

## **PART LIST**

PARTI	LIST		31	R1	BOLT HEAD CAP.
S. NO.	PART NO.	DESCRIPTION	32	R2	FILTER TOP CAP WASHER (14X19X2).
0	.,	220011111111	33	R3	DIAPHRAGM "O" RING (Ø 42X2).
1	P1	DOSING HEAD.	34	R4	PLUNGER WASHER.
2	P2	AIR RELEASE VALVE.	35	R5	SOLENOID SPACER 'O' RING.(Ø 15.6 X 1.78).
3	P3	DIAPHRAGM.	36	R6	P.C.B HOUSING WASHER (90 X 90 X 2.5).
4	P4	DIAPHRAGM SPACER.	37	R7	NRV BODY "O"RING(9.8X2.2).
5	P5	SOLENOID HOUSING.	38	R8	BALL SEAL.
6	P6	MOUNTING BRACKET.	39	R9	BIG STEP WASHER (18X8.5).
7	P7	PVC WASHER.	40	R10	SOLENOID HOUSING ORING (Ø 40 X 2).
8	P8	PVC RING.	41	R11	SOLENOID HOUSING PLATE GROMET.
9	P9	PCB HOUSING.	42	R12	BEADING.
10	P10	NRV BALL GLASS (6MM)[DISCHARGE VALVE].	43	R13	KNOB STICK WASHER.
11	P11	NRV WASHER SMALL (PTFE).	44	E1	P.C.B.
12	P12	NRV BALL PTFE (6MM)[SUCTION VALVE].	45	E2	POWER CORD.
13	P13	NRV BALL CAP	46	E3	TWO WAY CONNECTOR
14	P14	NRV WASHER BIG (PTFE).	47	M1	M4 X 45 BOLT (S.S. 316)
15	P15	NRV BODY.	48	M2	SMALL WASHER (5.2 X 15 X 2).
16	P16	SUCTION FILTER TUBING .	49	M3	SS PLUNGER.
17	P17	TUBING CAP.	50	M4	8 X3 SOLENOID BOLT COMBI.S.S.
18	P18	TUBING CONNECTOR.	51	M5	SOLENOID ASSEMBLY.
19	P19	INJECTION VALVE ADAPTOR.	52	M6	SOLENOID SPACER.
20	P20	KNOB STICK	53	M7	SPRING S.S.
21	P21	SUCTION VALVE.	54	M8	BIG WASHER (8.5 X 18 X 2).
22	P22	DISCHARGE VALVE.	55	M9	8MM NUT (S.S).
23	P23	INJECTION VALVE ASSEMBLY.	56	M10	10X 13 M.S S.TAP. SCREW
24	P24	SUCTION FILTER ASSEMBLY.	57	M11	M6 X 20 BOLT. S.S.
25	P25	TOP CAP	58	M12	M6 WASHER. S.S.
26	P26	FOUR RIB ADAPTER	59	M13	S.S INJECTION VALVE SPRING.
27	P27	SOLENOID HOUSING PLATE.	60	M14	M6 NUT.
28	P28	KNOB	61	M15	PCB M.S S.TAP. SCREW 4 X 6.5
29 30	P29	NRV BALL 8 MM(INJ.VALVE). NRV NOZZLE.	62	M16	STAR WASHER (M4)
	P30				
31	P31	PLUNGER WASHER PTFE.			

# **OPERATION & MAINTENANCE MANUAL**



## **FEATURES**

- Wetted parts suitable for most aggressive chemicals.
- Air bleed arrangement built into pump head.
- PTFE double ball NRV's ensures long life.
- Wide operating voltage range viz. 180-280 V. Automatic voltage compensation to ensure dosing consistency.
- Level switch inter-lock facility available.
- IP 65 Certified .
- Electrical Class 2 .
- CE Certified

## **SCOPE OF SUPPLY**

- Metering pump.
- 3 meter suction & discharge tubing.
- Suction filter cum foot valve.
- Injection / Back pressure assembly.
- O & M manual.

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#### **SPECIFICATIONS**

E Dose is an electronic metering pump using a solenoid, controlled by an internal circuit to drive a reciprocating diaphragm.

Electrical : 230 Volts AC (±20%) 50HZ.

Suction Tubing : 4/6 mm. Discharge Tubing : 4/6 mm.

: 1.5/3/6/10/at 4 Kg/cm<sup>2</sup>. Dosing Rate

Strokes / Minute : ≤ 400. Noise : ≤ 50dB.

## **OPTIONAL**

Level switch interlock : Normally open.

## MATERIAL OF CONSTRUCTION FOR WETTED PARTS:

Pump Head : Glass filled PP.

Diaphragm : PTFE.

Connectors : Glass filled PP.

: PE. Suction tubing : PE. Discharge tubing Ball Seal : VITON

## **INTERPRETATION OF LED's:**

- STATUS LED OFF & LED OFF : Mains supply 230V AC is
- STATUS LED OFF & : Mair supply 230V AC is ON
- STATUS LED ON & LED ON (Blinking) STATUS LED ON & LED ON (Steady)
- LED ON (Steady) but switch is OFF.
  - : Pump is working. : Fault in Pump.

### INSTALLATION

- Install the pump in a dry environment and mount it on a tank/surface using the mounting brackets and nut-bolts provided.
- Place the pump above the liquid to be dosed within a maximum limit of 1.5 meter suction lift.
- The discharge point (marked with arrow) should always be facing upward. The suction nipple will be on the lower side with the suction tubing being immersed completely in solution.
- Cut the suction tubing to the desired length and attach suction filter to it. Ensure that suction filter is placed vertical and always immersed completely in
- Use the remaining tubing on the discharge side and connect the back pressure/injection valve to the injection pipe into which dosing is to be done. Connect nozzle on pump to the injection valves.
- Plug the pump into a 230 Volts AC electrical outlet.

## STARTING THE PUMP.

While starting always first adjust the frequency knob to 100%. Switch on the pump by switching on the switch. Make sure that all the air is primed out of the system by opening the bleed valve until a continuous stream of liquid flows out. Close bleed valve.

## **PRECAUTION**

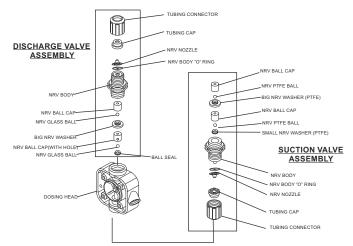


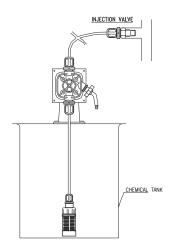
- A) Electrical • Ensure voltage is within range specified for the pump ie.180-280 Volts.
- Electrical connection should be made between "Live-Neutral" & Not Live- Ground".
- Avoid giving supply to dose from the same line as heavy electrical equipment.

#### CAUTION B) General

- Install pump in a shaded place AWAY from direct sunlight.
- Pump is resistant to dust and water but cannot be used in a sub-merged condition.
- Do not dispose off the pump or its parts into the environment.
- Before performing any maintenance on the pump, release internal pressure by operating bleed valve and disconnect power supply.
- Please confirm compatibility of wetted parts with chemical being dosed.
- Clamp the mounting bracket adequately so that vibrations do not loosen the mounting.

### DOSING HEAD EXPLODED VIEW

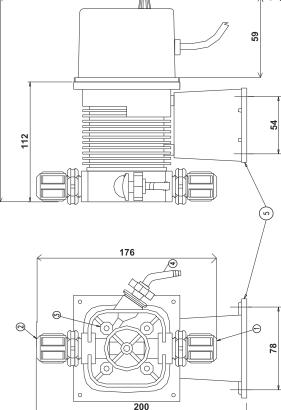






DOSE IS AN ELECTRONIC METERING PUMP WITH

AN INTERNAL CIRCUIT TO DRIVE A DIAPHARAGM **①** A SOLENOID CONTROLLED BY



MOUNTING

SUCTION VALVE DISCHARGE VALV DOSING HEAD