

**Date:** 25/02/2020

Qty. | Description

1 DDA 7.5-16



Note! Product picture may differ from actual product

Product No.: 97721958

DDA 7.5-16 AR-PV/E/C-F-31U2U2F

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: 3.75 l/h) and 25 % (maximum flow: 1.88 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:

Type key: DDA 7.5-16 AR-PV/E/C-F-31U2U2F



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 Max. Flow:
 7.5 l/h

 Max. flow in slow mode 50%:
 3.75 l/h

 Max. flow in slow mode 25%:
 1.88 l/h

 Min flow:
 2.5 ml/h

 Turn-down ratio:
 1:3000

Approvals on nameplate: CE,CSA-US,NSF61,EAC,RCM

Valve type: Standard Maximum viscosity at 100 %: 50 mPas

Maximum viscosity in slow mode 50 %: 1800 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: 0 .. 45 °C Maximum operating pressure: 16 bar NO

Installation type:

Pump inlet:

Pump outlet:

No installation set

4/6, 6/9, 6/12, 9/12 mm

4/6, 6/9, 6/12, 9/12 mm

Max. Suction lift during operation: 6 m Max. Suction lift during priming: 2 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 / NEMA 4X

Length of cable: 1.5 m Type of cable plug: EU

Inrush current: 25A at 230V for 2ms

Controls:

Control variant:
Level control:
Analog input:
Pulse control:
Ext. Stop input:
Analog output:

O/4-20 MA
YES
Analog output:
O/4-20 MA

Output relays: 2
Bus communication: YES

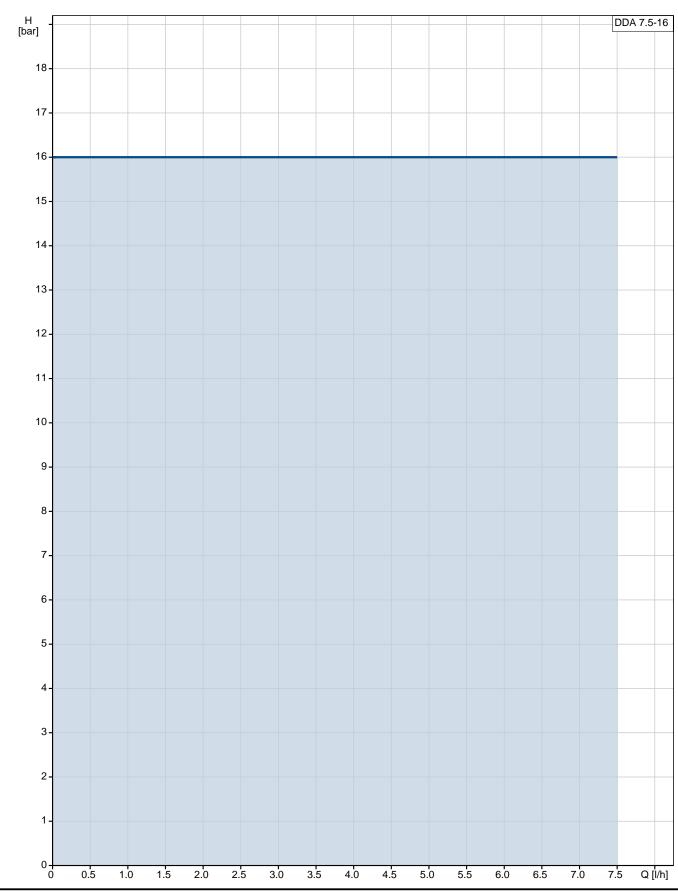
Others:

Net weight: 3 kg Gross weight: 4 kg Color: RED



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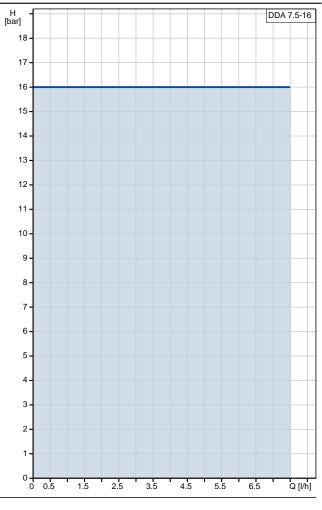
# 97721958 DDA 7.5-16

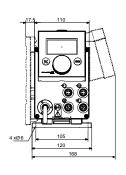


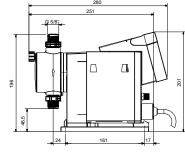


**Date:** 25/02/2020

Description	Value
General information:	BB4 = - 40
Product name:	DDA 7.5-16
Product No:	97721958
EAN number:	5710622721003
	5710622721003
Technical:	
Type key:	DDA 7.5-16
	AR-PV/E/C-F-31U2U2F
Max. Flow:	7.5 l/h
Max. flow in slow mode 50%:	3.75 l/h
Max. flow in slow mode 25%:	1.88 l/h
Min flow:	2.5 ml/h
Turn-down ratio:	1:3000
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM
Valve type:	Standard
Maximum viscosity at 100 %:	50 mPas
Maximum viscosity in slow mode 50 %:	1800 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:	0 45 °C
Maximum operating pressure:	16 bar
Installation set:	NO
Installation type:	No installation set
Pump inlet:	4/6, 6/9, 6/12, 9/12 mm
Pump outlet:	4/6, 6/9, 6/12, 9/12 mm
Max. Suction lift during operation:	6 m
Max. Suction lift during priming:	2 m
Liquid:	2 111
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•	Matau
Pumped liquid:	Water
Pumped liquid: Liquid temperature range:	-10 45 °C
Pumped liquid: Liquid temperature range: Selected liquid temperature:	-10 45 °C 20 °C
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	-10 45 °C
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data:	-10 45 °C 20 °C 998.2 kg/m³
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1:	-10 45 °C 20 °C 998.2 kg/m³
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data:	-10 45 °C 20 °C 998.2 kg/m³
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1:	-10 45 °C 20 °C 998.2 kg/m³
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency:	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage:	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V
Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Maximum power input - P1: Mains frequency: Rated voltage: Enclosure class (IEC 34-5):	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X
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:	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m
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:	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m
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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:	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms
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:	-10 45 °C 20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms
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:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES
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:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA
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:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA YES
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:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA YES YES
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: Analog output:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA YES YES 0/4-20 MA
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: Analog output: Output relays:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA YES YES 0/4-20 MA 2
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: Analog output: Output relays: Bus communication:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA YES YES 0/4-20 MA
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: Analog output: Output relays:	-10 45 °C 20 °C 998.2 kg/m³  24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m EU 25A at 230V for 2ms  AR FRONT-MOUNTED YES 0/4-20 MA YES YES 0/4-20 MA 2









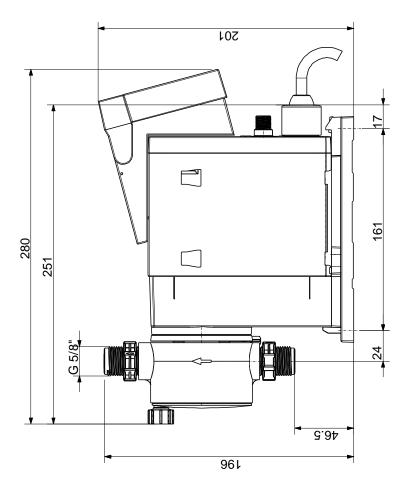
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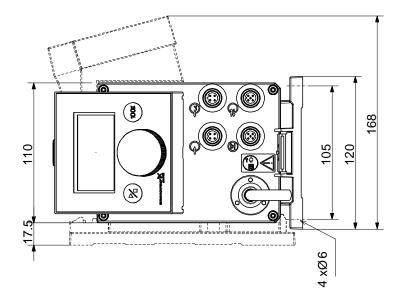
Description	Value
Gross weight:	4 kg
Color:	RED



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