

30/01/2020

Qty. | Description

1

DDA 7.5-16



Note! Product picture may differ from actual product

Product No.: 97722018 DDA 7.5-16 FCM-PVC/V/C-F-31U2U

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			
	0/4-20mA, external sto	р.	
<ul> <li>Input for low-level and</li> </ul>			
	put relays for max. 30 V	AC/DC (configu	rable, e.g. alarm, stroke signal, pump do
timer etc.)			
<ul> <li>Output analog 0/4-20r</li> </ul>	nA.		
		Ilso for additiona	I Profibus DP E-box to retrofit).
Technical:			
Type key:	DDA 7.5-16 FCM-P	VC/V/C-F-31U2	U
Max. Flow:	7.5 l/h		
Max. flow in slow mode 50%:			
Max. flow in slow mode 25%:			
Min flow:	2.5 ml/h		
Turn-down ratio:	1:3000	540 DOM	
Approvals on nameplate:	CE,CSA-US,NSF61	,EAC,RCM	
Valve type:	Standard		
Maximum viscosity at 100 %:	50 mPas		
Maximum viscosity in slow m	ode 50 %: 1800 mPas		
Maximum viscosity in slow m			
Accuracy of repeatability:	1 %		
Materials:			
Dosing head:	PVC (Polyvinyl chlo	ride)	
Valve ball:	Ceramic	nuej	
Gasket:	FKM		
Installation:			
Range of ambient temperatu	re: 045 °C		
Maximum operating pressure	: 10 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 opera			
Max. Suction lift during primir			
	5		
Liquid: Pumped liquid:	Water		
	-10 45 °C		
Liquid temperature range:			
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³		
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 2m	S	
Controls:			
Control variant:	FCM		
Level control:	YES		
Analog input:	0/4-20 MA		
Pulse control:	YES		
Ext. Stop input:	YES		
Analog output: Output relays:	0/4-20 MA 2		



Company name: Created by:

	GRUNDI	FOSX	Created by: Phone:		
			Date:	30/01/2020	
у.	Description				
	Bus communication:	YES			
	Others:				
	Net weight: Gross weight:	2 kg			
	Color:	3 kg RED			
	Finnish LVI No.:	4981125			
	Country of origin:	GB			
	Custom tariff no.:	84135040			
	1				



## Date: 30/01/2020 97722018 DDA 7.5-16 H [bar] DDA 7.5-16 11 10 9 8 7 6 5 4 3 2-1 0 0 0.5 1.0 1.5 2.0 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 2.5 7.5 Q [İ/h]



		Date:	30/01/20	20
Description	Value	H [bar]		DDA 7.5-1
General information:				
Product name:	DDA 7.5-16	11 -		
Product No:	97722018			
EAN number:	5710622721607	-		
EAN IIdilibel.		10-		
	5710622721607			
Price:	2.204,00 GBP			
Technical:		9 -		
Type key:	DDA 7.5-16			
	FCM-PVC/V/C-F-31U2U	8-		
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	7 -		
Min flow:	2.5 ml/h			
Turn-down ratio:	1:3000	-		
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM	6-		
Valve type:	Standard			
Maximum viscosity at 100 %:	50 mPas			
-	JU IIIF ad	5-		
Maximum viscosity in slow mode 50 %:	1800 mPas			
Maximum viscosity in slow mode 25 %:	2500 mPas	4 -		
Accuracy of repeatability:	1 %			
Materials:		3-		
Dosing head:	PVC (Polyvinyl chloride)	-		
Valve ball:	Ceramic	-		
Gasket:	FKM	2-		
Installation:				
Range of ambient temperature:	0 45 °C			
	10 bar	1-		
Maximum operating pressure:		_		
Installation set:	NO	0		
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		<u>+</u>	280
Max. Suction lift during operation:	6 m	17.5 110		251 G 5/8"
Max. Suction lift during priming:	2 m			
Liquid:			╕ᡛᠯ᠊ᠯ │└	
Pumped liquid:	Water		」 <mark>┃</mark> │││	
Liquid temperature range:	-10 45 °C			
Selected liquid temperature:	20 °C			
Density:	998.2 kg/m <sup>3</sup>			
Electrical data:	550.2 kg/III-	L P B O		
	24 \\			
Maximum power input - P1:	24 W	4 xØ 6 105	l	24 161 17
Mains frequency:	50 / 60 Hz	• <u>120</u>		
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:	2 kg			
Gross weight:	3 kg			
Color:	RED			
Finnish LVI No.:	4981125			
Country of origin:	GB			
Custom tariff no .:	84135040			



30/01/2020

Date:

97722018 DDA 7.5-16

