

# ST-D

All our products are manufactured in accordance with CE regulations - Die-cast aluminium housing protected by epoxy/anti-acid paint - Flow rate is achieved by operation of a dial control to adjust the stroke length rate from 10%-100% - The vertically motor drives the pump via a coupling (BP and BD series) - Standard motors are "TEFC", 3 phase: 0.18 Kw - 0.25 Kw - 0.37 Kw - 0.55Kw -0.75 Kw; 1400 rpm, Isolation Class F; Protection rating IP55 - Standard power supply: 230/400 Vca / 3 phase / 50 Hz - 275/480 Vca / 3 phase / 60 Hz - Other power supply options available upon request: 230 Vca Single-phase motors 50 or 60 Hz 110 Vca Single-phase 50 or 60 Hz - Tropicalized motors - Other options: Servo motor mechanism which accepts 4-20mA input to remotely control stroke length - Frequency inverter control.

**Valves type:** single ball check valve

**Gm:** Tread gas male BSPm

**Standard power supply:** 230 &ndash; 400 V three phase 50 Hz &bull; 275 &ndash; 480 V three phase 60 Hz &bull; isolation class F

Compact mechanical diaphragm dosing pumps with spring return mechanism. A high torque electric motor drives forward stroke via a worm gear and eccentric mechanism. The robust gearbox reduction systems ensures high performances giving reliability and repeatable performance. Fluid displacement by single piece PTFE diaphragm connected directly to the gearbox return rod.

**Features:** Flow capacities of 10 to 123 l/h (2,64-32,50 GPH) at 50 Hz - 12 a148 l/h (3,17-39,00 GPH) at 60 Hz &bull; Pressure up to 14 bar (203 PSI) &bull; Strokes: 60-60 -120-120-120 at 50 Hz - 72-72-144-144-144 at 60 Hz &bull; Stroke lengths: 2,6-3,1-4 mm - 1&rdquo;-1,2&rdquo;-1,6&rdquo; &bull; Motor Power range: 0,18 kW.



## Characteristics

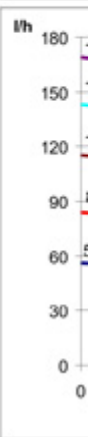
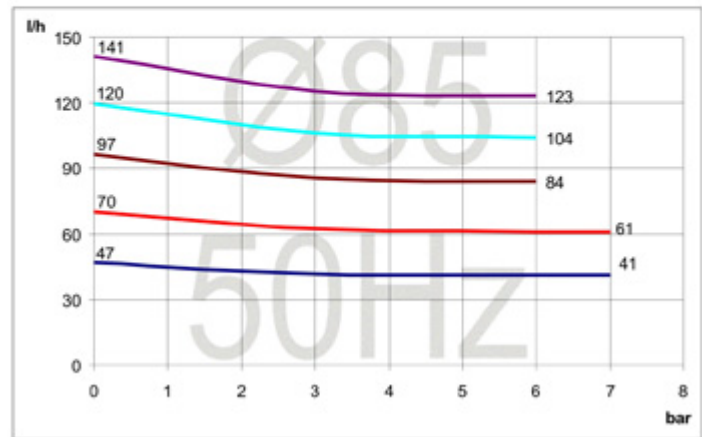
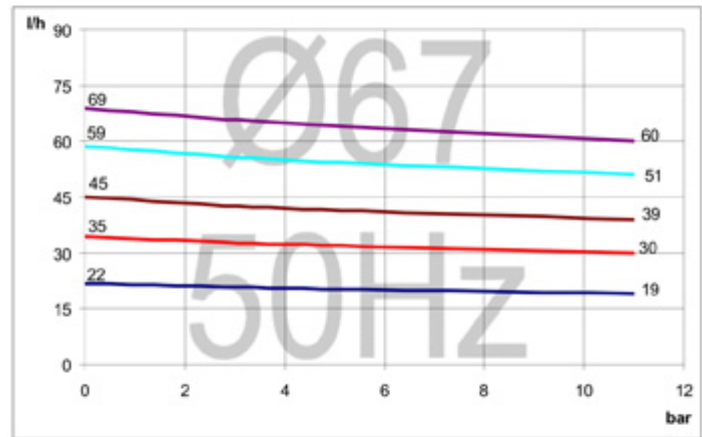
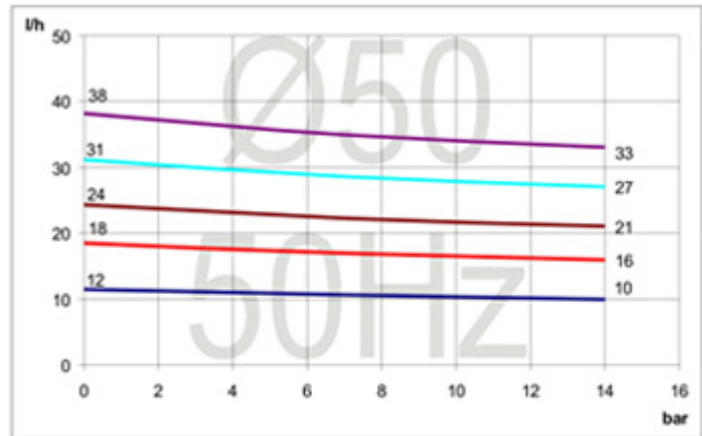
### SPRING RETURN MECHANICAL DIAPHRAGM METERING PUMPS ST-D SERIES / D SERIES

Mechanical diaphragm type pumps are suitable when: Pumped liquid is abrasive or contains suspended solid particles - Zero leakage is essential.

**Pump head:** Standard pump head materials are SS316, PVC and PP - Check valve assemblies (single or double ball) are design for easy maintenace and access - Standard connections are Gas Male-BPSm threads.

## Pressure and Flow Rate Capacity

Portata Flow rate l/h (GPH)		Prevalenza Delivery Head Bar (PSI) AISI		Prevalenza Delivery Head Bar (PSI) PP		Colpi/min Strokes/min		Corsa Stroke lenght mm	Ø Membrana Ø Diaphragm mm	Potenza Power kW	Valvole Valves		
50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz						
10 (2,64)	12 (3,17)	14 (203)	14 (203)	14 (203)	14 (203)	60	72	2,6	50	0,18	½" Gm		
16 (4,23)	18 (4,75)	14 (203)	14 (203)	14 (203)	14 (203)	60	72	4					
21 (5,55)	20 (5,28)	14 (203)	12 (174)	14 (203)	12 (174)	120	144	2,6					
27 (7,13)	30 (7,92)	14 (203)	12 (174)	14 (203)	12 (174)	120	144	3,1					
33 (8,72)	35 (9,26)	14 (203)	12 (174)	14 (203)	12 (174)	120	144	4					
19 (5,02)	21 (5,52)	11 (160)	11 (160)	11 (160)	11 (160)	60	72	2,6	67			0,18	½" Gm
30 (7,92)	33 (8,72)	11 (160)	11 (160)	11 (160)	11 (160)	60	72	4					
39 (10,30)	47 (12,42)	11 (160)	10 (145)	11 (160)	10 (145)	120	144	2,6					
51 (13,47)	61 (16,12)	11 (160)	10 (145)	11 (160)	10 (145)	120	144	3,1					
60 (15,85)	66 (17,44)	11 (160)	10 (145)	11 (160)	10 (145)	120	144	4					
41 (10,83)	43 (13,00)	7,5 (109)	6,5 (94)	7,5 (109)	6,5 (94)	60	72	2,6	85	0,18	½" Gm		
61 (16,12)	73 (19,34)	7 (102)	6,5 (94)	7 (102)	6,5 (94)	60	72	4					
84 (22,19)	101 (26,63)	6 (87)	5 (72)	6 (87)	5 (72)	120	144	2,6					
104 (27,48)	125 (32,97)	6 (87)	5 (72)	6 (87)	5 (72)	120	144	3,1					
123 (32,50)	148 (39,00)	6 (87)	5 (72)	6 (87)	5 (72)	120	144	4					



## Liquid End

**AA Configuration:** AISI (Stainless Steel) 316 pump heads

**BA Configuration:** PVC pump heads

**CA Configuration:** PP pump heads.

## Assembly and Dimension

**Sample Installation**

- A - Main Pipeline
- B - Injection Valve
- C - Backpressure Valve
- D - Pressure Gauge
- E - Pulsation Dampener
- F - Relief Valve
- G - Dosing Pump
- H - Tank Support
- I - Tank
- L - Foot Valve

