WALCHEM
An Iwaki America Company

EHHV Series | High Viscosity Metering Pumps

Overview



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

Equipped with rugged, machined PVC liquid ends and spring loaded ceramic valve balls, the HV series is designed for superior valve action and performance. Rated to 20,000 cps*, the HV series is available in four feed ranges from 1 to 4 GPH (at 50 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
Hastelloy C springs force ceramic balls against PCTFE valve seats for superior 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.

Ordering Information

EH	B20	R	1	—	HV	V
Pump Series	Capacity/ Pressure	Control Module	Voltage		Liquid End	Options

PUMP SERIES
EH = 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 EHB and EHC models; On/Off with external start/stop and digital pulse control; turndown ratio of 100:1

Y = For EHB and EHC 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 600:1

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 mulitplier/divider control; turndown ratio of 1200:1.

VOLTAGE

	EHB	EHC	EHE
1 = 115VAC, 50/60 Hz	0,9A Max. 16W Avg.	1,4A Max. 24W Avg.	1,8A Max. 48W Avg.
2 = 230VAC, 50/60 Hz	0,3A Max. 16W Avg.	0,5A Max. 24W Avg.	0,8A Max. 48W Avg.

LIQUID END MATERIALS
See chart on this page

OPTIONS
Blank = No accessories included.

V = Includes a threaded back pressure/anti-syphon valve.

SPECIFICATIONS

	EHB	EHC	EHE
Adjustment Range Stroke Length	40-100%		20-100%
Frequency	0-240 SPM		
Operating Temperature	32 a 122°F (0 a 50°C) 50-80% RH (non-condensing)		
Dimensions L x W x H inches	7.1 x 3.9 x 6.9	8 x 4.6 x 7.5	8.7 x 5.7 x 9.8

Capacity/Pressure Rating

Size	Max Output Capacity*		Max Output per stroke	Max Pressure		Connection Size Inches
	GPH	ml/min	ml	PSI	MPa	Tubing O.D.
B20	1.0	63	0.26	50	0.35	1/2" NPTM
C20	1.5	95	0.40	50	0.35	1/2" NPTM
C30	2.0	126	0.52	50	0.35	1/2" NPTM
E35	4.0	252	1.05	50	0.35	3/4" NPTM

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

Liquid End Materials

Parts	Material
Liquid End	HV
Pump head & fittings	PVC
Diaphragm	PTFE
Valve balls	CE
Valve seats	PCTFE
Valve seals	FKM
Valve spring	HC
Gasket	PTFE

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

Safety Performance
The EH-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

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