

CHEMICAL METERING PUMPS

Manual or Automatic Operation

PHP-500 Series
Starts at

\$378



PHP-300 Series

- ✓ Automatic or Manual Control
- ✓ Bleed Valve Assembly
- ✓ Thermally Protected Solenoid with Auto-Reset

PHP-400 and 500 Series

- ✓ Manual Control
- ✓ Water-Resistant Casing
- ✓ Reliable Timing Circuit
- ✓ Bleed Valve Assembly

Employing a 4 to 20 mA or pulse input, OMEGA's PHP-300 programmable, solenoid-driven diaphragm liquid metering pumps can be operated manually or automatically. The PHP-400 and PHP-500 Series are diaphragm liquid metering pumps designed for manual operation. The stroke length for all pumps is manually adjustable from 10 to 100% and the stroking rate from 12 to 125 strokes per minute. Head and filling material options include glass-filled polypropylene, polyvinylidene fluoride (PVDF), and AISI-316 SS. The diaphragm is made of PTFE-faced CSPE. The guided check valves provide precise seating along with excellent priming and suction lift characteristics. The PHP-310 Series incorporates all the features of the PHP-300 as well as a 4 to 20 mA input signal, while the PHP-320 accepts a pulse input signal. Every unit comes with an inlet strainer/foot valve and an injection valve. In addition, "G" and "K" models are equipped with 1.2 m (4') of PVC suction tubing, 2.4 m (8') of PE discharge tubing, and bleed valve assembly.



PHP-313-K,
\$1256, shown
smaller than
actual size.

SPECIFICATIONS

Power: 115 Vac, 60 Hz

Liquid End: Glass-filled polypropylene on "G" models, PVDF on "K" models, and AISI-316 SS on "S" models

Valve Balls: Ceramic for "G" and "K" models; 316 SS for "S" models

Seals: CSPE for "G" and "K" models; PTFE for "S" models

Diaphragm: PTFE-faced CSPE

Metering Range: 10 to 100% of capacity

Max Frequency: 125 strokes/minute

Nominal Power:

PHP-300: 130 W

PHP-400/500: 50 W

Peak Power Consumption:

PHP-300: 30 W

PHP-400/500: 130 W

L-X

Dimensions:

PHP-300: 292 H x 159 W x 292 mm D (11.25 x 6.25 x 11.25")

PHP-400: 250 H x 127 W x 241 mm D (10 x 5 x 9.5")

PHP-500: 250 H x 127 W x 241 mm D (10 x 5 x 9.5")

Weight:

PHP-300: 9.5 kg (21 lb)

PHP-400: 4.5 kg (10 lb)

PHP-500: 4.5 kg (10 lb)

Maximum Temperature:

"G" Models: 77°C (170°F)

"K" and "S" Models: 93°C (200°F)



PHP-305-K, \$1104,
shown smaller than
actual size.



PHP-305-K,
back view.



PHP-300 Series Manual Operation

MOST POPULAR MODELS HIGHLIGHTED!

Model No.	Max Capacity			Max Pressure psi/bar	Suction Line OD x ID	Discharge OD x ID	Line Material*	Price
	GPH	GPD	LPD					
PHP-304(*)	5.0	120	454	100/7	1/2 x 3/8"	1/2 x 3/8"	G	\$953
					1/2 x 3/8"	1/2 x 3/8"	K	1003
					1/2 FNPT	1/2 FNPT	S	1181
PHP-305(*)	8.0	192	727	50/3.3	1/2 x 3/8"	1/2 x 3/8"	G	1054
					1/2 x 3/8"	1/2 x 3/8"	K	1104
					1/2 FNPT	1/2 FNPT	S	1340
PHP-306(*)	10.0	240	909	35/5.6	1/2 x 3/8"	1/2 x 3/8"	G	1080
					1/2 x 3/8"	1/2 x 3/8"	K	1130
					1/4 FNPT	1/4 FNPT	S	1362

Ordering Example: PHP-305-K, pump with manual operation, PVDF, 8.00 GPH (727 LPD) capacity, \$1104.

PHP-310 Series Operation with 4 to 20 mA Input (124 Ω Input Impedance)

Model No.	Max Capacity			Max Pressure psi/bar	Suction Line OD x ID	Discharge OD x ID	Line Material*	Price
	GPH	GPD	LPD					
PHP-311(*)	1.70	41	154	250/17	3/8 x 1/4"	3/8 x 1/4"	G	\$1568
					3/8 x 1/4"	3/8 x 1/4"	K	1534
					1/4 FNPT	1/4 FNPT	S	1700
PHP-312(*)	3.15	76	286	150/10	1/2 x 3/8"	1/2 x 3/8"	G	1499
					1/2 x 3/8"	1/2 x 3/8"	K	1549
					1/2 x 3/8"	1/4 FNPT	S	1727
PHP-314(*)	5.00	120	454	100/7	1/2 x 3/8"	1/2 x 3/8"	G	1194
					1/2 x 3/8"	1/2 x 3/8"	K	1244
					1/4 FNPT	1/4 FNPT	S	1422
PHP-315(*)	8.00	192	727	50/3.3	1/2 x 3/8"	1/2 x 3/8"	G	1295
					1/2 x 3/8"	1/2 x 3/8"	K	1345
					1/4 FNPT	1/4 FNPT	S	1534
PHP-316(*)	10.00	240	910	35/5.6	1/2 x 3/8"	1/2 x 3/8"	G	1321
					1/2 x 3/8"	1/2 x 3/8"	K	1371
					1/4 FNPT	1/4 FNPT	S	1556
PHP-317(*)	25	600	2270	30/2	3/4 x 1/2"	3/4 x 1/2"	G	1838

Ordering Example: PHP-314-K, pump with 4 to 20 mA input, PVDF, 5.00 GPH (120 GPD) capacity, \$1244.

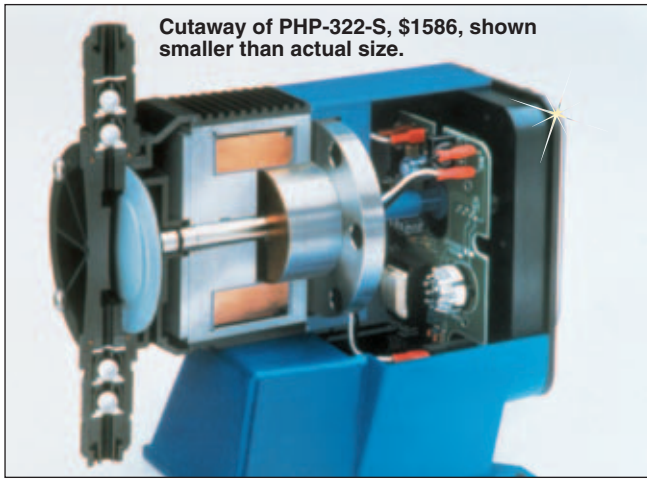
PHP-500 Series Manual Operation

Model No.	Max Capacity			Max Pressure psi/bar	Suction Line OD x ID	Discharge OD x ID	Line Material*	Price
	GPH	GPD	LPD					
PHP-501(*)	0.25	6	22	80/5.6	3/8 x 1/4"	3/8 x 1/4"	G	\$378
					3/8 x 1/4"	3/8 x 1/4"	K	428
					1/4 FNPT	1/4 FNPT	S	706
PHP-502(*)	0.50	12	46	80/5.6	3/8 x 1/4"	3/8 x 1/4"	G	378
					3/8 x 1/4"	3/8 x 1/4"	K	428
					3/8 x 1/4"	1/4 FNPT	S	706
PHP-503(*)	1.00	24	91	80/5.6	3/8 x 1/4"	3/8 x 1/4"	G	378
					3/8 x 1/4"	3/8 x 1/4"	K	428
					1/4 FNPT	1/4 FNPT	S	706
PHP-504(*)	1.25	30	113	80/5.6	3/8 x 1/4"	3/8 x 1/4"	G	378
					3/8 x 1/4"	3/8 x 1/4"	K	428
					1/4 FNPT	1/4 FNPT	S	706

Comes with complete operator's manual, inlet strainer/foot valve, and injection valve. In addition, "G" and "K" models are equipped with 1.2 m (4') of PVC suction tubing, 2.4 m (8') of PE discharge tubing, and bleed valve assembly.

*Insert "G" for glass-filled polypropylene, "K" for PVDF, or "S" for 316 SS.

Ordering Example: PHP-504-K, pump with manual operation, PVDF, 1.25 GPH (113 LPD) capacity, \$428.



PHP-320 Series Operation with Pulse Input

☐ MOST POPULAR MODELS HIGHLIGHTED!

Model No.	Max Capacity			Max Pressure psi/bar	Suction Line OD x ID	Discharge OD x ID	Line Material*	Price
	GPH	GPD	LPD					
PHP-321-(*)	1.70	41	154	250/17	3/8 x 1/4"	3/8 x 1/4"	G	\$1343
					3/8 x 1/4"	3/8 x 1/4"	K	1393
					1/4"	1/4"	S	1559
PHP-322-(*)	3.15	76	286	150/10	1/2 x 3/8"	1/2 x 3/8"	G	1358
					1/2 x 3/8"	1/2 x 3/8"	K	1408
					1/4"	1/4"	S	1586
PHP-324-(*)	5.00	120	454	100/7	1/2 x 3/8"	1/2 x 3/8"	G	1053
					1/2 x 3/8"	1/2 x 3/8"	K	1103
					1/4 FNPT	1/4 FNPT	S	1281
PHP-325-(*)	8.00	192	727	50/3.3	1/2 x 3/8"	1/2 x 3/8"	G	1154
					1/2 x 3/8"	1/2 x 3/8"	K	1204
					1/4 FNPT	1/4 FNPT	S	1420
PHP-326-(*)	10.00	240	910	35/5.6	1/2 x 3/8"	1/2 x 3/8"	G	1180
					1/2 x 3/8"	1/2 x 3/8"	K	1230
					1/4 FNPT	1/4 FNPT	S	1442
PHP-327-(*)	25.00	600	2270	30/2	1/2 x 3/8"	1/2 x 3/8"	G	1667

* Insert "G" for glass-filled polypropylene, "K" for PVDF, or "S" for 316 SS.
Ordering Example: PHP-324-K, pump, PVDF, 120 GPD (454 LPD) capacity, \$1103.

PHP-400 Series Manual Operation

Model No.	Max Capacity			Max Pressure psi/bar	Suction Line OD x ID	Discharge OD x ID	Line Material*	Price
	GPH	GPD	LPD					
PHP-401- (*)	0.25	6	22	150/10	3/8 x 1/4"	3/8 x 1/4"	G	\$413
					3/8 x 1/4"	3/8 x 1/4"	K	463
					1/4 FNPT	1/4 FNPT	S	741
PHP-402- (*)	0.50	12	46	150/10	3/8 x 1/4"	3/8 x 1/4"	G	413
					3/8 x 1/4"	3/8 x 1/4"	K	463
					3/8 x 1/4"	1/4 FNPT	S	741
PHP-403- (*)	1.00	24	92	100/7	3/8 x 1/4"	3/8 x 1/4"	G	413
					3/8 x 1/4"	3/8 x 1/4"	K	463
					1/4 FNPT	1/4 FNPT	S	741
PHP-404- (*)	1.25	30	112	100/7	3/8 x 1/4"	3/8 x 1/4"	K	463
					1/4 FNPT	1/4 FNPT	S	741

* Insert "G" for glass-filled polypropylene, "K" for PVDF, or "S" for 316 SS.
Ordering Example: PHP-401-K, pump, PVDF, 6 GPD (22 LPD) capacity, \$463.

Recommended Reference Book:
 Water Treatment Storage Facilities Handbook, **ES-2258, \$100.**
 See Section Y For Additional Books



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