

**Date:** 4/11/2019

Count | D

Description

**DDA 17-7** 



Product photo could vary from the actual product

Product No.: 97722571

DDA 17-7 AR-PVC/E/C-F-32U7U7BG

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 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.

### 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: 2.245 US gal/hour) and 25 % (maximum flow: 1.123 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:

- 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 AR-PVC/E/C-F-32U7U7BG



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> Max. Flow: 4.491 US gal/hour Max. flow in slow mode 50%: 2.245 US gal/hour Max. flow in slow mode 25%: 1.123 US gal/hour

Min flow: 17.0 ml/h Turn-down ratio: 1:1000

CE,CSA-US,NSF61,RCM Approvals on nameplate: Valve type: Spring-Loaded (HV-version)

500 mPas Maximum viscosity at 100 %:

Maximum viscosity in slow mode 50 %: 1300 mPas Maximum viscosity in slow mode 25 %: 2500 mPas

Accuracy of repeatability: 1 %

Materials:

Dosing head: PVC (Polyvinyl chloride)

Valve ball: Ceramic Gasket: **EPDM** 

Installation:

Range of ambient temperature: 32 .. 113 °F Maximum operating pressure: 101.53 psi

Installation set: NO

Installation type: No installation set

Pump inlet: 0.17x 1/4, 1/4x3/8, 3/8x1/2" Pump outlet: 0.17x 1/4, 1/4x3/8, 3/8x1/2"

Max. Suction lift during operation: 19.7 ft Max. Suction lift during priming: 9.84 ft

Liquid:

Pumped liquid: Water 14 .. 113 °F Liquid temperature range: Selected liquid temperature: 68 °F Density: 62.29 lb/ft3

**Electrical data:** 

Maximum power input - P1: 24 W Main frequency: 60 Hz

Rated voltage: 1 x 100-240 V Enclosure class (IEC 34-5): IP65 / NEMA 4X

Length of cable: 4.92 ft Type of cable plug: USA, Canada

25A at 230V for 2ms Inrush current:

Controls:

Control variant: AR Level control: YES 0/4-20 mA Analog input: Pulse control: YES Ext. Stop input: YES 0/4-20 mA Analog output:

Output relays: 2 Bus communication: YES

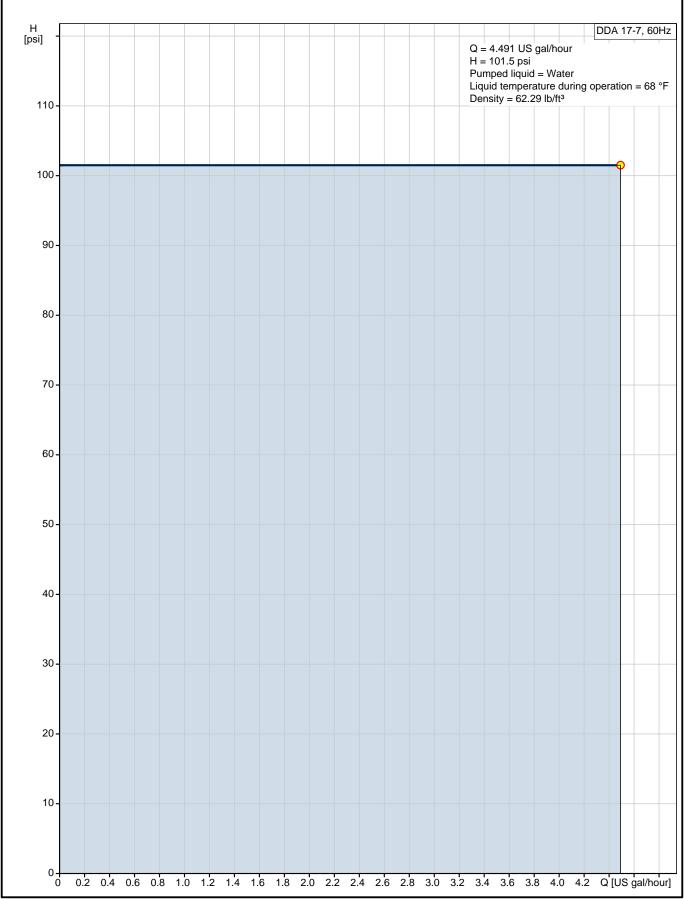
Others:

Net weight: 4.41 lb Gross weight: 6.62 lb COLOR: RED



**Date:** 4/11/2019

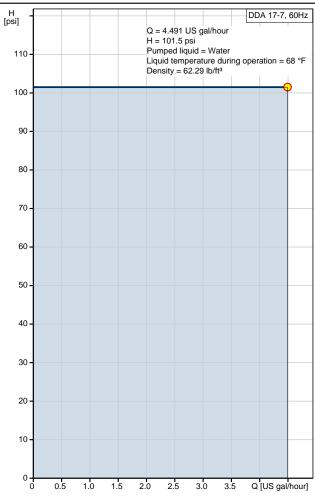
# 97722571 DDA 17-7 60 Hz

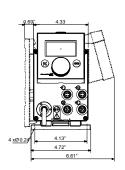


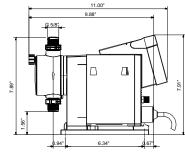


**Date:** 4/11/2019

Description	Value		
General information:	Value		
Product name:	DDA 17-7		
Product No.:	97722571		
EAN:	5710622727340		
Technical:	5710622727340		
recnnicai:	DDA 17.7		
Type key:	DDA 17-7 AR-PVC/E/C-F-32U7U7BG		
Max. Flow:	4.491 US gal/hour		
Max. flow in slow mode 50%:	2.245 US gal/hour		
Max. flow in slow mode 25%:	1.123 US gal/hour		
Min flow:	17.0 ml/h		
Turn-down ratio:	1:1000		
Approvals on nameplate:	CE,CSA-US,NSF61,RCM		
Valve type:	Spring-Loaded (HV-version)		
Maximum viscosity at 100 %:	500 mPas		
Maximum viscosity in slow mode 50 %:	1300 mPas		
Maximum viscosity in slow mode 25 %:	2500 mPas		
	1 %		
Accuracy of repeatability:  Materials:	1 /0		
	DVO (Dalamina dalamida)		
Dosing head:	PVC (Polyvinyl chloride)		
Valve ball:	Ceramic		
Gasket:	EPDM		
Installation:			
Range of ambient temperature:	32 113 °F		
Maximum operating pressure:	101.53 psi		
Installation set:	NO		
Installation type:	No installation set		
Pump inlet:	0.17x 1/4, 1/4x3/8, 3/8x1/2"		
Pump outlet:	0.17x 1/4, 1/4x3/8, 3/8x1/2"		
Max. Suction lift during operation:	19.7 ft		
Max. Suction lift during priming:	9.84 ft		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	14 113 °F		
Selected liquid temperature:	68 °F		
Density:	62.29 lb/ft³		
Electrical data:	0414/		
Maximum power input - P1:	24 W		
Main frequency:	60 Hz		
Rated voltage:	1 x 100-240 V		
Enclosure class (IEC 34-5):	IP65 / NEMA 4X		
Length of cable:	4.92 ft		
Type of cable plug:	USA, Canada		
Inrush current:	25A at 230V for 2ms		
Controls:			
Control variant:	AR		
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:			
Net weight:	4.41 lb		









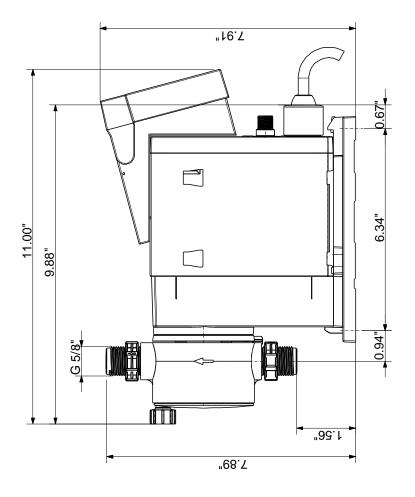
**Date:** 4/11/2019

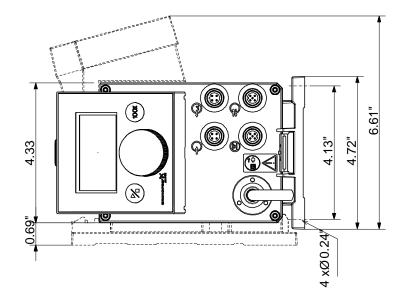
Description	Value
Gross weight:	6.62 lb
COLOR:	RED



**Date:** 4/11/2019

# 97722571 DDA 17-7 60 Hz





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



**Date:** 4/11/2019

**Order Data:** 

Product name: DDA 17-7

Amount: 1

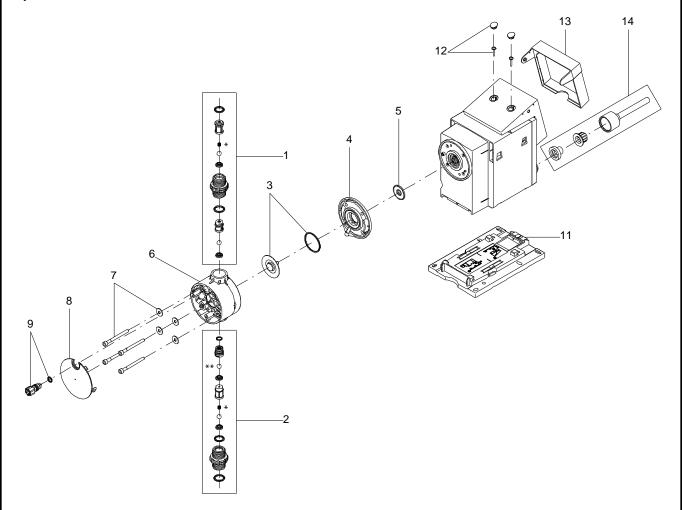
Product No.: 97722571

Total: Price on request



**Date:** 4/11/2019

## **Exploded view**



166x112



**Date:** 4/11/2019

# Parts list DDA 17-7, Prod number 97722571 Produced After 1132 (production year and week number)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
- 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	
	Compression spring				1	
- 2	Suction valve cpl.				1	pcs
	O-ring				1	
	O-ring				1	
	O-ring				1	
	Valve seat				2	
	Ball				1	
	Valve housing				1	
	Ball cage				1	
	Ball cage				1	
	Compression spring				1	
3	O-ring				1	pcs
3	Diaphragm				1	pcs
4	Pump head flange				1	pcs
5	Diaphragm				1	pcs
6	Dosing 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