Reliable & High Precision
Dosing Pumps

Model : DP/60/HYD/VIII

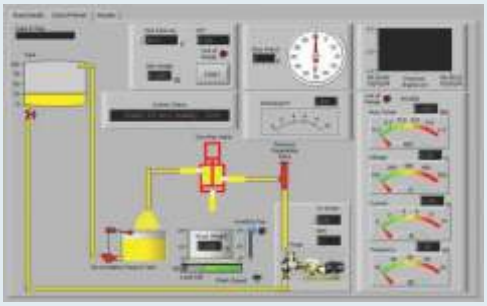
Multi Head Dosing Pump,
Space Saving, Modular Design with
any Combination of Plunger &
Diaphragm Heads & MOC's

SHAPOTOOLS

INTRODUCTION

Shapotools are the pioneers of dosing, proportioning and metering pumps in India since 1966. Shapotools was established in the year 1965. Initially the company was manufacturing jigs, fixtures, moulds & dies. From 1966 onwards, Shapotools switched to production of precision reciprocating pumps and now has over 50 years of experience. We pioneered in the design and manufacture of metering & dosing pumps in India. Since then, we have established a significant presence in the Indian market, together with a number of exports. The company caters to a diversified customer base, inclusive of project consultants, plant manufacturers (OEM's) & end users. We are ISO 9001 certified since 2003.

Pump Testing



Shapotools Metering Pumps are high precision positive displacement pumps, as per API 675, for controlled volume pumps, together with smaller non API mechanically driven diaphragm pumps. The discharge can be varied from zero to maximum capacity while pumps are running or at rest. Our pump designs make them an ideal flow control element in chemical process, for the feeding of chemicals with a high degree of accuracy, even under very high discharge pressure conditions. Our products are robust and of unmatched quality and offer considerable savings to customer on account of compactness, low installation cost, operational cost and minimum maintenance. Our design, manufacturing & testing facilities are geared to meet the exact requirements of the customer. By closely interacting with our customer's needs, our product has continuously evolved to be one step ahead of the competition.

We are fully committed to providing the finest pumps, the best engineering, the most attentive customer service and the greatest after sales support possible. Our modern manufacturing and calibrated testing facilities are accepted by all our prestigious customers.

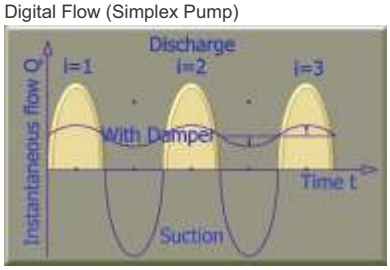
Modern Manufacturing Facilities

While our competitors continue to flatter us by copying our older designs, we welcome you to our next generation of pumps!

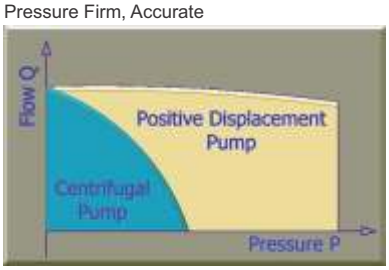
Typical Characteristics

Shapotools Metering Pumps have a capacity output which is digital in Nature, linear in proportion to the length of stroke & speed and is almost Independent of the discharge pressure.

Digital Flow (Simplex Pump)



Pressure Firm, Accurate



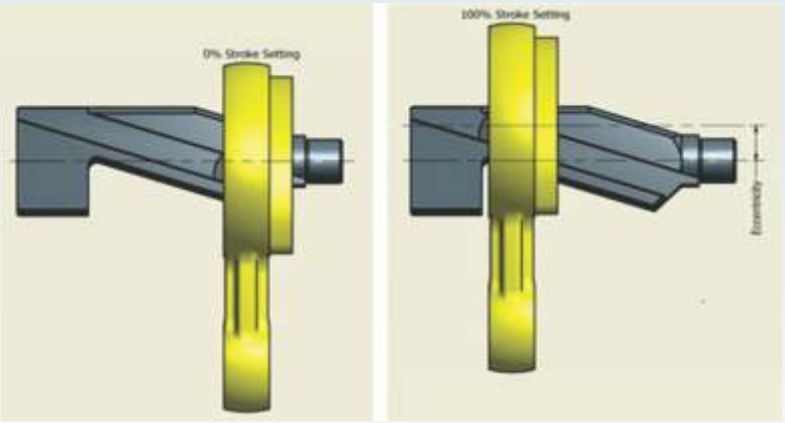
Typical Applications

• Chemical	• Textiles	• Paper	• Consultancy Agencies
• Cosmetic	• Nuclear Reactor	• Petroleum	• Steel
• Detergents	• Water Treatment	• Pharmaceuticals	• Fertilizers
• Food & Beverages	• Paints	• Power	• Institutes

Typical applications of our pumps are the accurate dosing & mixing of acids, alkalis, slurries, viscous liquid, etc. which may be pumped at elevated, ambient or low temperatures, 24 hrs. a day. Our range covers everything from the single pump to a complete automated metering dosing system with all the necessary accessories, our API 675 pumps are of plunger & hydraulically operated diaphragm type with metering ranges from fractional to twenty thousand liters per hour per pump head. Pumps can be offered in simplex, duplex or multiple heads (upto twelve heads) for handling different chemicals with a common motor. Each head has independent connections & capacity of each head can also be independently adjustable. The multiple heads of the pumps can be arranged in a linear chain or in a tier formation.

Stroke Adjustment

The stroke of the pump is controlled by a precision machined, hardened slotted crank, eccentric and connecting rod mechanism, which ensures a positive motion on both the forward and return stroke of the plunger. The pump discharge is variable while pump is running or at rest from zero (0%) to full stroke (100%).



Remote - Automatic, Electrically and Pneumatically operated pump

The stroke of the pump can be controlled either :-

- Local - Manual
- Remote - Automatic, Electrically (4-20mA) or Pneumatically (0.2 – 1 kg/sq.cm.)

The speed of the pump can be controlled :-

- Remote - Automatic, Electrically (4-20mA)

Liquid End Material

Wetted Parts can be offered in :-

- Stainless Steel 304 / 316 / 304L / 316L
- Plastics P.V.C. / P.P. / PTFE - Virgin, Carbon Filled or Glass Filled
- Steel / Steel with Lining or Coating of FEP or PVDF
- From Other Machinable Materials.

Accessories Available

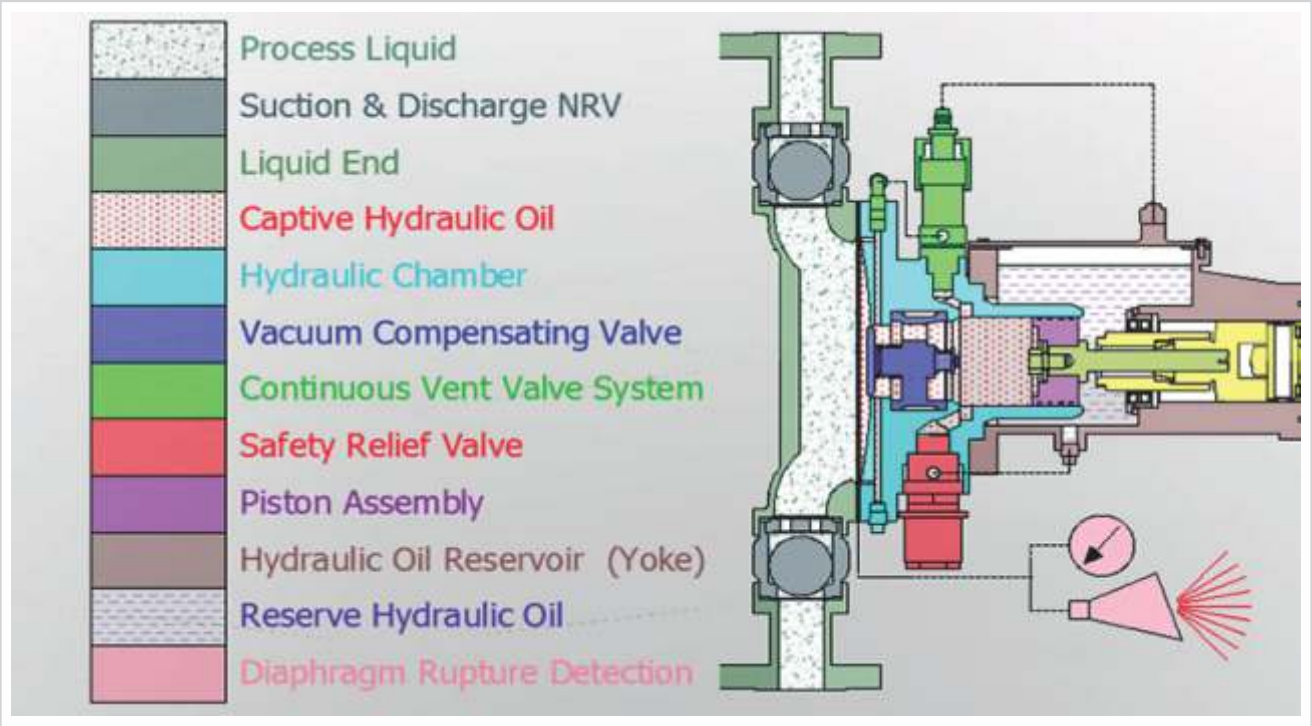
- Baseplate & Coupling
- Motor & VFD (Frequency Inverter)
- Safety Relief Valve & Back Pressure Valve (Anti Siphon Valve / NRV)
- Strainer (Basket & Y Type)
- Pulsation Damper (Volume Bottle Type / Diaphragm Type / Bladder Type) & Pressure Gauge
- Pressure Switch for Diaphragm Rupture
- Storage Tank & Agitator
- Calibration Pot
- Homogenizing Valve

API 675 PUMPS

Hydraulically Operated Sandwich Diaphragm Type Liquid Ends

Features :

- No Leakages / Robust Design
- Hydraulically Balanced Sandwich (Double) Diaphragm with Rupture Detection
- Built in Safety Relief Valve
- High Pumping Pressures & API 675 Accuracies
- Low NPSHR (Pull back design available for ultra low NPSHR for viscous liquids / high vapour pressure)
- Continuous Hydraulic Oil Venting
- Wide range of Plastic & Metallic MOCs
- Positive return Stroke Mechanism
- Permits Pumping of Slurries and Viscous Liquids



The diaphragm is hydraulically actuated. Its function is basically that of a partition. Hence, very high pumping pressures can be attained.

The diaphragm material is usually Teflon but also supplied in Stainless steel in some cases for extreme duty conditions & temperatures.

There is no leakage of the process fluid as it is hermetically sealed.

The diaphragm has a long life as it is always in hydraulic balance, with the liquid being pumped on one side, and process fluid on the opposite side.

The system is safe guarded by a built in relief valve on the hydraulic side, a diaphragm actuated compensating valve & Continuous Hydraulic oil venting system.

A rupture detection system is provided to detect diaphragm failure, in order to prevent the contamination of the metered fluid. The two diaphragms are marginally separated by a spacer, and are linked together by a light vacuum. In case of diaphragm failure the vacuum turns to pressure which is indicated by a compound gauge, switch or transmitter. There is no intermediate fluid which virtually eliminates the possibilities of contamination of the pumped liquid.

The pumps are of glandless design eliminating all kinds of leakages.

Plunger Type Liquid Ends

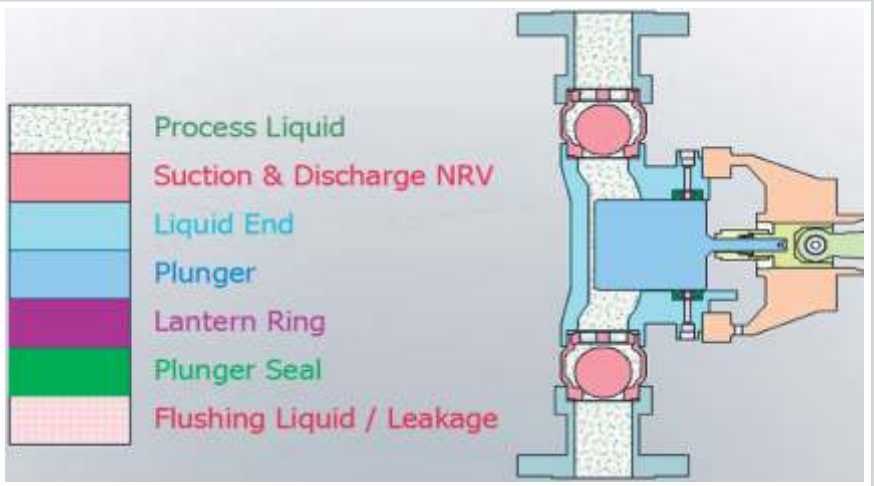
Features :

- Simple Design / Economical / Robust Design
- Special Seal for Minimal Leakage
- Low NPSHR
- Easy To maintain
- High Pumping Pressures & API 675 Accuracies
- Available with Jacketing for Molten Liquids

Standard Type

Features :

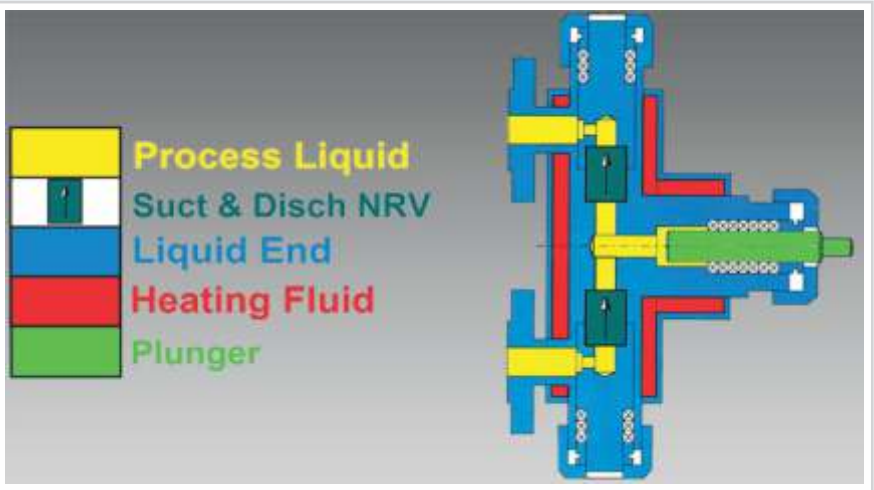
- Due to their simplicity they are economical
- Low maintenance cost
- Can be provided with Latern Ring Flushing Connections
- Have Low NPSHR requirement
- High Reliability



Jacketed Heads

Features :

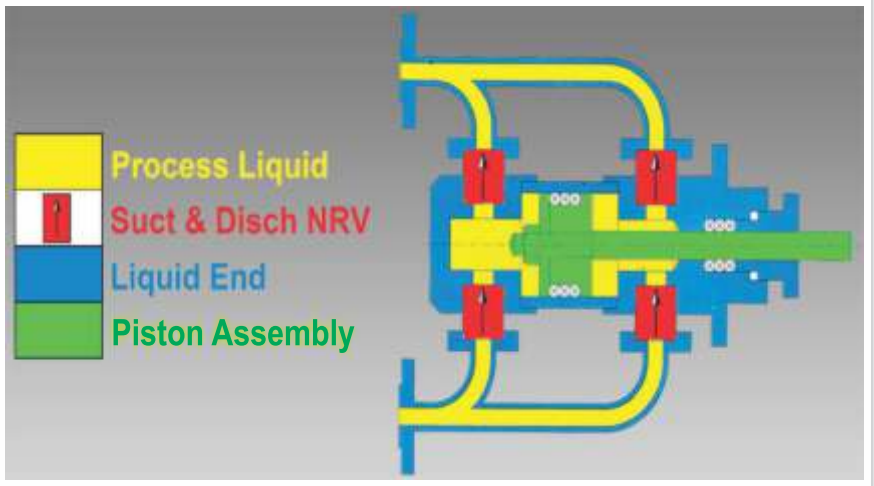
- The Jacket encloses the check valves & gland chamber
- Valves are Cartridge Type & be removed for servicing without dismantling the suction and discharge Connections
- Can be supplied in diaphragm type pumps also



High Capacity Heads

Features :

- For capacities greater than nine thousand Litres per Hour and having low discharge pressures, double acting type piston pump heads can be provided.



PUMP MODELS

Model : DP/20

Pump model DP/20 is one of our most versatile models suitable for a very wide range of flow rates & pressures

DP/20/HYD - Hydraulic Diaphragm in Metallic Construction

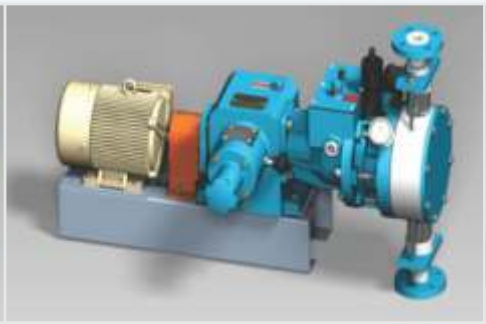
DP/20/HYD - Hydraulic Diaphragm in Plastic Construction

DP/20 - Metallic Plunger Type

Model : DP/30 & DP/60

Pump models DP/30 & DP/60 are similar in appearance

DP/30/HYD - Hydraulic Diaphragm in Metallic Construction



DP/30/HYD - Hydraulic Diaphragm in Plastic Construction

DP/60 - Metallic Plunger Type

Model : DP/60HP & DP/45

Pump models DP/45 & DP/60HP are similar in appearance

DP/60HP/HYD - Hydraulic Diaphragm in Metallic Construction

DP/60HP/HYD - Hydraulic Diaphragm in Plastic Construction

DP/45 - Metallic Plunger Type

Model : DP/90 & DP/70/II

Pump models DP/90 & DP/70/II cover very high flow rates & pressures. DP/70 is multi cylinder type.

DP/90/HYD - Hydraulic Diaphragm in Metallic Construction

DP/90/II - Duplex Pump Metallic Double Acting Piston Type for Very High Flow Rates

DP/70/II - Duplex Pump Metallic Plunger Type

SHAPOTOOLS PUMP MODEL SELECTION & SIZING

How would you choose your pump model?

Greater the Discharge Capacity & Pressure, higher the pump model as is indicated in the preliminary pump model selection chart. From the chart it is clear that for a given pump stroke length, higher the Discharge Capacity, lower the Maximum Permissible Discharge Pressure and vice versa. When sizing the plunger diameter it is essential to check whether the plunger load specified for a pump model of a particular stroke length is capable of withstanding the maximum discharge pressure. If the discharge pressure is higher than the Maximum permissible Discharge pressure or if the required capacity can not be met by the maximum plunger diameter available for a given pump model, then the next larger pump model must be selected. Alternatively a multi-cylinder pump can be selected in which the capacity is attained by summing up the discharges of each individual cylinder.

A small metering pump unit with two pump heads may be less expensive than a larger unit with one head. Moreover, the application of two or more pump heads will reduce discharge pulsation and increase the pump turn-down ratio. Low SPM is preferred for high viscosity fluids when NPSHA is low or plastic material of construction. When handling thin clear liquids at low discharge pressures, the volumetric efficiency is high. The volumetric efficiency drops slightly while pumping at high discharge pressures. High viscosity fluids, suspensions, or plastic material of construction.

PUMP MODEL SELECTION CHART

Stroke Length (mm)	Strokes Per Minute	Plunger Force (Kgf)	Plunger Diameters > (mm)	15	25	38.4	46.3	54	60.3	66.7	77	91.5	100	114.3	127	161.5
20	57	248	Flow (LPH)>	11	30.6	72.1	104.8	142.6	177.8	217.5	289.8	–	–	–	–	–
			Pr (Kg/cm^2g)>	116	41.8	17.7	12.2	8.3	6.2	4.6	2.8	–	–	–	–	–
	70	228	Flow (LPH)>	13.5	37.5	88.5	128.7	175.1	218.3	267.1	356	–	–	–	–	–
			Pr (Kg/cm^2g)>	106.6	38.4	16.3	11.2	7.5	5.5	4	2.4	–	–	–	–	–
	100	525	Flow (LPH)>	19.3	53.6	126.5	183.9	250.1	311.9	381.6	508.5	–	–	–	–	–
			Pr (Kg/cm^2g)>	117.9	42.4	18	12.4	8.5	6.3	4.7	2.9	–	–	–	–	–
	114	228	Flow (LPH)>	22	61.1	144.2	209.6	285.1	355.5	435	579.7	–	–	–	–	–
			Pr (Kg/cm^2g)>	106.6	38.4	16.3	11.2	7.5	5.5	4	2.4	–	–	–	–	–
	141	216	Flow (LPH)>	27.2	75.6	178.3	259.2	352.6	439.7	538	717	–	–	–	–	–
			Pr (Kg/cm^2g)>	101	36.4	15.4	10.6	6.9	5.1	3.7	2.1	–	–	–	–	–
	196	168	Flow (LPH)>	37.8	105.1	247.9	360.4	490.2	611.2	747.9	996.7	–	–	–	–	–
			Pr (Kg/cm^2g)>	78.6	28.3	12	7.5	4.8	3.4	2.3	1.1	–	–	–	–	–

Stroke Length (mm)	Strokes Per Minute	Plunger Force (Kgf)	Plunger Diameters > (mm)	15	25	38.4	46.3	54	60.3	66.7	77	91.5	100	114.3	127	161.5
30	60	444	Flow (LPH)>	–	–	–	165.5	225.1	280.7	343.4	457.7	646.2	771.9	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	21.8	16	12.8	10.5	7	4.3	3.2	–	–	–
	75	413	Flow (LPH)>	–	–	–	206.8	281.4	350.8	429.3	572.1	807.8	964.9	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	20.3	14.9	11.9	9.3	6.4	3.8	2.8	–	–	–
	100	348	Flow (LPH)>	–	–	–	275.8	375.1	467.8	572.3	762.8	1077.1	1286.5	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	17.1	12.6	10.1	7.5	6	2.8	1.9	–	–	–
	120	331	Flow (LPH)>	–	–	–	330.9	450.2	561.3	686.8	915.3	1292.5	1543.8	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	16.3	12	9.1	7	4.6	2.5	1.7	–	–	–
	141	319	Flow (LPH)>	–	–	–	388.9	528.9	659.6	807	1075.5	1518.7	1813.9	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	15.7	11.5	8.7	6.6	4.4	2.4	1.6	–	–	–
	196	283	Flow (LPH)>	–	–	–	540.5	735.3	916.8	1121.8	1495	2111.1	2521.5	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	13.9	10.2	7.4	5.6	3.6	1.8	1.1	–	–	–
45	57	544	Flow (LPH)>	–	–	–	–	320.7	399.9	489.4	652.2	920.9	1099.9	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	19.6	15.7	12.9	9.2	5.8	4.4	–	–	–
	70	544	Flow (LPH)>	–	–	–	–	393.9	491.2	601	800.9	1130.9	1350.8	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	19.6	15.7	12.9	9.2	5.8	4.4	–	–	–
	93	489	Flow (LPH)>	–	–	–	–	523.3	652.5	798.4	1064	1502.5	1794.6	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	17.6	14.1	11.6	8	4.9	3.7	–	–	–
	117	480	Flow (LPH)>	–	–	–	–	658.4	820.9	1004.5	1338.6	1890.3	2257.8	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	17.3	13.9	11.4	7.8	4.8	3.6	–	–	–
	149	471	Flow (LPH)>	–	–	–	–	838.4	1045.5	1279.2	1704.8	2407.3	2875.3	–	–	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	17	13.6	11.1	7.6	4.7	3.5	–	–	–
60	60	624	Flow (LPH)>	–	–	–	–	450.2	561.3	686.8	915.3	1292.5	1543.8	2016.9	2490	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	22.5	18.1	14.8	11.1	7	5.4	3.6	2.4	–
	75	593	Flow (LPH)>	–	–	–	–	562.7	701.7	858.5	1144.1	1615.6	1929.7	2521.1	3112.5	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	21.4	17.2	14	10.5	6.5	5.1	3.3	2.2	–
	100	533	Flow (LPH)>	–	–	–	–	750.3	935.6	1144.7	1525.5	2154.2	2573	3361.4	4149.9	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	19.2	15.4	12.6	9	5.6	4.3	2.7	1.7	–
	123	513	Flow (LPH)>	–	–	–	–	922.8	1150.7	1408	1876.4	2649.6	3164.7	4134.6	5104.4	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	18.5	14.9	12.1	8.5	5.3	4	2.5	1.6	–
	150	493	Flow (LPH)>	–	–	–	–	1125.4	1403.9	1717	2288.3	3231.2	3859.4	5042.2	6224.9	–
			Pr (Kg/cm^{2}g)>	–	–	–	–	17.8	14.3	11.7	8.1	5	3.8	2.3	1.4	–
60HP	60	1440	Flow (LPH)>	–	–	–	–	–	–	686.8	915.3	1292.5	1543.8	2016.9	2490	4026.5
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	34.1	25.6	18.1	15.2	11.6	8.9	4.5
	74	1360	Flow (LPH)>	–	–	–	–	–	–	847.1	1128.9	1594.1	1904	2487.5	3071	4966
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	32.2	24.1	17.1	14.3	11	8.2	4.1
	93	1267	Flow (LPH)>	–	–	–	–	–	–	1064.6	1418.7	2003.4	2392.9	3126.1	3859.4	6241.1
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	30	22.5	15.9	13.3	10.2	7.5	3.7
	112	1260	Flow (LPH)>	–	–	–	–	–	–	1282	1708.6	2412.6	2881.7	3764.8	4647.9	7516.2
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	29.8	22.4	15.8	13.3	10.1	7.4	3.7
	150	1253	Flow (LPH)>	–	–	–	–	–	–	1717	2288.3	3231.2	3859.4	5042.2	6224.9	10066.3
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	29.6	22.2	15.8	13.2	10.1	7.4	3.6
90	60	1529	Flow (LPH)>	–	–	–	–	–	–	1030.2	1373	1938.7	2315.7	3025.3	3734.9	6039.8
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	36.2	27.1	19.2	16.1	12.3	9.6	5
	75	1458	Flow (LPH)>	–	–	–	–	–	–	1287.8	1716.2	2423.4	2894.6	3781.6	4668.7	7549.7
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	34.5	25.9	18.3	15.3	11.7	9	4.6
	100	1413	Flow (LPH)>	–	–	–	–	–	–	1717	2288.3	3231.2	3859.4	5042.2	6224.9	10066.3
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	33.4	25.1	17.8	14.9	11.4	8.7	4.4
70	60	1529	Flow (LPH)>	–	–	–	–	–	–	1602.6	2135.7	3015.8	3602.2	4706	5809.9	9395.2
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	36.2	27.1	19.2	16.1	12.3	9.6	5
	75	1458	Flow (LPH)>	–	–	–	–	–	–	2003.2	2669.6	3769.8	4502.7	5882.5	7262.4	11744
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	34.5	25.9	18.3	15.3	11.7	9	4.6
	100	1413	Flow (LPH)>	–	–	–	–	–	–	2670.9	3559.5	5026.4	6003.6	7843.4	9683.2	15658.7
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	33.4	25.1	17.8	14.9	11.4	8.7	4.4
	115	1315	Flow (LPH)>	–	–	–	–	–	–	3071.6	4093.5	5780.3	6904.1	9019.9	11135.7	18007.5
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	31.1	23.3	16.5	13.8	10.6	7.9	3.9
	150	1218	Flow (LPH)>	–	–	–	–	–	–	4006.4	5339.3	7539.5	9005.4	11765.1	14524.8	23488
			Pr (Kg/cm^{2}g)>	–	–	–	–	–	–	28.8	21.6	15.3	12.8	9.4	7.1	3.4

NON API PUMPS

SHAPOTOOLS

Mechanically Actuated Diaphragm Type Pumps

Features :

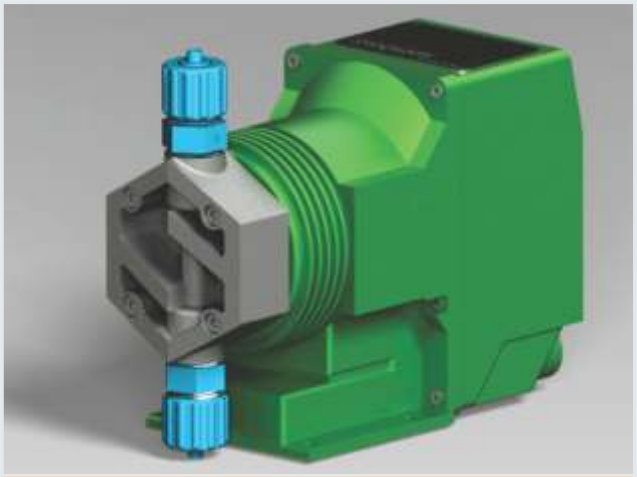
- Simple Design, Economical & Easy to maintain
- No Leakage & Low NPSHR
- Suitable for Flame Proof Area
- Wide range of plastic & Metallic MOCs

PUMP MODEL	Stroke Lg (MM)	DIAPH DIA	SPM	Max Capacity (LPH)	Max Pressure (kg/cm Sq)	Connection (mm)	Max Motor (KW)
DP/3/DIA/50	3	50	29	6	6	15	0.04
DP/3/DIA/50	3	50	48	9.9	6	15	0.04
DP/3/DIA/65	3	65	29	12	6	15	0.04
DP/2/DIA/80	2	80	49	20	8	15	0.37
DP/3/DIA/50	3	50	98	20	6	15	0.04
DP/3/DIA/65	3	65	48	20	6	15	0.04
DP/2/DIA/90	2	90	49	26	8	15	0.37
DP/3/DIA/50	3	50	144	31	6	15	0.06
DP/4/DIA/80	4	80	49	40	8	15	0.37
DP/3/DIA/65	3	65	98	42	6	15	0.06
DP/3/DIA/50	3	50	185	43	6	15	0.06
DP/4/DIA/90	4	90	49	52	8	15	0.37
DP/3/DIA/65	3	65	144	64	6	20	0.06
DP/8/DIA/80	8	80	49	89	8	20	0.37
DP/8/DIA/90	8	90	49	115	7.3	20	0.37
DP/8/DIA/100	8	100	49	143	5.6	20	0.37
DP/8/DIA/120	8	120	49	147	3.4	20	0.37
DP/8/DIA/80	8	80	98	178	8	25	0.37
DP/8/DIA/90	8	90	98	221	7.4	25	0.37
DP/8.5/DIA/130	8.5	130	49	243	8	25	0.75
DP/8/DIA/80	8	80	147	268	8	25	0.37
DP/8/DIA/100	8	100	98	286	5.7	25	0.37
DP/8/DIA/90	8	90	147	345	7	25	0.37
DP/8.5/DIA/150	8.5	150	49	350	7.5	25	0.75
DP/8/DIA/80	8	80	196	379	6	25	0.75
DP/8/DIA/120	8	120	98	388	3.5	25	0.37
DP/8.5/DIA/170	8.5	170	49	425	5.5	25	0.75
DP/8/DIA/100	8	100	147	429	5.4	25	0.37
DP/8/DIA/90	8	90	196	460	4.4	25	0.75
DP/8.5/DIA/130	8.5	130	98	487	7.8	25	0.75
DP/8/DIA/100	8	100	196	543	3.3	25	0.75
DP/8/DIA/120	8	120	147	582	3.3	25	0.75
DP/8.5/DIA/150	8.5	150	98	700	5.5	40	0.75
DP/8.5/DIA/130	8.5	130	147	730	7.1	40	0.75
DP/8/DIA/120	8	120	196	777	1.8	40	0.75
DP/8.5/DIA/170	8.5	170	98	851	4	40	0.75
DP/8.5/DIA/130	8.5	130	196	973	6.1	40	1.12
DP/8.5/DIA/150	8.5	150	147	1050	4.9	40	0.75
DP/8.5/DIA/170	8.5	170	147	1251	3.5	40	1.12
DP/8.5/DIA/150	8.5	150	196	1400	4.2	40	1.12
DP/8.5/DIA/170	8.5	170	196	1932	2.9	50	1.12

Electronic Diaphragm Type Pumps

Features :

- Low Cost
- Low Power Consumption
- Optional Stroke control
- Single Phase
- Wide range of plastic & Metallic MOCs



'H' SERIES

Technical Features :

- **Mounting** : Wall / Foot Mounting
- **Diaphragm** : Teflon
- **Housing** : Polycarbonate
- **Valves** : Double Ball
- **Connections** : ¼" BSP
- **SPM** : 0 to 150
- **Power** : 15/24 Watts, 230 V ± 10% Single Phase
- **Working Temp.** : 5/45 °C
- **Protection** : IP-44
- **Weight** : 5 Kgs/ Approx.
- **Motor** : Not Required

- **Suitable for Safe Area (Non Flame Proof)**

'H' Series		'V' Series		'F' Series	
1802	2 l/h against 18 bar	2001	1 l/h at 20 bar	0705	5 l/h at 7 bar
1504	4 l/h against 15 bar	1804	4 l/h at 18 bar	0606	6 l/h at 6 bar
1005	5 l/h against 10 bar	1502	2 l/h at 15 bar	0505	5 l/h at 5 bar
1002	2 l/h against 10 bar	1505	5 l/h at 15 bar	0507	7 l/h at 5 bar
10006	0.6 l/h against 10 bar	1010	10 l/h at 10 bar	1005	5 l/h at 10 bar
0808	8 l/h against 8 bar	0706	6 l/h at 7 bar	0510	10 l/h at 5 bar
1510	10 l/h against 5 bar	0512	12 l/h at 5 bar		
0214	14 l/h against 2 bar	0501	1 l/h at 5 bar		
0705	5 l/h against 7 bar	0408	8 l/h at 4 bar		
		0310	10 l/h at 3 bar		
		0217	17 l/h at 2 bar		
		0116	16 l/h at 1 bar		

Extra Accessories / Features :

- Foot Mounting Base
- Suction Tubing with Fittings (1M on suct. & disch.)
- Foot Valve
- Injection valve
- High Precision Multi-turn Flow Adjuster
- Stroke Variation over and above Speed Variation
- 0 to 10 Volts input signal for Auto Flow Variation
- 4 to 20 mA input signal for Auto Flow Variation
- Level probe for suction tank with connection to pump

'V' SERIES

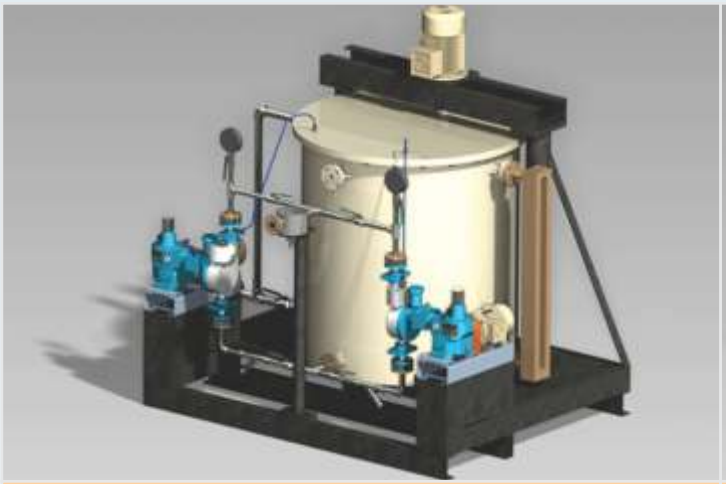
'F' SERIES

DOSING SYSTEMS

Compact Turnkey Dosing Systems

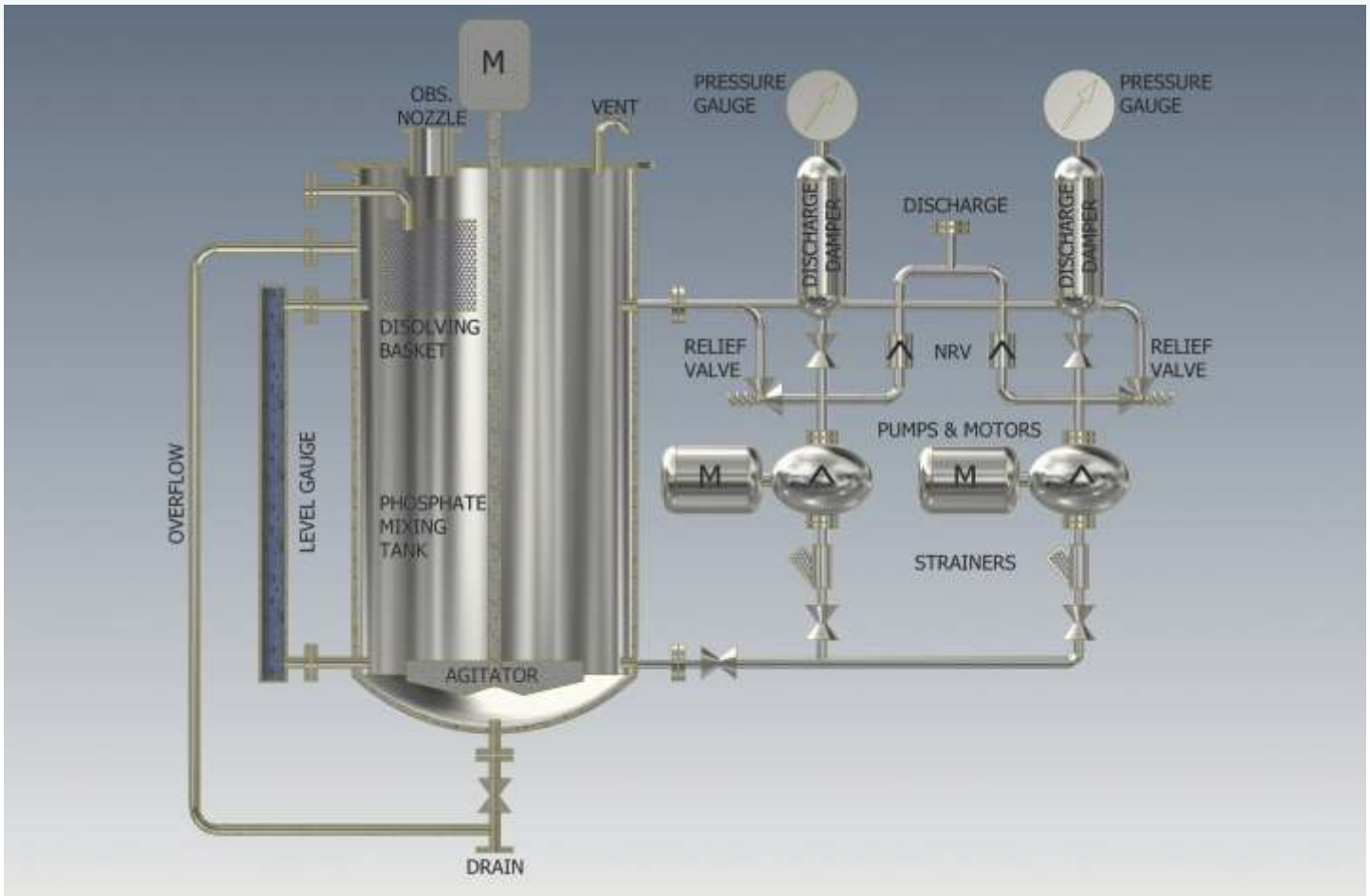
Features :

- Skid Mounted Pumps with all Accessories
- Entire Dosing Systems with Tanks and all Accessories
- Wide range of Plastic & Metallic MOCs
- Compact Design & Minimal Footprint



Compact Plastic Dosing System with Pumps, Agitator & accessories

Compact Metallic Dosing System with Pumps, Agitator & accessories



Typical Ordering Information

- Liquid Name
- P.T. [C] Normal
- Viscosity at PT. (SSU / CP)
- Vapor PR. at PT. (Kg/Sq. Cm a)
- Specific Gravity at PT. (gm/cc)
- Corrosion / Erosion Caused by
- Capacity (LPH)
- NPSHA (Kg/Sq. Cm a)
- Suction Pressure (Kg/Sq. Cm a)
- Discharge Pressure (Kg/Sq. Cm a)
- Accel Head (Kg/Sq. Cm a)
- Wetted Material of Construction

Our Products

- METERING PUMPS
- RECIPROCATING PUMPS
- PLUNGER PUMPS
- DIAPHRAGM PUMPS
- DOSING PUMPS
- TRIPLEX PUMPS
- RATIO PROPORTIONING PUMPS
- POSITIVE DISPLACEMENT PUMPS
- PVDF/PTFE LINED PUMPS
- ELECTRIC OPERATED DOUBLE
- DIAPHRAGM PUMPS (EODD)

The Pioneers in Dosing Pumps in India

SHAPOTOOLS

ISO 9001:2015
Reg. No.: RQ91/9077

Gujarat Factory

Shed No. A2/3, GIDC Industrial Estate,
Plot No. 59, Antalia, Bilimora,
Gujarat - 396 321, India.
Tel: +91 (2634) 289890
Email: inquiry@shapotools.com

Reckon Advtg./Shapotools_052020