## **Submittal Data**

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



### DDA 30-4 FCM-C-PVC/V/C-F-31U7U7BG

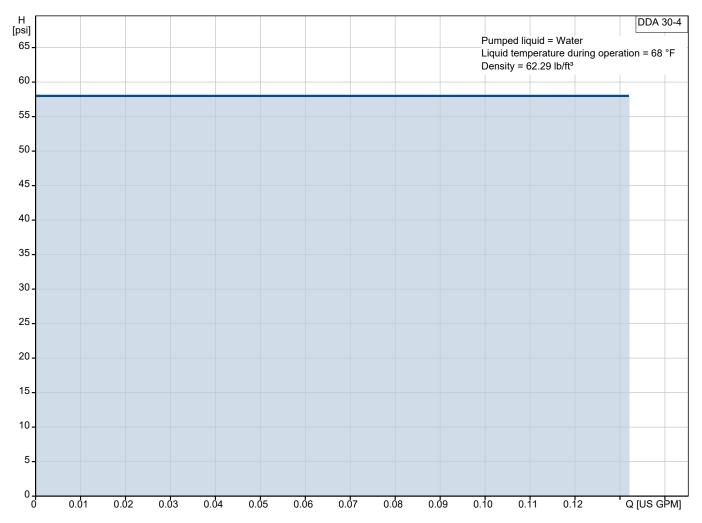
SMART Digital diaphragm dosing pump with internal brushless motor drive. High-end solution for complex and demanding applications (Digital Dosing Advanced).

Note! Product picture may differ from actual product

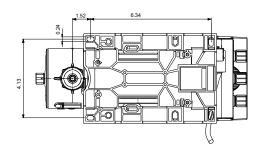
Conditions of Service						
Liquid:	Water					
Temperature:	68 °F					
Specific Gravity:	1.000					

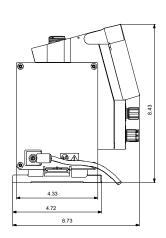
Pump Data						
Maximum operating pressure:	58.02 psi					
Liquid temperature range:	32 113 °F					
Maximum ambient temperature:	113 °F					
Product number:	93065086					

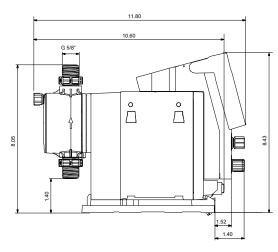
Motor Data						
Rated voltage:	100-240 V					
Mains frequency:	50 / 60 Hz					
Enclosure class:	IP65 / TYPE 4X					



# Submittal Data







### Materials:

PVC (Polyvinyl chloride) Ceramic Dosing head:

Valve ball: Gasket: FKM



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#### 1 DDA 30-4 FCM-C-PVC/V/C-F-31U7U7BG



Note! Product picture may differ from actual product

Product No.: 93065086

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 sensor-based FlowControlMeasurement (FCM) system detects malfunctions such as air bubbles, line breaks or overpressure directly in the dosing head and displays them in plain text in the alarm menu.

FCM measures the actual pressure and flow rate and eliminates the need for additional monitoring and control devices (accuracy of ± 1.5 % of the set value in a trouble-free process).

The measured pressure and flow are displayed and can be integrated into the process control system, e.g.

In addition, the AutoFlowAdapt function automatically adjusts the pump speed to the process conditions to maintain the target flow even with fluctuating back pressure or air bubble formation (degassing drive strategy).

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,
- A pressure sensor.

#### 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:

- The sensor-based FlowControlMeasurement (FCM) system detects malfunctions such as air bubbles, line breaks or overpressure directly in the dosing head.
- Measurement of actual pressure and flow.
- AutoFlowAdapt automatically adjusts the pump speed to the process conditions (what you set is what you get).



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- Degassing drive strategy in case of air bubbles detected in the dosing head and Auto Deaeration during pump standby avoids stand-still due to air-locking.
- ConditionCheck analyses the pump and the system where the pump is installed.
- 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.

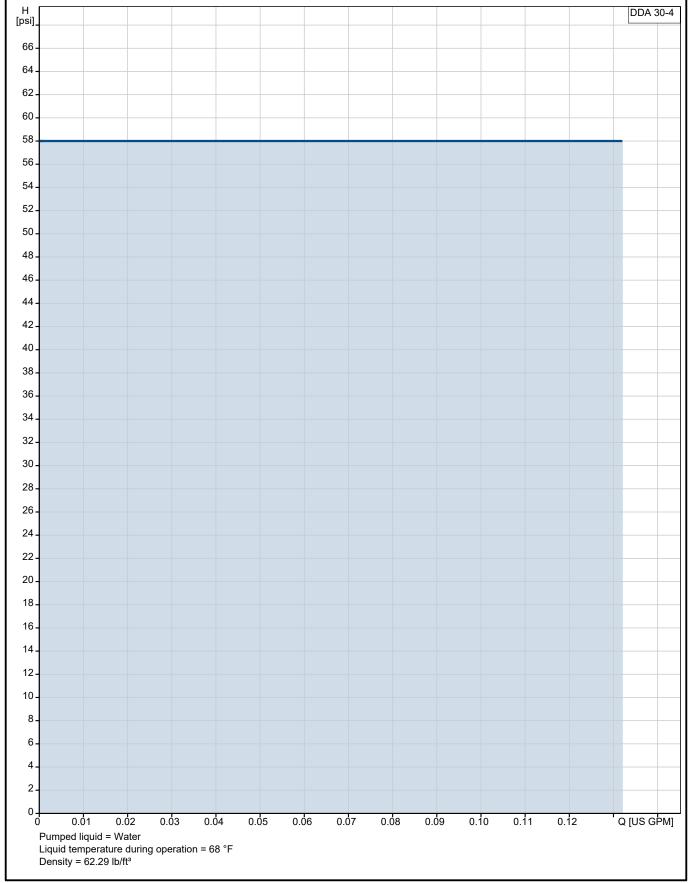
#### Signal inputs/outputs:

- 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.)
- Output analog 0/4-20mA.
- 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).



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## 93065086 DDA 30-4 FCM-C-PVC/V/C-F-31U7U7BG





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Description	Value					
General information:						
Product name:	DDA 30-4 FCM-C-PVC/V/C-F-31U7U7BG					
Product No:	93065086					
EAN number:	5715467279177					
Technical:						
Type key:	DDA 30-4 FCM-C-PVC/V/C-F-31U7U					
Max. Flow:	0.13209 US GPM					
Max. flow in slow mode 50%:	0.06604 US GPM					
Max. flow in slow mode 25%:	0.03302 US GPM					
Min flow:	30.0 ml/h					
Turn-down ratio:	1:1000					
Approvals:	CE,CSA-US,NSF61,RCM					
Valve type:	Standard					
Maximum viscosity at 100 %:	150 mPas					
Maximum viscosity in slow mode 50 %:	600 mPas					
Maximum viscosity in slow mode 25 %:	1500 mPas					
Accuracy of repeatability:	1 %					
Materials:						
Dosing head:	PVC (Polyvinyl chloride)					
Valve ball:	Ceramic					
Gasket:	FKM					
Installation:						
Range of ambient temperature:	32 113 °F					
Maximum operating pressure:	58.02 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:	6.56 ft					
Liquid:						
Pumped liquid:	Water					
Liquid temperature range:	32 113 °F					

H [psi]													DE	A 30-4
65 -														
60 -														
55 <b>-</b>														
50 -														
45 <b>-</b>														
40 -														
35 -														
30 -														
30 -														
25 🗕														
207														
20 -														
15 <b>-</b>														
10 -														
5 -														
0	0.0	1	0.0	12	0.0	\	0.0	7	0.0	20	0.	1	O ILIS	CDMI
1	Liquid temperature during operation = 68 °F													
Density = 62.29 lb/ft <sup>3</sup>														

Liquid:

Pumped liquid:

Liquid temperature range:

Selected liquid temperature:

68 °F

Density:

62.29 lb/ft³

Electrical data:

Maximum power input - P1: 24 W

Mains frequency: 50 / 60 Hz

Rated voltage: 1 x 100-240 V

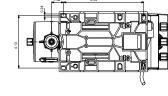
Enclosure class (IEC 34-5): IP65 / TYPE 4X

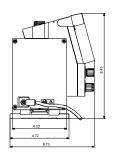
Length of cable: 4.92 ft

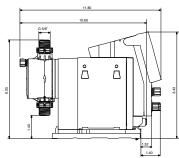
Type of cable plug: USA, Canada

Inrush current: 25A at 230V for 2ms

Controls: FCM-C Control variant: 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: Output relays: 2 Bus communication: YES Others:









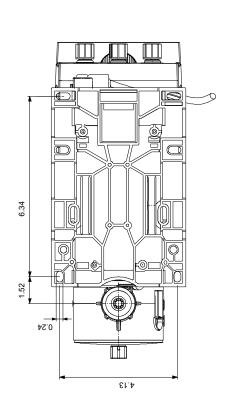
**Date:** 12/02/2025

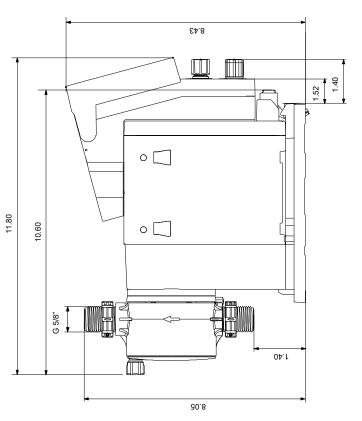
Description	Value
Net weight:	6.62 lb
Gross weight:	6.62 lb
Color:	RED
Country of origin:	US
Custom tariff no.:	8413.19.0000

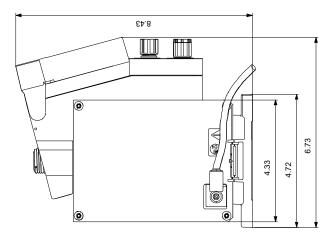


12/02/2025 Date:

# 93065086 DDA 30-4 FCM-C-PVC/V/C-F-31U7U7BG







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