

**Date:** 4/11/2019

Count | Description

DDA 30-4



Product photo could vary from the actual product

Product No.: 97722680

DDA 30-4 AR-PVC/T/C-F-31U7U7BG

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: 3.963 US gal/hour) and 25 % (maximum flow: 1.981 US gal/hour), 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 30-4 AR-PVC/T/C-F-31U7U7BG



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Max. Flow: 7.925 US gal/hour Max. flow in slow mode 50%: 3.963 US gal/hour Max. flow in slow mode 25%: 1.981 US gal/hour

Min flow: 30.0 ml/h Turn-down ratio: 1:1000

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

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: **PTFE** 

Installation:

Range of ambient temperature: 32 .. 113 °F Maximum operating pressure: 58.02 psi Installation set:

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 14 .. 113 °F Liquid temperature range: Selected liquid temperature: 68 °F Density: 62.29 lb/ft3

**Electrical data:** 

Maximum power input - P1: 24 W Main frequency: 60 Hz

Rated voltage: 1 x 100-240 V Enclosure class (IEC 34-5): IP65 / NEMA 4X

Length of cable: 4.92 ft Type of cable plug: USA, Canada

Inrush current: 25A at 230V for 2ms

Controls:

Control variant: AR YES Level control: 0/4-20 mA Analog input: Pulse control: YES Ext. Stop input: YES 0/4-20 mA Analog output:

Output relays: 2 Bus communication: YES

Others:

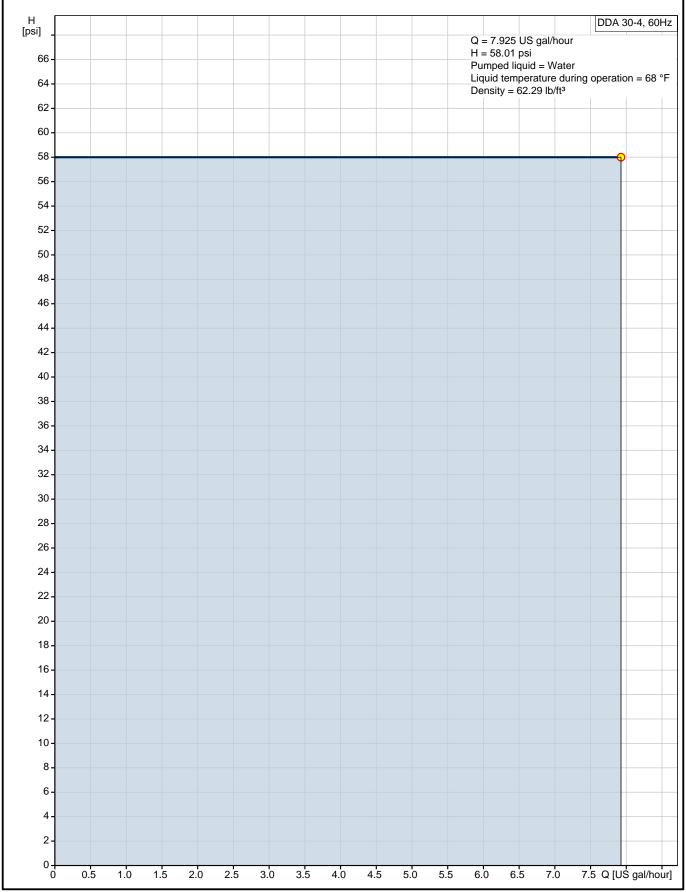
Net weight: 6.62 lb Gross weight: 8.82 lb COLOR: **RED** 

Custom tariff no .: 8413.50.0050



**Date:** 4/11/2019

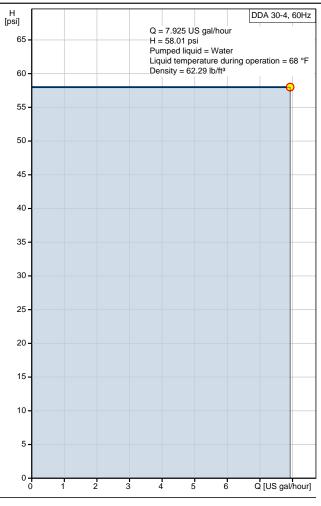
# 97722680 DDA 30-4 60 Hz

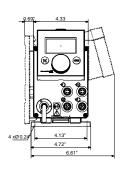


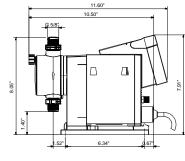


**Date:** 4/11/2019

Description	Value
General information:	
Product name:	DDA 30-4
Product No.:	97722680
EAN:	5710622728439
Technical:	
	DDA 30-4
Type key:	AR-PVC/T/C-F-31U7U7BG
Max. Flow:	7.925 US gal/hour
Max. flow in slow mode 50%:  Max. flow in slow mode 25%:	3.963 US gal/hour
	1.981 US gal/hour
Min flow:	30.0 ml/h
Turn-down ratio:	1:1000
Approvals on nameplate:	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:	PTFE
Installation:	
Range of ambient temperature:	32 113 °F
Maximum operating pressure:	58.02 psi
Installation set:	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
0. 0	0.30 11
Liquid:	Matax
Pumped liquid:	Water
Liquid temperature range:	14 113 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
Electrical data:	
Maximum power input - P1:	24 W
Main frequency:	60 Hz
Rated voltage:	1 x 100-240 V
Enclosure class (IEC 34-5):	IP65 / NEMA 4X
Length of cable:	4.92 ft
Type of cable plug:	USA, Canada
Inrush current:	25A at 230V for 2ms
Controls:	
Control variant:	AR
Control panel:	FRONT-MOUNTED
Level control:	YES
Analog input:	0/4-20 mA
Pulse control:	YES
Ext. Stop input:	YES
Analog output:	0/4-20 mA
Output relays:	2
Bus communication:	YES
Others:	. 25
Guiota.	
Net weight:	6.62 lb









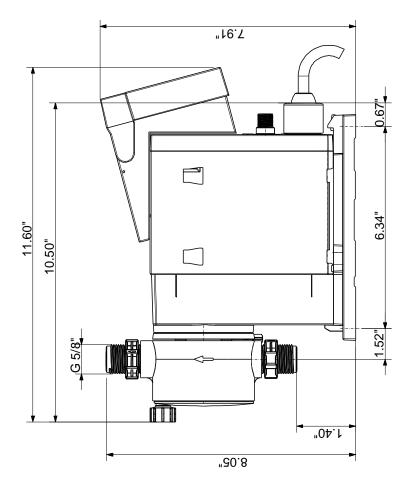
**Date:** 4/11/2019

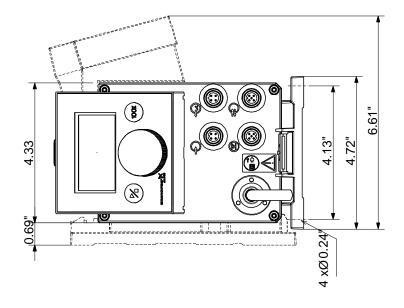
Description	Value
Gross weight:	8.82 lb
COLOR:	RED
Custom tariff no.:	8413.50.0050



**Date:** 4/11/2019

# 97722680 DDA 30-4 60 Hz





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



**Date:** 4/11/2019

**Order Data:** 

Product name: DDA 30-4

Amount: 1

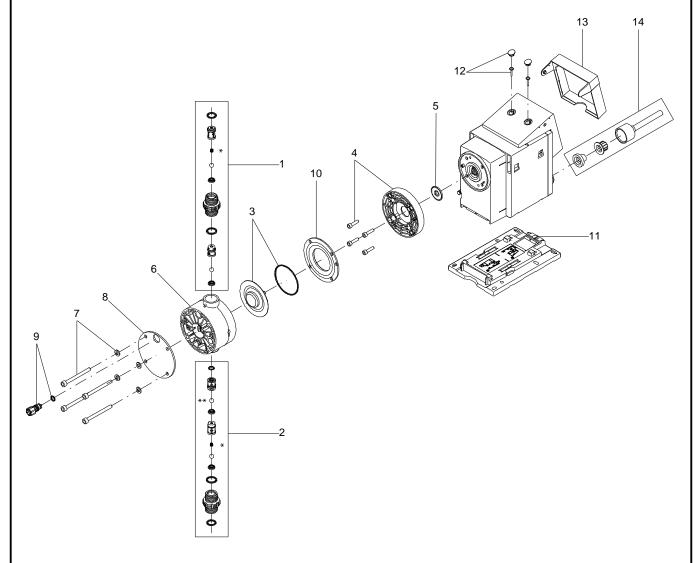
Product No.: 97722680

Total: Price on request



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## **Exploded view**



166x112



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## Parts list DDA 30-4, Prod number 97722680 Produced After 1132 (production year and week number)

Position		Annotation	Classification data	Part No.		Unit
- 1	Discharge valve cpl.				1	pcs
	O-ring				1	
	O-ring				1	
	Valve seat				1	
	Ball				2	
	Valve housing				1	
	Ball cage				1	
	Ball cage				1	
- 2	Suction valve cpl.				1	pcs
	O-ring				1	
	O-ring				1	
	O-ring				1	
	Valve seat				2	
	Ball				2	
	Valve housing				1	
	Ball cage				1	
	Ball cage				1	
3	O-ring				1	pcs
3	Diaphragm				1	pcs
4	Hex socket head cap screw				1	pcs
4	Pump head flange				1	pcs
5	Diaphragm				1	pcs
6	Pump head				1	pcs
7	Hex socket head cap screw				4	pcs
8	Cover				1	pcs
- 9	Venting valve				1	pcs
	O-ring				1	
	Spindle				1	
10	Intermediate ring				1	pcs
11	Base plate				1	pcs
12	Cover for screw				2	pcs
12	Pan washer head screw				2	pcs
13	Cover for cube				1	pcs
14	Power cable				1	pcs