	0,60	
16-405/1-30	30	1,14	
16-412/1-40	40	2,70	

ALB	16-107/1-12	(example order)	
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### Your selection

ALB			
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## DOSALux UV-Disinfection units Series LCD +LCDP

1.20 ... 12.00 m<sup>3</sup>/h



### General Information:

- Output range\*: 1.20 ... 12,00 m<sup>3</sup>/h  
Operating pressure: max. 9 bar  
Water temperature: 2 ... 60° C
- High-performance low-pressure UV-C lamps in the 254 nm range, minimum lamp life approx ca. 9.000 hours
- Reactor made of stainless steel material 1.4301, (1.4404 available on request)
- Inlet and outlet on the side
- Flammable connectors made of stainless steel of sampling (except for 16-405/1-30,16-412/1-40 und 16-450/1-40)
- Connector for UV-C Sensor (LCDP) (except 16-450/2-40)
- Upper maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Top ventilation valve and bottom drain valve as standard (except 16-405/1-30,16-412/1-40 und 16-440/1-40)
- Multiple lamp system with high-quality, centrally mounted quartz glass protection tube
- Different UV controllers are available:  
- Type „LCD“ or Type „LCDP“

- 16-480/1-80

### Options:

- 4-20 mA output for the radiation intensity and temperature

### UV- reactors available on request for:

- Aggressive media
- Hot water
- Manual, automatic or chemical cleaning

### Technical specifications

Serie LCD + LCDP		16-405/ 1-30	16-412/ 1-40	16-440/ 1-40	16-450/ 2-40	16-480/ 1-80	16-550/ 2-40	16-80/ 2-80
Flow rate*	l/min m <sup>3</sup> /h	20 1,20	45 2,70	60 3,60	75 4,50	85 5,10	100 6,00	200 12,00
Connected load	Watt	30	40	40	80	80	80	160
Reactor connection	Inch	3/4	1	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Ventilation connection	Inch	-	-	1/2	-	1/2	1/2	1/2
Extraction connection	inch	-	-	1/8	-	1/8	1/8	1/8
Number of lamps		1	1	1	2	1	2	2
Lamp type		UVL 30	UVL 40	UVL 40	UVL 40	UVL 80	UVL 40	UVL 80
UV-C dose	J/m <sup>2</sup>	> 300	> 300	> 300	> 300	> 300	> 400	> 400
Dimensions Reactor								
Height H	mm	524	925	880	925	880	985	985
Width W		90	90	200	230	200	215	185
Dimensions								
Height H	mm	160	160	160	190	160	190	190
Width W		200	200	200	240	200	240	240
Depth D		95	95	95	95	95	95	95

\*The max. flow rates are based on a transmission power T<sub>1cm</sub> of 99% of a measured UV-C dose of 400J/m<sup>2</sup> after about 9000 hours

Electrical UV-Controller		16-405/ 1-30	16-412/ 1-40	16-440/ 1-40	16-450/ 2-40	16-480/ 1-80	16-550/ 2-40	16-80/ 2-80	
LCDP	LCD	Power Supply	230 V – 50/60 Hz.						
		El. Connected load	30 Watt	40 Watt	40 Watt	80 Watt	80 Watt	80 Watt	160 Watt
		Protection class	IP 55						
		Connection lead, length approx.	1 m						
		Lamp connection lead, length approx.	1 m						
		LCD (microprocessor controlled)	•						
		Operating hours counter	•						
		Red LED for fault signals	•						
		Alarm relay with floating potential contact, NO/NC	•						
		Monitor for lamp operation	•						
		Alarm relay, 230V output, 2A max., NO/NC	•						
		Resettable hour meter with alarm on reaching the end of the lamp service life	•						
		Switch-off when the temperature of the UV reactor and the controller is high	•						
		Monitoring of radiation intensity and temperature (with default values)	•						
		4-20mA output	Optional						

Order Code

Series DOSALux LCD			
		Connected load	Flow rate
		Watt	m <sup>3</sup> /h
	16-405/1-30	30	1,20
	16-412/1-40	40	2,70
	16-440/1-40	40	3,60
	16-450/2-40	80	4,50
	16-480/1-80	80	5,10
	16-550/2-40	80	6,00
	16-80/2-80	160	12,00

<b>LCD</b>	<b>16-550/2-40</b>	(example order)	
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Your selection:

<b>LCD</b>			
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Order Code:

Series DOSALux LCDP			
		Connected load	Flow rate
		Watt	m <sup>3</sup> /h
	16-405/1-30	30	1,20
	16-412/1-40	40	2,70
	16-440/1-40	40	3,60
	16-480/1-80	80	5,10
	16-550/2-40	80	6,00
	16-80/2-80	160	12,00
		<b>Options:</b>	
		0	no
		1	4 – 20 mA output

<b>LCDP</b>	<b>16-550/2-40</b>	<b>0</b>	(example order)
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Your selection:

<b>LCDP</b>			
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## DOSALux UVdesinfection units series RDS80 + RDSP80

65 ... 200 m<sup>3</sup>/h



### General information

- Delivery range\*: 65 ... 200 m<sup>3</sup>/h  
Operating pressure: max. 9 bar  
Water temperature: 2 ... 60° C
- High-performance low-pressure UV-C lamps in the 254 nm range, minimum lamp lifetime approx. 9,000 hours
- Reactor made of stainless steel material 1,4301; (1.4404 on request)
- Inlet and Outlet on the side
- Flammable connectors made of stainless steel for sampling
- Connection for UV-C sensor (**RDSP80**)
- Upper maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Top ventilation valve and bottom drain valve as standard
- Multi-lamp system with high-quality, centrally mounted quartz-glass protection tube
- Different UV- controllers are available:
  - Type „**RDS80**“ or type „**RDSP80**“

### UV reactors available on request:

- aggressive media
- hot water
- manual, automatic or chemical cleaning

### UV controller available on request:

- Output 4-20 mA
- Remote maintenance
- Ö-Norm/DVGW certified UV-C sensor

### Technical specifications

<b>Series RDS80 + RDSP80</b>		<b>16-80/6-80</b>	<b>16-80/8-80</b>	<b>16-80/10-80</b>	<b>16-80/12-80</b>
Flow rate*	m <sup>3</sup> /h	65	80	135	200
Connected load	Watt	480	640	800	960
Reactor connection		DN 100 – PN10	DN 100 – PN10	DN 150 – PN10	DN 150 – PN10
Ventilation connection	inch	1/2	1/2	1/2	1/2
Extraction connection	inch	1/8	1/8	1/8	1/8
Number of lamps		6	8	10	12
Lamp type		UV 80	UV 80	UV 80	UV 80
UV-C dose	J/m <sup>2</sup>	> 400	> 400	> 400	> 400
Dimensions of reactor					
Height H	mm	1.120	1.120	1.120	1.140
Width W		463	463	507	572
Dimensions of controller					
Height H		500	500	750	750
Width W	mm	400	400	400	400
Depth D		250	250	250	250

\* The max. flow rates are based on a transmission power  $T_{1\text{ cm}}$  of 99% of a measured UV-C dose of 400 J/m<sup>2</sup> after about 9000 hours.

Electrical UV controller		16-80/ 6-80	16-80/ 8-80	16-80/ 10-80	16-80/ 12-80		
RDS80	RDS80	Power supply				230 V – 50/60 Hz.	
		El. Connected load		480 Watt	640 Watt	800 Watt	960 Watt
		Protection class		IP 54			
		Connection lead, length approx.		2,5 m			
		Lamp connection lead, length approx.		2,5 m			
		Lamp operation monitor		•			
		Operating hours meter and resettable hour meter with alarm on reaching the end of the lamp service life		•			
		Relays with floating potential contact, NO/NC, 230 V output, 5A max.		•			
		Temperature monitoring in the controller		•			
		ON / OFF Timer		•			
		Datalogging software		Optional			
		Main switch		•			
		Visual fault signal		•			
		Programmable multi-information display		•			
		General operation monitoring using programmable microprocessor		•			
		Remote On/Off		•			
		Storage of identification number of defective lamps		•			
		Monitoring of radiation intensity and temperature (with default values)		•			
Switchoff when the temperature of the UV reactor and the controller is high		•					
Datalogging of radiation intensity and temperature software		Optional					

Options	
Shutdown on flooding	
Radiation intensity measured in W/m <sup>2</sup>	
4/20 mA output for radiation intensity and temperature	
Flow rate monitor (shutdown on no flow)	
Connection to a contact water meter	
Preparation for a connection of the water meter	
Software for datalogging	
UV-C calculation (J/m <sup>2</sup> ) only in connection with contact water meter	

Order Code

Series DOSALux RDS80			
		Connected load	Flow rate
		Watt	m <sup>3</sup> /h
	16-80/6-80	480	65
	16-80/8-80	640	80
	16-80/10-80	800	135
	16-80/12-80	960	200

<b>RDS80</b>	<b>16-80/6-80</b>	(example order)	
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Your selection:

<b>RDS80</b>			
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Order Code

Series DOSALux RDSP80			
		Connected load	Flow rate
		Watt	m <sup>3</sup> /h
	16-80/6-80	480	65
	16-80/8-80	640	80
	16-80/10-80	800	135
	16-80/12-80	960	200

<b>RDSP80</b>	<b>16-80/6-80</b>	(example order)	
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Your selection:

<b>RDSP80</b>			
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Order Code

Options DOSALux RDSP80		
1	Shutdown on flooding	
2	Radiation intensity measured in W/m <sup>2</sup>	
3	4/20 mA output for radiation intensity and temperature	
4	Flow rate monitor (shutdown on no flow)	
5	Connection to a contact water meter	
6	Preparation for a connection of the water meter	
7	Software for datalogging	
8	UV-C calculation (J/m <sup>2</sup> ) only in connection with contact water meter	



## DOSALux UV disinfection units Series DS PLUS 400 + DS PLUS RA400 50 ... 980 m<sup>3</sup>/h



### General information:

- Delivery range\*: 50 ... 980 m<sup>3</sup>/h
- Operating pressure: max. 9 bar
- Water temperature: 0 ... 50° C
- High-Performance low-pressure UV-C amalgam lamps in the 254 nm range, lamp lifetime approx. 14.000 hours
- Reactor made of stainless steel material 1.4404
- Top inlet and outlet
- Flammable connectors made of stainless steel for sampling
- Side maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Multi-Lamp system with high-quality, centrally mounted quartz glass protection tube
- UV controllers type „DS PLUS“
- Automatic cleaning type „DS PLUS RA“

### UV reactors available on request for:

- Aggressive media
- Hot water

### UV controllers on request for:

- Output 4-20mA
- Remote maintenance
- Ö-Norm/DVGW certified UV-C sensor

### Technical specifications

Series DS PLUS 400 DS PLUS RA 400		16-400/ 1-400	16-400/ 2-400	16-400/ 3-400	16-400/ 4-400
Flow rate*	m <sup>3</sup> /h	50	100	150	250
Connected load	Watt	440	880	1300	1760
Reactor connection		DN 80 – PN10	DN 100 – PN10	DN 150 – PN10	DN 200 – PN10
Ventilation connection	inch	1/2	1/2	1/2	1/2
Number of lamps		1	2	3	4
Lamp type		UVL 400	UVL 400	UVL 400	UVL 400
UV-C dose	J/m <sup>2</sup>	> 400	> 400	> 400	> 400
Dimensions of Reactor Height H Width W	mm	330 1.800	380 1.800	500 1.800	670 1.800
Dimensions of Controller Height H Width W Depth D	mm	500 400 250	500 400 250	750 400 250	750 400 250

\*The max. flow rates are based on a transmission power  $T_{1cm}$  of 99% of a measured UV-C dose of 400 J/m<sup>2</sup> after about 14,000 hours.

## Technical specifications

Series DS PLUS 400 DS PLUS RA 400		16-400/ 5-400	16-400/ 6-400	16-400/ 8-400	16-400/ 10-400	16-400/ 12-400
Flow rate*	m <sup>3</sup> /h	300	420	600	830	980
Connected load	Watt	2180	2600	3500	4400	5300
Reactor connection		DN 200 – PN10	DN 250 – PN10	DN 250 – PN10	DN 300 – PN10	DN 350 – PN10
Ventilation connection	Zoll	1/2	1	1	1	1
Number of lamps		5	6	8	10	12
Lamp type		UVL 400	UVL 400	UVL 400	UVL 400	UVL 400
UV-C dose	J/m <sup>2</sup>	> 400	> 400	> 400	> 400	> 400
Dimensions Reactor						
Height H	mm	670	720	755	820	820
Width W		1.800	1.800	1.800	1.80	1.800
Dimensions of Controller						
Height H	mm	800	800	1000	1000	1200
Width W		600	600	800	800	800
Depth D		300	300	300	300	300

\* The max. flow rates are based on a transmission power  $T_{1cm}$  of 99% of a measured UV-C dose of 400 J/m<sup>2</sup> after about 14,000 hours.

Electrical UV Controller		16-400/ 1-400	16-400/ 2-400	16-400/ 3-450	16-400/ 4-400
DS PLUS 400	Power supply	230 V – 50/60 Hz.			
	Connected load	440 Watt	880 Watt	1300 Watt	1760 Watt
	Protection class	IP 54			
	Connection lead, length approx.	2.5 m			
	Lamp connection lead, length approx.	2.5 m			
	<b>Lamp Operating monitor</b>	•			
	<b>Operating hours counter and resettable hour meter with alarm on reaching the end of lamp lifetime</b>	•			
	<b>Relays with floating potential contact, NO/NC, 230V output, 5A max.</b>	•			
	<b>Temperature monitoring in the controller</b>	•			
	<b>ON / OFF Timer</b>	•			
	<b>Datalogging Software</b>	Optional			
	<b>Main switch</b>	•			
	<b>Visual fault signal</b>	•			
	Programmable multi-information display	•			
	General operational monitoring using programmable microprocessor	•			
	Remote On/Off	•			
	Storage of identification number of defective lamps	•			
	Monitoring of radiation intensity and temperature (with default values)	•			
	Shutdown when the temperature of the UV reactor and the controller is high	•			
	Datalogging of radiation intensity and temperature software	Optional			

Electrical UV controller		16-400/ 5-400	16-400/ 6-400	16-400/ 8-400	16-400/ 10-400	16-400/ 12-400
<b>DS PLUS 400</b>	Power supply	230 V – 50/60 Hz.				
	Connected load	2180 Watt	2600 Watt	3500 Watt	4400 Watt	5300 Watt
	Protection class	IP 54				
	Connection lead, length approx.	2.5 m				
	Lamp connection lead, length approx.	2.5 m				
	<b>Lamp operating monitor</b>	•				
	<b>Operating-hours meter and resettable hour meter with alarm on reaching the end of lamp lifetime</b>	•				
	<b>Relays with floating potential contact, NO/NC, 230V output, 5A max.</b>	•				
	<b>Temperature monitoring in the controller</b>	•				
	<b>ON / OFF Timer</b>	•				
	<b>Datalogging Software</b>	Optional				
	<b>Main switch</b>	•				
	<b>Visual fault signal</b>	•				
	Programmable multi-information display	•				
	General operation monitoring using programmable microprocessor	•				
	Remote On/Off	•				
	Storage of identification number of defective lamps	•				
	Monitoring of radiation intensity and temperature	•				
	Shutdown when the temperature of the UV reactor and the controller is high	•				
	Datalogging of radiation intensity and temperature software	Optional				

Options	
	Shutdown on flooding
	Radiation intensity measured in W/m <sup>2</sup>
	4/20mA output for radiation intensity and temperature
	Flow rate monitor (Shutdown on no flow)
	Connection to a contact water meter
	Preparation for a connection of the water meter
	Software for datalogging
	UV-C calculation (J/m <sup>2</sup> ) only in connection with contact water meter

Order Code

Series DOSALux DS PLUS 400			
		Anschlussleistung	Durchflussleistung
		Watt	m <sup>3</sup> /h
	16-400/1-400	440	50
	16-400/2-400	880	100
	16-400/3-400	1300	150
	16-400/4-400	1760	250
	16-400/5-400	2180	300
	16-400/6-400	2600	420
	16-400/8-400	3500	600
	16-400/10-400	4400	830
	16-400/12-400	5300	980

<b>DS PLUS 400</b>	<b>16-400/6-400</b>	(Bestellbeispiel)	
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Ihre Auswahl

<b>DS PLUS 400</b>			
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Order Code

Series DOSALux DS PLUS RA400			
		Connected load	Flow rate
		Watt	m <sup>3</sup> /h
	16-400/3-400	1300	150
	16-400/4-400	1760	250
	16-400/5-400	2180	300
	16-400/6-400	2600	420
	16-400/8-400	3500	600
	16-400/10-400	4400	830
	16-400/12-400	5300	980

<b>DS PLUS RA400</b>	<b>16-400/4-400</b>	(example order)	
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Ihre Auswahl

<b>DS PLUS RA400</b>			
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Order Code

Options DOSALux DSRA400		
1	Shutdown on flooding	
2	Radiation intensity measured in W/m <sup>2</sup>	
3	4/20mA output for radiation intensity and temperature	
4	Flow rate monitor (shutdown on no flow)	
5	Connection to a contact water meter	
6	Preparation for a connection of the water meter	
7	Software for datalogging	
8	UV-C calculation (J/m <sup>2</sup> ) only in connection with contact water meter	

## DOSALux UV disinfection units Series RLCD + RLCDP

20 ... 40 m<sup>3</sup>/h



### General information:

- Output range\*: 20 ... 40 m<sup>3</sup>/h  
Operating pressure: max. 9 bar  
Water temperature: 2 ... 60° C
- High-performance low-pressure UV-C lamps in the 254nm range, minimum lamp lifetime approx. 9000 hours
- Reactor made of stainless steel material 1.4301, (1.4404 on request)
- Inlet and outlet on the side
- Flammable connectors made of stainless steel for sampling
- Connection for UV-C sensor (**RLCDP**)
- Upper maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Top ventilation valve and bottom drain valve as standard
- Multi lamp system with high-quality, centrally mounted quartz glass protection tube
- Different UV controllers are available  
- Type **RLCD** or type **RLCDP**

### Options

- 4-20mA output for the radiation intensity and temperature

### UV-reactors available on request for:

- aggressive Medien
- hot water
- manual, automatic or chemical cleaning

### Technical specifications

Series RLCD + RLCDP		16-80/ 3-80	16-80/4-80	16-80/5-80
Flow rate*	l/min m <sup>3</sup> /h	333 20	500 30	666 40
Connected load	watt	335	335	445
Reactor connection	Inch	2	DN 80 – PN10	DN 80 – PN10
Ventilation connection	Inch	1/2	1/2	1/2
Extraction connection	Inch	1/8	1/8	1/8
Number of lamps		3	4	5
Lamp type		UVL 40	UVL 80	UVL 80
UV-C dose	J/m <sup>2</sup>	> 400	> 400	> 400
Size of reactor				
Height H	mm	985	1.080	1.080
Width W		230	338	338
Dimensions				
Height H	mm	400	400	400
Width W		300	300	300
Depth D		200	200	200

\*The max. flow rates are based on a transmission power  $T_{1cm}$  of 99% of a measured UV-C dose of 400 J/m<sup>2</sup> after about 9000 hours.

Electrical UV controller		16-80/ 3-80	16-80/4-80	16-80/5-80	
RLCDP	RLCD	Power supply	230 V – 50/60 Hz.		
		Electrical connected load	335 Watt	335 Watt	445 Watt
		Protection class	IP 55		
		Connection lead length approx.	1.5 m		
		Lamp connection lead, length approx.	2.5 m		
		LCD (microprocessor controlled)	•		
		Operating hours counter	•		
		Resettable hour meter with alarm on reaching the end of the lamp service life	•		
		Red LED for fault signals	•		
		Alarm relay, with floating potential contact, NO/NC	•		
		Monitor for lamp operation	•		
		Alarm relay, 230 V output, 2A max., NO/NC	•		
		Monitor for radiation intensity and temperature	•		
		Shutdown when UV reactor is at high temperature	•		
4-20 mA output	Optional				

Order Code

Series DOSALux RLCD			
		Connected load Watt	Flow rate m <sup>3</sup> /h
	16-80/3-80	335	20
	16-80/4-80	333	30
	16-80/5-80	445	40

<b>RLCD</b>	<b>16-80/4-80</b>	(Example order)	
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Your selection:

<b>RLCD</b>			
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Order Code

Series DOSALux RLCDP			
		Connected load Watt	Flow rate m <sup>3</sup> /h
	16-80/3-80	335	20
	16-80/4-80	333	30
	16-80/5-80	445	40
		<b>Options:</b>	
	0	no	
	1	4 – 20 mA output	

<b>RLCDP</b>	<b>16-80/4-80</b>	<b>0</b>	(example order)
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Your selection:

<b>RLCDP</b>			
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## DOSALux UV disinfection units Series SMPDS + SMPDSRA

40 ... 1,200 m<sup>3</sup>/h



### General information:

- Delivery range\*: 40 ... 1.200 m<sup>3</sup>/h  
Operating pressure: max. 9 bar  
Water temperature: 2 ... 60° C
- High-performance medium-pressure UV-C lamps in the 254 nm range, minimum lamp life approx. 5.000 hours
- Reactor made of stainless steel Material 1.4404
- Side inlet and outlet
- flammable connectors made of stainless steel for sampling
- Connection for UV-C sensor
- Side maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Top ventilation valve and bottom drain valve as standard
- Single/Multi lamp system with high-quality, centrally mounted quartz glass protection tube.
- UV controller Type "SMPDS" or Type "SMPDSRA"

### UV-Reaktoren available on request for

- aggressive media
- automatic cleaning

### UV-controller available on request

- output 4-20 mA
- remote maintenance
- Ö-Norm/DVGW certified UV-C sensor

Technical specifications:

Series SMP		16-SMP10/ 1-1000	16-SMP20/ 1-2000	16-SMP25/ 1-2500	16-SMP35/ 1-3500	16-SMP50/ 2-2500	16-SMP70/ 2-3500	16-SMP105/ 3-3500	16-SMP140/ 4-3500
Flow rate*	m <sup>3</sup> /h	40	90	130	250	350	500	750	1200
Connected load	watt	1000	2000	2500	3500	5000	7000	10500	14000
Reactor connection		DN 80 – PN10	DN 100 – PN10	DN 150 – PN10	DN 200 – PN10	DN 200 – PN10	DN 250 – PN10	DN 300 – PN10	DN 400 – PN10
Ventilation connection	inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Extraction connection	inch	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Discharge	inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Number of lamps		1	1	1	1	2	2	3	4
Manual cleaning		•	•	•	•	•	•	•	•
Lamp type		UVL 1000	UVL 2000	UVL 2500	UVL 3500	UVL 2500	UVL 3500	UVL 3500	UVL 3500
UV-C dose	J/m <sup>2</sup>	> 800	> 800	> 800	> 800	> 800	> 800	> 800	> 800
Dimensions reactor:									
Height H	mm	408	408	468	604	606	606	606	656
Width B		1.010	882	932	986	1.066	1.066	1.066	1.162
Size of controller									
Height H	mm	500	750	750	750	1200	1200	1800	1800
Width B		400	400	400	400	600	600	600	600
Depth T		300	300	300	300	400	400	400	400

\*The max. flow rates are based on a transmission power  $T_{1\text{ cm}}$  of 99% of a measured UV-C dose of 800 J/m<sup>2</sup> after about 5,000 hours.

Electrical UV controller		16-SMP10 1-1000	16-SMP20 1-2000	16-SMP25 1-2500	16-SMP35 1-3500	16-SMP50 2-2500	16-SMP70 2-3500	16-SMP10 53- 3500	16-SMP14 0 4-3500	
SMPDSRA	SMPDS	Power supply	230 V – 50/60 Hz.		380 V 50/60 Hz					
		Connected load	1000 Watt	2000 Watt	2500 Watt	3500 Watt	5000 Watt	7000 Watt	10500 Watt	14000 Watt
		Protection class	IP 54							
		Connection lead length approx.	2,5 m							
		Lamp connection lead Length approx.	2,5 m							
		Lamp operation monitor	•							
		Operating hours counter and resettable hour meter with alarm on reaching the end of the lamp service life	•							
		Relays with floating potential contact, NO/NC, 230 V output, 5A max.	•							
		Temperature monitoring in the Controller	•							
		ON / OFF timer	•							
		Datalogging software	Optional							
		Main switch	•							
		Visual fault signal	•							
		Programmable multi-information display	•							
		General operational monitoring using programmable microprocessor	•							
		Remote On/Off	•							
		Storage of identification number of defective lamps	•							
		Monitoring of radiation intensity and temperature (with default values)	•							
Switch-off when the temperature of the UV reactor and the controller is high	•									
Datalogging of radiation intensity and temperature software	Optional									

Options	
	Shutdown on flooding
	Radiation intensity measured in W/m <sup>2</sup>
	4/20 mA output for radiation intensity and temperature
	Flow rate monitor (shutdown on no flow)
	Connection to a contact water meter
	Preparation for a connection of the water meter
	Software for datalogging
	UV-C calculation (J/m <sup>2</sup> ) only in connection with contact water meter

Order code:

<b>DOSALux SMPDS</b>			
		<b>Connected load:</b>	<b>Flow rate:</b>
		<b>Watt</b>	<b>m<sup>3</sup>/h</b>
	<b>16-10/1-1000</b>	1000	40
	<b>16-20/1-2000</b>	2000	90
	<b>16-25/1-2500</b>	2500	130
	<b>16-35/1-3500</b>	3500	250
	<b>16-50/2-2500</b>	5000	350
	<b>16-70/2-3500</b>	7000	500
	<b>16-105/3-3500</b>	10500	750
	<b>16-140/4-3500</b>	14000	1.200

<b>SMPDS</b>	<b>16-25/1-2500</b>	(example order)	
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Your selection:

<b>SMPDS</b>			
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Order code:

<b>DOSALux SMPDSRA</b>			
		<b>Connected load:</b>	<b>Flow rate:</b>
		<b>Watt</b>	<b>m<sup>3</sup>/h</b>
	<b>16-10/1-1000</b>	1000	40
	<b>16-20/1-2000</b>	2000	90
	<b>16-25/1-2500</b>	2500	130
	<b>16-35/1-3500</b>	3500	250
	<b>16-50/2-2500</b>	5000	350
	<b>16-70/2-3500</b>	7000	500
	<b>16-105/3-3500</b>	10500	750
	<b>16-140/4-3500</b>	14000	1.200

<b>SMPDSRA</b>	<b>16-25/1-2500</b>	(example order)	
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Your selection:

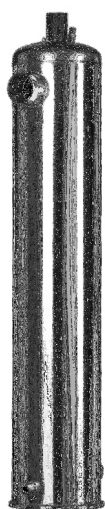
<b>SMPDSRA</b>			
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Order code:

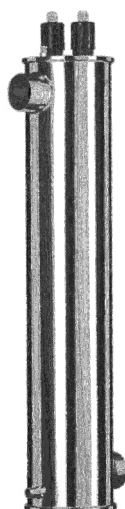
<b>Options DOSALux SMPDSRA</b>		
1	Shutdown on flooding	
2	Radiation intensity measured in W/m <sup>2</sup>	
3	/20 mA output for radiation intensity and temperature	
4	Flow rate monitor (shutdown on no flow)	
5	Connection to a contact water meter	
6	Preparation for a connection of the water meter	
7	Software for datalogging	
8	UV-C calculation (J/m <sup>2</sup> ) only in connection with contact water meter	

## DOSALux UV disinfection units Series Pool LCD

4 - 34 m<sup>3</sup>/h



18/1-80



34//2-80

### General information

- Delivery range\*: 4 - 34 m<sup>3</sup>/h
- Operating pressure: max. 9 bar
- Water temperature: 2 - 60° C
- High-performance low-pressure UV-C lamps in the 254 nm range, lamp service life approx. 9000 hours
- Reactor made of stainless steel material 1.4301 (1.4404 available on request)
- Inlet and outlet on the side
- Flammable connectors made of stainless steel for sampling
- Upper maintenance screwed joint for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Top ventilation valve and bottom drain valve as standard
- Single/Multi-lamp system with high-quality, centrally mounted quartz glass protection tube.
- UV controller Type "Pool LCD"

### Technical specifications

Series Pool LCD		16-4/1-40	16-7/1-40	16-14/1-80	16-18/1-80	16-34/2-80
Flow rate*	l/h m <sup>3</sup> /h	67 4	115 7	235 14	300 18	565 34
Connected load	Watt	40	40	80	80	150
Reactor connection	inch	1 1/2	2	2	2	2 1/2
Ventilation connection	inch	1/2	1/2	1/2	1/2	1/2
Extraction connection	inch	1/8	1/8	1/8	1/8	1/8
Number of lamps		1	1	1	1	2
Lamp type		UVL 40	UVL 40	UVL 80	UVL 80	UVL 80
UV-C dose	J/m <sup>2</sup>	> 250	> 250	> 250	> 250	> 250
Size of reactor						
Height H	mm	880	900	900	900	900
Width W		215	254	254	268	268
Size of controller						
Height H	mm	160	160	160	160	190
Width W		200	200	200	200	240
Depth D		95	95	95	95	95

\*The max. flow rates are based on a transmission power  $T_{1\text{ cm}}$  of 99% of a measured UV-C dose of 250 J/m<sup>2</sup> after about 9000 hours.

Electrical UV controller		16-4/1-40	16-7/1-40	16-14/1-80	16-18/1-80	16-34/2-80
Pool LCD	Power supply	230 V – 50/60 Hz.				
	Connected load	40 Watt	40 Watt	80 Watt	80 Watt	160 Watt
	Protection class	IP 55				
	Connection lead length approx.	1.0 m				
	Lamp connection lead Length approx.	1.0 m				
	LCD (microprocessor controlled)	•				
	Operating hours counter	•				
	Red LED for fault signals	•				
	Alarm relay, with floating potential contact, NO/NC	•				
	Alarm relay, 230V output, 2A max., NO/NC	•				

Order code

DOSALux Pool LCD			
		Connected load Watt	Flow rate m <sup>3</sup> /h
	16-4/1-40	40	4
	16-7/1-40	40	7
	16-14/1-80	80	14
	16-18/1-80	80	18
	16-34/2-80	160	34

<b>Pool LCD</b>	<b>16-14/1-80</b>	(example order)
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Your selection

<b>Pool LCD</b>		
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## DOSALux UV disinfection units Series ABOX® C

Certificated according to ÖNORM M 5873-1: 2001, according to the current drinking water DIN V2001, 1.6 - 28 m³/h



- Lamp guide opening with O-ring seal
- Degree of protection: IP 65
- Upper maintenance flange for mounting the quartz glass protection tubes and for easy access to the reactor chamber
- Control cabinet with UV monitor for monitoring the operation of the unit. An LCD shows the measured UV intensity in relative %, or in W/m², and the operating messages and fault messages in plain text.
- Temperature measurement (optional)
- External release and digital output to activate a discharge valve (cooling)

### General information

- Delivery range\*: 1.6 - 28
- Operating pressure: max. 10 bar
- Water temperature: 2 - 45°C
- Ambient temperature: 0 - 50°C
- Reactor made of stainless steel 1.4571, two bath pickled and electropolished
- With side inlet and outlet pipe connections, or flanges with integrated deflection plates and pipe connections depending on the model for flameable stainless steel sampling valves
- Side connector socket with screw-in, selective
- UV-C sensor and side viewing window according to DVGW W-294
- Top ventilation valve and bottom drain valve as standard
- Single or multi-beam system with high-quality, centrally-mounted quartz protection tubes
- High-performance low-pressure UV-C lamps in the 254 nm range, minimum lamp life 9000 hours
- Signal LEDs to indicate operation or malfunction
- Floating-potential signal contacts and pre-alarm
- malfunction
- 4-20 mA signal output proportional to the UV-C intensity
- Power supply 90 - 260 VAC, 50/60 Hz, power lead with Euro plug, approx. 2 m

### Technical specifications

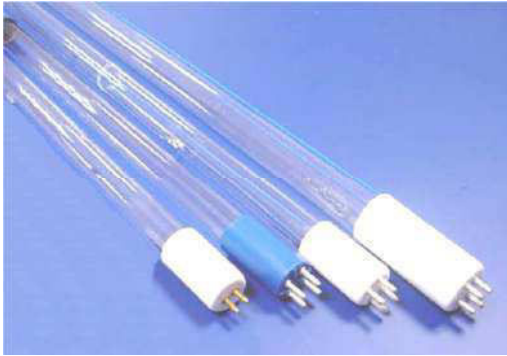
Series ABOX®		C 60	C 200	C 600
Flow rate*	m³/h	166	7	28
Connected load	Watt	75	210	700
UV lamps	Number of	1	1	3
	Watt	60	200	200
Reactor connection		R ¾"	R 2"	ND 80
Size of reactor				
Height H	mm	600	1300	1000
Width W		160	185	368
Size of controller				
Height H	mm	400	400	600
Width W		260	260	380
Depth D		123	123	210
<b>Price</b>				

\*The max. flow rates are based on a transmission power  $T_{1\text{ cm}}$  of 96% of a measured UV-C dose of 400 J/m² after about 8000 hours.  
 ABOX® is a trademarked product name of UMEX GmbH, Kirchheim

## Service parts for DOSALux UV disinfection units

Genuine DOSALux service parts must be used to ensure and maintain UV disinfection performance.

### DOSALux standard- and high-performance UV lamps



#### General information

- Low pressure lamp with main emission range 253.7 nm
- With special glass to prevent the buildup of ozone
- The UV lamps have a special long-life internal coating for a very long service life and low decay in radiation intensity

#### Standard - UV - lamp type DOSALux UVL

- Lifetime approx. 8000 hours
- Service life approx. 1 year
- Average radiation decay: approx. 20% after 5000 h
- Optimum temperature range: 10° - 30°C

Order code

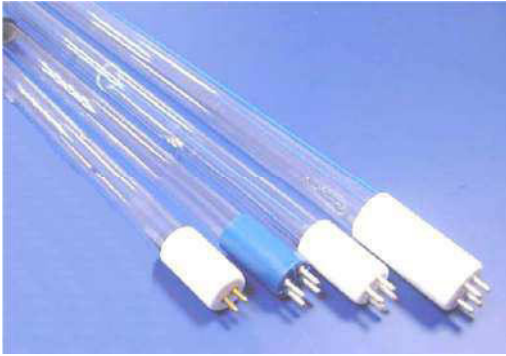
DOSALux Lamps UVL			
	Power consumption Watt	Packaging unit Number of pieces	
	12	4	
	16	4	
	30	4	
	40	4	
	80	4	
	150	4	

<b>UVL</b>	<b>30</b>	(example order)	
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Your selection

<b>UVL</b>			
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## DOSALux medium pressure and high performance UV lamps



### General information

- Low pressure lamp with main emission range 253.7 nm
- With special glass to prevent the buildup of ozone
- The UV lamps have a special long-life internal coating for a very long service life and low decay in radiation intensity

### Medium pressure - UV - lamp type DOSALux UVL

- Lifetime approx. 4,500 hours
- service life approx. 1/2 year

Order code

DOSALux Lamps UVLM		
Power consumption Watt	Packaging unit Number of pieces	
1000	1	
2000	1	
2500	1	
3500	1	

<b>UVLM</b>	<b>2000</b>	(example order)
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Your selection

<b>UVLM</b>		
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## DOSALux high performance UV lamps for ABOX® C



### General information

- Special lamps for UV disinfection units with DVGW or Ö-Norm certificate
- Low pressure lamp with main emission range 253.7 nm
- With special glass to prevent the buildup of ozone
- The UV lamps have a special long-life internal coating for a very long service life and low decay in the radiation intensity
- Lifetime approx. 9000 hours
- Average radiation decay: approx. 35% after 8,000 h
- Optimum temperature range 10 - 40°C

Order code

UV units ABOX®	UV lamps
C 60	C 60
C 200	C 200
C 600	C 600

ABOX® is a trademarked product name of UMEX GmbH, Kirchheim

## DOSALux quartz protection tubes QSR



### General information

- Quartz protection tubes made of very high quality material, suitable for DOSALux – UV disinfection units
- The tubes are half round sealed on one side and edge-fused
- Manufactured to precise dimensions with small tolerances:
  - Diameter: +/- 0.3 mm (over the entire length of the tube)
  - Wall thickness: +/- 0.1 mm
  - Length: +/- 1 mm
- Pressure resistance up to 10 bar at 55°C

Head flange and O-rings (as shown in the picture) are not included and must be ordered separately if required!

Order code

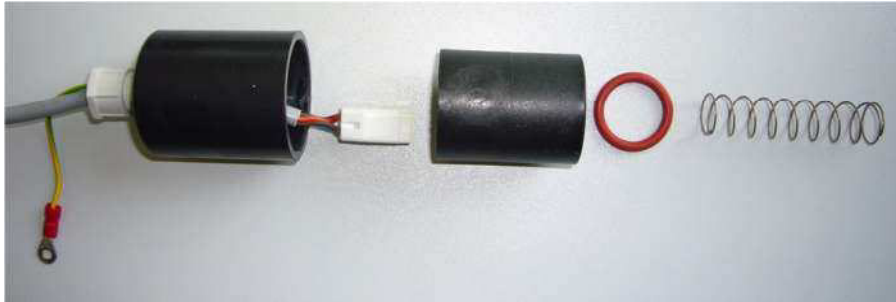
DOSALux quartz protection tube QSR		
For DOSALux Lamps UVL Watt	Packaging unit Number of pieces	
12	4	
16	4	
30	4	
40/80	4	
150	4	
10/20	1	
25	1	
35/50/70/105	1	
140	1	

<b>QSR</b>	<b>30</b>	(example order)	
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Your selection

<b>QSR</b>			
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## Spare parts for DOSALux UV reactors



Order code

DOSALux unit	Protection cap	Protection cap with lead	Plug	Head flange	O-ring	Spring
ALB	Protection cap for UV lamps Plastic	Protection cap in plastic for UV lamps with 4 pin plug and 1 m lead	4 pin plug for UV lamps UVL 12, 16, 30, 40, 80 and 150	Headpiece in plastic for quartz tube GSR	O-ring for quartz tube QSR	Spring for UV lamps AISI 304
LCD						
LCDP						
RLCD						
RLCDP						
R80						
RP80						
R200						
RP200						

## UV sensor for DOSALux UV disinfection units



Order code

for DOSALux:		
LCDP, RLCDP, RP RP (DVGW) SMP ABOX® C		

## DOSAactive electrolysis system Series D

The modern systems use salt, water and electricity for an on-site production of fresh, highly active chlorine for an effective disinfection of water.



Applying the electrolysis principle with open cell construction, a common salt solution is used to produce a stock of sodium hypochlorite solution on site that is stable when stored. All functional components, like control, brine pump, tubular cell, water distribution valve and hydrogen separator are mounted on a wall mounting plate made of polyethylene. The cover (white) for the wall mounting plate is provided with a tucked-in closure and can be removed with a single movement. The salt saturation tank with built-in water softener and the product tank are set up separately. Extra-large tanks can be used on request. The operating mode is visualized via an LED display on the control unit. The regeneration intervals of the integrated water softening plant vary, depending on the hardness of the used fill-up water. Installation only indoors, or outdoors with housing. A spate technical room is not required. The used operating resources (salt, electricity, water) are safe.

Recommendations for use

<b>DOSAactive Serie D</b>		<b>30</b>	<b>60</b>	<b>90</b>	<b>200</b>
Drinking-water disinfection	Drinking-water supply municipal (TVO, §11UBA)	•	•	•	•
	Drinking water supply on ships or the like (TVO, § 11UBA)	•	•	•	•
Water treatment	Beverage industry	•	•	•	•
	Circulation water	•	•	•	•
	Sewage	•	•	•	•
	Aquaria, fish farming	•	•	•	•
	Livestock breeding	•	•	•	•
	miscellaneous	•	•	•	•

Technical data:

<b>DOSAactive Serie D</b>		<b>30</b>	<b>60</b>	<b>90</b>	<b>200</b>
Supply voltage	V/Hz	230 V / 50 Hz.			
Energy demand	kW/h operation	approx. 0,135	approx. 0,27	approx. 0,405	approx. 0,90
Chlorine production	g /chlorine/h	approx. 30	approx. 60	approx. 90	approx. 200
ø   max. daily output	g/day	approx. 660 / 720	approx. 1320 / 1440	approx.1980 / 2160	approx. 4400 / 4800
Chlorine concentration	g /chlorine/l	approx. 5- 6	approx. 5 – 6	approx. 5 – 6	approx. 5 – 6
Water consumption	l/h	approx. 6	approx. 12	approx. 18	approx. 40
Salt consumption	g/h	approx. 108	approx. 216	approx. 324	approx. 720
Operating weight	kg	approx. 118	approx. 118	approx. 118	approx. 45
Operating mode	kg	approx. 250	approx. 250	approx. 250	approx. 475
Flow control monitor		yes			
Monitoring of backflow in hydrogen line		yes			
Brine tank		integrated			
Refill control in softener		yes			
Operating mode		stand-alone			
Product tank		integrated			
Tanque de salmuera		integrated			
Required space	mm (HxBxT)	1212 x 772 x 195			
min./max. Room temperature	°C	10 – 40			
Ventilation/deaeration of installation room		necessary			
Process water inlet temperature	°C	max. 25			
Closed hydrogen discharge to the outside		yes, continuously rising			

Order Code

<b>DOSAactive Serie D</b>			
		<b>Chlorine production</b>	
	D-30	g/Cl/h	
	D-60	g/Cl/h	
	D-90	g/Cl/h	
	D-200	g/Cl/h	

<b>DOSAactive</b>	<b>D-60</b>	(example order)	
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Your selection:

<b>DOSAactive</b>	<b>D-60</b>				
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## General Terms and Conditions of Delivery

Valid: October 2006

### I. Scope of application

1. The present terms and conditions of delivery shall apply exclusively; deviating conditions or conditions contrary of the customer shall only apply provided the supplier approved of this in writing.
2. The present General Terms and Conditions of Delivery shall also apply to subsequent orders and to replacement parts deliveries without necessitating repeated pointing out of this fact.
3. Supplements and representations as well as modifications or amendments to a contract concluded in writing or by fax/e-mail must be in writing.

### II. Offer and order confirmation

1. Offers shall only be binding provided a time limit for acceptance is stated in the offer. To be legally binding, offers shall require the written confirmation of the supplier.
2. The supplier reserves any titles to and copyrights in figures, drawings, calculations, and other offer documentation and similar information of physical and non-physical type – also in electronic form; these may only be disclosed to third parties on the supplier's written approval and shall be immediately returned to the supplier on request if no order is awarded to the supplier.

### III. Scope of deliveries and services

1. The deliveries and services are determined based on the mutual written declarations. If no such declarations exist, the written order confirmation of the supplier shall be decisive. For mere sales contracts, the agreed upon delivery provisions shall be interpreted according to the INCOTERMS valid at the conclusion of the contract.
2. Data in brochures catalogues or general technical documentation shall only be binding if reference is made to them in writing.
3. The costs for an agreed mounting and assembly, including all and any required ancillary costs such as travel expenses or costs for the transport of tools or personal luggage shall be remunerated separately by the customer, if not otherwise agreed upon.
4. If software is part of the delivery scope, the customer shall be granted a non-exclusive right of use in the software. The customer may copy or edit the software only in the legally permissible scope.
5. Partial deliveries shall be permissible, provided it is reasonable for the customer, considering the interests of both the supplier and the customer.
6. In case of deliveries abroad, the supplier's obligation shall be under the proviso that any necessary export licenses are granted.

### IV. Prices and terms of payment

1. All prices shall be in EURO unless otherwise stated. They shall apply to mere delivery transactions "ex works" (EXW), exclusive of packaging.
2. The prices do not include any turnover tax. This tax is itemized separately in the invoice in the statutory amount applicable at the date of invoicing.
3. The deduction of discounts shall require a special agreement in writing.
4. If not otherwise shown in the order confirmation, the sales price shall be due for payment 30 days from invoice date without any deduction.
5. If the customer does not comply with the date for payment, the customer shall pay default interest in the amount of 8 percentage points above the base interest rate pursuant to §247 German Civil Code from the due date. Payment of further damages remains reserved.
6. If not otherwise agreed upon, the delivery of goods for deliveries abroad shall be under the proviso that an irrevocable commercial letter of credit is issued by the customer in favour of the supplier, and confirmed by a German banking institution.
7. In case of delayed payment, the supplier may suspend the performance of his own obligations until total payment was received, giving written notice to the customer.
8. The customer may only set off claims or assert a right of retention, provided these are undisputed or have become non-appealable.

### V. Time-limits for deliveries or services

1. With regard to time-limits, the mutual written declarations or, in the absence of such declarations, the written order confirmation of the supplier shall be decisive. The time-limit shall be deemed observed, provided all and any documentation to be provided by the customer are received in time, and all and any required permits, releases, in particular plans, are provided, and the agreed upon terms of payment and other obligations are met by the customer. If these prerequisites are not met in time, the time-limit shall be prolonged reasonably; this shall not apply if the supplier is responsible for the delay.
2. If non-observance of the time-limits is the result of force majeure, e.g. mobilization, war, riot or similar events, e.g. strike or lock-out, the agreed upon time-limits shall be prolonged reasonably.
3. If mounting and assembly are not part of the agreed upon services, the time-limit shall be deemed observed if the goods ready for operation were shipped or collected within the time-limit. Should the delivery be delayed for reasons for which the customer is responsible, the time-limit shall be deemed observed upon notification of readiness for shipment.

4. If the supplier is responsible for the non-observance of the time-limit, the customer, provided the customer suffered an actual loss, may request compensation for delay for each full week of delay of a maximum of 0.5%, however, not exceeding 5% of the price for the part of the delivery which could not be taken into relevant operation because of the delay. Claims for compensation of the customer exceeding the limits stipulated in item 5.4 shall be excluded in all cases of delayed delivery or service, also after expiry of any grace period set to the supplier. This shall not apply to the extent mandatory liability exists in cases of intent, gross negligence or personal injury; a shift of the burden of proof to the disadvantage of the customer is not given in this case.
5. The customer's right to withdraw after ineffectual expiry of a grace period for the supplier shall remain unaffected. The grace period, however, must be reasonable and amount to at least four weeks.
6. If shipment or delivery is delayed for more than one month after notice of readiness for shipment on the customer's request, warehouse charges in the amount of 0.5% of the price of the delivery goods, however, not exceeding a total of 5%, may be charged to the customer for each month started. The parties to the contract shall remain free to furnish proof of higher or lower warehouse charges.

### VI. Passage of utility and risk; insurance; packaging

1. The risk of deliveries and services rendered by the supplier shall pass to the customer as follows, even in case of deliveries freight paid.
  - a. For deliveries without mounting or assembly, even in case of partial deliveries, if these have been shipped or collected. Shipments shall be insured by the supplier against the usual transport risks upon wish and at the expense of the customer. If such insurance exists, the supplier shall be immediately notified about any damages to goods in transit.
  - b. For deliveries with mounting or assembly on the day of acceptance in the customer's operations or, if agreed upon, after perfect test operation.
2. If the shipment, delivery, start performance of mounting or assembly acceptance in the customer's operations or test operation is/are delayed for reasons attributable to the customer or if the customer delays acceptance for other reasons, the risk shall pass to the customer.
3. The shipment is in principle made in standard packaging of the supplier. The latter shall be entitled to choose special types of packaging deemed necessary in the supplier's discretion. The costs of these packagings shall be borne by the customer.

### VII. Mounting and assembly

The mounting, assembly and installation of the equipment and devices of the supplier may only be performed by specialists, observing the supplier's guidelines and the applicable technical standards.

If mounting and/or assembly are performed by the supplier, the following provisions shall apply, if not otherwise agreed upon in writing:

1. The customer shall assume and provide in time at the customer's expense:
  - a. All earthworks, construction work and other different ancillary work, including the required specialists and auxiliary staff, materials and tools.
  - b. The commodities and materials such as scaffolds, cranes and elevators and other devices, fuels, lubricants, and chemicals required for assembly and commissioning.
  - c. Energy and water at the site of use, including connections, heating, and illumination.
  - d. Sufficiently large, suitable, dry and lockable rooms at the assembly site for storing machine parts, fixings, materials, and tools etc., and suitable working and recreation rooms for the assembly staff, including appropriate sanitary installations. For the protection of the supplier's property and the assembly staff, the customer shall also take the measures he normally would take to protect his own property.
  - e. Protective clothing and protective devices which are necessary because of special circumstances at the assembly site.
2. Prior to the start of the assembly work, the customer shall unsolicitedly provide the required information about the position of subsurface energy, gas, water conduits or similar installations as well as the required data on statics.
3. Prior to the start of mounting or assembly, the additions and objects required to start the work must be at the mounting or assembly site and all preparations prior to start of the installation must be advanced such that the mounting or assembly can be started as agreed upon and can be performed without any interruptions. Access routes and the mounting or assembly site must be flattened and clear of any objects.
4. Should mounting, assembly or commissioning be delayed for reasons beyond the control of the supplier, the customer shall bear the costs for waiting time and additionally required travels of the supplier or the assembly staff in an adequate amount.
5. If a plant cannot be installed immediately after delivery, the customer shall be responsible for a proper storage according to the supplier's guidelines.
6. The customer shall provide the supplier with weekly information on the duration of the working hours of the assembly staff and shall immediately confirm the completion of mounting, assembly or commissioning.

7. The commission may only be performed by technicians acknowledged by the supplier and according to the supplier's instruction. The technicians shall be entitled to refuse commissioning of the plant if the operating conditions to be provided by the customer do not guarantee a safe operation of the plant. The customer shall bear the costs of any delay in commissioning incurred to the supplier.

8. Should the supplier request acceptance of the deliveries and services after completion, the customer shall be obliged to do so within two weeks. Otherwise, the acceptance shall be deemed made. The acceptance shall be deemed made, too, if the delivery goods and services – also after completion of an agreed test phase, if any – have been taken in use.

### VIII. Warranty

1. Should goods delivered or services rendered by the supplier prove to be defective because they do not possess the agreed quality or because they are not suitable for the agreed or usual use, the supplier shall in its discretion either remedy the parts or services concerned or deliver or render them again at no cost within the limitation period, provided the cause of the defect already existed at the time of risk passing.

2. Claims for material defects become statute barred after 12 months. The time-limit shall start with passing of the risk (item 6). The above provisions shall not apply to the extent the law mandatorily prescribes longer time-limits according to §§438(1) no. 2 German Civil Code (goods for edifices), §479(1) German Civil Code (right of recourse); and §634a German Civil Code (Structural defects). The warranty period may be prolonged up to 60 months in suitable cases, provided the customer concludes a maintenance contract for the corresponding period.

3. The customer shall immediately give notice of defects to the supplier.

4. In the event of notices of defects, payments of the customer may be retained in the volume which shows a reasonable ratio to the material defects incurred. The customer may retain payments only if a notice of defect is given whose justification is beyond doubt. If the notice of defect is given wrongfully, the supplier shall be entitled to request from the customer compensation for the expenses incurred to the supplier.

At first, the supplier shall always be given the opportunity to post-perform within a reasonable time-limit. The customer shall grant the supplier the time and opportunity required to do so. Should the customer refuse this, the supplier shall be exempted from the liability for defects.

6. If the post-performance fails, the customer - notwithstanding possible claims for damages- may withdraw from the contract or reduce the compensation. The customer may not claim compensation for futile expenses.

7. Claims for defects do not exist in case of minor deviations from the agreed or assumed quality, minor impairment of usability, natural wear or damages incurred after passing of the risk because of incorrect or negligible handling, excessive use, unsuitable operating material, faulty construction work, unsuitable subsoil or because of special external influences which are not established in the contract as well as in case of non-reproducible software errors. If the customer or third parties perform improper modifications or repair work, no claims for defects will exist for these and the resulting consequences.

8. The supplier shall not bear the additional expenditure, in particular transport, travelling, labour and material costs, which result from the fact that the subject matter for the delivery was later transported to a different location than the customer's branch or the original place of destination, except the transport corresponds to its proper use.

9. In all cases, the customer shall be obliged to take any possible and reasonable steps to keep the expense for the purpose of post-performance as small as possible. The supplier shall participate in the costs for a recall campaign only if this is necessary based on the factual and legal situation. The customer shall be obliged to either return defective products or keep them ready for inspection and rests, in the supplier's discretion.

10. Claims for recourse of the customer against the supplier shall only exist to the extent the customer did not conclude any agreements with the customer's purchaser which exceed the statutory claims for defects. In addition, item 8.8 shall apply correspondingly to the scope of the right for recourse of the customer against the supplier.

11. Furthermore, item 11 (other claims for damages) also applies to claims for damages. More extensive or other claims than stipulated in the present item 8 of the customer against the supplier and its persons employed in performing the obligations because of a material defect shall be excluded.

### IX. Industrial property rights and copyright; defects of title

1. If not otherwise agreed upon, the supplier shall be obliged to render the delivery free of any industrial property rights and copyrights of third parties (hereinafter called: property rights) solely in the country of the place of delivery. To the extent a third party makes justifies claims against the customer because of infringement of property rights by deliveries rendered by the supplier and used according to contract, the supplier shall be liable to the customer within the time-limit stipulated in item 8.2 as follows:

- a. The supplier shall at the supplier's expense and in the supplier's discretion either obtain a right of use for the deliveries concerned, modify them such that the property right is not infringed or exchange them. Should the supplier not be able to do so under reasonable conditions, the customer shall be entitled to statutory cancellation of reduction right. The customer may not claim compensation for futile expenses.
- b. The supplier's obligation to pay damages shall be subject to item 11.

- c. The above-mentioned obligations of the supplier shall only be given provided the customer immediately informs the supplier in writing about claims asserted by third parties, refuses to acknowledge an infringement, and all and any measures of protection and settlement proceedings remain reserved to the supplier. Should the customer discontinue the use of the delivery goods for the purpose of reducing the damage or for other reasons, the customer shall be obliged to inform the third party about the fact that the discontinuance of use does not represent an acknowledgement of the property rights infringement.

2. Claims of the customer shall be excluded the customer is responsible for the property rights infringement.

3. Claims of the customer shall furthermore be excluded to the extent the property rights infringement was caused by special standards stipulated by the customer, by use not foreseeable by the supplier or by the fact that the delivery goods were modified by the customer or used in conjunction with products not delivered by the supplier.

4. In the event of property rights infringements, the claims of the customer stipulated in item 9.1 a) shall apply, in addition the provisions in item 8.4, item 8.5, and item 8.10 shall apply correspondingly. In case of other defects of title, the provisions of item 8 shall apply correspondingly.

More extensive or other claims than stipulated in the present item 9 of the customer against the supplier and its persons employed in performing the obligations because of a defect of title shall be excluded.

### X. Impossibility; adaptation of contract

1. To the extent the delivery is not possible, the customer shall be entitled to claim damages, except the impossibility is attributable to the supplier. The customer's claims for damages, however, shall be limited to 10% of the part of the delivery which cannot be taken into relevant operation because of the impossibility. This limitation shall not apply to the extent mandatory liability exists in cases of intent, gross negligence or personal injury; a shift of the burden of proof to the disadvantage of the customer is not given in this case. The customer's right to withdraw from the contract shall remain unaffected.

2. In case of temporary impossibility, item 5 (time-limits) shall apply.

3. Should unforeseeable events in the sense of item 5.2 significantly change the economic meaning or the content of the delivery or have a significant effect on the supplier's operations, the contract shall be adapted in good faith. To the extent this is not economically reasonable, the supplier shall be entitled to withdraw from the contract. If the supplier intends to assert this right to withdraw, the supplier after having obtained knowledge about the scope of the event, shall immediately inform the customer to this effect. This shall also apply if a prolongation of the delivery period was agreed upon with the customer at first.

### XI. Other claims for damages

1. Claims of the customer for damages and indemnity of expenses because of infringement of main or ancillary obligations from the contractual obligation, from tort or other legal grounds shall be excluded.

2. This exclusion shall not apply to the extent mandatory liability exists, e.g. pursuant to the German Product Liability Act, in cases of intent, gross negligence, for personal injury, because of the assumption of a guaranty for the presence of a property, or infringement of material contractual obligations. The damages for the infringement of material contractual obligations shall, however, be limited to the contract-typical, foreseeable damage, provided no intent or gross negligence exists or liability exists for personal injury or because of the assumption of a guaranty for the presence of a property. A shift of the burden of proof to the disadvantage of the customer is not related with the above provisions.

3. If mandatory law does not stipulate longer limitation periods, all and any claims for damages shall become statute-barred within the time-limits stated in item 8.2.

### XII. Warranty and product description

1. Warranties shall only be effective if made in writing.

2. Data described in catalogues, tender documentation and other printed matter as well as general advertising statements do not represent an offer for the conclusion of a warranty agreement.

### XIII. Reservation of title

1. The supplier reserves the title in the delivery goods (reserve goods) until the customer has made the complete payment due from the business relationship. The reservation of title shall also include the acknowledged balance, to the extent the supplier enters the claims against the customer in current account (current account reserve).

2. If the supplier accepts return of the delivery goods, this shall mean a withdrawal from the contract. Upon return of the goods purchased, the supplier shall be entitled to realize these goods; the realization fees. In the event the delivery goods are attached, the supplier shall be entitled to withdraw from the contract without setting a time-limit. In case of attachment or other interventions by third parties, the customer shall immediately inform the supplier in writing for the supplier to be able to file action pursuant to §771 German Code of Civil Procedure. To the extent third parties are not able to reimburse the judicial and extra judicial expenses of an action pursuant to §771 German Code of Civil Procedure to the supplier, the customer shall be liable for the loss incurred by the supplier.

3. The customer shall be entitled to resell the delivery goods in the proper course of business; however, the customer already now assigns to the sup-



plier. All and any claims in the amount of the final invoice amount, including value added tax, which are due to him from resale against his purchaser or third parties, independent of the fact whether the delivery goods were resold without or after processing. The customer shall be entitled to collect this claim also after its assignment. The supplier's power to collect the claim himself remains unaffected; the supplier may request the customer to disclose the assigned claims and their debtors, to provide the information required for collection, to provide the relevant documentation and to inform the debtor (third party) about the assignment.

4. The processing and transformation of the delivery goods by the customer shall always be performed for the supplier. If the delivery goods are processed together with other objects not belonging to the supplier, the supplier shall obtain co-ownership in the new object in the proportion of the value of the delivery goods to the other processed objects at the time of processing. Otherwise, the same provisions as for reserve goods shall apply to the matter created by processing. The customer shall also assign to the supplier the claims for securing the supplier's claims which are due to the customer against a third party by joining the delivery goods with a real property.

5. If the delivery goods are mixed in-separately with other objects not belonging to the supplier, the supplier shall obtain co-ownership in the new object in the proportion of the value of the delivery goods to the other mixed objects at the time of mixing. If the mixing is done such that the matter of the customer is to be deemed a main component, the parties agree that the customer shall assign to the supplier proportional co-ownership. The customer shall keep the sole property or co-property for the supplier. The customer shall insure it in the usual scope against usual risks such as e.g. fire, theft, water, and similar. The customer shall already now assign to the supplier the customer's claims for compensation which are due to him from damages of the above-mentioned type against insurers or other third parties, in the amount of the invoice value of the goods.

6. If the realizable value of the securities due to the supplier exceeds the supplier's total claims by more than 10%, the supplier shall be obliged to release in the supplier's discretion securities on request of the customer or a third party affected by the excessive security.

#### **XIV. Place of jurisdiction and applicable law**

1. The place of jurisdiction for all and any disputes arising out of the present contract shall be the supplier's headquarters, provided the customer is a merchant: The supplier, however, shall be entitled to file action at the customer's headquarters.

2. German law shall apply to the contractual relationships. The UN Convention on the International Sale of Goods (CISG) shall be excluded.

#### **XV. Severability**

Should any individual provisions of the present contract be legally ineffective, the validity of the remaining provisions shall in no way be affected. This shall not apply if abiding by the contract would constitute an unreasonable hardship for the other party to the contract.

DOSATRONIC GmbH

# DOSATRONIC

MANAGEMENT IN WATER



**DOSATRONIC GmbH**  
Zuppingerstr. 8  
D-88213 Ravensburg

Tel.: +49-751-29512-0  
Fax: +49-751-29512-190  
info@dosatronic.de  
www.dosatronic.de