PULSAtron®

Series MP

Electronic Metering Pumps

PULSAFEEDER®
A Unit of IDEX Corporation

Key Features

- ***Automatic Control,*** 4-20mA and 20-4mA current signals can be ratioed from 100% to 2% of incoming signal.
- ***Manual Control*** allows for a combined 1000:1 turndown resulting in accurate metering for critical applications.
- ***Relay Output*** for computer interface or AC power allows for external control.
- ***Six-button Touch Pad Control*** with internationally recognized symbols for simplified programming.
- ***Simple Prompts*** in plain language allow for easy-to-understand instructions for programming. **Available in three languages.**
- ***Alarm Signals*** for signal loss, full count, circuit failure, pulse overflow and pulse rate high. Liquid low level indicator capability is standard.
- ***Timed Sequences*** can be set for selected intervals and rate for repetitive metering.
- ***Pulse Signals*** can be multiplied or divided by 1 to 999 allowing for pumps to handle peak requirements.
- ***LCD,*** 16 character dot matrix backlit multi-lingual display allows for easy reading and user-friendly programming.
- ***Extended Two Year Warranty*** on electronic circuit board for trouble free service.

Complete Economical Selection

Nineteen distinct models are available, having pressure capabilities to 300 PSIG @ 3 GPD, and flow capacities to 504 GPD @ 20 PSIG, with a turndown ratio of 1000:1. Metering performance is reproducible to within ± 2% of maximum capacity.

Please refer to the reverse side for Series MP specifications.

Operating Benefits

Reliable metering performance. Our guided check valves, with their state-of-the-art seat and ball designs, provide precise seating, and excellent priming and suction lift characteristics. Our timing circuit is highly reliable and, by design, virtually unaffected by temperature, EMI and other electrical disturbances.

Rated "hot" for continuous duty. Series MP pumps continue to meet their specifications for pressure and capacity even during extended use. That's because of our high quality solenoid and special enclosure that effectively dissipates heat.

High viscosity capability. A straight flow path and ample clearance between the diaphragm and head enable standard PULSAtron pumps to handle viscous chemicals up to a viscosity of 3000 CPS. For higher vicosity applications, larger, spring-loaded connections are available.

Leak-free, sealless, liquid end. Our diaphragms are of superior construction—teflon-faced, bonded to a composite of Hypalon and fabric layers, and reinforced with a metal insert for optimum flexibility and durability.

System Compatibility

A wide variety of chemicals can be pumped. Liquid end materials include glass-filled polypropylene (GFPPL), PVC, styrene-acrylonitrile (SAN), Polyvinylidene Fluoride (PVDF), Teflon, Hypalon, Viton, ceramic, alloys and 316SS.

Immediate installation and start-up. Included as standard accessories with all models are an injection/back pressure valve assembly and a foot valve/strainer assembly*, including discharge and suction tubing (*not avail. with high viscosity connections for >3000 CPS).

Safe and easy priming and valve maintenance. Included as a standard accessory is a bleed valve assembly, including return tubing (available only on those models with tubing connections and ≤ 240 GPD).

Quick and economical liquid end maintenance. Available for every model is a unique KOPkit®, a convenient, economically priced, package containing new cartridge check valves and other important spare parts.

For additional information about PULSAtron's full-featured Series E PLUS refer to Technical Sheet No. EMP-021, about the mid-range Series E, Series D & Series A PLUS refer to Technical Sheet No. EMP-022, EMP-023 & EMP-025. For information about the economical Series C PLUS & Series C, refer to Technical Sheet No. EMP-026 & EMP-024.

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PULSAtron Series MP Specifications

Pressure and Flow Rate Capacity

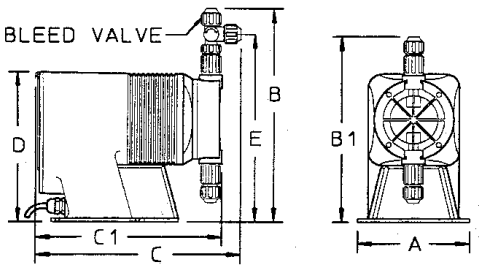
MODEL		LMK2	LMB2	LMA2	LMD3	LMB3	LMA3	LMK3	LMF4	LMD4	LMB4	LMH4	LMG4	LME4	LMK5	LMH5	LMH6	LMK7	LMH7	LMH8
Capacity	GPH	0.13	0.21	0.25	0.50	0.50	0.50	0.60	0.85	0.90	1.00	1.70	1.75	1.85	2.50	3.15	5.00	8.00	10.00	21.00
nominal	GPD	3	5	6	12	12	12	14	20	22	24	41	42	44	60	76	120	192	240	504
(max.)	LPH	0.5	0.8	0.9	1.9	1.9	1.9	2.3	3.2	3.4	3.8	6.4	6.6	7.0	9.5	11.9	18.9	30.3	37.9	79.5
Pressure	PSIG	300	250	150	250	150	100	100	250	150	100	250	150	100	150	150	100	50	35	20
(max.)	BAR	21	17	10	17	10	7	7	17	10	7	17	10	7	10	10	7	3.3	2.4	1.3
Connections:	Tubing	1/4" ID X 3/8" OD 3/8" ID X 1/2" OD 3/16" ID X 5/16" OD													3/8" ID X 1/2" OD 1/2" ID x 3/4" OD (LPH8 ONLY)					
	Piping	1/4" FNPT													1/4" FNPT 1/2" FNPT					
Reproducibility at max. capacity		+/- 2%																		
Viscosity Max CPS		For viscosity up to 3000 CPS, select connection size 3, 4, B or C with 316SS ball material. Flow rate will determine connection/ball size. Greater than 3000 CPS require spring loaded ball checks. See Selection Guide for proper connection.																		
Controls		6-Station Membrane Switch																		
Status Display		16-Position LCD Dot Matrix Backlight																		
LED Indicator Lights, Panel Mount		Power On - Green, Pulsing - Green Flashing, Stop - Red																		
Stroke Frequency Max SPM		125																		
External Stroke Frequency Control (Automatic)		4-20 mADC, 20-4 mADC External Pacing																		
Output Relay (Signal Level Option)		24 VDC, 10 mA																		
Output Relay (Power Option)		250 VAC, 50/60 HZ, .5A																		
Stroke Frequency Turn-Down Ratio		100:1																		
Stroke Length Turn-Down Ratio		10:1																		
Power Input		115 VAC/50-60 HZ/1 ph 230 VAC/50-60 HZ/1 ph																		
Average Current Draw @ 115 VAC: Amps @ 230 VAC: Amps		1.0 0.5																		
Peak Input Power Watts		300																		
Average Input Power @ max SPM: Watts		130																		

Important: Series MP - 19 model selections. Digit 1 and 2 (LM) signify product class, digit 3 and 4 signify pressure/flow. For full model selection information refer to Price Schedule EMP-PS LP.

Liquid End Materials

Series	Pump Head	Diaphragm	Check Valves		Fittings	Bleed Valve	Injection Valve Assembly Foot Valve Assembly	Tubing
			Seats/O-Rings	Balls				
MP	GFPPL PVC SAN PVDF 316 SS	Teflon-faced Hypalon-backed	Teflon, Hypalon, Viton	Ceramic, Teflon, 316SS, Alloy C	GFPPL PVC PVDF	Same as fitting and check valve selected, except 316SS	Same as fitting and check valve selected	Clear PVC White PE

Dimensions



Series MP Dimensions (inches)																	
Model No.	A	B	B1	C	C1	D	E	Shipping Weight	Model No.	A	B	B1	C	C1	D	E	Shipping Weight
LMA2	5.4	10.3	-	10.8	-	7.5	8.9	13	LMH4	6.2	10.9	-	11.2	-	8.2	9.5	21
LMA3	5.4	10.6	-	10.7	-	7.5	9.2	13	LMH5	6.2	11.3	-	11.2	-	8.2	9.9	21
LMB2	5.4	10.3	-	10.8	-	7.5	8.9	13	LMH6	6.2	11.3	-	11.2	-	8.2	9.9	21
LMB3	5.4	10.6	-	10.7	-	7.5	9.2	13	LMH7	6.1	11.7	-	11.2	-	8.2	10.3	21
LMB4	5.4	10.6	-	10.7	-	7.5	9.2	13	LMH8*	6.1	-	10.9	-	10.6	8.2	-	25
LMD3	5.4	10.6	-	11.2	-	7.5	9.2	15	LMK2	5.4	10.3	-	10.8	-	7.5	8.9	13
LMD4	5.4	10.6	-	11.2	-	7.5	9.2	15	LMK3	5.4	10.6	-	10.7	-	7.5	9.2	13
LME4	5.4	10.6	-	11.2	-	7.5	9.2	15	LMK5	5.4	10.9	-	11.7	-	7.5	9.5	18
LMF4	5.4	10.6	-	11.7	-	7.5	9.2	18	LMK7	6.1	11.7	-	11.2	-	8.2	10.3	21
LMG4	5.4	10.6	-	11.7	-	7.5	9.2	18									

NOTE: Inches X 2.54 = cm
* the LPH8 is designed without a bleed valve available.

An ISO Certified Company

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