

30/01/2020

Qty. | Description

1

DDA 7.5-16



Note! Product picture may differ from actual product

Product No.: 97722034 DDA 7.5-16 FCM-PV/T/C-F-31U2U2

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 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: 3.75 l/h) and 25 % (maximum flow: 1.88 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:



<ul> <li>Input for low-level and empty-tank signal.</li> <li>Two potential-free output relays for max. 30 V /</li> </ul>						
<ul> <li>Input for low-level and empty-tank signal.</li> <li>Two potential-free output relays for max. 30 V /</li> </ul>	ч.					
	<ul> <li>Input for pulse, analog 0/4-20mA, external stop.</li> <li>Input for low-level and empty-tank signal.</li> <li>Two potential-free output relays for max. 30 V AC/DC (configurable, e.g. alarm, stroke signal, pump do timer etc.)</li> </ul>					
<ul> <li>Output analog 0/4-20mA.</li> <li>Fieldbus communication interface (GeniBus, also for additional Profibus DP E-box to retrofit).</li> </ul>						
Tochnical						
Technical:Type key:DDA 7.5-16 FCM-PV/T/C-F-31U2U2						
Max. Flow: 7.5 l/h						
Max. flow in slow mode 50%: 3.75 l/h						
Max. flow in slow mode 25%: 1.88 l/h						
Min flow: 2.5 ml/h						
Turn-down ratio: 1:3000						
Approvals on nameplate: CE,CSA-US,NSF61,	EAC,RCM					
Valve type: Standard						
Maximum viscosity at 100 %: 50 mPas Maximum viscosity in slow mode 50 %: 1800 mPas						
Maximum viscosity in slow mode 25 %: 2500 mPas						
Accuracy of repeatability: 1 %						
Materials:						
Dosing head: PVDF (Polyvinyliden	e fluoride)					
Valve ball: Ceramic						
Gasket: PTFE						
Installation:						
Range of ambient temperature: 0 45 °C						
Maximum operating pressure: 16 bar						
Installation set: NO						
Installation type: No installation set						
Pump inlet: 4/6, 6/9, 6/12, 9/12 n						
Pump outlet: 4/6, 6/9, 6/12, 9/12 n	าท					
Max. Suction lift during operation: 6 m Max. Suction lift during priming: 2 m						
Liquid: Pumped liquid: Water						
Liquid temperature range: -10 45 °C						
Selected liquid temperature: 20 °C						
Density: 998.2 kg/m <sup>3</sup>						
Electrical data:						
Maximum power input - P1: 24 W						
Mains frequency: 50 / 60 Hz						
Rated voltage: 1 x 100-240 V						
Enclosure class (IEC 34-5): IP65 / NEMA 4X						
Length of cable: 1.5 m						
Type of cable plug: EU						
Inrush current: 25A at 230V for 2ms						
Controls:						
Control variant: FCM						
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						



Company name: Created by:

	GRUND	FOSX	Created by: Phone:		
			Date:	30/01/2020	
ty.	Description				
	Bus communication:	YES			
	Others:	0.4-5			
	Net weight: Gross weight:	3 kg 4 kg			
	Color:	RED			
	Country of origin: Custom tariff no.:	FR			
	Custom tariff no.:	84135040			



Company name: Created by:

Phone: Date: 30/01/2020 97722034 DDA 7.5-16 H [bar] DDA 7.5-16 18 17 16 15 14 13-12. 11 10 9 8 7. 6. 5 4 3 2 1 0<del>+</del> 0 0.5 1.0 1.5 2.0 3.0 4.0 4.5 5.0 5.5 6.5 7.0 2.5 3.5 6.0 7.5 Q [İ/h]



		н 🚽 🖂		DDA 7.5-1
Description	Value	H - [bar]		
General information:		18 -		
Product name:	DDA 7.5-16	17 -		
Product No:	97722034	17-		
EAN number:	5710622721768	16-		
	5710622721768			
Price:	2.410,00 GBP	15 -		
Technical:		14 -		
Type key:	DDA 7.5-16 FCM-PV/T/C-F-31U2U2			
Max. Flow:	7.5 l/h	13-		
Max. flow in slow mode 50%:	3.75 l/h	12 -		
Max. flow in slow mode 25%:	1.88 l/h			
Min flow:	2.5 ml/h	11-		
Turn-down ratio:	1:3000			
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM	10-		
Valve type:	Standard	9-		
Maximum viscosity at 100 %:	50 mPas			
Maximum viscosity at 100 %.		8-		
50 %:	1800 mPas	7-		
Maximum viscosity in slow mode 25 %:	2500 mPas	6 -		
Accuracy of repeatability:	1 %	5-		
Materials:		5-		
Dosing head:	PVDF (Polyvinylidene fluoride)	4 -		
Valve ball:	Ceramic			
Gasket:	PTFE	3-		
Installation:		2-		
Range of ambient temperature:	0 45 °C	2-		
Maximum operating pressure:	16 bar	1-		
Installation set:	NO	-		
Installation type:	No installation set	0 0.5	1.5 2.5 3.5 4.	5 5.5 6.5 Q [l/l
Pump inlet:	4/6, 6/9, 6/12, 9/12 mm			
Pump outlet:	4/6, 6/9, 6/12, 9/12 mm		L	280
Max. Suction lift during operation:	6 m			251
Max. Suction lift during priming:	2 m	17.5 110	<u>G 5/8"</u>	
Liquid:				- A
Pumped liquid:	Water		,∎\\ <b>∍</b> r∸_†∏	
Liquid temperature range:	-10 45 °C	⊂ ∭ <u>®</u> O⊜		
Selected liquid temperature:	20 °C			
Density:	998.2 kg/m <sup>3</sup>			
Electrical data:				
Maximum power input - P1:	24 W			
Mains frequency:	50 / 60 Hz	4 xØ 6 105 120		161 17
Rated voltage:	1 x 100-240 V	168	·	
-				
Enclosure class (IEC 34-5):	IP65 / NEMA 4X			
Length of cable:	1.5 m			
Type of cable plug:	EU			
Inrush current:	25A at 230V for 2ms			
Controls:				
Control variant:	FCM			
Control panel:	FRONT-MOUNTED			
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:				



		Date:	30/01/2020
Description	Value		
Net weight:	3 kg	-	
Gross weight:	4 kg		
Color:	RED		
Country of origin:	FR		
Custom tariff no .:	84135040		



30/01/2020

Date:

97722034 DDA 7.5-16

