

30/01/2020

Qty. | Description

1

DDA 7.5-16



Note! Product picture may differ from actual product

Product No.: 97722036 DDA 7.5-16 FCM-PV/T/C-F-32U2U2

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:



			Date:	30/01/2020		
	Description					
F	<ul> <li>Input for pulse, analog 0/4</li> </ul>	1-20mA external sto	n			
	- Input for low-level and empty-tank signal.					
			AC/DC (conf	igurable, e.g. alarm, stroke signal, pump de		
	timer etc.)					
	- Output analog 0/4-20mA.					
	<ul> <li>Fieldbus communication interface (GeniBus, also for additional Profibus DP E-box to retrofit).</li> </ul>					
	Technical:					
	Type key:	DDA 7.5-16 FCM-P	V/T/C-E-32U2	2112		
	Max. Flow:	7.5 l/h	0202			
	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:	Spring-Loaded (HV				
	Maximum viscosity at 100 %:	600 mPas				
	Maximum viscosity in slow mode					
	Maximum viscosity in slow mode					
	Accuracy of repeatability:	1 %				
	Materials:					
	Dosing head:	PVDF (Polyvinylide	ne 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	mm			
	Pump outlet:	4/6, 6/9, 6/12, 9/12				
	Max. Suction lift during operatior					
	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>				
		Ū.				
	Electrical data:	04.144				
	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 2m	S			
	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 97722036 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]



Description	Value	H - [bar]		DDA 7.5-1
General information:		18 -		
Product name:	DDA 7.5-16			
Product No:	97722036	17 -		
EAN number:	5710622721782	16-		
	5710622721782	10		
Price:	2.431,00 GBP	15 -		
Technical:				
Turne keyu	DDA 7.5-16	14-		
Type key:	FCM-PV/T/C-F-32U2U2	13 -		
Max. Flow:	7.5 l/h			
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	10 -		
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM			
Valve type:	Spring-Loaded (HV-version)	9-		
Maximum viscosity at 100 %:	600 mPas			
Maximum viscosity in slow mode	1900 mDoo	8-		
50 %:	1800 mPas	7 -		
Maximum viscosity in slow mode 25 %:	2500 mPas	6-		
Accuracy of repeatability:	1 %			
Materials:		5-		
Dosing head:	PVDF (Polyvinylidene fluoride)	4 -		
Valve ball:	Ceramic			
Gasket:	PTFE	3-		
Installation:				
Range of ambient temperature:	0 45 °C	2-		
Maximum operating pressure:	16 bar	1		
Installation set:	NO	• ']		
Installation type:	No installation set	0		
Pump inlet:	4/6, 6/9, 6/12, 9/12 mm	0 0.5	1.5 2.5 3.5 4	.5 5.5 6.5 Q [l/
Pump outlet:	4/6, 6/9, 6/12, 9/12 mm			280
Max. Suction lift during operation:	4/0, 0/9, 0/12, 9/12 mm 6 m			251
Max. Suction lift during priming:	2 m			
Liquid:	2 111			
-	Motor		╵╽╲╴╴╵╘┱╌╤╖	┍╾┑╘╾╌┓╢║╽
Pumped liquid:	Water	(  ⊛(_)€	◉   \ \   ¯	
Liquid temperature range:	-10 45 °C 20 °C			
Selected liquid temperature:				
Density:	998.2 kg/m <sup>3</sup>			
Electrical data:	24 \\		z⊐l   +• +t₫	
Maximum power input - P1:	24 W	4 <u>xØ6</u> 120		161 17
Mains frequency:	50 / 60 Hz	168		
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			
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:

97722036 DDA 7.5-16

