Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
	TYPE OF SERVICE:	
REPRESENTATIVE:	SUBMITTED BY:	DATE:
ENGINEER:	APPROVED BY:	DATE:
CONTRACTOR:	ORDER NO.:	DATE:

DDA 12-10 AR-PV/T/C-F-31U7U7BG



Note! Product picture may differ from actual product

SMART Digital diaphragm dosing pump with internal brushless motor drive. High-end solution for complex and demanding applications (Digital Dosing Advanced).

Conditions of Service		
Liquid:	Water	
Temperature:	20 °C	
Specific Gravity:	1.000	

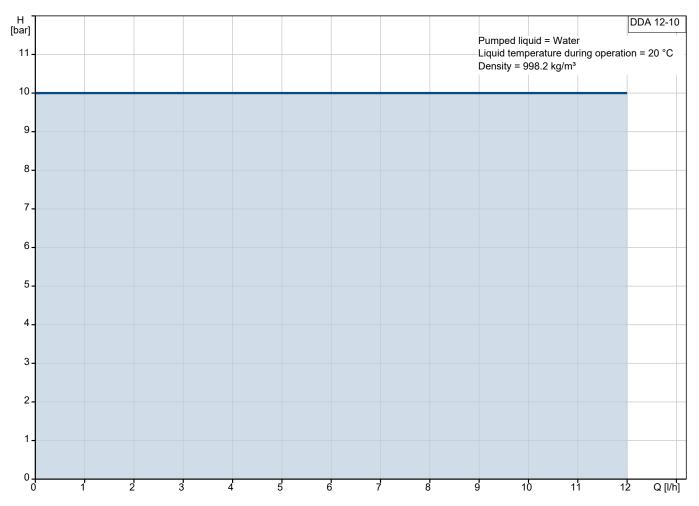
Pump Data		
Maximum operating pressure:	10 bar	
Liquid temperature range:	-10 45 °C	
Maximum ambient temperature:	45 °C	
Approvals:	CE,CSA-US,NSF61,RCM	
Product number:	97722487	

Motor Data

Rated voltage: 100-240 V

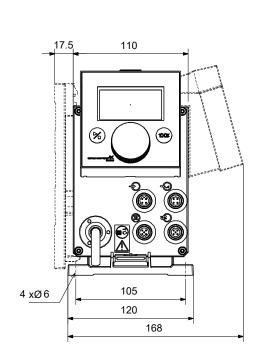
Mains frequency: 50 / 60 Hz

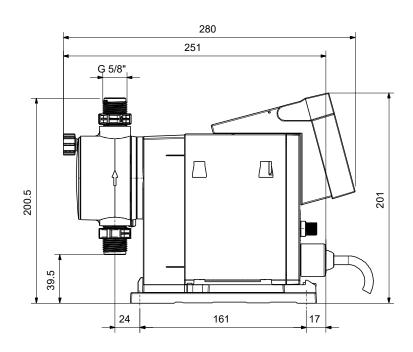
Enclosure class: IP65 / TYPE 4X



1

Submittal Data





Materials:

Dosing head: PVDF (Polyvinylidene fluoride)

Valve ball: Ceramic Gasket: PTFE



Date: 02/08/2024

Qty. | Description

1 DDA 12-10 AR-PV/T/C-F-31U7U7BG



Note! Product picture may differ from actual product

Product No.: 97722487

DDA 12-10 AR-PV/T/C-F-31U7U7BG

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= 6 l/h) and 25 % (maximum flow= 3 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:

- 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:



Date: 02/08/2024

Qty. | Description

Type key: DDA 12-10 AR-PV/T/C-F-31U7U7BG

Max. Flow: 12 I/h
Max. flow in slow mode 50%: 6 I/h
Max. flow in slow mode 25%: 3 I/h
Min flow: 12.0 ml/h
Turn-down ratio: 1:1000

Approvals: CE,CSA-US,NSF61,RCM

Valve type: Standard Maximum viscosity at 100 %: 300 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: PTFE

Installation:

Range of ambient temperature: 0 .. 45 °C Maximum operating pressure: 10 bar 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: 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 / TYPE 4X

Length of cable: 1.5 m

Type of cable plug: USA, Canada Inrush current: 25A at 230V for 2ms

Controls:

Control variant: AR
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

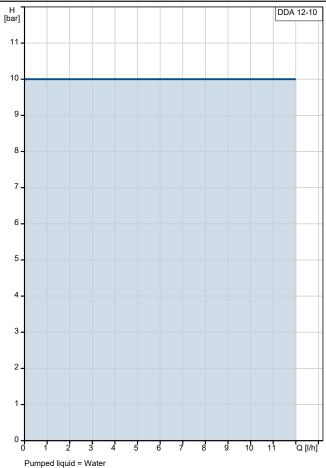
Others:

Net weight:3 kgGross weight:3 kgColor:RED



Date: 02/08/2024

Description	Value
General information:	
Product name:	DDA 12-10 AR-PV/T/C-F-31U7U7BG
Product No:	97722487
EAN number:	5710622726305
Technical:	
Type key:	DDA 12-10 AR-PV/T/C-F-31U7U7BG
Max. Flow:	12 l/h
Max. flow in slow mode 50%:	6 l/h
Max. flow in slow mode 25%:	3 l/h
Min flow:	12.0 ml/h
Turn-down ratio:	1:1000
Approvals:	CE,CSA-US,NSF61,RCM
Valve type:	Standard
Maximum viscosity at 100 %:	300 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:	PTFE
Installation:	
Range of ambient temperature:	0 45 °C
Maximum operating pressure:	10 bar
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:	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 / TYPE 4X
Length of cable:	1.5 m
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
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Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³



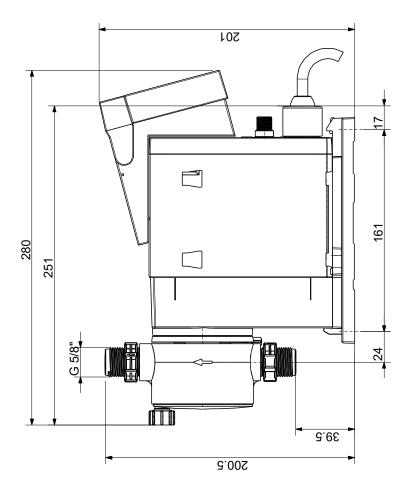
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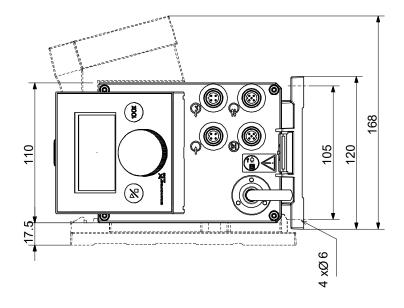
Description	Value
Net weight:	3 kg
Gross weight:	3 kg
Color:	RED



Date: 02/08/2024

97722487 DDA 12-10 AR-PV/T/C-F-31U7U7BG





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