## **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-C-PVC/T/C-F-31U7U7BG

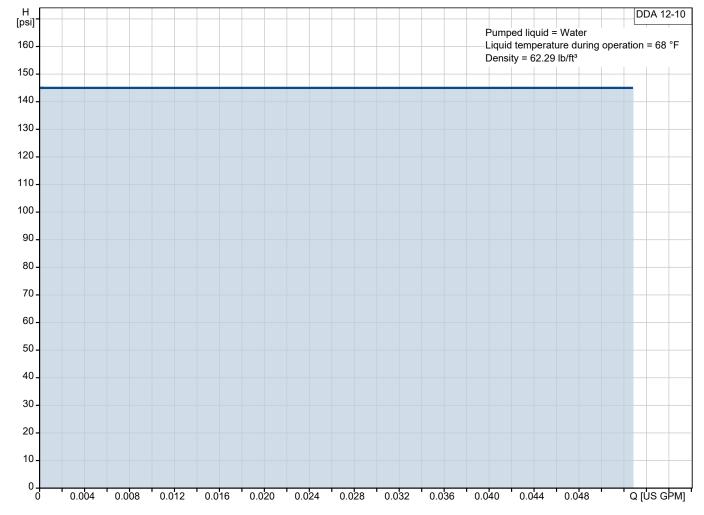
SMART Digital diaphragm dosing pump with internal brushless motor drive. High-end solution for complex and demanding applications (Digital Dosing Advanced).

Note! Product picture may differ from actual product

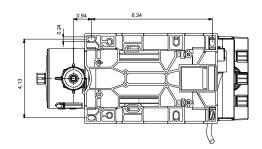
Conditions of Service		
Liquid:	Water	
Temperature:	68 °F	
Specific Gravity:	1.000	

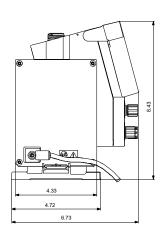
Pump Data				
Maximum operating pressure:	145.04 psi			
Liquid temperature range:	32 113 °F			
Maximum ambient temperature:	113 °F			
Product number:	93065216			

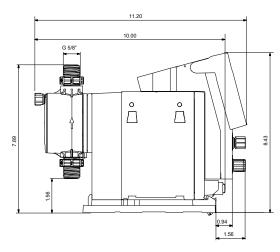
Motor Data			
Rated voltage:	100-240 V		
Mains frequency:	50 / 60 Hz		
Enclosure class:	IP65 / TYPE 4X		



# Submittal Data







### Materials:

PVC (Polyvinyl chloride) Ceramic PTFE Dosing head:

Valve ball: Gasket:



**Date:** 05/02/2025

### Qty. | Description

#### DDA 12-10 AR-C-PVC/T/C-F-31U7U7BG



Note! Product picture may differ from actual product

Product No.: 93065216

The SMART Digital DDA-C 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.

Depending on the set capacity, the duration of the discharge stroke varies, ensuring an optimal, uniform 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 easily turned to the front, left or right position.

The click wheel and the multi-coloured backlit graphic plain-text LC display enable intuitive commissioning and operation.

The control elements are protected by a transparent cover.

The DDA-C has built-in connectivity that allows easy setup and tracking via the Grundfos GO app as well as easy integration into a Modbus RTU or TCP bus system.

The dosing head includes the following parts:

- · A durable and chemically resistant full PTFE diaphragm,
- · Double ball valves for maximum dosing accuracy,
- A deaeration valve for easy start-up.

#### Operation modes and functions:

- 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 (integrated Modbus RTU and TCP; Profibus DP, Profinet and Ethernet IP via CIM/CIU models).
- Cloud control and monitoring (Smart Digital Chempairing Suite; Grundfos Connect).

#### Other features:

- · Auto deaeration during pump standby to avoid stand-still due to air-locking.
- Two SlowMode steps (anti-cavitation), 50 % and 25 % maximum flow, e.g. for high-viscosity or degassing liquids.
- Max. Capacity to limit the capacity of the pump to a set maximum.
- Service information display to show when service and which wear-part order numbers are required.
- Two-step key lock function to protect the pump against unauthorised access.
- Multi-parameter dashboard function to provide further information on up to 4 parameters.
- Counter for total dosed volume (resettable), operating hours, etc.
- Save, copy and load customised settings as well as reload 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.)

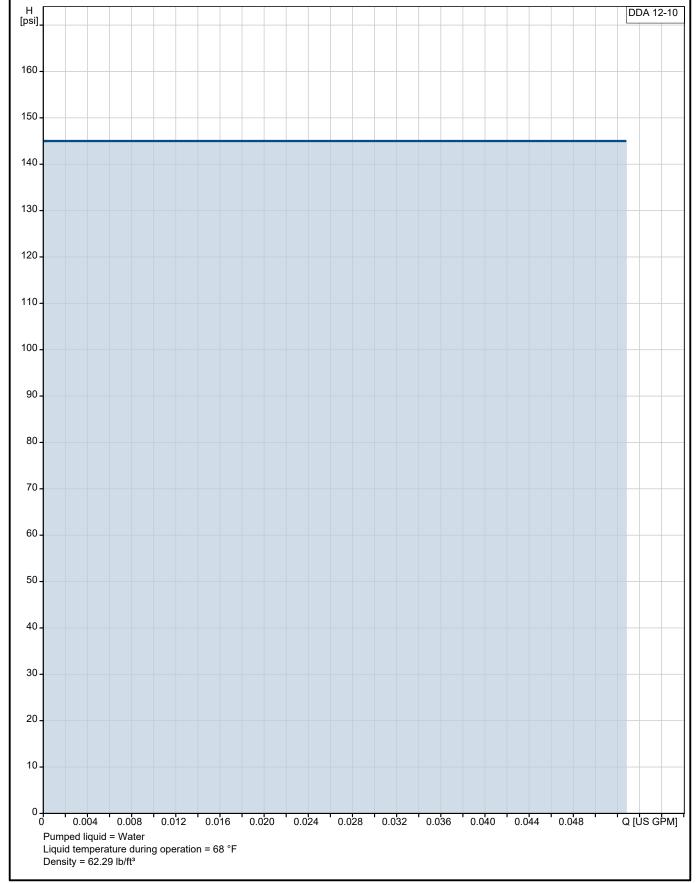


		<b>Date</b> : 05/02/2025
Qty.	Descr	iption
1	•	Output analog 0/4-20mA.
•	•	Fieldbus communication interface (integrated Modbus RTU and TCP; Profibus DP, Profinet and Ethernet IP via CIM/CIU models).



**Date:** 05/02/2025

## 93065216 DDA 12-10 AR-C-PVC/T/C-F-31U7U7BG





**Date:** 05/02/2025

Description	Value
General information:	
Product name:	DDA 12-10 AR-C-PVC/T/C-F-31U7U7BG
Product No:	93065216
EAN number:	5715467281453
Technical:	
Type key:	DDA 12-10 AR-C-PVC/T/C-F-31U7U
Max. Flow:	0.05283 US GPM
Max. flow in slow mode 50%:	0.02642 US GPM
Max. flow in slow mode 25%:	0.01321 US GPM
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:	PVC (Polyvinyl chloride)
Valve ball:	Ceramic
Gasket:	PTFE
Installation:	
Range of ambient temperature:	32 113 °F
Maximum operating pressure:	145.04 psi
Installation set (Yes/No):	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:	32 113 °F
Selected liquid temperature:	68 °F

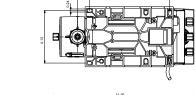
H [psi]						DDA 12-10
160 -						
150						
140 -						
130						
120 -						
110						
100 -						
90						
90-						
80 -						
70						
70 -						
60 -						
50 -						
40 -						
30 -						
20 -						
10 -						
0						
Ö	0.005	0.015	0.025	0.035	0.045	Q [US GPM]
Pu	umped liquid	= Water ature during o	neration = 6	R °F		
De	ensity = 62.2	9 lb/ft³	poration = 0			

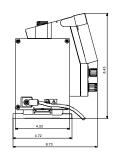
Selected liquid temperature: 68 °F Density: 62.29 lb/ft3 Electrical data: 24 W Maximum power input - P1: Mains frequency: 50 / 60 Hz Rated voltage: 1 x 100-240 V Enclosure class (IEC 34-5): IP65 / TYPE 4X Length of cable: 4.92 ft Type of cable plug: USA, Canada Inrush current: 25A at 230V for 2ms Controls: AR-C Control variant: Control panel: Front-Mounted Level control: YES Analog input: 0/4-20 MA Pulse control: YES

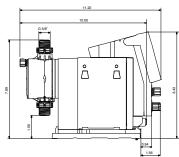
> Yes 0/4-20 MA

YES

2







Ext. Stop input:

Analog output: Output relays:

Others:

Bus communication:



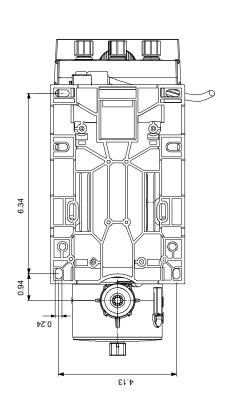
**Date:** 05/02/2025

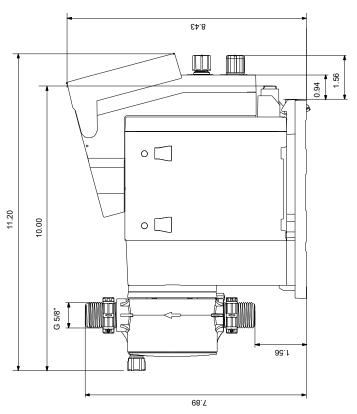
Description	Value
Net weight:	4.41 lb
Gross weight:	6.62 lb
Color:	RED
Country of origin:	US
Custom tariff no.:	8413.19.0000

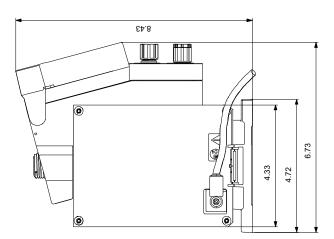


05/02/2025 Date:

# 93065216 DDA 12-10 AR-C-PVC/T/C-F-31U7U7BG







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