

# **EHB & EHC** **ELECTRONIC** **METERING** **PUMPS**

The EH Series metering pump offers superior dosing capability. Superb valve performance and advanced solenoid engineering combine to make a highly precise pump. Its high speed of operation and long service life fit it for applications requiring a pump three times its physical size. Super quiet and compact, EH metering pumps prime in seconds and hold prime reliably.

EH: The most sophisticated yet simple technology the metering pump industry has ever developed.



IWAKI WALCHEM CORPORATION  
A Walchem Company

**2 year warranty**  
includes wetted parts

# Welcome to Superior Metering Pump Performance

## Superior Priming

The EH metering pump easily self primes 100 cps viscosity solutions with a 5 ft suction lift.

## External Input (EXT) and Stop Function

A standard feature, enabling automated operation with a wide margin of control. Easily interfaces with many instruments.

## Compact Size

Ideal for OEM specifications, EH pumps fit into small cabinets or spaces. Quiet, lightweight, they have a long service life. Low electrical power consumption means economical operation.

## Optional Automatic Air Vent Valve (pat. pend.)

Maximizes safety in working with liquids that gas easily.

## High Speed Operation

Up to 360 strokes per minute. The EH series injects at three times the rate of comparable metering pumps, resulting in high resolution chemical feed and elimination of slug-feed effects.

## Double Ball Check Valves

The ball, seat and guide assembly ensures a tight seal to prevent loss of prime. Modular design enables change-out without having to replace the entire liquid end.

## Unique Construction

The solenoid and pump housing are molded as a single unit for better heat rejection and durability.



## Long Lasting Diaphragm

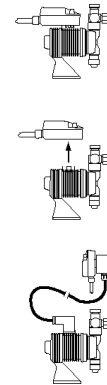
PTFE laminate over EPDM is molded onto a solid core. A retainer plate is provided to minimize flow rate changes as pressure varies.

## Double Support Bearing Construction

Supporting the plunger at both ends gives maximum stability and increases bearing life.

## Modular Components

The liquid end, drive and controller are modular, enabling economical repair or replacement of parts. The electronics module is a fully sealed pod that can be mounted separately from the pump - quick to install, safe and versatile. Remote mounting cable available separately. Consult factory.

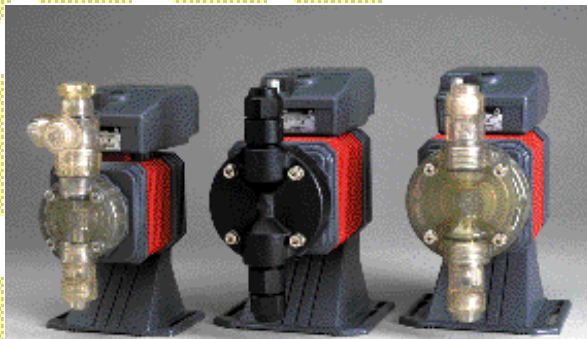
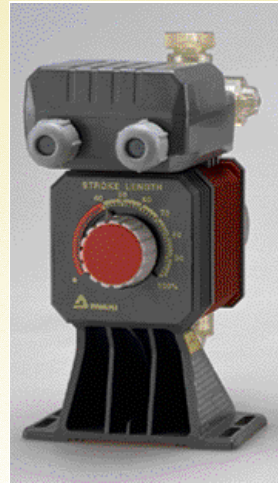


## Wide Selection of Materials

EH pumps fit all typical applications for metering pumps. The liquid ends are available in an array of materials including PVC (translucent), GFRPP, PVDF, 316 SS.

## Standard Materials of Construction

CE	Alumina ceramic
EPDM	Ethylene propylene diene monomer
FKM	Fluoroelastomer
GFRPP	Glass fiber reinforced polypropylene
HC	Hastelloy C276
PCTFE	Polychlorotrifluoroethylene
PE	Polyethylene
PTFE	Polytetrafluoroethylene
PVC	Polyvinylchloride (translucent)
PVDF	Polyvinylidene fluoride
SS	316 stainless steel



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EH
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**1 Pump Series**

**EH** Electronic metering pump with external pulse control or manual speed control (adjustable to 360 strokes per minute) and manually adjustable stroke length. Typical turndown ratio 125:1.

**2 Capacity/Pressure Rating**

Size	Maximum Output Capacity		Maximum Output per stroke (mL)	Maximum Pressure		Connection Size (in) Tubing O.D. †
	(GPH)	(mL/min)		PSI	MPa	
<b>B10*</b>	0.6	38	0.11	150	1.0	3/8
<b>B15*</b>	1.0	65	0.18	105	0.7	3/8
<b>B20*</b>	1.5	95	0.26	60	0.4	3/8
<b>B30</b>	3.2	200	0.56	30	0.2	1/2
<b>C15*</b>	1.3	80	0.22	150	1.0	3/8
<b>C20*</b>	2.0	130	0.36	105	0.7	3/8
<b>C30</b>	4.3	270	0.75	50	0.35	1/2
<b>C35</b>	6.7	420	1.17	30	0.2	1/2

\* PVC and GFRPP heads standardly come with manual air vent valve † 1/4" NPT female for 316 SS

**3 Control Module**

**R** For use on all EHB & EHC models, features external pulse capability as standard

**4 Voltage**

- 1** 115 VAC, 50/60 Hz
- 2** 230 VAC, 50/60 Hz

**5 Liquid End**

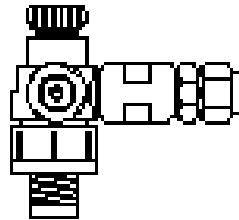
Liquid End Code	Pump Head & Fittings	Diaphragm	Valve Balls	Valve Seat	Valve Seals	Gasket	Tubing
FC	PVDF	PTFE (Bonded to EPDM)	CE	PCTFE	PTFE	PTFE	PE  1/4" NPTF  PE
PC	GFRPP		CE	FKM	FKM		
PE	GFRPP		CE	EPDM	EPDM		
SH	SS		HC	HC	PTFE		
VC	PVC		CE	FKM	FKM		
VE	PVC		CE	EPDM	EPDM		

(See materials code, left page)

All pumps (except those with stainless steel heads) include one foot valve, one injection valve and 20 ft of polyethylene tubing.

**6 Feature**

- Blank** No feature supplied
- A** Automatic air vent valve installed  
PVC: B10, B15\*, C15, C20\*  
\* limited to 60 psi with auto air vent valve



Automatic air vent valve (pat. pend.)





## Other Specifications

<b>Electrical</b>	50/60 Hz, single phase		
EHB	115 VAC ± 10%	0.9 Amp max.	16 watt avg.
	230 VAC ± 10%	0.3 Amp max.	16 watt avg.
EHC	115 VAC ± 10%	1.4 Amp max.	24 watt avg.
	230 VAC ± 10%	0.5 Amp max.	24 watt avg.

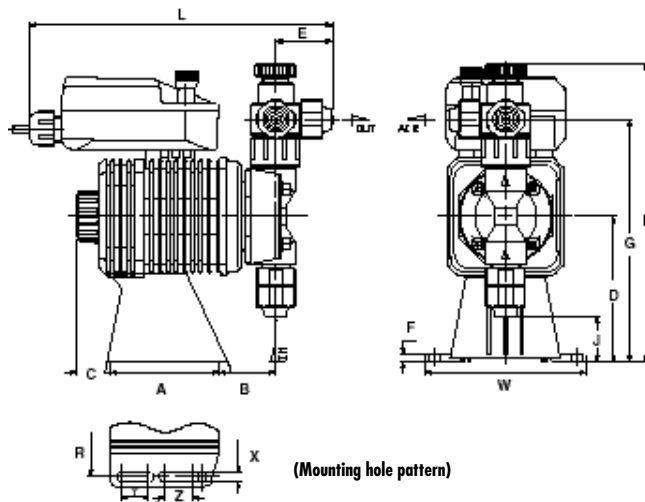
## Operating Conditions

Ambient temperature                      32°F to 122°F      (0°C to 50°C)

## Shipping Weight (approximate)

EHB	6 lbs	(thermoplastic	8 lbs	(stainless steel
EHC	9 lbs	liquid end)	10 lbs	liquid end)

**Dimensions (in inches)** Dimensions given are the maximum dimensions for the largest liquid end available for that model.



### Overall Dimensions

	A	B	C	D	E	F	G	H	J	L	W
EHB	2.64	1.57	0.83	3.54	1.38	0.20	5.91	7.24	0.35	7.36	3.94
EHC	3.82	1.46	0.67	3.94	1.38	0.20	7.13	7.64	0.75	8.23	4.57

### Mounting Dimensions

	R	S	T	V	Z	X
EHB	3.46	0.28	0.65	0.37	0.71	0.24
EHC	3.94	0.28	0.67	0.39	1.81	0.24

(dimensions in inches)

### 2 Year Limited Warranty

Our warranty covers the metering pump electronics (control unit and drive unit) *and* the entire liquid end, including diaphragm. Up to 2 years after delivery, we will repair or replace any properly applied pump if it fails.



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