

Date: 4/11/2019 Count Description DDA 7.5-16 1 Product photo could vary from the actual product Product No.: 97722429 DDA 7.5-16 FCM-PP/V/C-F-31U7U7 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: 0.9906 US gal/hour) and 25 % (maximum flow: 0.4966 US gal/hour), 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:

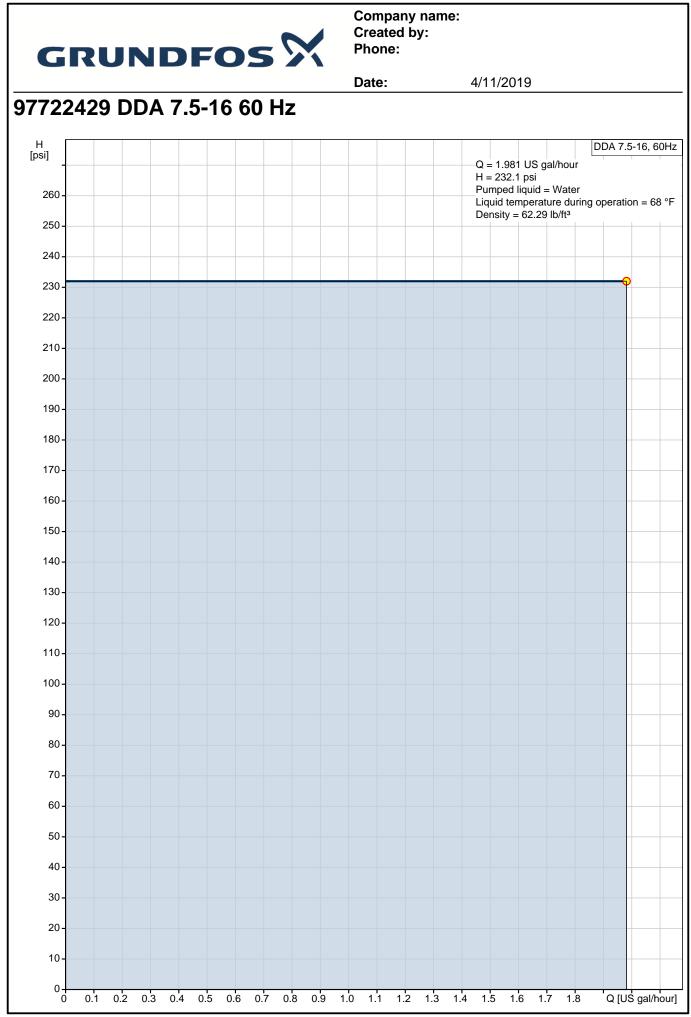


			Date:	4/11/2019			
Count	Description						
	<ul> <li>Input for pulse, analog 0/</li> <li>Input for low-level and er</li> <li>Two potential-free output</li> </ul>	npty-tank signal.		configurable, e.g. alarm, stroke signal, pump			
	dosing, timer etc.) - Output analog 0/4-20mA						
	- Fieldbus communication interface (GeniBus, also for additional Profibus DP E-box to retrofit). Technical:						
	Type key: Max. Flow:	DDA 7.5-16 FCM 1.981 US gal/hou		310707			
	Max. flow in slow mode 50%:	0.9906 US gal/ho					
	Max. flow in slow mode 25%:	0.4966 US gal/ho					
	Min flow:	2.5 ml/h					
	Turn-down ratio:	1:3000					
	Approvals on nameplate:	CE,CSA-US,RCM	1				
	Valve type:	Standard					
	Maximum viscosity at 100 %:	50 mPas					
	Maximum viscosity in slow mode						
	Maximum viscosity in slow mode Accuracy of repeatability:	e 25 %: 2500 mPa 1 %	as				
	Materials:						
	Dosing head:	PP (Polypropylen	e)				
	Valve ball:	Ceramic	0)				
	Gasket:	FKM					
	Installation:						
	Range of ambient temperature:						
	Maximum operating pressure:	232.06 psi					
	Installation set:	NO					
	Installation type:	No installation set					
	Pump inlet: Pump outlet:	0.17x 1/4, 1/4x3/8 0.17x 1/4, 1/4x3/8					
			, J/0X1/Z				
	Max. Suction lift during operation: 19.7 ft Max. Suction lift during priming: 6.56 ft						
	Liquid:						
	Pumped liquid:	Water					
	Liquid temperature range:	14 113 °F					
	Selected liquid temperature:	68 °F					
	Density:	62.29 lb/ft <sup>3</sup>					
	Electrical data:	0.4 M					
	Maximum power input - P1:	24 W					
	Main frequency:	60 Hz					
	Rated voltage: Enclosure class (IEC 34-5):	1 x 100-240 V IP65 / NEMA 4X					
	Length of cable:	4.92 ft					
	Type of cable plug:	USA, Canada					
	Inrush current:	25A at 230V for 2	ms				
	Controls:						
	Control variant:	FCM					
	Level control:	YES					
	Analog input:	0/4-20 mA					
	Pulse control:	YES					
	Ext. Stop input:	YES					
	Analog output:	0/4-20 mA 2					
	Output relays:	۷					



Company name: Created by:

C	RUNDF	OS X	Phone:			
			Date:	4/11/2019		
Count	Description					
	Bus communication:	YES				
	Others:					
	Net weight:	4.41 lb				
	Gross weight:	6.62 lb				
	COLOR: Custom tariff no.:	RED 8413.50.0050				
		6413.30.0030				





		Date:	1, 1 1	/201	-	1		
Description	Value	H [psi]					DDA 7	.5-16, 60H
General information:					1.981 L 232.1 p	JS gal/hour		
Product name:	DDA 7.5-16	250 -		Pun	nped liq	uid = Water		
Product No.:	97722429					erature during 2.29 lb/ft <sup>3</sup>	g operat	ion = 68 °F
EAN:	5710622725711	240 -		Dei	isity = 0	2.29 10/11*		
Technical:		230 -						<b>-</b>
<b>–</b> – –	DDA 7.5-16	220 -						
Type key:	FCM-PP/V/C-F-31U7U7	210 -						
Max. Flow:	1.981 US gal/hour	200 -						
Max. flow in slow mode 50%:	0.9906 US gal/hour	190 -						
Max. flow in slow mode 25%:	0.4966 US gal/hour	180 -						
Min flow:	2.5 ml/h							
Turn-down ratio:	1:3000	170 -						
Approvals on nameplate:	CE,CSA-US,RCM	160 -						
Valve type:	Standard	150 -						
Maximum viscosity at 100 %:	50 mPas	140 -						
Maximum viscosity in slow mode		130 -						
50 %:	1800 mPas	120 -						
Maximum viscosity in slow mode	2500 D	110 -						
25 %:	2500 mPas							
Accuracy of repeatability:	1 %	100 -						
Materials:		90 -						
Dosing head:	PP (Polypropylene)	80 -						
Valve ball:	Ceramic	70 -						
Gasket:	FKM	60 -						
Installation:		50 -						
Range of ambient temperature:	32 113 °F	40 -						
Maximum operating pressure:	232.06 psi	30 -						
Installation set:	NO							
Installation type:	No installation set	20 -						
Pump inlet:	0.17x 1/4, 1/4x3/8, 3/8x1/2"	- 10 -						
Pump outlet:	0.17x 1/4, 1/4x3/8, 3/8x1/2"	0	2 0.4 0.6 (	).8 1.	0 1.3	2 1.4 1		JS gal/hou
Max. Suction lift during operation:	19.7 ft		2 0.4 0.0 0		0 1.	- 1.4 1	.0 @[0	o gaintou
Max. Suction lift during priming:	6.56 ft					11.00"		.1
Liquid:						9.88"		- 1
Pumped liquid:	Water	0.69" 4.33		-	G 5/8"		_	<u> </u>
Liquid temperature range:	14 113 °F						-4	$A \mid I$
Selected liquid temperature:	68 °F			þ			\	
Density:	62.29 lb/ft <sup>3</sup>	— (   <u>®</u> C	)		∲  +			\ <u>\</u> .
Electrical data:				L	$\downarrow$			2.91
Maximum power input - P1:	24 W			-			∣⊫	
Main frequency:	60 Hz			1.83				$\mathbb{P}$
Rated voltage:	1 x 100-240 V	4.13"		-		6.34"	0.67	
Enclosure class (IEC 34-5):	IP65 / NEMA 4X	4 100.24			0.94"	6.34	4.6/	-
Length of cable:	4.92 ft	- 6	i.61"					
Type of cable plug:	USA, Canada							
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 0/4 20 mA							
Analog output:	0/4-20 mA							
Output relays:	2							
Bus communication:	YES							
Others:								
Net weight:	4.41 lb							
Gross weight:	6.62 lb							

Printed from Grundfos Product Center [2019.02.002]



4/11/2019

DescriptionValueCOLOR:RED

Custom tariff no .:

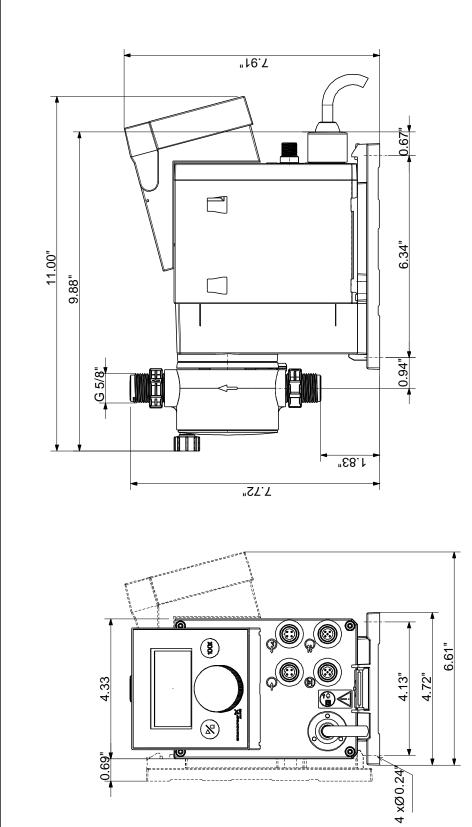
8413.50.0050



Date:

4/11/2019

## 97722429 DDA 7.5-16 60 Hz



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

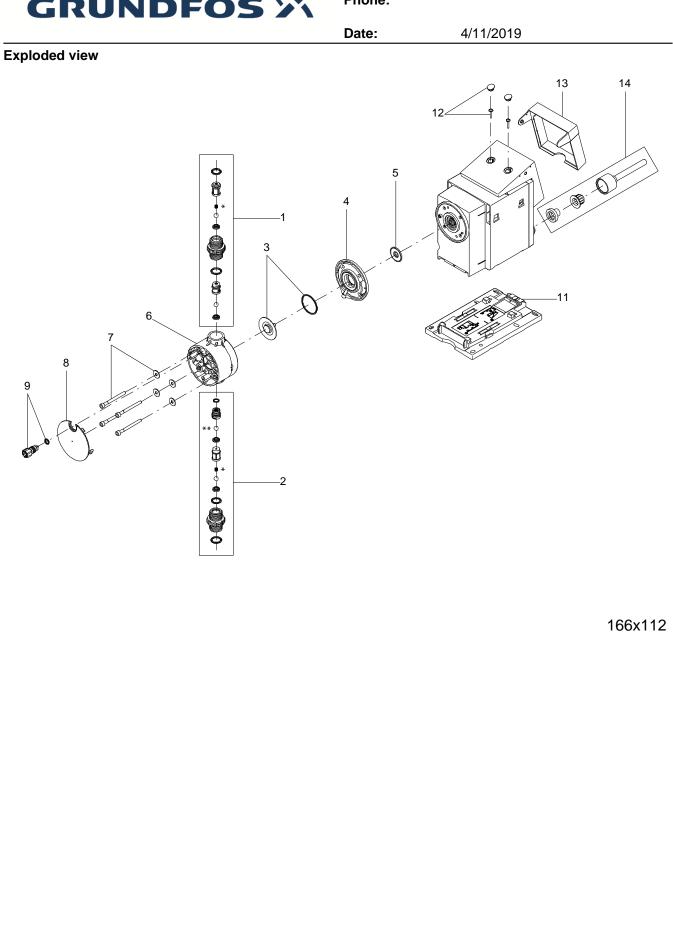


4/11/2019

Product name: DDA 7.5-16 Amount: 1 Product No.: 97722429

Total: Price on request







4/11/2019

## Parts list DDA 7.5-16, Prod number 97722429 Produced After 1132 (production year and week number)

Position		Annotation	Classification data	Part No.		
- 1	Discharge valve cpl.				1	pcs
	O-ring				1	
	O-ring				1	
	Valve seat				1	
	Ball				2	
	Valve housing				1	
	Ball cage				1	
	Ball cage				1	
- 2	Suction valve cpl.				1	pcs
	O-ring				1	
	O-ring				1	
	O-ring				1	
	Valve seat				1	
	Valve seat				1	
	Ball				1	
	Ball				1	
	Valve housing				1	
	Ball cage				1	
	Ball cage				1	
3	O-ring		Diameter: 35		1	pcs
			Material type: EPDM			
			Thickness: 2			
3	Diaphragm				1	pcs
4	Pump head flange				1	pcs
5	Diaphragm				1	pcs
6	Pump head				1	pcs
7	Washer				4	pcs
7	Hex socket head cap screw				4	pcs
8	Pump head cover				1	pcs
- 9	Venting valve				1	pcs
	O-ring				1	
	Spindle				1	
11	Base plate				1	pcs
12	Cover for screw				2	pcs
12	Pan washer head screw				2	pcs
13	Cover for cube				1	pcs
14	Power cable				1	pcs