Micropump



OVERVIEW

Line shaft horizontal centrifuge pump; Micropump is used for:

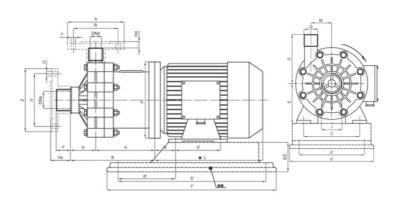
- Sea water, saline water
- %100 Acids, Bases
- Chemical liquid transfers
- Chemical liquid circulations

All types of corrossive liquids

Parameter	Unit Range			
Flowrate	m3/h 9 - 100			
mWc	m 15 - 100			
Connection Diameter	DN 32 - 100			
Suction Diameter	DN 20-150			
Pumping Diameter	DN 20-125			
Speed of Engine	rpm	1450-2950		
Power	kW	0.37 - 5		
Impeller Type	Open & Closed			
Physical Formation	Monobloc			
Casing	Spiral			
Casing Material	PP			
Pump Shaft	Connected to Bearing Shaft			
Working Temperature	-10°C / +120°C			



* Micropump is manufactured specially, regarding to the customer requirements



Micropump(MPR - MPV)



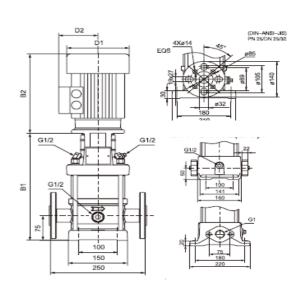
Stainless steel vertical multistage MPS and MPV pumps are used for:

- Transferring liquids of low viscosity, non inflammable and non-explosive, not containing solid particles or fibers
- Water supply & drainage for high-rise buildings, Filtration and transfer at waterworks, pressure boosting in main pipe
- Washing and cleaning systems, boiler feeding, cooling water circulation, water treatment systems, auxiliary system
- Ultrafiltration systems, reverse-osmosis systems, distillation systems, separators, swimming pools
- Agricultural irrigation

Parameter	Unit	Range	
Flowrate	m3/h 0,7 - 240		
Max. Pressure	bar	16-22	
Connection Diameter	DN	32 - 100	
Pumping Diameter	DN	25-150	
Pump Efficiency	%	45-79	
Power	kW	0.37 - 5	
Casing Material -MPV	Stainless Steel		
Casing Material -MPR	Cast iron base & pump cover		
Pump Shaft	Connected to Bearing Shaft		
Working Temperature	-20°C / +120°C		

* Micropump is manufactured specially, regarding to the customer Requirements





Micropump – Dosing Pump



Applications:

- Potable water treatment: Metering of disinfectants
- Cooling circuits: Metering of corrosion inhibitors and biocides
- Waste water treatment: Metering of flocculants
- Paper industry: Metering of additives
- Plastics production: Metering of additives



Micro-Dosing Pump

Model	50/60 Hz Flow(L/h) Pressure(Bar) Flow(GPH) Pressure(psi)			Diaphragm Dia. (mm)	Power	Connection Size	
MDP0110	1	10	0.3	145	120	34	5*8mm
MDP0408	3.8	7.6	1	110	180		
MDP0505	5	5	1.3	73		41	
MDP0804	7.6	3.5	2	51		41	
MDP1002	10	2	2.6	29			
MDP1202	12	1.5	3.2	22		52	
MDP1501	15	1	4	15			

Materials:

- Pump Head: PVC, PVDF, SS304, SS316
- Diaphragm: Composite PTFE diaphragm
- Check Valve Body: PVC, PVDF, SS304, SS316 (same as pump head selection)
- Valve Ball: Ceramic, SS304
- Valve Seat: PTFE, SS316
- Suction and Discharge Tubing: PE

PVC SS316 PVDF

Micro-Dosing Pump/Pump Head
Materials





Technical data

Nominal size	DN10 to DN800		
Nominal pressure	PN10 to PN40 (depending on diameter)		
Flow range	0.1 to 10 m/s (0.02 to 5000 l/s)		
Accuracy	0.5 % (0.5 to 10 m/s) of reading value		
	1 % (0.1 to 0.5 m/s) of reading value		
Maximal medium temperature	70°C (158°F) for rubber liner 130°C (266°F) for PTFE liner in remote version		
Ambient temperature	-20 to 60 °C (-4 to 140°F)		
Power supply	 115/230V (+10%, -15%), 50/60Hz, auto selectable 12V, 24V, 48V DC/50/60Hz as option 		
Power consumption	10 VA		
Liner	hard rubberPTFE		
Electrodes	 CrNi (stainless) steel 1.4571 Hastelloy C276 Tantalum 		
Measuring tube	Stainless steel 1.4201, dimensions according to DIN 17457		
Flange	Steel 1.0402 or higher Dimensions according to EN1092, DIN2501 (BS 4504), ANSI B16.5, Sanitary (DIN11851 or Tri Clamp), flangeless wafer style		
Protection category	Compact version: IP67 Remote version: sensor IP68, converter IP65 (optionally IP67)		
Outputs	 Frequency 0 to 12 kHz with programmable flowrate and function Pulse 0 to 50 Hz with programmable volume, function and pulse width Relay contacts 100V/0.5A with programmable function Current loop 4 to 20 mA with programmable flowrate and function 		
Input	Digital input with programmable function		
Communication	RS485, RS232		
Displayed values	Flowrate (m3/h, l/s, US.Gal/min, user)		
	Volume (m3, I, US.Gal, user) Positive total positive and qualified (alegant le dails) columns		
Control	Positive, total, negative and auxiliary (clearable, daily) volume Keyboard Magnetic pointer RS232 and RS485		
Low-flow cutoff	Programmable value		
Time constant	Settable in range 1 to 20 s		
Other features	Test of excitation coils, status of pipe line and electronic unit Diagnostic of internal temperature and power supply voltages Real time circuit for datalogging Datalogger memory up to 15000 values (programmable sample rate) Registration of min. and max. flowrate including date and time		
Conformity requirements	LVD (safety) according to EN 61010-1, EN61010-1/A2 PED according to directive 97/23/EC EMC according to EN 61000 part 3-2, 3-3, EN 61000 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, EN 61000 part 6-2, EN 50081-1		

