

20/02/2020

Description

Qty. Description



Note! Product picture may differ from actual product

Product No.: 97722200 DDA 17-7 FC-PV/V/C-F-31U2U2FG

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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	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 interface (GeniBus, also for additional Profibus DP E-box to retrofit). 								
	Technical:								
	Type key:	DDA 17-7 FC-PV/	V/C-F-31U2U2F	G					
	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	61,EAC,RCM						
	Valve type:	Standard							
	Maximum viscosity at 100 %:	300 mPas							
	Maximum viscosity in slow mode	e 50 %: 1300 mPa	IS						
	Maximum viscosity in slow mode								
	Accuracy of repeatability:	1 %							
	Materials:								
	Dosing head:	PVDF (Polyvinylid	ene fluoride)						
1	Valve ball:	Ceramic							
1	Gasket:	FKM							
1	Installation:								
	Range of ambient temperature:	0 45 °C							
	Maximum operating pressure:	7 bar							
	Installation set:	NO							
	Installation type:	No installation set							
	Pump inlet:	4/6, 6/9, 6/12, 9/12	2 mm						
	Pump outlet:	4/6, 6/9, 6/12, 9/12	2 mm						
	Max. Suction lift during operation	n: 6 m							
	Max. Suction lift during priming: 3 m								
	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:	FC							
	Level control:	YES							
	Analog input:	0/4-20 MA							
	Pulse control:	YES							
	Ext. Stop input:	YES							
		0/4 00 144							
	Analog output: Output relays:	0/4-20 MA							



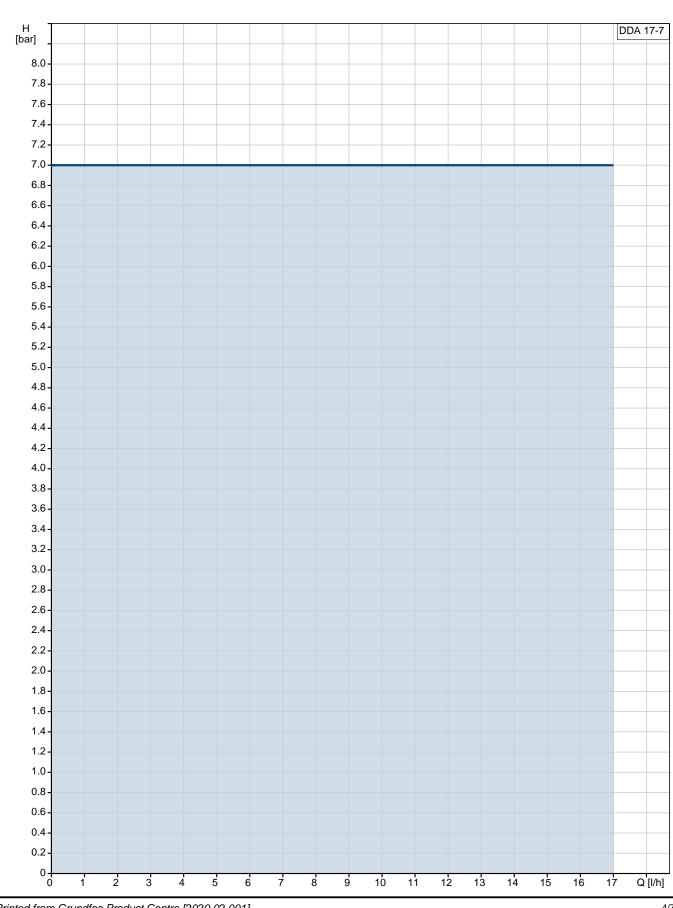
Company name: Created by:

	GRUNDI	FOS	Phone:	Created by: Phone:		
			Date:	20/02/2020		
ty.	Description					
	Bus communication:	YES				
	Others:	2 kg				
	Net weight: Gross weight:	3 kg 4 kg				
	Color:	4 kg RED				



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97722200 DDA 17-7





Description	Value	H [bar]		DDA
General information:				
Product name:	DDA 17-7	7.6		
Product No:	97722200	7.5 -		
EAN number:	5710622723434	7.0		
	5710622723434	7.0		
Technical:		6.5 -		
- -	DDA 17-7	0.0		
Type key:	FC-PV/V/C-F-31U2U2FG	6.0 -		
Max. Flow:	17 l/h			
Max. flow in slow mode 50%:	8.5 l/h	5.5 -		
Max. flow in slow mode 25%:	4.25 l/h			
Min flow:	17.0 ml/h	5.0 -		
Turn-down ratio:	1:1000			
A I I I	CE,CSA-US,NSF61,EAC,RCM	4.5 -		
Approvals on nameplate:				
Valve type:	Standard	4.0 -		
Maximum viscosity at 100 %:	300 mPas			
Maximum viscosity in slow mode		3.5 -		
50 %:	1300 mPas			
Maximum viscosity in slow mode	2000 mPas	3.0 -		
25 %:		2.5 -		
Accuracy of repeatability:	1 %			
Materials:		2.0 -		
Dosing head:	PVDF (Polyvinylidene fluoride)			
Valve ball:	Ceramic	1.5 -		
Gasket:	FKM			
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	0 2	4 6 8	10 12 14 16 Q
Pump inlet:	4/6, 6/9, 6/12, 9/12 mm			
Pump outlet:	4/6, 6/9, 6/12, 9/12 mm		H	280
Max. Suction lift during operation:	6 m		e	251
Max. Suction lift during priming:	3 m	17.5 110		
Liquid:				
Pumped liquid:	Water			
Liquid temperature range:	-10 45 °C			
Selected liquid temperature:	20 °C		5005	
Density:	998.2 kg/m³			
Electrical data:				
Maximum power input - P1:	24 W	4 105	╶╗╷╴┶┶	
Mains frequency:	50 / 60 Hz	120		-eie
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:	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			



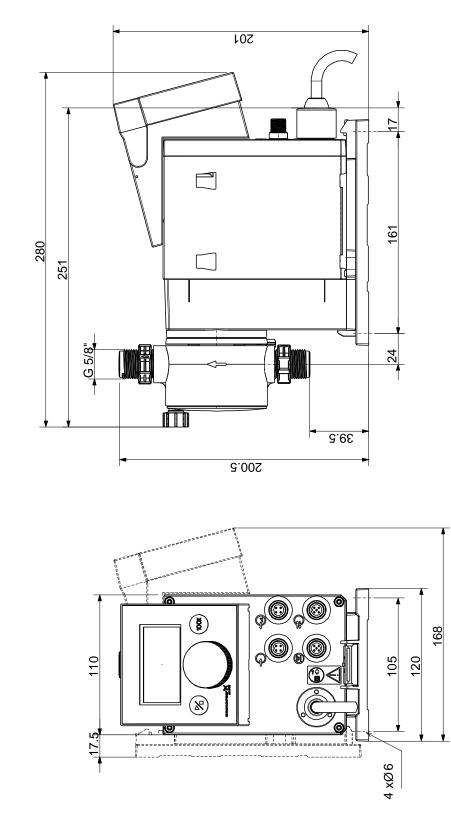
Date:20/02/2020DescriptionValueNet weight:3 kgGross weight:4 kgColor:RED



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Date:

97722200 DDA 17-7



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