Overview

Walchem and Iwaki have created a unique partnership with over 100 years combined pump experience in an array of different markets. This talent has led to the design of the most innovative and comprehensive metering pump product line in the world, the E-Class Metering Pumps. Powered by advanced microprocessor-based electronics and superior mechanical design, the

E-Class features four great series: EZ, EW, EK and EHE. The variety of pumps within the E-Class will fit any water treatment, wastewater, agriculture, water conditioning, car wash or other industrial feed application.



EHE Series

E-Class Metering Pumps

Summary of Benefits

- **Superior Valve Design**
  The EHE primes in seconds after turning the pump on. Tightly guided check valves ensure a tight seal after each pulse, preventing loss of prime.

- **High Resolution Metering**
  Up to 360 strokes per minute provides smooth, uniform, precise chemical injection.

- **Engineered Longevity**
  Unique, double support of the solenoid armature extends the life of the bearing creating a smoother, quieter and more precise shot every stroke.

- **Dual Control Option**
  Manual or automatic mode features speed adjustment in one stroke/minute increments from 1 to 360. Turn down ratio is 1800:1.

WALCHEM



EHE Series

No other electronic metering pump can match the power and performance of Walchem's EHE Series.



EHE Series pumps have outputs up to 20 gallons per hour and pressure capabilites from 30 to 150 psi. Combining the EHE performance and a turndown ratio of 1800:1 yields one of the most versatile pumps on the market today.

Superior mechanical design and manufacturing quality merge to create a pump better than the sum of its parts.

POWERFUL

The EHE35 size pump is the most powerful electronic metering pump currently available. A pump's maximum pressure rating times its maximum output at that pressure gives a relative measure of the pump's hydraulic output power, a "power index." The EHE 35 with an output of 8.5 gph at 105 psi yields a power index of 892.5. No other metering pump even comes close!

EFFICIENT

The EHE Series does its work extremely well. Hydraulic output is maximized by its economic use of electricity via excellent heat rejection, valves that positively and consistently seat and unique front-and-back support of the armature.

DURABLE

Superior magnetic, electronic, thermal and hydraulic designs have been acheived in the EHE metering pump. The result is a pump that will perform longer at maximum duty than any other comparable pump.

TWO YEAR WARRANTY

The pump will be repaired or replaced for up to 2 years, should it fail, providing the pump is applied according to factory recommendations.



2-Year Warranty
"Bumper-to-Bumper" On All E-Class Pumps
- Including Wetted Parts

Microprocessor-Based Control Circuitry

Microprocessor-based circuitry

Allows operator adjustment of pump speed and external input settings via 4-button keypad.



External digital input mode, pulse multiply

Often used in flow proportional systems, such as with a flowmeter contactor. One input pulse can produce 1 to 999 pump strokes.



External digital input mode, pulse divide

Pump can be set to divide (accumulate) pulses by a factor of 1 to 999.



External analog input mode

Programmable 4-20mA input allows for user defined speed control band; user sets minimum and maximum pump speeds.



Specifications

Electrical

50/60 Hz, single phase	48 Watt avg.
115 VAC ± 10%	1.8 Amp max
230 VAC ± 10%	0.8 Amp max.

Operating Conditions

Ambient temperature	32°F to 122°F (0°C to 50°C)
Relative humidity	30% to 90% non-condensing

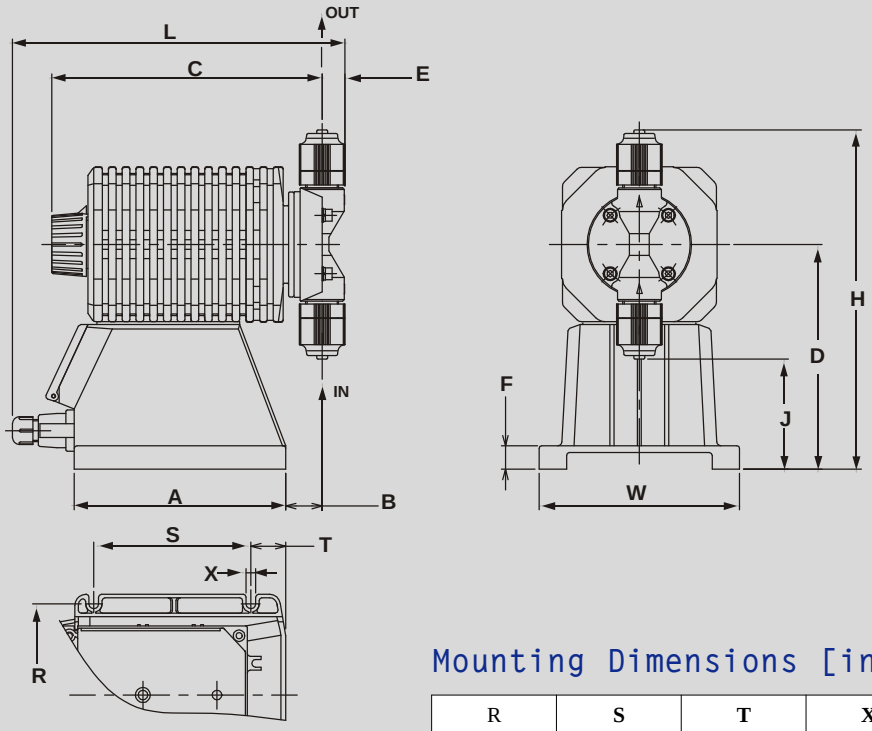
Shipping Weight (approximate)

22lbs (10 kg)

Safety Performance

The EHE series metering pumps have been UL tested to meet UL and CSA standards.

Dimensions



Mounting Dimensions [inches(mm)]

R	S	T	X
5.20	4.50	1.00	0.28
(132)	(114)	(25.4)	(7)

A	B	C	D	E	F	H	J	L	W
6.06	1.42	8.13	6.42	0.91	0.67	10.45	2.38	10.17	5.75
(154)	(36)	(206.5)	(163)	(23)	(17)	(265.5)	(60.5)	(258)	(146)

Standard Materials of Construction

CE	Alumina ceramic	**PTFE**	Polytetrafluoroethylene
EPDM	Ethylene propylene diene monomer	**PCTFE**	Polychlorotrifluoroethylene
FKM	Fluoroelastomer	**PVC**	Polyvinylchloride (translucent)
GFRPP	Glass fiber reinforced polypropylene	**PVDF**	Polyvinylidenefluoride
PE	Polyethylene	**M-PVC**	Machined polyvinylchloride

Walchem Corporation Five Boynton Road Hopping Brook Park Holliston, MA 01746 USA www.walchem.com Phone: 508-429-1110 Fax: 508-429-7433

Ordering Information

EH	E35	E	1	-	PC	V
1	2	3	4		5	6

1 PUMP SERIES

EH Microprocessor control for all EHE models. Features manual speed control from 1 to 360 spm in 1 spm increments. External control from pulse signal with internal multiply and divide or from analog 4-20 mA signal.

2 CAPACITY/PRESSURE RATING

Size	Max. Output Capacity		Max. Output per Stroke	Max. Pressure		Power Index
	GPH	ml/min	ml	PSI	MPa	GPH x PSI
E30	5.5	340	0.94	150	1.0	825.0
E35	8.5	520	1.44	105	0.7	892.5
E45	12.0	750	2.08	60	0.4	720.0
E55	20.0	1250	3.47	30	0.2	600.0

3 CONTROL MODULE

E = For use on all EHE models, features external pulse capability. (pulse divide, pulse multiply, analog)

4 VOLTAGE

1 = 115VAC, 50/60 Hz

2 = 230VAC, 50/60 Hz

5 LIQUID END

Liquid End	Pump Head & Fittings	Diaphragm	Valve Balls	Valve Seat	Valve Seals	Gasket	Tubing
FC	PVDF	PTFE BONDED TO EPDM	CE	PCTFE	PTFE	PTFE	PE
PC	GFRPP		CE	FKM	FKM		
PE	GFRPP		CE	EPDM	EPDM		
VC	PVC		CE	FKM	FKM		
VE	PVC		CE	EPDM	EPDM		
VF	PVC		PTFE	EPDM	EPDM		
VM*	M-PVC		CE	FKM	FKM		

**Note: VM liquid end available on E55 only.*

6 OPTIONS

BLANK = Standard 1/2" tube connection. No accessory valve.

V = Standard 1/2" tube connection with back pressure/anti-syphon valve, except on FC models.

T = 3/4" NPT (male) pipe thread connection

P = 3/4" NPT (male) connection with back pressure/anti-syphon valve

Note: Tube to piping connection material of construction will be the same as the liquid end.

All pumps include one foot valve, one injection valve, 20 feet of polyethylene tubing and one ceramic weight with the exception of options P and T.



WEBMASTER GENERAL INDUSTRIAL CONTROLLER



WEBMASTER BOILER CONTROLLER



METERING PUMPS AND ACCESSORIES



WEBALERT REMOTE MONITORING & DATALOGGING

Walchem designs and manufactures an integrated line of analytical control, sensing and metering equipment.

Our in-house engineering is driven by quality, technology and innovation.

For more information on the entire Walchem product line, visit : **www.walchem.com**

WALCHEM

180180.F 8/2003

Walchem Corporation Five Boynton Road Hopping Brook Park Holliston, MA 01746 USA www.walchem.com Phone: 508-429-1110 Fax: 508-429-7433