

# Procam Diaphragm Metering Pumps



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## Economical and Reliable

These pumps with mechanically actuated dual diaphragms bring the advantages and security of the diaphragm design to applications with operating pressure up to 290 psi and flow rates up to 793 gph at an economical price.

## Applications

- Protecting the metered liquid against contamination from pump gasket particles and lubricants, e.g. for potable water handling and treatment.
- Pumping hazardous or toxic liquids, where a **leakproof pump** is essential.
- An economical solution when **high operating security** and reliability is mandatory.

## Advantage

### Excellent Operating Security

- **Hermetically sealed pump** metering pumphead with mechanically actuated PTFE double-diaphragm.
- **Diaphragm condition monitoring system** signals broken diaphragms by either hose nipple, pressure gauge, or pressure switch.

### Economical Pumping of Hazardous Liquids

- **Excellent chemical resistance** due to high-grade PTFE double-diaphragm.
- **Two year warranty** on the diaphragm due to special qualities of the diaphragm material.

## Options & Features

### Flow Rate Control

- Manual (standard).
- Electric motor (optional).
- Electric motor with integrated control electronics (option).



*DS 50 with stainless steel pumphead and electric flow rate control*

## Modular Design

- Multiple pump combinations are available, with up to 6 pumpheads and different combinations of gear modules (types 15-500).

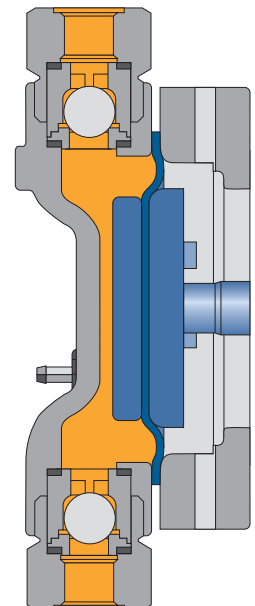
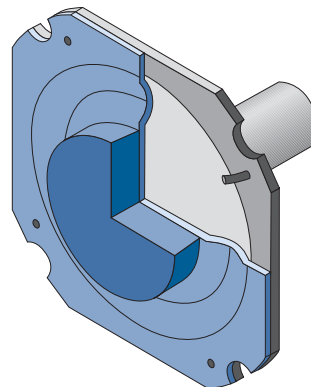
## Materials

### Pump Head and Valve Housing

- Stainless steel construction.
- Plastic construction.

### Gear Box

- Rugged cast iron housing with metallic internals.



*Standard double-diaphragm*

# Dimensions and Gear Data

## Gear Type

Integrated worm drive

## Stroke frequencies, selectable (min<sup>-1</sup>)

60, 86, 120, 172

## Lubrication

Splash Lubrication

## Drive Motor

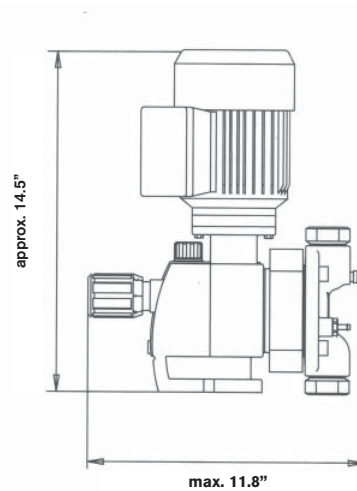
Electric motor according to customer requirements

- TEFC
- Variable Speed
- Explosion-proof

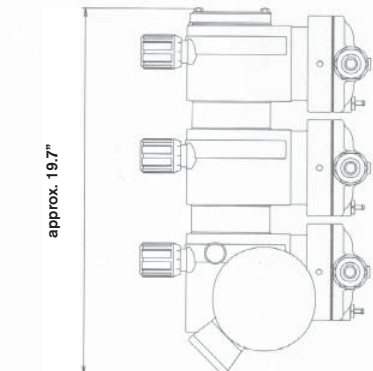
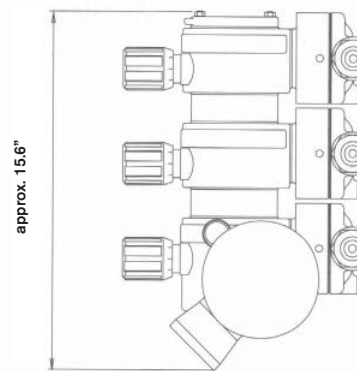
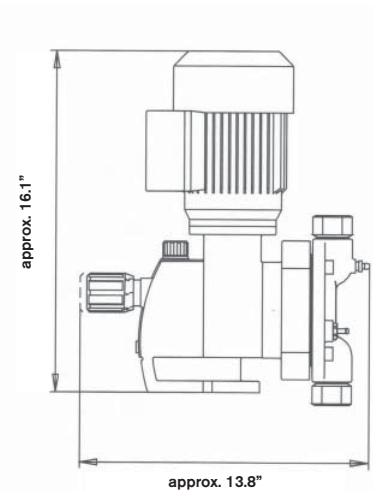
## Pump Weight (without motor)

Approx. 24 lbs. - 42 lbs.

DS 15/50 / DP 15/50



DS 200 / DP 200  
DS 500 / DP 500



# ProCam Capacity Chart

316 Stainless Steel Pumphead	Nominal Max. Capacities* (gph) at stroke speeds				Max. Pressure PSI	Connection NPT
	60	86	120	172		
DS 15	1.6	2.4	3.2	4.7	300	3/8"
DS 50	5.5	7.9	11.1	15.8	150	3/8"
DS 200	22.2	31.7	44.4	63.4	150	1/2"
DS 500	55.5	79.3	111	158.5	60	1"

PVC Plastic Pumphead	Nominal Max. Capacities* (gph) at stroke speeds				Max. Pressure PSI	Connection NPT
	60	86	120	172		
DS 15	1.6	2.4	3.2	4.7	300	3/8"
DS 50	5.5	7.9	11.1	15.8	150	3/8"
DS 200	22.2	31.7	44.4	63.4	150	1/2"
DS 500	55.5	79.3	111	158.5	60	1"

\* Values at 100% volumetric efficiency

# ProCam Compact Metering Station

## A Complete Solution

This compact mixing and preparation unit, combined with a ProCam pump, offers a complete solution for preparing and metering chemical solutions.

### Applications

- Chemical industry, e.g. metering of additives and inhibitors.
- Water preparation and treatment plants.
- Clean-In-Place installations in the food and beverage industries.
- Electroplating and surface treatment processes.
- Preparation of fertilizer solutions.

### Adaptable To Individual Requirements

- Tank sizes from 15 to 150 gallons or on request.
- Standard equipment includes suction pipe, inlet valve, manual stirrer and stable mounting plate for pumps.
- Vessel is calibrated in liters and can be fitted with 1 or 2 contact level switches.
- Cover is easily removed for quick filling and inspection.

### Solid Construction

- A base plate for pumps weighing up to 50 kg provides a stable platform for the pump.
- Temperature range up to 60° C.
- Tanks are UV-resistant and can be used outdoors.
- The polyethylene tank is resistant to most aggressive metered liquids.
- Optional brackets are available to fix the container to the floor.



*ProCam - Compact Metering Station*

### Options

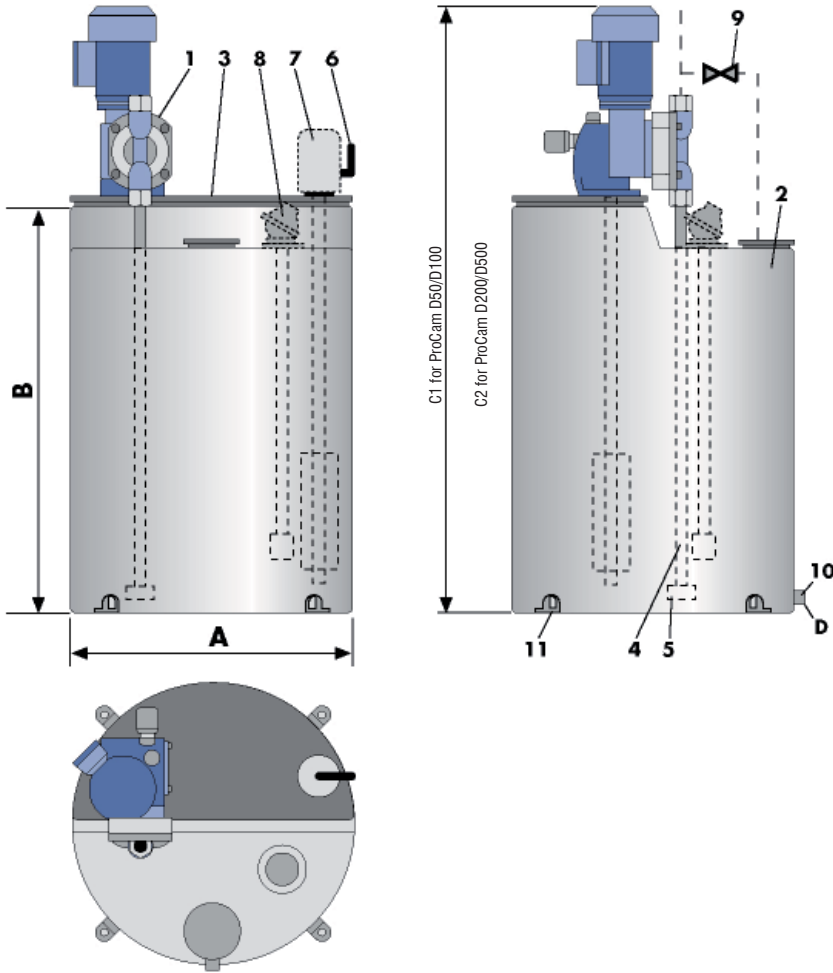
- Electric stirrer.
- Optional choice of 1 or 2 contact level switches is available.
- Pressure limiting valve with bypass to tank.
- Drain valve for tank.

### Installations

The standard specification, including suction pipe, inlet valve, hand operated stirrer and pump base plate, allows the ProCam to become operational at a glance in most installations. The level switched, pressure limiting valve and other options extend its applications to more demanding requirements and extend its operational security.

# Volume and Dimensions

Container	ØA Inches	B Inches	C1 Inches	C2 Inches	D Inches
15 Gallon	18	21	36	38	1/2"
25 Gallon	19	29	44	45	1/2"
50 Gallon	24	34	49	51	1/2"
80 Gallon	27	37	52	54	1"
125 Gallon	33	42	57	59	1"



Item	Description	Quantity	Material
1	ProCam Metering Pump	1	
2	Container	1	PE
3	Mounting Plate	1	PVC
4	Suction Pipe	1	PVC
5	Inlet Valve	1	PVC
6	Manual Agitator	1	PVC
7	Option: Electric Agitator	1	
8	Option: Level Switch	1	
9	Option: Pressure Relief	1	
10	Option: Drain Valve	1	
11	Option: Mounting Clamps	4	PE