

**Date:** 1/17/2019

Count | Description

**DDE 120-7** 



Product photo could vary from the actual product

Product No.: 99159435

DDE 120-7 AR-PV/E/C-F-31A7A7BG

The SMART Digital DDE is a compact positive displacement, diaphragm dosing pump with variable-speed drive (PMS 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 degassing liquids. The duration of each discharge stroke varies according to the capacity set, resulting in optimum smooth and continuous discharge flow.

The mounting plate allows quick installation and service. The control cube can be turned easily into front, left or right position. The dosing flow can be adjusted by means of an adjustment knob on a logarithmical scale from 0.1-100%. The control elements are protected by a transparent cover.

#### The dosing head is composed of:

- Long lifetime and universal, chemically resistant full double PTFE diaphragm.
- Ball valves for highest dosing accuracy.
- Deaeration valve for easy startup.

### Operating modes:

- Manual dosing from 0.1 to 100%.
- Pulse control (divisor function included).
- Analog 4-20 mA control (scalable maximum flow)

#### Other features:

- 100 % key (maximum capacity), e.g. for deaeration.
- Operation mode switch key between manual, pulse and analog.
- Status LEDs for pulse, analog and manual.

#### Signal-Inputs/outputs:

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

Controls:

Control variant: AR
Ext. Stop input: NO

Liquid:

Pumped liquid: Water
Liquid temperature range: 32 .. 122 °F
Liquid temperature during operation: 68 °F
Density: 62.29 lb/ft³

Technical:

Type key: DDE 120-7 AR-PV/E/C-F-31A7A7BG



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Max. Flow: 31.7 US gal/hour

Min flow: 150 ml/h Turn-down ratio: 1:800

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

Valve type: Standard
Maximum viscosity at 100 %: 100 mPas
Maximum viscosity in slow mode 50 %: N/A mPas

Maximum viscosity in slow mode 25 %: N/A mPas

Accuracy of repeatability: 5 %

Materials:

Dosing head: PVDF (Polyvinylidene fluoride)

Valve ball: Ceramic Gasket: EPDM

Installation:

Range of ambient temperature: 32 .. 113 °F Maximum operating pressure: 102 psi Installation set: NO

Installation type: No installation set

Pump inlet: Conn. Threaded 3/4#NPTM CodeA7
Pump outlet: Conn. Threaded 3/4#NPTM CodeA7

Max. Suction lift during operation: 9.843 ft Max. Suction lift during priming: 4.922 ft

**Electrical data:** 

Maximum power input - P1: 62 W Main frequency: 60 Hz

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

Length of cable: 4.922 ft
Type of cable plug: USA, Canada

Inrush current: 70A at 240V (35A/100V) for 2ms

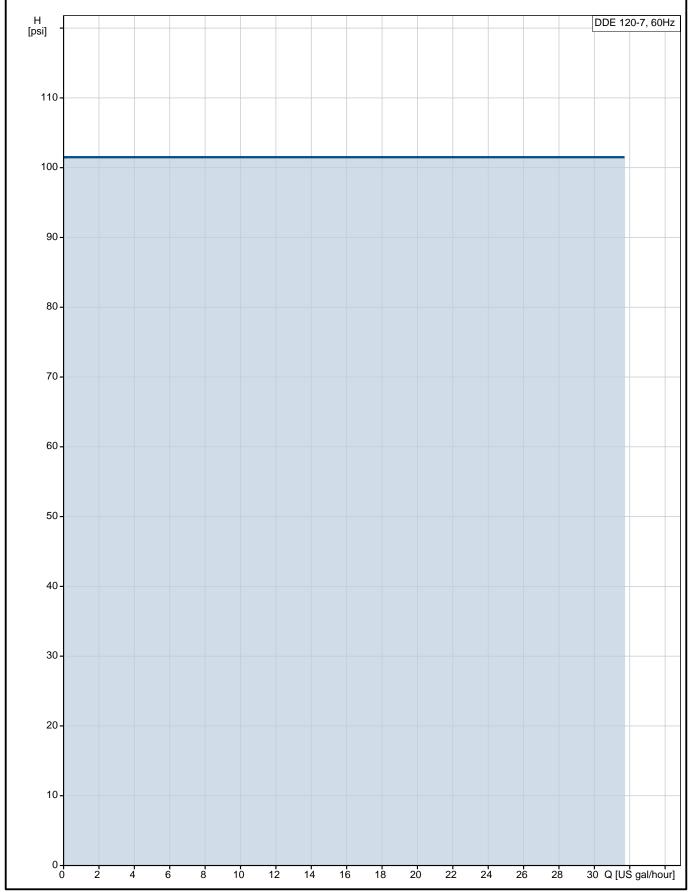
Others:

Net weight: 15.4 lb Gross weight: 17.6 lb COLOR: RED



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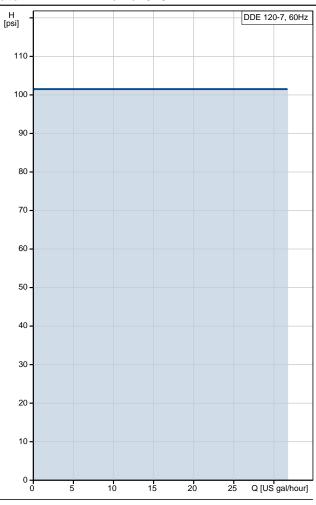
# 99159435 DDE 120-7 60 Hz

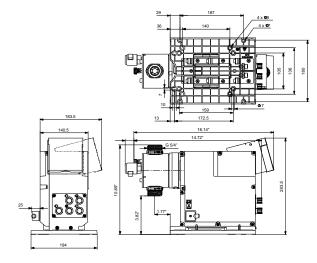




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Description	Value
General information:	
Product name:	DDE 120-7
Product No.:	99159435
EAN:	5712607842239
Technical:	
Type key:	DDE 120-7 AR-PV/E/C-F-31A7A7BG
Max. Flow:	31.7 US gal/hour
Min flow:	150 ml/h
Turn-down ratio:	1:800
Approvals on nameplate:	CE,CSA-US,NSF61,RCM
Valve type:	Standard
Maximum viscosity at 100 %:	100 mPas
Maximum viscosity in slow mode 50 %:	N/A mPas
Maximum viscosity in slow mode 25 %:	N/A mPas
Accuracy of repeatability:	5 %
Materials:	
Dosing head:	PVDF (Polyvinylidene fluoride)
Valve ball:	Ceramic
Gasket:	EPDM
Installation:	
Range of ambient temperature:	32 113 °F
Maximum operating pressure:	102 psi
Installation set:	NO.
Installation type:	No installation set
Pump inlet:	Conn. Threaded 3/4#NPTM CodeA7
Pump outlet:	Conn. Threaded 3/4#NPTM CodeA7
Max. Suction lift during operation:	9.843 ft
Max. Suction lift during priming:	4.922 ft
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	32 122 °F
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
Electrical data:	
Maximum power input - P1:	62 W
Main frequency:	60 Hz
Rated voltage:	1 x 100-240 V
Enclosure class (IEC 34-5):	IP65 / NEMA 4X
Length of cable:	4.922 ft
Type of cable plug:	USA, Canada
Inrush current:	70A at 240V (35A/100V) for 2ms
Controls:	
Control variant:	AR
Control panel:	FRONT-MOUNTED
Ext. Stop input:	NO
Others:	-
Net weight:	15.4 lb
Gross weight:	17.6 lb
COLOR:	RED
0020IV.	

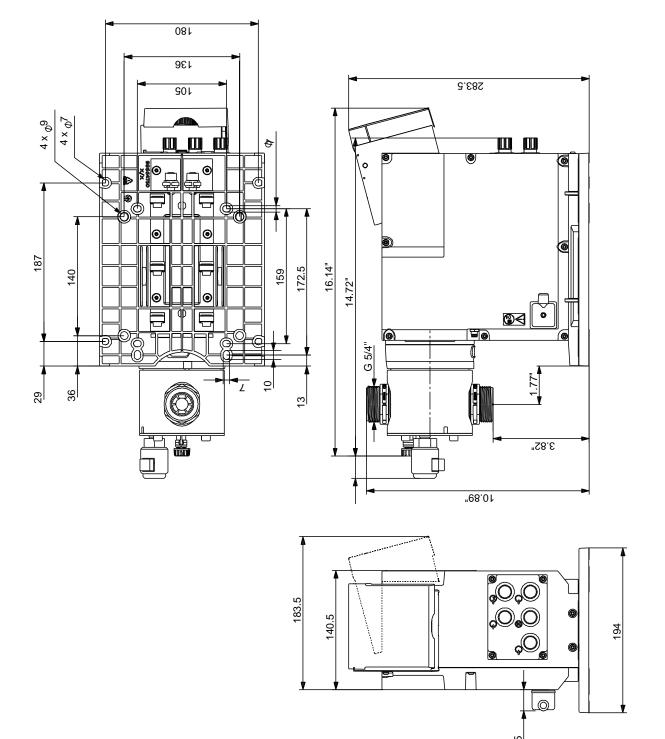






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## 99159435 DDE 120-7 60 Hz



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