

Date: 20/02/2020 Qty. Description **DDA 30-4** 1 Note! Product picture may differ from actual product Product No.: 97722308 DDA 30-4 FC-PV/T/C-F-31I002FG The SMART Digital DDA is a compact positive displacement, diaphragm dosing pump with variable-speed drive (stepper motor) and intelligent control electronics with minimum energy consumption. The SMART Digital Dosing series operates at full stroke length to ensure optimum accuracy, priming and suction, even for high-viscosity or degassing liquids. The duration of each discharge stroke varies according to the capacity set, resulting in optimum smooth and continuous discharge flow. The click-stop mounting plate allows installation in three different positions without using any additional accessories. The control cube can be turned easily into front, left or right position. The click wheel and the multi-coloured backlit graphical, plain-text LC display make commissioning and operation intuitive. The control elements are protected by a transparent cover. The sensor-based FlowControl (FC) system detects malfunctions directly in the dosing head and displays them in plain text in the alarm menu, e.g. air bubbles, line burst, overpressure. The integrated flow measurement function (only FCM) measures the actual flow and makes additional monitoring and control equipment redundant (accuracy of  $\pm 1,5$ % of set value in case of trouble-free process). The measured flow is displayed and can be integrated in the analysis of set value in case of trouble-free process). The measured flow is displayed and can be integrated in the measurement of  $\pm 1,5$ % of set value in case of trouble-free process). The measured flow is displayed and can be integrated in the measurement of the measurement of the measurement function (and the function (and the function (and the function)). the process control, e.g. SCADA. Furthermore, the AutoFlowAdapt function (only FCM) automatically adjusts the pump speed according to the process conditions to maintain target flow even at e.g. varying backpressure or air bubbles foaming (degassing drive strategy). The dosing head is composed of: Long lifetime and universal, chemically resistant full-PTFE diaphragm. Double ball valves for highest dosing accuracy. Deaeration valve for easy start-up. Pressure sensor. Operation modes: Manual dosing in ml/h, l/h or gph. Pulse control in ml/pulse (incl. memory function). Analog control 0/4-20 mA (scalable). Pulse-based batch function in ml, I or gal. Timer-based batch function (Dosing timer, cycle or week). Fieldbus control (Genibus prepared for ProfibusDP E-box). Other features: Auto deaeration during pump standby to avoid breakdowns due to air-locking. Two SlowMode steps (anti-cavitation), 50 % (maximum flow: 15 l/h) and 25 % (maximum flow: 7.5 l/h), e.g. for high-viscosity or degassing liquids. Service information display to show when service and which wear-part order number is required. Two-step key lock function to protect the pump against unauthorised access. Additional display function to provide further information, e.g. the actual mA input signal. Counter for total dosed volume (resettable), operating hours, etc. Save and load customised settings as well as reload of factory settings.

Signal inputs/outputs:



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Description	
- Input for pulse, a	alog 0/4-20mA, external stop.
<ul> <li>Input for low-level</li> </ul>	and empty-tank signal.
timer etc.)	output relays for max. 30 V AC/DC (configurable, e.g. alarm, stroke signal, pump dosi
<ul> <li>Output analog 0,</li> </ul>	
<ul> <li>Fieldbus commu</li> </ul>	cation interface (GeniBus, also for additional Profibus DP E-box to retrofit).
Installation set includes	
	ns (Hose 9/12 mm 6).
<ul> <li>Foot valve (with</li> </ul>	t level switch).
- Injection unit.	
- 6 m PE discharg	
- 2 m PVC suction	
- 2 m PVC deaera	on hose (4/6 mm).
Technical:	
Type key:	DDA 30-4 FC-PV/T/C-F-311002FG
Max. Flow:	30 l/h
Max. flow in slow mode	
Max. flow in slow mode Min flow:	
Turn-down ratio:	30.0 ml/h 1:1000
Approvals on nameplat	
Valve type:	Standard
Maximum viscosity at 1	
Maximum viscosity in s	v mode 50 %: 600 mPas
	v mode 25 %: 1500 mPas
Accuracy of repeatabilit	
Materials:	
Dosing head:	PVDF (Polyvinylidene fluoride)
Valve ball:	Ceramic
Gasket:	PTFE
Installation:	
Range of ambient temp	ature: 0 45 °C
Maximum operating pre	
Installation set:	YES
Installation type:	9/12 mm up to 60 l/h,13 bar
Pump inlet:	Hose 9/12 mm 6
Pump outlet:	Hose 9/12 mm 6
Max. Suction lift during	
Max. Suction lift during	iming: 2 m
Liquid:	
Pumped liquid:	Water
Liquid temperature range	
Selected liquid tempera	
Density:	998.2 kg/m³
Electrical data:	
Maximum power input -	1: 24 W
Mains frequency:	50 / 60 Hz
Rated voltage:	1 x 100-240 V
Enclosure class (IEC 34	
Length of cable:	1.5 m
Type of cable plug.	FU

EU

25A at 230V for 2ms

Type of cable plug:

Inrush current:



			Date:	20/02/2020	
Qty.	Description				
	Controls:				
	Control variant:	FC			
	Level control:	YES			
	Analog input:	0/4-20 MA			
	Pulse control:	YES			
	Ext. Stop input:	YES			
	Analog output:	0/4-20 MA			
	Output relays:	2			
	Bus communication:	YES			
	Others:				
	Net weight:	3 kg			
	Gross weight:	4 kg			
	Color:	RED			
	Country of origin:	FR			
	Custom tariff no.:	84135040			



Company name: Created by:

Phone: Date: 20/02/2020 97722308 DDA 30-4 H [bar] DDA 30-4 4.6 4.4 4.2 4.0 3.8 3.6 3.4 3.2 3.0 2.8 2.6 2.4 2.2 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0<del>|</del> 0 2 4 6 8 10 12 14 16 18 20 22 26 28 24 30 Q [İ/h]



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00-240 V						
/ NEMA 4X						
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at 230V for 2ms						
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	C 2 kg/m <sup>3</sup> / 60 Hz 00-240 V / NEMA 4X n at 230V for 2ms NT-MOUNTED 20 MA	C 2 kg/m <sup>3</sup> / 60 Hz 00-240 V / NEMA 4X n at 230V for 2ms NT-MOUNTED 20 MA	C 2 kg/m <sup>3</sup> / 60 Hz 00-240 V / NEMA 4X n at 230V for 2ms NT-MOUNTED 20 MA	C 2 kg/m <sup>3</sup> / 60 Hz 00-240 V / NEMA 4X n at 230V for 2ms NT-MOUNTED 20 MA	C 2 kg/m <sup>3</sup> / 60 Hz 00-240 V / NEMA 4X n at 230V for 2ms NT-MOUNTED 20 MA	C 2 kg/m <sup>3</sup> / 60 Hz 00-240 V / NEMA 4X n at 230V for 2ms NT-MOUNTED 20 MA



		Date:	20/02/2020
Description	Value		
Bus communication:	YES		
Others:			
Net weight:	3 kg		
Gross weight:	4 kg		
Color:	RED		
Country of origin:	FR		
Custom tariff no .:	84135040		



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