

**Date:** 27/02/2020

Qty. | Description

1 DDA 30-4



Note! Product picture may differ from actual product

Product No.: 97722263

DDA 30-4 AR-PVC/T/C-F-32I002FG

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: 15 l/h) and 25 % (maximum flow: 7.5 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).

#### Installation set includes:

- 2 pump connections (Hose 9/12 mm 6).



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- Foot valve (without level switch).
- Injection unit.
- 6 m PE discharge hose.
- 2 m PVC suction hose.
- 2 m PVC deaeration hose (4/6 mm).

#### Technical:

Type key: DDA 30-4 AR-PVC/T/C-F-32I002FG

 Max. Flow:
 30 l/h

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

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

 Min flow:
 30.0 ml/h

 Turn-down ratio:
 1:1000

Approvals on nameplate: CE,CSA-US,NSF61,EAC,RCM Valve type: Spring-Loaded (HV-version)

Maximum viscosity at 100 %: 200 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: PTFE

Installation:

Range of ambient temperature: 0 .. 45 °C Maximum operating pressure: 4 bar Installation set: YES

Installation type: 9/12 mm up to 60 l/h,13 bar

Pump inlet: Hose 9/12 mm 6 Pump outlet: Hose 9/12 mm 6

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

Output relays: 2



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Bus communication: YES

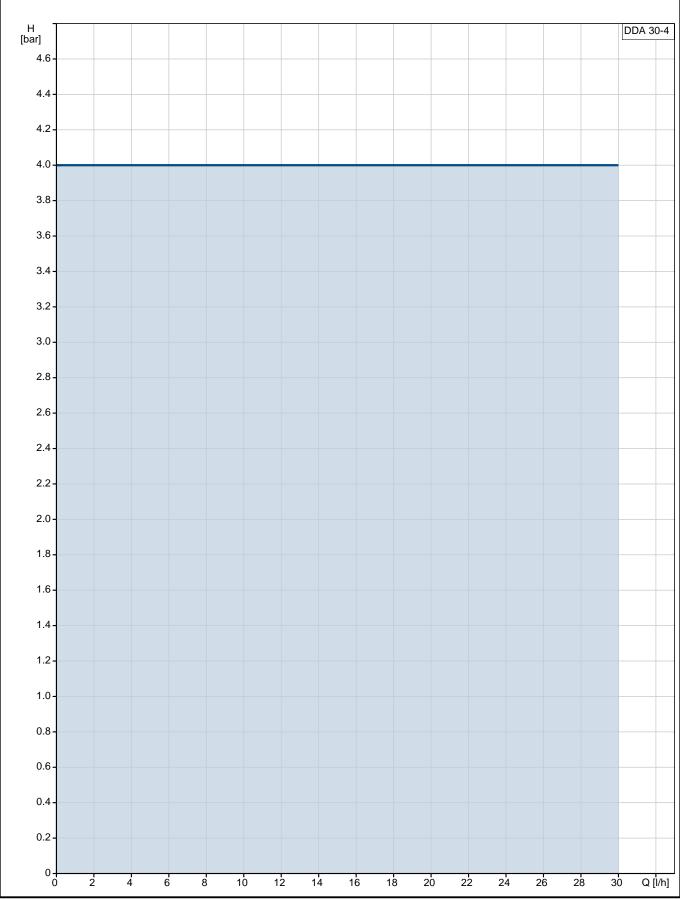
Others:

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



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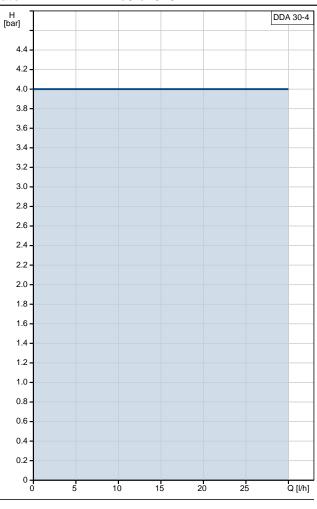
# 97722263 DDA 30-4

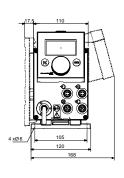


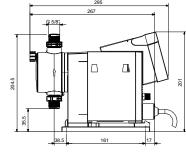


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Description	Value
General information:	
Product name:	DDA 30-4
Product No:	97722263
EAN number:	5710622724066
Tankadank	5710622724066
Technical:	DDA 00 4
Type key:	DDA 30-4 AR-PVC/T/C-F-32I002FG
Max. Flow:	30 l/h
Max. flow in slow mode 50%:	15 l/h
Max. flow in slow mode 25%:	7.5 l/h
Min flow:	30.0 ml/h
Turn-down ratio:	1:1000
Approvals on nameplate:	CE,CSA-US,NSF61,EAC,RCM
Valve type:	Spring-Loaded (HV-version)
Maximum viscosity at 100 %:	200 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:	PTFE
Installation:	
Range of ambient temperature:	0 45 °C
Maximum operating pressure:	4 bar
Installation set:	YES
Installation type:	9/12 mm up to 60 l/h,13 bar
Pump inlet:	Hose 9/12 mm 6
Pump outlet:	Hose 9/12 mm 6
Max. Suction lift during operation:	6 m
Max. Suction lift during priming:	2 m
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	
<u> </u>	-10 45 °C
Selected liquid temperature:	20 °C
Density:	
Density: Electrical data:	20 °C 998.2 kg/m³
Density:  Electrical data:  Maximum power input - P1:	20 °C 998.2 kg/m³ 24 W
Density:  Electrical data:  Maximum power input - P1:  Mains frequency:	20 °C 998.2 kg/m³ 24 W 50 / 60 Hz
Density:  Electrical data:  Maximum power input - P1:  Mains frequency:  Rated voltage:	20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V
Density:  Electrical data:  Maximum power input - P1:  Mains frequency:  Rated voltage:  Enclosure class (IEC 34-5):	20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X
Density:  Electrical data:  Maximum power input - P1:  Mains frequency:  Rated voltage:  Enclosure class (IEC 34-5):  Length of cable:	20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m
Density:  Electrical data:  Maximum power input - P1:  Mains frequency:  Rated voltage:  Enclosure class (IEC 34-5):  Length of cable:  Type of cable plug:	20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m
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:	20 °C 998.2 kg/m³ 24 W 50 / 60 Hz 1 x 100-240 V IP65 / NEMA 4X 1.5 m
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:	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
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:	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
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:	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
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:	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
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:	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
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:	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
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:	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
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:	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
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:	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
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:	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
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:	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









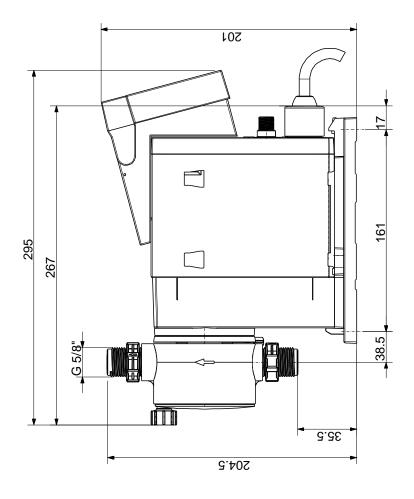
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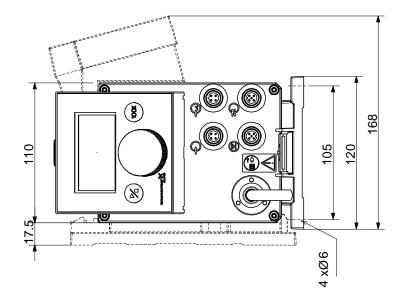
Description	Value
Gross weight:	4 kg
Color:	RED



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