

04/02/2020

Qty. | Description

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DDA 17-7



Note! Product picture may differ from actual product

Product No.: 97722240 DDA 17-7 FCM-PV/T/C-F-32U2U2FG

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: 8.5 l/h) and 25 % (maximum flow: 4.25 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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у.	Description						
	 Input for pulse, analog 0/4-20mA, external stop. 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 dosing timer etc.) 						
	 Output analog 0/4-20mA. Fieldbus communication 		, also for additio	nal Profibus DP E-box to retrofit).			
	Technical: Type key:	DDA 17-7 FCM-P	V/T/C-F-32U2U	2FG			
	Max. Flow:	17 l/h					
	Max. flow in slow mode 50%:	8.5 l/h					
	Max. flow in slow mode 25%:	4.25 l/h					
	Min flow:	17.0 ml/h					
	Turn-down ratio:	1:1000					
	Approvals on nameplate:	CE,CSA-US,NSF					
	Valve type:	Spring-Loaded (H	V-version)				
	Maximum viscosity at 100 %:	500 mPas					
	Maximum viscosity in slow mode						
	Maximum viscosity in slow mode Accuracy of repeatability:	e 25 %: 2000 mPa 1 %	IS				
	Materials:						
	Dosing head:	PVDF (Polyvinylic	lene fluoride)				
	Valve ball:	Ceramic	,				
	Gasket:	PTFE					
	Installation:						
	Range of ambient temperature:	045 °C					
	Maximum operating pressure:	7 bar					
	Installation set:	NO					
	Installation type:	No installation set					
	Pump inlet:	4/6, 6/9, 6/12, 9/1					
	Pump outlet:	4/6, 6/9, 6/12, 9/1					
	Max. Suction lift during operation						
	Max. Suction lift during priming:						
	Liquid:						
	Pumped liquid:	Water					
	Liquid temperature range:	-10 45 °C					
	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 2	ms				
	Controls:						
	Control variant:	FCM					
	Level control:	YES					
		0/4-20 MA					
	Analog input:						
	Pulse control:	YES					
	Pulse control: Ext. Stop input:	YES YES					
	Pulse control:	YES					



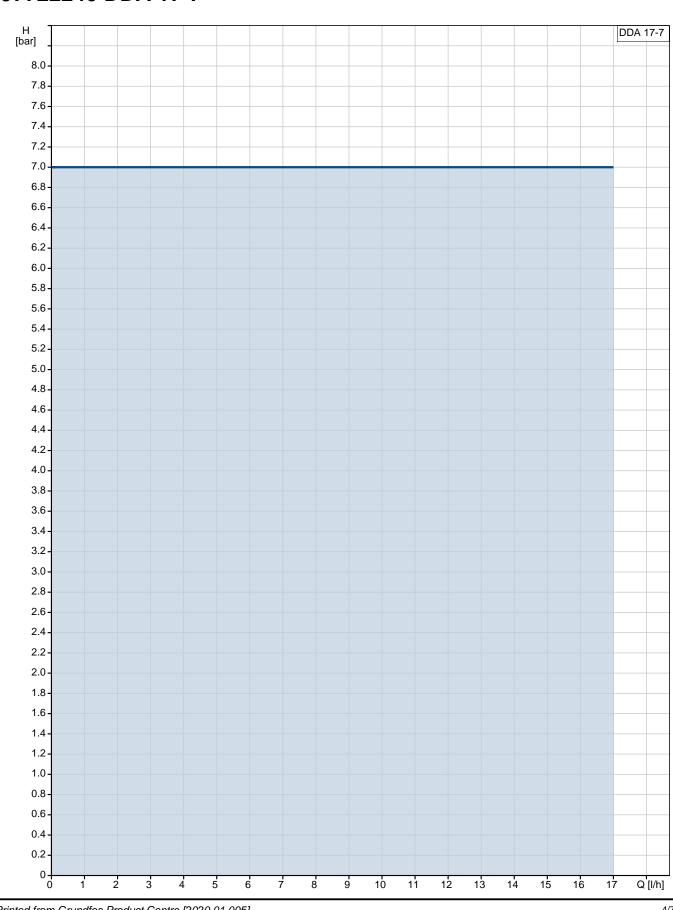
Company name: Created by:

	GRUNDI	FosX	Created by: Phone:		
			Date:	04/02/2020	
t y.	Description				
	Bus communication:	YES			
	Others:				
	Net weight:	3 kg			
	Gross weight: Color:	4 kg RED			
	Country of origin:	FR			
	Country of origin: Custom tariff no.:	84135040			



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Level control:

Analog input:

Pulse control:

Ext. Stop input:

Analog output:

Output relays: Bus communication:

Company name: Created by: Phone:

		Date:	04/02/20	J20
Description	Value	H [bar]		DDA 17-7
General information:				
Product name:	DDA 17-7	-		
Product No:	97722240	7.5 -		
EAN number:	5710622723830	7.0		
	5710622723830	7.0		
Price:	2.720,00 GBP	6.5 -		
Technical:		0.0		
Type key:	DDA 17-7 FCM-PV/T/C-F-32U2U2FG	6.0 -		
Max. Flow:	17 l/h	5.5 -		
Max. flow in slow mode 50%:	8.5 l/h			
Max. flow in slow mode 25%:	4.25 l/h	5.0 -		
Min flow:	17.0 ml/h			
Turn-down ratio:	1:1000	4.5 -		
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM			
Valve type:	Spring-Loaded (HV-version)	4.0 -		
Maximum viscosity at 100 %:	500 mPas			
Maximum viscosity in slow mode 50 %:	1300 mPas	3.5 -		
Maximum viscosity in slow mode 25 %:	2000 mPas	3.0 - 2.5 -		
Accuracy of repeatability:	1 %	2.5-		
Materials:		2.0 -		
Dosing head:	PVDF (Polyvinylidene fluoride)			
Valve ball:	Ceramic	1.5 -		
Gasket:	PTFE	-		
Installation:		1.0 -		
Range of ambient temperature:	0 45 °C			
Maximum operating pressure:	7 bar	0.5 -		
Installation set:	NO	-		
Installation type:	No installation set		4 6 8	10 12 14 16 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		L	280
Max. Suction lift during operation:		<u>17.5110</u>		251
Max. Suction lift during priming:	3 m		$\overline{\mathbf{A}}$	
Liquid:			」Mi∖∖ ⊨¶ſ	
Pumped liquid:	Water			╡╫╶ <mark>╷</mark> ┍┓╺┓╎║╲╲╵
Liquid temperature range:	-10 45 °C		3 005	
Selected liquid temperature:	20 °C		0	
Density:	998.2 kg/m ³	LPBO		
Electrical data:	5		╤┓│┶╩	
Maximum power input - P1:	24 W	4 <u>xØ 6 105</u> 120		24 161 17
Mains frequency:	50 / 60 Hz	- 16	8	
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			
	VEO			

YES

YES

YES

YES

0/4-20 MA

0/4-20 MA 2



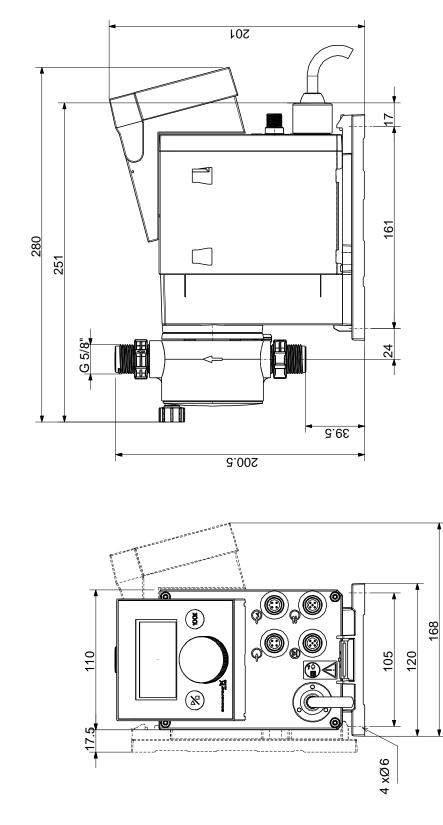
		Date:	04/02/2020	
Description	Value			
Others:				
Net weight:	3 kg			
Gross weight:	4 kg			
Color:	RED			
Country of origin:	FR			
Custom tariff no .:	84135040			



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Date:

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Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.