

# Metering Pumps



## HV Series High Viscosity

Walchem and Iwaki have created a unique partnership with over 100 years combined pump experience in an array of different markets. The HV series is specifically designed to accurately feed high viscosity chemicals.

Equipped with rugged, machined PVC or molded GFRPP liquid ends and spring loaded stainless steel valve balls, the HV series is designed for superior valve action and performance. Rated to 20,000 cps\*, the HV series is available in feed ranges from 2.3 GPH to 8 GPH and pressures up to 73 PSI.



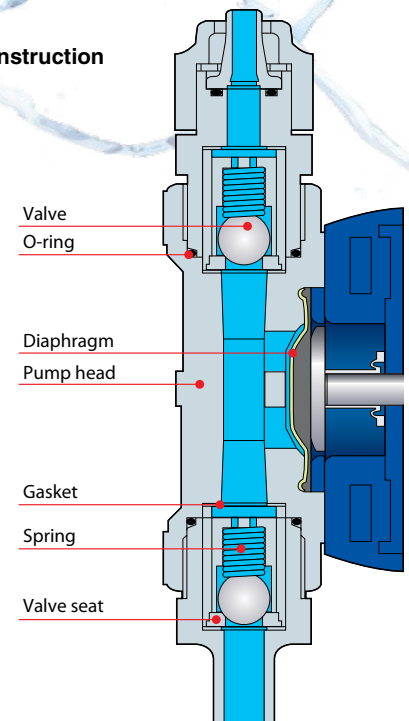
Sophisticated design and backed with the industry's only full 2-year warranty, the EH-HV series is the perfect solution for high viscosity feed applications.

\*Tested with 20,000 cps polymer verified with a Brookfield viscometer, Model LVF at 25°C, #4 spindle at 12rpm.

## Summary of Key Benefits

- **High Speed Operation**  
Up to 240 strokes per minute results in high resolution chemical feed, reduced pulsation and improved mixing.
- **Spring Loaded Valve Action**  
Stainless Steel or Hastelloy C276 springs help quickly close the valve balls against the PCTFE seats, increasing the valve action with high viscosity polymers.
- **Adaptable Modular Design**  
Liquid end, drive and electronics are modular, enabling economical repair or replacement of parts. The control module can easily be mounted in a remote location.
- **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.

### Construction



**WALCHEM**

IWAKI America Inc.

# Ordering Information

<b>EH</b>	<b>E36</b>	<b>E</b>	<b>1</b>	<b>HV</b>	<b>V</b>	
Pump Series	Capacity/Pressure	Control Module	Voltage	Liquid End	Options	
<b>EWN</b>	<b>C31</b>	<b>PC</b>	<b>U</b>	<b>R</b>	<b>V</b>	<b>T</b>
Pump Series	Capacity/Pressure	Liquid End	Voltage	Control Module	High Viscosity	Options

## PUMP SERIES

EH/EWN = Electronic metering pump with external control and manual speed control

## CAPACITY/PRESSURE RATING

See chart on this page

## CONTROL MODULE

**R** = For use on all EWN-C models: On/Off with 0-240 digital speed control, external start/stop, programmable 4-20 and digital pulse input with multiplier/divider control; turndown ratio of 1200:1.

**E** = For use on all EHE models: On/Off with 0-240 digital speed control, external start/stop, programmable 4-20 and digital pulse input with multiplier/divider control; turndown ratio of 1200:1.

## VOLTAGE

### EHE

1 = 115VAC, 50/60 Hz 1.8A Maximum, 48W Avg.  
2 = 230VAC, 50/60 Hz 0.8A Maximum, 48W Avg.

### EWN-C

U = 115VAC, 50/60 Hz 1.2A Maximum, 24W Avg.  
2 = 230VAC, 50/60 Hz 1.2A Maximum, 24W Avg.

## LIQUID END MATERIALS

See chart on this page

## OPTIONS

Blank = No accessories included, only tubing

**V** = EHE models including a threaded back pressure/anti-siphon valve.

**T** = EWN-C and EHE models including 1/2" NPT fittings on suction/discharge of pump

**P** = EHE models including 1/2" NPT fittings on suction/discharge of pump & threaded back pressure/anti-siphon valve

**S** = Changes valve balls to 316SS in EWN-C-PC models

## Capacity/Pressure Rating

Size	Max Output Capacity*		Max Output per stroke	Max Pressure		Connection Size
	GPH	ml/min		PSI	MPa	
C31	2.3	150	0.625	73	0.5	3/8" ID x 1/2" OD Tubing DISHCARGE x 1/2" ID Flex Tube SUCTION  1/2" MNPT (on -T Versions ONLY)
E36	4.0	252	1.05	73	0.5	
E46	8.0	505	2.10	60	0.4	

\*Output rated w/20,000cps polymer. Output increases with lower viscous fluids up to 25% with water.

## Liquid End Materials

Parts	Material		
Liquid End	EHE-HV	EWN-C P6	EWN-C PC(S)
Pump head & fittings	GFRPP		
Diaphragm	PTFE		
Valve balls	SS		CE (SS)
Valve seats	PCTFE		
Valve seals	FKM	EPDM	FKM
Valve spring	HC	SS	HC
Gasket	PTFE		

CE	Alumina ceramic
PCTFE	Polychlorotrifluoroethylene
FKM	Fluoroelastomer
PVC	Polyvinylchloride (translucent)
HC	Hastelloy C276
PTFE	Polytetrafluoroethylene
SS	Stainless Steel

## Safety Performance

The HV Series metering pumps are tested by Intertek to UL and CSA standards.



## ABOUT US

Walchem integrates its advanced sensing, instrumentation, fluid pumping and communications technologies to deliver reliable and innovative solutions to the global water treatment market. Our in-house engineering is driven by quality, technology and innovation. For more information on the entire Walchem product line, visit: [www.walchem.com](http://www.walchem.com)

