

Date: 4/11/2019

Count | Description

DDA 12-10



Product photo could vary from the actual product

Product No.: 97722481

DDA 12-10 AR-PV/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: 1.585 US gal/hour) and 25 % (maximum flow: 0.7925 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 12-10 AR-PV/E/C-F-32U7U7BG



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Max. Flow: 3.17 US gal/hour
Max. flow in slow mode 50%: 1.585 US gal/hour
Max. flow in slow mode 25%: 0.7925 US gal/hour

Min flow: 12.0 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

Accuracy of repeatability: 1 %

Materials:

Dosing head: PVDF (Polyvinylidene fluoride)

Valve ball: Ceramic Gasket: EPDM

Installation:

Range of ambient temperature: 32 .. 113 °F
Maximum operating pressure: 145.04 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:

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: USA, Canada

25A at 230V for 2ms

Controls:

Control variant:

Level control:

AR

YES

Analog input:

Pulse control:

Ext. Stop input:

Analog output:

O/4-20 mA

Output rolous:

AR

YES

O/4-20 mA

Output relays: 2
Bus communication: YES

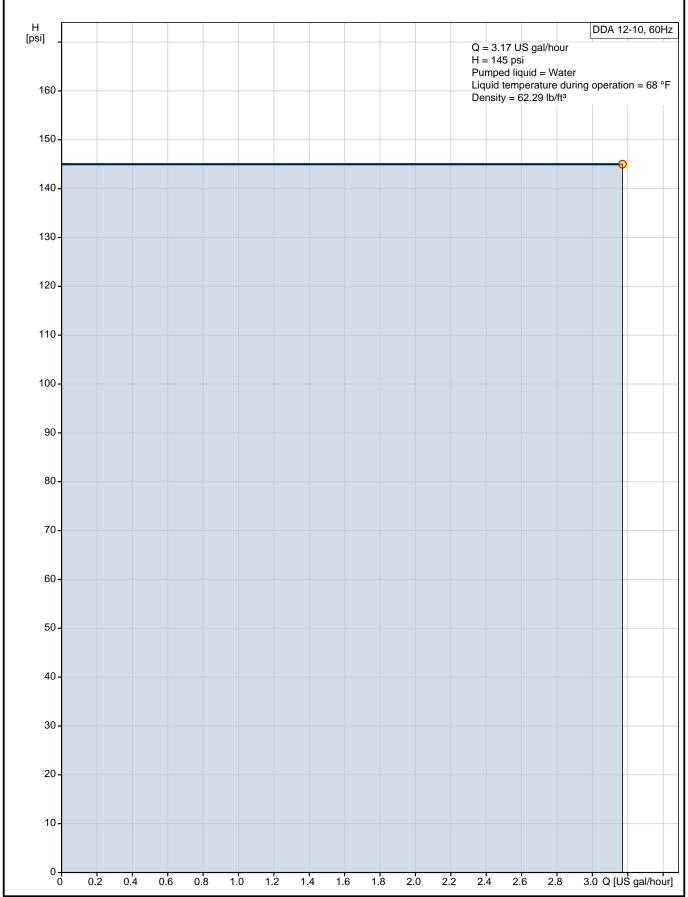
Others:

Net weight: 6.62 lb Gross weight: 8.82 lb COLOR: RED



Date: 4/11/2019

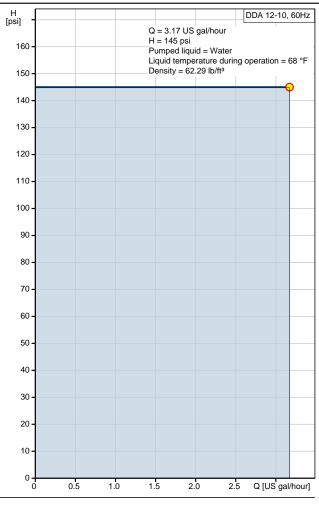
97722481 DDA 12-10 60 Hz

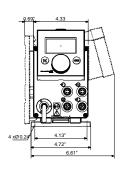


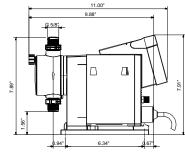


Date: 4/11/2019

Description	Value			
General information:				
Product name:	DDA 12-10			
Product No.:	97722481			
EAN:	5710622726244			
Technical:				
Type key:	DDA 12-10 AR-PV/E/C-F-32U7U7BG			
Max. Flow:	3.17 US gal/hour			
Max. flow in slow mode 50%:	1.585 US gal/hour			
Max. flow in slow mode 25%:	0.7925 US gal/hour			
Min flow:	12.0 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			
Accuracy of repeatability:	1 %			
Materials:				
Dosing head:	PVDF (Polyvinylidene fluoride)			
Valve ball:	Ceramic			
Gasket:	EPDM			
Installation:				
Range of ambient temperature:	32 113 °F			
Maximum operating pressure:	145.04 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/ft ³			
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			
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:	6.62 lb			









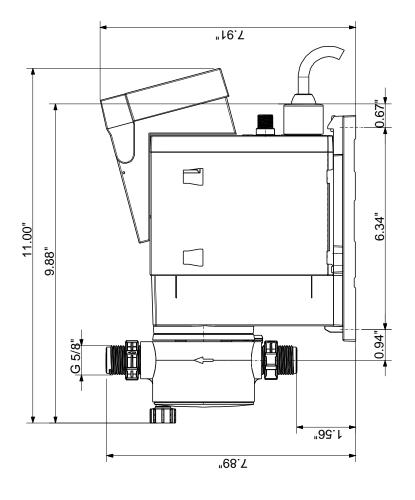
Date: 4/11/2019

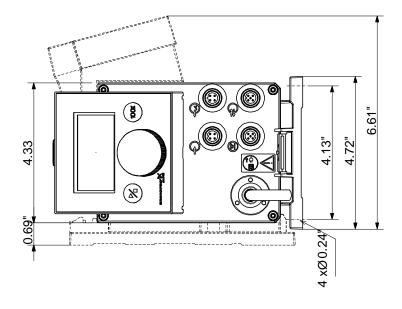
Description	Value	
Gross weight:	8.82 lb	
COLOR:	RED	



Date: 4/11/2019

97722481 DDA 12-10 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 12-10

Amount: 1

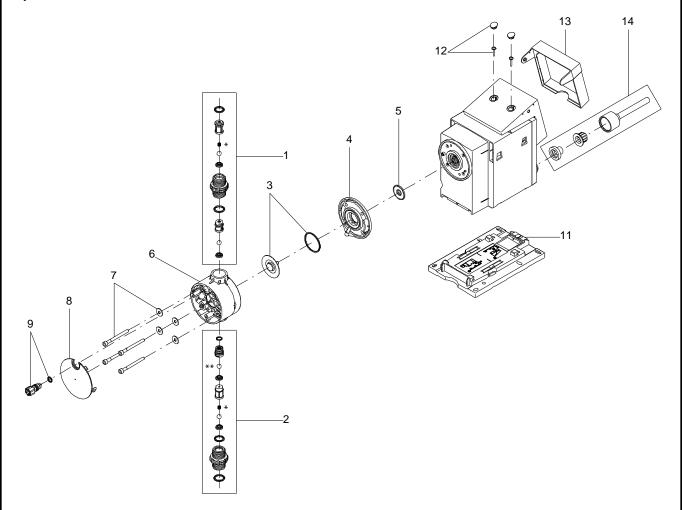
Product No.: 97722481

Total: Price on request



Date: 4/11/2019

Exploded view



166x112



Date: 4/11/2019

Parts list DDA 12-10, Prod number 97722481 Produced After 1132 (production year and week number)

Position		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