

20/02/2020

Qty. Description **DDA 17-7**

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Note! Product picture may differ from actual product

Product No.: 97722201 DDA 17-7 FC-PV/V/C-F-31I002FG

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 analysis of set value in case of trouble-free process). The measured flow is displayed and can be integrated in the measurement of $\pm 1,5$ % of set value in case of trouble-free process). The measured flow is displayed and can be integrated in the measurement of the measurement of the measurement function (and the function (and the function (and the function (and the function)). 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, a	nalog 0/4-20mA, exterr	nal stop.	
	el and empty-tank signa		
			urable, e.g. alarm, stroke signal, pump dosi
timer etc.)			
 Output analog 0/ 			
 Fieldbus commu 	nication interface (Geni	Bus, also for addition	al Profibus DP E-box to retrofit).
Installation set includes	:		
 2 pump connecti 	ons (Hose 9/12 mm 6).		
- Foot valve (with			
 Injection unit. 			
 6 m PE discharg 	e hose.		
- 2 m PVC suction	hose.		
- 2 m PVC deaera	tion hose (4/6 mm).		
Technical:			
Type key:	DDA 17-7 FC	-PV/V/C-F-311002FG	
Max. Flow:	17 l/h		
Max. flow in slow mode	50%: 8.5 l/h		
Max. flow in slow mode			
Min flow:	17.0 ml/h		
Turn-down ratio:	1:1000		
Approvals on nameplate	e: CE,CSA-US,	NSF61,EAC,RCM	
Valve type:	Standard		
Maximum viscosity at 1	00 %: 300 mPas		
Maximum viscosity in sl	ow mode 50 %: 1300	mPas	
Maximum viscosity in sl	ow mode 25 %: 2000	mPas	
Accuracy of repeatabilit	y: 1 %		
Materials:			
Dosing head:	PVDF (Polyvi	nylidene fluoride)	
Valve ball:	Ceramic	•	
Gasket:	FKM		
Installation:			
Range of ambient temp	erature: 045 °C		
Maximum operating pre			
Installation set:	YES		
Installation type:	-	o 60 l/h,13 bar	
Pump inlet:	Hose 9/12 mr		
Pump outlet:	Hose 9/12 mr		
Max. Suction lift during			
Max. Suction lift during			
Liquid:			
Pumped liquid:	Water		
Liquid temperature rang			
Selected liquid tempera			
Density:	998.2 kg/m ³		
Electrical data:			
Maximum power input -	P1: 24 W		
Mains frequency:	50 / 60 Hz		
Rated voltage:	1 x 100-240 \	1	
Enclosure class (IEC 34			
Length of cable:	1.5 m		
Type of cable plug:	FU		

EU

25A at 230V for 2ms

Type of cable plug:

Inrush current:

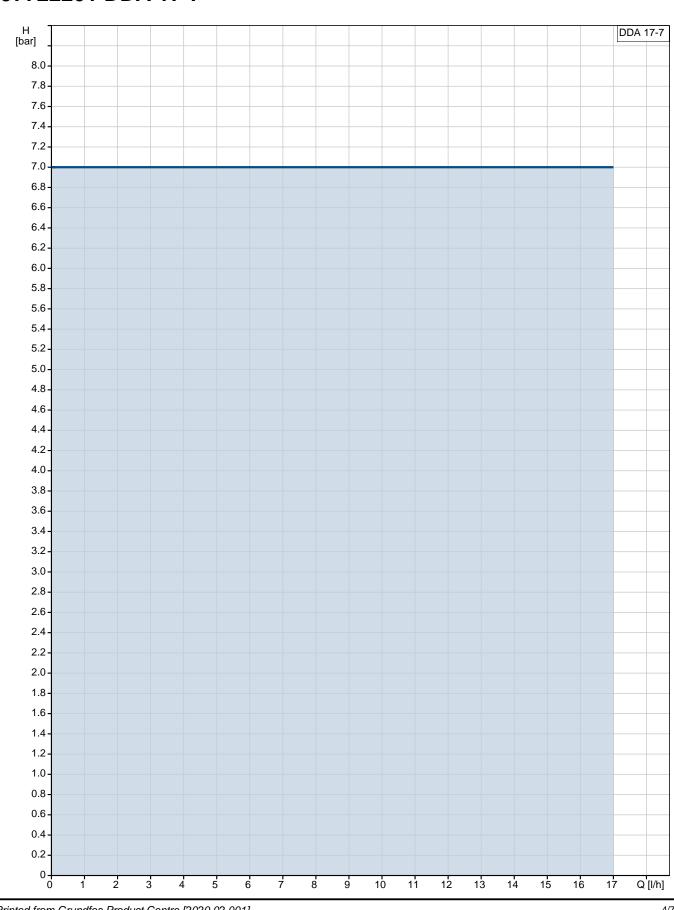


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Qty.	Description				
	Controls:				
	Control variant:	FC			
	Level control:	YES			
	Analog input:	0/4-20 MA			
	Pulse control:	YES			
	Ext. Stop input:	YES			
	Analog output:	0/4-20 MA			
	Output relays:	2			
	Bus communication:	YES			
	Others:				
	Net weight:	3 kg			
	Gross weight:	4 kg			
	Color:	REĎ			



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97722201 DDA 17-7



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Description	Value	H [bar]				DDA 17
General information:		-				
Product name:	DDA 17-7					
Product No:	97722201	7.5 -				
EAN number:	5710622723441					
	5710622723441	7.0				
Technical:	0110022120441	0.5				
	DDA 17-7	6.5 -				
Type key:	FC-PV/V/C-F-31I002FG	6.0 -				
Max. Flow:	17 l/h	0.0 -				
Max. flow in slow mode 50%:	8.5 l/h	5.5 -				
Max. flow in slow mode 25%:	4.25 l/h	5.5				
Min flow:		5.0 -				
	17.0 ml/h	3.0 -				
Turn-down ratio:	1:1000	4.5 -				
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM	4.0				
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 25 %:	2000 mPas	3.0 -				
Accuracy of repeatability:	1 %	2.5 -				
Materials:						
	PVDF (Polyvinylidene fluoride)	2.0 -				
Dosing head:		1.5 -				
Valve ball:	Ceramic					
Gasket:	FKM	1.0 -				
Installation:						
Range of ambient temperature:	0 45 °C	0.5 -				
Maximum operating pressure:	7 bar					
Installation set:	YES	0				
Installation type:	9/12 mm up to 60 l/h,13 bar	0 2	4	6 8	10 12	14 16 Q [l/
Pump inlet:	Hose 9/12 mm 6					
Pump outlet:	Hose 9/12 mm 6			-	280	. •
Max. Suction lift during operation:	6 m			-	G 5/8"	•
Max. Suction lift during priming:	3 m		-1-7			
Liquid:	3111					
-	\M/atan					
Pumped liquid:	Water			200.5		
Liquid temperature range:	-10 45 °C		0	× L		
Selected liquid temperature:	20 °C	100 m		-		
Density:	998.2 kg/m³			39.5		= + + 5 ()
Electrical data:		4 x0 6 105	= <u> </u>	<u></u>	24 161	17
Maximum power input - P1:	24 W	120	-		- 4 - 4 101	-+ +-
Mains frequency:	50 / 60 Hz	- 16	•			
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:						
	FC					
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					

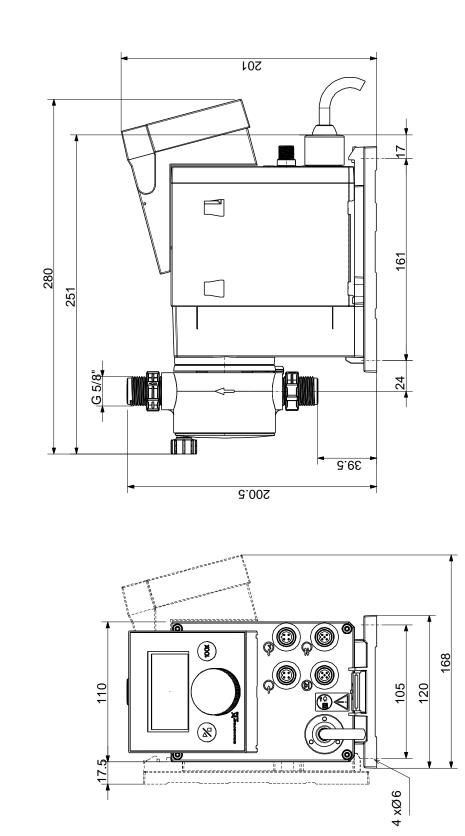


		Date:	20/02/2020
Description	Value		
Others:			
Net weight:	3 kg		
Gross weight:	4 kg		
Color:	RED		



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