

06/02/2020

Qty. | Description

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DDA 7.5-16



Note! Product picture may differ from actual product

Product No.: 97721974 DDA 7.5-16 FC-PP/E/C-F-32U2U2F

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:



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De	escription					
	- Input for pulse, analog 0/4					
	- Input for low-level and empty-tank signal.					
	- Two potential-free output	relays for max. 30 V AC/DC (configurable, e.g. alarm, stroke signal, pump dosi				
	timer etc.)					
	- Output analog 0/4-20mA.					
	- Fleidbus communication i	interface (GeniBus, also for additional Profibus DP E-box to retrofit).				
Те	echnical:					
Ту	/pe key:	DDA 7.5-16 FC-PP/E/C-F-32U2U2F				
M	ax. Flow:	7.5 l/h				
M	ax. flow in slow mode 50%:	3.75 l/h				
M	ax. flow in slow mode 25%:	1.88 l/h				
M	in flow:	2.5 ml/h				
Τι	urn-down ratio:	1:3000				
Ar	oprovals on nameplate:	CE,CSA-US,EAC,RCM				
	alve type:	Spring-Loaded (HV-version)				
	aximum viscosity at 100 %:	600 mPas				
	aximum viscosity in slow mode					
	aximum viscosity in slow mode					
	ccuracy of repeatability:	1%				
	aterials:					
	osing head:	PP (Polypropylene)				
	alve ball:	Ceramic				
Ga	asket:	EPDM				
In	stallation:					
Ra	ange of ambient temperature:	045 °C				
	aximum operating pressure:	16 bar				
	stallation set:	NO				
	stallation type:	No installation set				
	ump inlet:	4/6, 6/9, 6/12, 9/12 mm				
	ump outlet:	4/6, 6/9, 6/12, 9/12 mm				
	ax. Suction lift during operation					
	ax. Suction lift during priming:					
	quid:	Weter				
	umped liquid:	Water				
	quid temperature range:	-10 45 °C				
	elected liquid temperature:	20 °C				
De	ensity:	998.2 kg/m ³				
EI	ectrical data:					
M	aximum power input - P1:	24 W				
M	ains frequency:	50 / 60 Hz				
	ated voltage:	1 x 100-240 V				
	nclosure class (IEC 34-5):	IP65 / NEMA 4X				
	ength of cable:	1.5 m				
	/pe of cable plug:	EU				
	rush current:	25A at 230V for 2ms				
	ontrols:					
-	ontrol variant:	FC				
	evel control:	YES				
	nalog input:	0/4-20 MA				
Ρι	ulse control:	YES				
E>	kt. Stop input:	YES				
	nalog output:	0/4-20 MA				



Company name: Created by:

	GRUNDI	FosX	Created by: Phone:		
			Date:	06/02/2020	
у.	Description				
	Bus communication:	YES			
	Others:				
	Net weight:	2 kg			
	Gross weight: Color:	3 kg RED			
	Color:	FR			
	Country of origin: Custom tariff no.:	84135040			



Company name: Created by:

Phone: Date: 06/02/2020 97721974 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+ 0

1.0

1.5

2.0

2.5

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3.5

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5.5

6.5

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7.5

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Description	Value	[bar]		
General information:		18 -		
Product name:	DDA 7.5-16	47		
Product No:	97721974	17 -		
EAN number:	5710622721164	16-		
	5710622721164			
Price:	1.949,00 GBP	15 -		
Technical:		14		
Type key:	DDA 7.5-16 FC-PP/E/C-F-32U2U2F			
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,EAC,RCM	10 -		
Valve type:	Spring-Loaded (HV-version)	9-		
Maximum viscosity at 100 %:	600 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:	PP (Polypropylene)	4 -		
Valve ball:	Ceramic			
Gasket:	EPDM	3-		
Installation:		2-		
Range of ambient temperature:	0 45 °C	-		
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/h
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 • 5/8"
Max. Suction lift during priming:	2 m			
Liquid:				
Pumped liquid:	Water			
Liquid temperature range:	-10 45 °C		38	
Selected liquid temperature:	20 °C			
Density:	998.2 kg/m³	() () () () () () () () () () () () () (õ ₁	
Electrical data:				
Maximum power input - P1:	24 W	4 <u>xØ</u> 6 105		24 161 17
Mains frequency:	50 / 60 Hz	120	·	, , - , ,-
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:	FC			
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:	120			



		Date:	06/02/2020	
Description	Value			
Net weight:	2 kg			
Gross weight:	3 kg			
Color:	RED			
Country of origin:	FR			
Custom tariff no .:	84135040			



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