Submittal Data

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

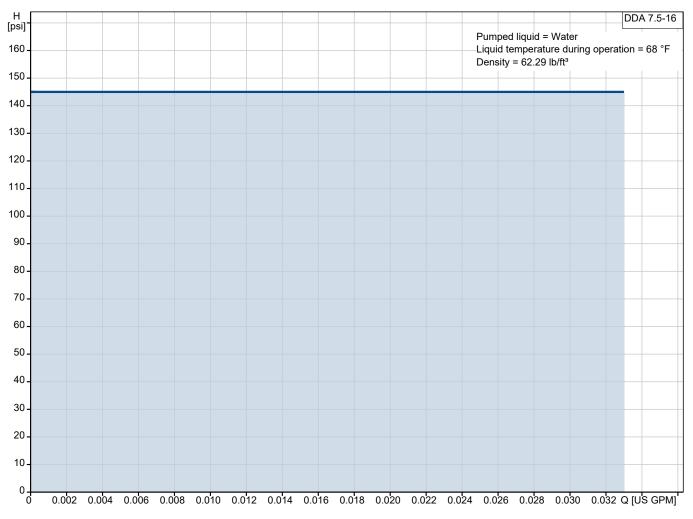


Note! Product picture may differ from actual product

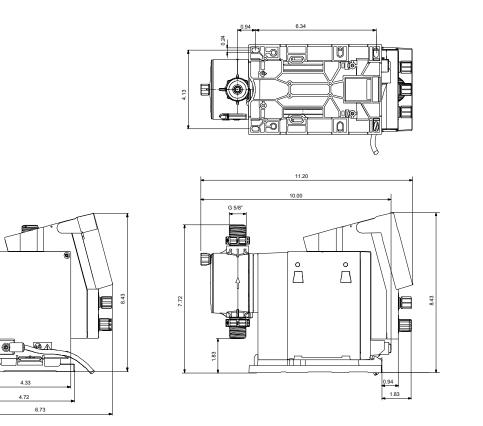
DDA 7.5-16 AR-C-PVC/T/C-F-31U7U7BG

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

| Conditions of Service | | Pump Data | | Motor Data | | |
|-----------------------|-------|------------------------------|------------|------------------|----------------|--|
| Liquid: | Water | Maximum operating pressure: | 145.04 psi | Rated voltage: | 100-240 V | |
| Temperature: | 68 °F | Liquid temperature range: | 32 113 °F | Mains frequency: | 50 / 60 Hz | |
| Specific Gravity: | 1.000 | Maximum ambient temperature: | 113 °F | Enclosure class: | IP65 / TYPE 4X | |
| | | Product number: | On request | | | |



Submittal Data





Dosing head: Valve ball: Gasket:

PVC (Polyvinyl chloride) Ceramic PTFE



03/02/2025

Date:

Qty. | Description

1

DDA 7.5-16 AR-C-PVC/T/C-F-31U7U7BG



Note! Product picture may differ from actual product

Product No.: On request

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:

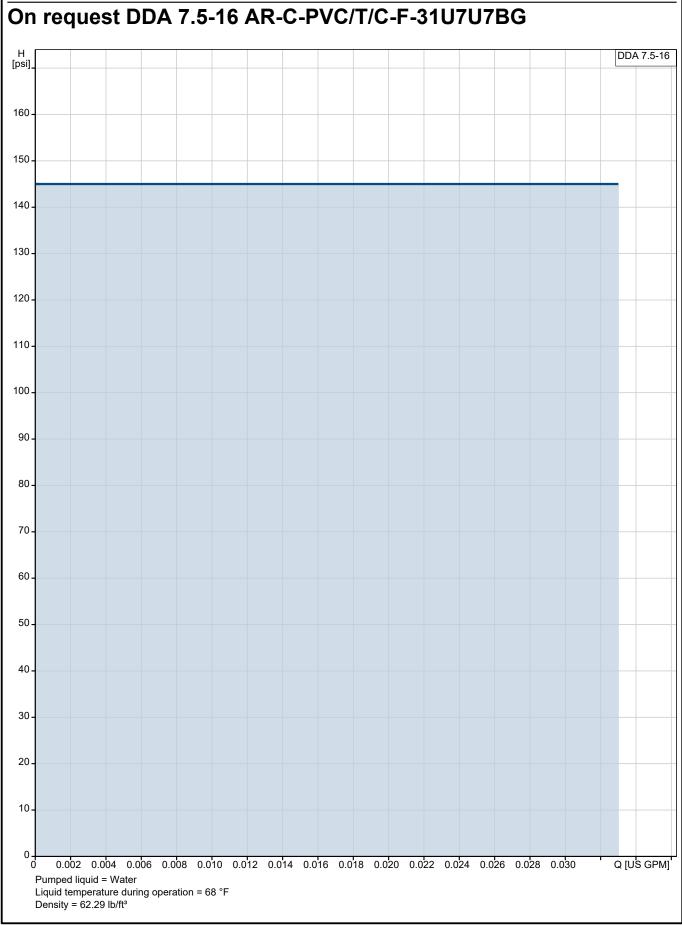
- Input for pulse, analog 0/4-20mA, external stop.
- Input for low-level and empty-tank signal.
- Two potential-free output relays for max. 30 V AC/DC (configurable, e.g. alarm, stroke signal, pump dosing, timer etc.)

| | | Company name: Created by: Phone: | |
|--------------|---|--|---------------------------------------|
| | GRUNDFOS 🕅 | | 00/00/0005 |
| <u></u> | Description | Date: | 03/02/2025 |
| Qty . | Description Output analog 0/4-20mA. | | |
| I | Fieldbus communication interface (integrated M via CIM/CIU models). | odbus RTU and TCP; | Profibus DP, Profinet and Ethernet IP |
| | VIA CIM/CIU models). | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



Date:

03/02/2025





| | | .H. | | | | | DDA |
|--|---|-----------------------------------|---------|------------------|----------|----------|-------|
| Description | Value | [psi] | | | | | L |
| General information: | | 160 - | | | | | |
| Product name: | DDA 7.5-16 AR-C-PVC/T/C-F-31U7U7BG | 150 - | | | | | |
| Product No: | On request | | | | | | |
| EAN number: | On request | 140 - | | | | | |
| Technical: | | - | | | | | |
| Type key: | DDA 7.5-16 AR-C-PVC/T/C-F-31U7 | 130 - | | | | | |
| Max. Flow: | 0.03302 US GPM | 120 - | | | | | |
| Max. flow in slow mode 50%: | 0.01651 US GPM | 110 | | | | | |
| Max. flow in slow mode 25%: | 0.00828 US GPM | | | | | | |
| Min flow: | 2.5 ml/h | 100 - | | | | | |
| | | | | | | | |
| Turn-down ratio: | 1:3000 | 90 - | | | | | |
| Approvals: | CE,CSA-US,NSF61,RCM | | | | | | |
| Valve type: | Standard | 80 - | | | | | |
| Maximum viscosity at 100 %: | 50 mPas | 70 - | | | | | |
| Maximum viscosity in slow mode 50 %: | 1800 mPas | 60 - | | | | | |
| Maximum viscosity in slow mode 25 %: | 2500 mPas | 50 - | | | | | |
| Accuracy of repeatability: | 1 % | | | | | | |
| Materials: | | 40 - | | | | | |
| Dosing head: | PVC (Polyvinyl chloride) | | | | | | |
| Valve ball: | Ceramic | 30 - | | | | | |
| Gasket: | PTFE | | | | | | |
| Installation: | | 20 - | | | | | |
| Range of ambient temperature: | 32 113 °F | 10 - | | | | | |
| - | | | | | | | |
| Maximum operating pressure: | 145.04 psi NO | 0 | 5 0.010 | 0.015 0.0 |)20 0.03 | | |
| Installation set (Yes/No): | | 0 0.005 | | 0.015 0.0 | 0.0. | 25 | Q [US |
| Installation type: | No installation set | Pumpea liquid | | peration = 68 °F | | | |
| Pump inlet: | 0.17x 1/4, 1/4x3/8, 3/8x1/2" | Density = 62. | | portulion de l | | | |
| Pump outlet: | 0.17x 1/4, 1/4x3/8, 3/8x1/2" | | | | | | |
| | | | | | | | |
| Max. Suction lift during operation: | 19.7 ft | | | | 4 6.34 | | |
| Max. Suction lift during priming: | 19.7 ft 6.56 ft | | | 20 | | <u>.</u> | |
| Max. Suction lift during priming: | | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: | 6.56 ft Water | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: | 6.56 ft | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: | 6.56 ft Water | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: | 6.56 ft Water 32 113 °F | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: | 6.56 ft Water 32 113 °F 68 °F | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: | 6.56 ft Water 32 113 °F 68 °F | | | | | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz | | FT 1 | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V | | FT 1 | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C | 4.33 | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted | | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted YES | 4.33 | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted | 4.33 | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: Analog input: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted YES | 4.33 | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: Analog input: Pulse control: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted YES 0/4-20 MA | 4.33 | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: Analog input: Pulse control: Ext. Stop input: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted YES 0/4-20 MA YES | 4.33 | | | 11.20 | | |
| Max. Suction lift during operation: Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: Analog input: Pulse control: Ext. Stop input: Output relays: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft ³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted YES 0/4-20 MA Yes 0/4-20 MA | 4.33 | | | 11.20 | | |
| Max. Suction lift during priming: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5): Length of cable: Type of cable plug: Inrush current: Controls: Control variant: Control panel: Level control: Analog input: Pulse control: Ext. Stop input: | 6.56 ft Water 32 113 °F 68 °F 62.29 lb/ft³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / TYPE 4X 4.92 ft USA, Canada 25A at 230V for 2ms AR-C Front-Mounted YES 0/4-20 MA YES Yes | 4.33 | | | 11.20 | | |



Date:03/02/2025DescriptionValueNet weight:4.41 lbGross weight:6.62 lbColor:REDCountry of origin:USCustom tariff no.:8413.19.0000

