


Count	Description
1	<p><b>DDA 60-10</b></p>  <p>Product photo could vary from the actual product</p> <p>Product No.: <a href="#">99159455</a> DDA 60-10 AR-PVC/V/C-F-31A7A7B</p> <p>The SMART Digital DDA 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 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.</p> <p>The mounting plate allows quick installation and service. 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.</p> <p>The dosing head is composed of:</p> <ul style="list-style-type: none"> <li>- Long lifetime and universal, chemically resistant full double PTFE diaphragm.</li> <li>- Ball valves for highest dosing accuracy.</li> <li>- Deaeration valve for easy startup.</li> </ul> <p>Operating modes:</p> <ul style="list-style-type: none"> <li>- Manual dosing in ml/h, l/h or gph.</li> <li>- Pulse control in ml/pulse (incl. memory function).</li> <li>- Analog control 0/4-20 mA (scalable).</li> <li>- Pulse-based batch function in ml, l or gal.</li> <li>- Timer-based batch function (Dosing timer, cycle or week).</li> <li>- Fieldbus control (GENIbus prepared for Grundfos CIU fieldbus modules).</li> </ul> <p>Other features:</p> <ul style="list-style-type: none"> <li>- Auto deaeration during pump standby to avoid breakdowns due to air-locking.</li> <li>- Two SlowMode steps (anti-cavitation), 50 % (maximum flow: 7.925 US gal/hour) and 25 % (maximum flow: 3.963 US gal/hour), e.g. for high-viscosity or degassing liquids.</li> <li>- Service information display to show when service and which wear-part order number is required.</li> <li>- Two-step key lock function to protect the pump against unauthorised access.</li> <li>- Additional display function to provide further information, e.g. the actual mA input signal.</li> <li>- Counter for total dosed volume (resettable), operating hours, etc.</li> <li>- Save and load customised settings as well as reload of factory settings.</li> </ul> <p>Signal inputs/outputs:</p> <ul style="list-style-type: none"> <li>- Input for pulse, analog 0/4-20mA and external stop.</li> <li>- Input for low-level and empty-tank signal.</li> <li>- Two potential-free output relays for maximum 30 V AC/DC (configurable, e.g. alarm, stroke signal, pump dosing, timer etc.)</li> <li>- Output analog 0/4-20mA.</li> <li>- Fieldbus communication interface (GENIbus, for connection of the Grundfos CIU fieldbus converter).</li> </ul> <p><b>Controls:</b> Control variant: AR</p>

Count	Description
	<p>Level control: YES</p> <p>Analog input: 0/4-20 mA</p> <p>Pulse control: YES</p> <p>Ext. Stop input: YES</p> <p>Analog output: 0/4-20 mA</p> <p>Output relays: 2</p> <p>Bus communication: YES</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: 32 .. 104 °F</p> <p>Selected liquid temperature: 68 °F</p> <p>Density: 62.29 lb/ft³</p> <p><b>Technical:</b></p> <p>Type key: DDA 60-10 AR-PVC/V/C-F-31A7A7B</p> <p>Max. Flow: 15.85 US gal/hour</p> <p>Max. flow in slow mode 50%: 7.925 US gal/hour</p> <p>Max. flow in slow mode 25%: 3.963 US gal/hour</p> <p>Min flow: 75 ml/h</p> <p>Turn-down ratio: 1:800</p> <p>Approvals on nameplate: CE,CSA-US,NSF61,RCM</p> <p>Valve type: Standard</p> <p>Maximum viscosity at 100 %: 150 mPas</p> <p>Maximum viscosity in slow mode 50 %: 2000 mPas</p> <p>Maximum viscosity in slow mode 25 %: 3000 mPas</p> <p>Accuracy of repeatability: 1 %</p> <p><b>Materials:</b></p> <p>Dosing head: PVC (Polyvinyl chloride)</p> <p>Valve ball: Ceramic</p> <p>Gasket: FKM</p> <p><b>Installation:</b></p> <p>Range of ambient temperature: 32 .. 113 °F</p> <p>Maximum operating pressure: 145.04 psi</p> <p>Installation set: NO</p> <p>Installation type: No installation set</p> <p>Pump inlet: Conn. Threaded 3/4#NPTM CodeA7</p> <p>Pump outlet: Conn. Threaded 3/4#NPTM CodeA7</p> <p>Max. Suction lift during operation: 9.84 ft</p> <p>Max. Suction lift during priming: 4.92 ft</p> <p><b>Electrical data:</b></p> <p>Maximum power input - P1: 62 W</p> <p>Main frequency: 60 Hz</p> <p>Rated voltage: 1 x 100-240 V</p> <p>Enclosure class (IEC 34-5): IP65 / NEMA 4X</p> <p>Length of cable: 4.92 ft</p> <p>Type of cable plug: USA, Canada</p> <p>Inrush current: 70A at 240V (35A/100V) for 2ms</p> <p><b>Others:</b></p> <p>Net weight: 13.2 lb</p> <p>Gross weight: 15.4 lb</p> <p>COLOR: RED</p>



Company name:

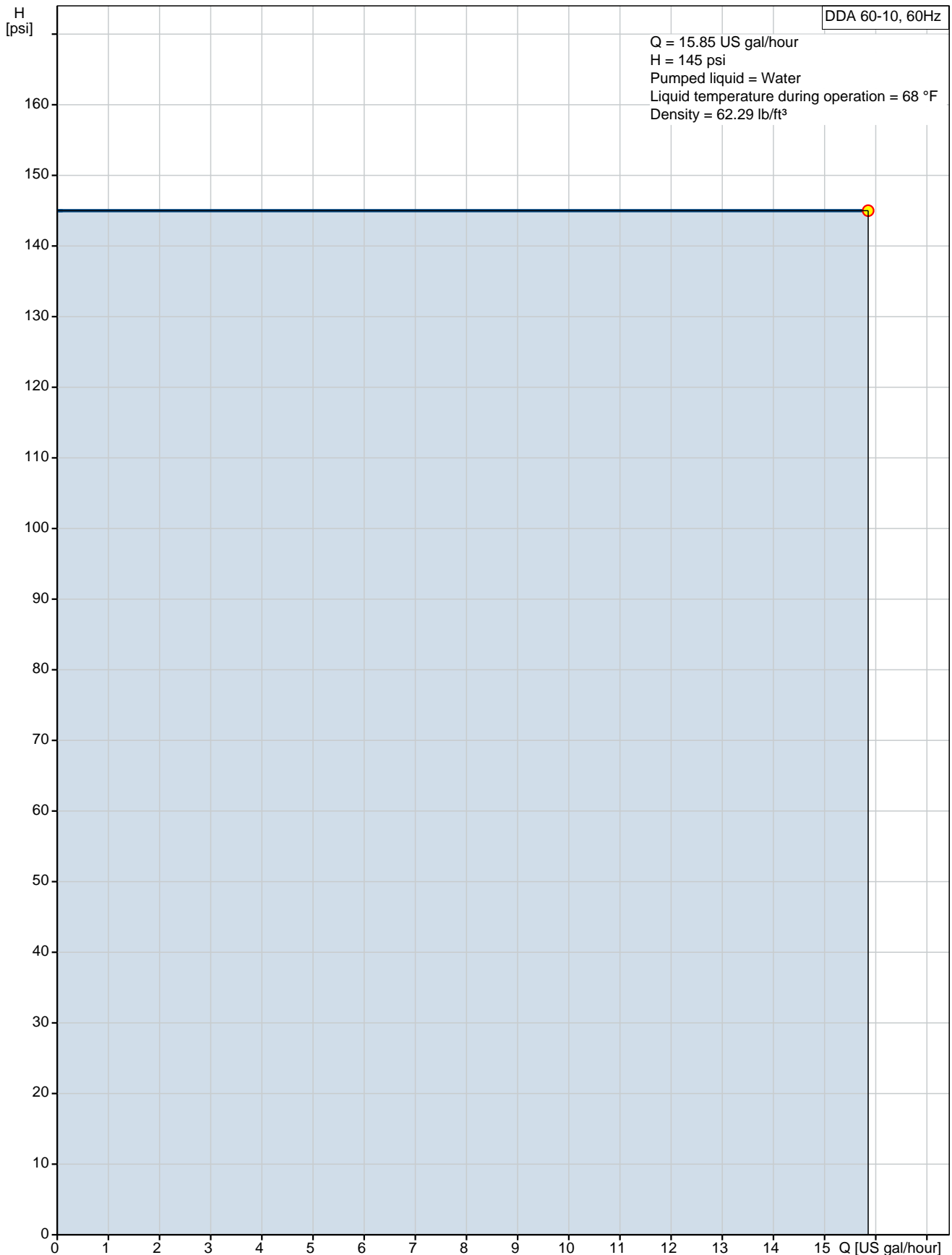
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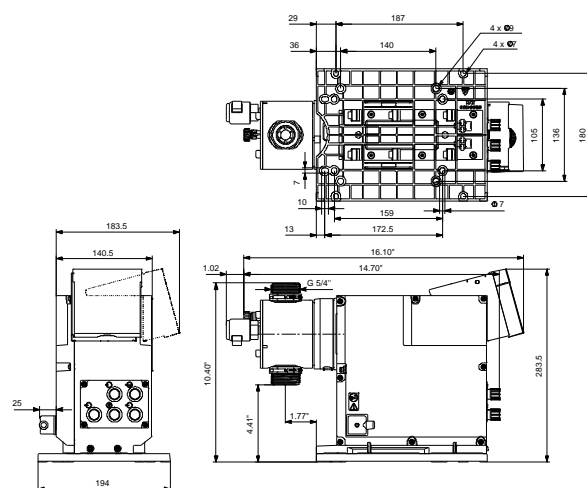
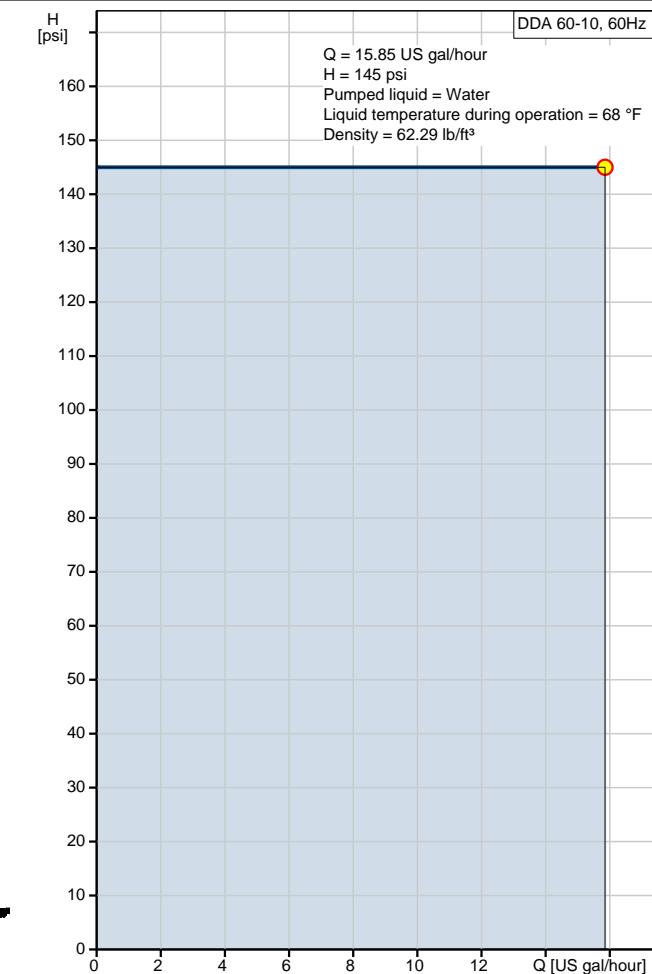
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4/11/2019

## 99159455 DDA 60-10 60 Hz



Description	Value
<b>General information:</b>	
Product name:	DDA 60-10
Product No.:	99159455
EAN:	5712607842437
<b>Technical:</b>	
Type key:	DDA 60-10 AR-PVC/V/C-F-31A7A7B
Max. Flow:	15.85 US gal/hour
Max. flow in slow mode 50%:	7.925 US gal/hour
Max. flow in slow mode 25%:	3.963 US gal/hour
Min flow:	75 ml/h
Turn-down ratio:	1:800
Approvals on nameplate:	CE,CSA-US,NSF61,RCM
Valve type:	Standard
Maximum viscosity at 100 %:	150 mPas
Maximum viscosity in slow mode 50 %:	2000 mPas
Maximum viscosity in slow mode 25 %:	3000 mPas
Accuracy of repeatability:	1 %
<b>Materials:</b>	
Dosing head:	PVC (Polyvinyl chloride)
Valve ball:	Ceramic
Gasket:	FKM
<b>Installation:</b>	
Range of ambient temperature:	32 .. 113 °F
Maximum operating pressure:	145.04 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:	9.84 ft
Max. Suction lift during priming:	4.92 ft
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	32 .. 104 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
<b>Electrical data:</b>	
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:	4.92 ft
Type of cable plug:	USA, Canada
Inrush current:	70A at 240V (35A/100V) for 2ms
<b>Controls:</b>	
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





Company name:

Created by:

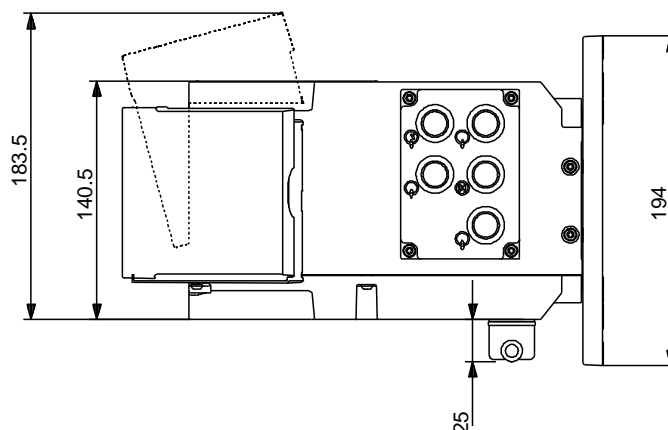
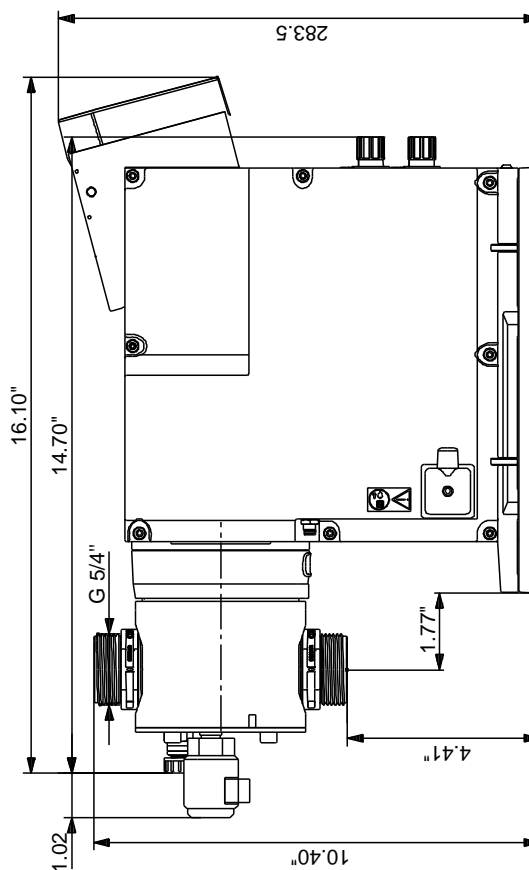
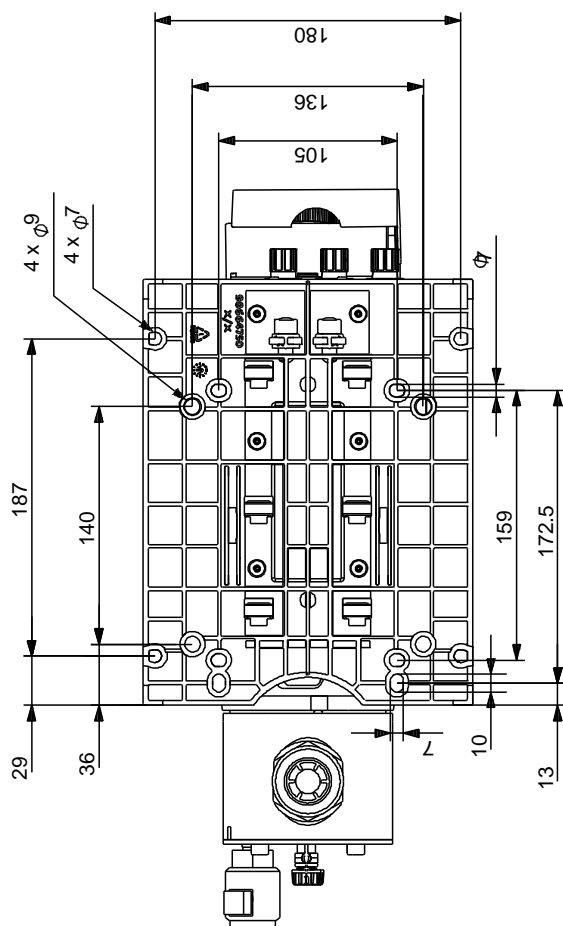
Phone:

Date:

4/11/2019

Description	Value
Bus communication:	YES
<b>Others:</b>	
Net weight:	13.2 lb
Gross weight:	15.4 lb
COLOR:	RED

## 99159455 DDA 60-10 60 Hz



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



Company name:

Created by:

Phone:

Date:

4/11/2019

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**Order Data:**

Product name: DDA 60-10

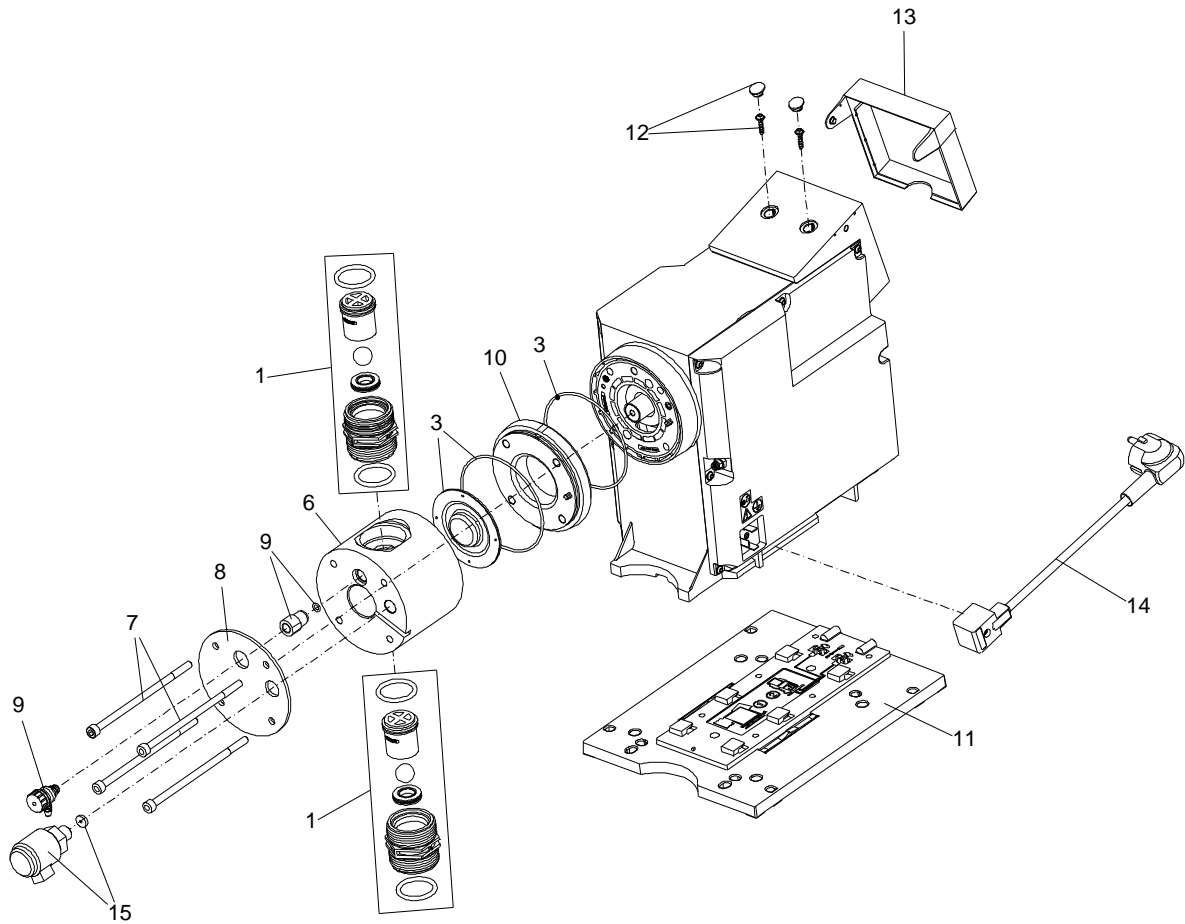
Amount: 1

Product No.: 99159455

Total: Price on request

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( TM067903 for DDE,DDA XS )





**Parts list DDA 60-10, Prod number 99159455**

**Produced After 1644 (production year and week number)**

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	O-ring				1	pcs
	Diaphragm				1	pcs
	Cover cpl.				1	pcs
	Gear				1	pcs
	Shaft				1	pcs
	Extension piece				1	pcs
	Seal				1	pcs
	Foil				1	pcs
	Enclosure				1	pcs
	Sensor				1	pcs
	Pump head flange				1	pcs
- 1	Valve cpl.				1	pcs
	Valve body				1	
	Valve seat				1	
	Ball				1	
	Ball cage				1	
2	O-ring				2	
- 1	Valve cpl.				1	pcs
	Valve body				1	
	Valve seat				1	
	Ball				1	
	Ball cage				1	
2	O-ring				2	
3	Diaphragm				1	pcs
4	O-ring				1	pcs
4	O-ring				1	pcs
4	O-ring				1	pcs
6	Pump head				1	pcs
7	Hex socket head cap screw				4	pcs
8	Cover plate				1	pcs
9	O-ring				1	pcs
- 9	Venting valve				1	pcs
	O-ring				2	
	Screw				1	
	Ball				1	
	Housing				1	
	Hose connection				1	
9	O-ring				2	
9	Double nipple				1	pcs
10	Intermediate ring				1	pcs
11	Base plate				1	pcs
12	Cover for screw				2	pcs
12	Pan washer head screw				2	pcs
12	Pan washer head screw				2	pcs
12	Pan washer head screw				8	pcs
12	Pan washer head screw				4	pcs
12	Pan washer head screw				1	pcs
12	Pan washer head screw				2	pcs
13	Cover for cube				1	pcs
13a	Cover				5	pcs
14	Power cable				1	pcs
16	Cube cpl.				1	pcs
17	I O Board cpl.				1	pcs