OVERVIEW

EZ Series electronic metering pumps offer precise chemical injection at a low cost. The compact size and simple control make them ideal for water treatment and OEM applications.

EZ Series have outputs to 6.3 GPH (24 l/h) and a maximum pressure of 150 PSI (10 bar). Advanced microprocessor control and a turndown ratio of 360:1 make this series an exceptional value. The pumps are simple to operate with only three pushbutton keys and the unmatched turndown ratio provides both versatility and high resolution chemical feed which eliminates slug-feeding effects.

SUMMARY OF KEY BENEFITS

High Speed Performance
E-Class pumps operate at 360 strokes-per-minute, providing high resolution chemical feed. Most competitive products operate at slower speeds, resulting in slug feeding, accelerated diaphragm wear and poor feed control.

Engineered Longevity
All E-Class pumps feature dual bearing support. The armature and shaft are supported with a bearing on each end, which ensures proper axial movement, enabling the E-Class to operate at 360 SPM while extending the life of the diaphragm.

Superior Check Valve Performance
Dual Check Valve Assemblies in both suction and discharge fittings feature precision ball guides and tapered seats. Precise machining and molding of parts limit valve ball travel, ensuring that balls fully seat and seal with every stroke. This superior check valve design guarantees fast priming and reliable performance.

High Compression Ratio
The compression ratio of a metering pump is important because it affects the pump's ability to prime and vent. The compression ratio is raised when you reduce the dead volume of the pump head during operation. All E-Class pumps feature a very high compression ratio that ensures proper feed especially with off-gassing products (i.e. Sodium Hypochlorite).

Innovative Timer Control
The EZ-Timer module integrates Walchem's EZB pump technology with a versatile programmable timer. Timed feed control can be programmed in daily or weekly cycles.

Walchem and Iwaki have over 100 years of combined pump experience. This partnership has led to the design of the most innovative and comprehensive metering pump product line in the world, the E-Class Metering Pumps. E-Class features five great series: EZ, EW, EK, EHE and EHF. The wide range of capabilities within the E-Class ensures that there's a model to fit any water treatment, food & beverage, agriculture, water conditioning, car wash, or other industrial chemical feed applications.

EZ pumps have outputs to 6.3 GPH (24 l/h) and pressure capabilites to 150 PSI (10 bar). The compact size and simple control make it ideal for OEM applications. Effective, reliable performance is achieved through sophisticated engineering. Designed with a turndown ratio of 360:1, the EZ is an exceptional value.

Simply stated - the EZ packs all of the 360spm performance of the bigger pumps into the compact chassis of the industry's easiest pump to operate. The EZ is the best on/off pump on the market. Built to prime, hold prime and to last, the EZ Series metering pump offers precise chemical injection at an economical cost.

Features include double ball check valves, long lasting diaphragm, an optional automatic air vent valve and the ability to remotely mount the control unit.

Digital Speed Control

The EZ is simple to operate with three pushbutton keys. The 360:1 turndown ratio provides unmatched versatility.

Timer Control Module Option

The EZ-Timer module integrates Walchem's EZB technology with a versatile programmable timer. Timed feed control can be programmed in daily or weekly cycles. The weekly schedules can be programmed in either 1 or 2-week cycles with a daily on-time. The daily timer can be set for multiple daily on-times. On-times are set in minutes (0-999).

The EZ-Timer pump is a simple and effective way to automate additions in small systems. With capacities up to 3.2 GPH and pressure ratings up to 150 psi, the EZ-Timer pump is perfect for many applications, including accurate, consistent addition of biocides into your cooling tower system.

2-YEAR WARRANTY
'Bumper-to-Bumper' on all
E-Class Pumps
including Wetted Parts

Electrical Specifications

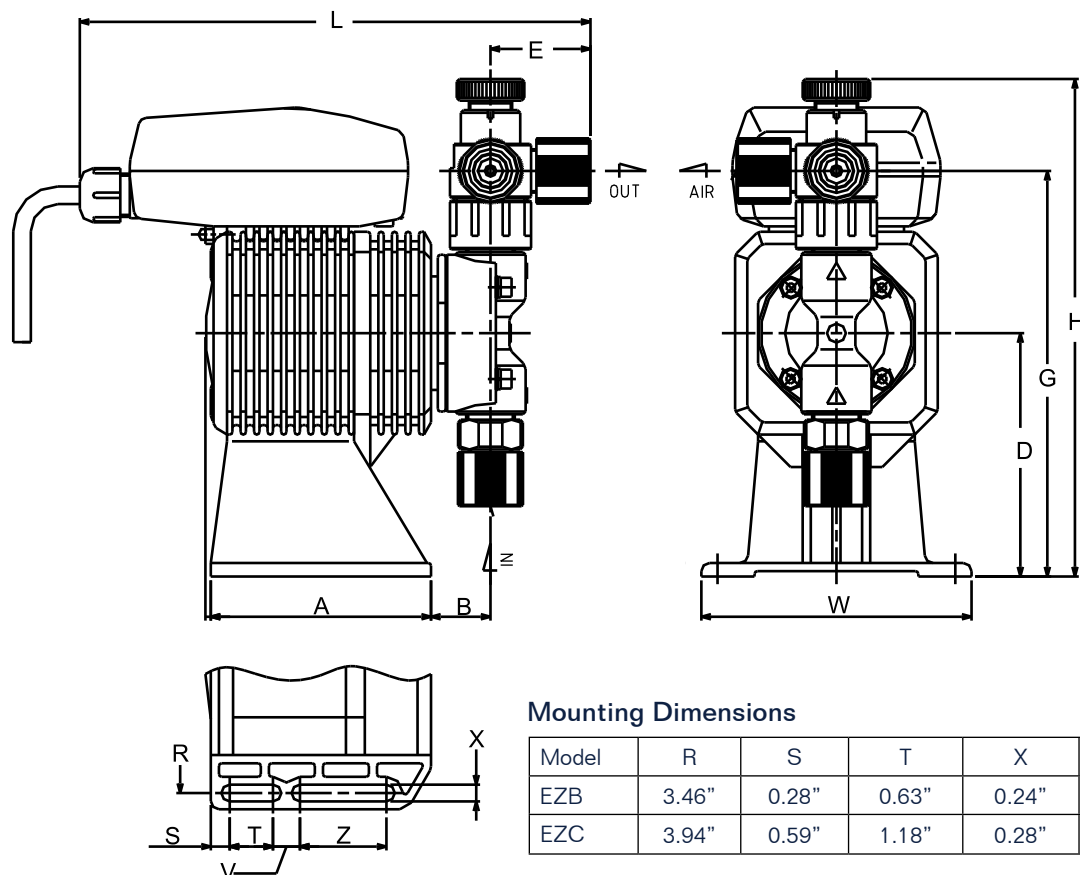| EZ	EZB	EZC
50/60 Hz, single phase	20 Watt avg.	22 Watt avg.
115 VAC ±10%	0.8 Amp max.	1.2 Amp max.
230 VAC ±10%	0.4 Amp max.	0.6 Amp max.

Shipping Weight

	6 lbs. (2.7kg) (approximate)	8 lbs. (3.6 kg) (approximate)

Safety Certifications

The EZ series metering pumps are WQA tested and certified to NSF/ANSI Standard 61.

The EZ series metering pumps are tested by Intertek to UL and CSA standards.

Operating Conditions

Ambient Temperature: 32 to 122°F (0 to 50°C)
Relative Humidity: 30% to 90% non-condensing
Liquid Temperature:
PVC liquid ends: 32 to 104°F (0 to 40°C)
PP, PVDF, SS liquid ends: 32 to 140°F (0 to 60°C)
Below 32°F (0°C), pump is limited to 70% of maximum pressure. Liquid cannot freeze.

Dimensions

Mounting Dimensions

Model	R	S	T	X	V	Z
EZB	3.46"	0.28"	0.63"	0.24"	0.39"	1.26"
EZC	3.94"	0.59"	1.18"	0.28"	0.59"	1.18"

approximate dimensions for larger size pump

Model	A	B	E	D	G	H	L	W
EZB	3.2	1.0	1.5[1]	3.5	6.8[2]	8.0	7.5	3.9[3]
EZC	4.1	1.1	1.5[1]	3.9	7.1[2]	8.4	8.2	4.6[3]

Notes for EZ11, 16, 21:
1. Addition of a Multifunction valve increases overall length by 0.37". Addition of an Auto Air Vent Valve increases overall length by 1.59"
2. Addition of a Multifunction Valve increases discharge height by 0.22". No change for the Auto Air Vent Valve.
3. Addition of a Multifunction Valve increases overall liquid end height by 1.16". No change for the Auto Air Vent Valve.

ORDER INFORMATION

EZ	B16	D	1	— VC	A
Pump series	Capacity/ Pressure	Control Module	Voltage	Liquid End	Options

PUMP SERIES

EZ = Electronic metering pump with manual speed control (adjustable to 360 strokes per minute)

CAPACITY/PRESSURE RATING

See chart on this page

CONTROL MODULE

D = Manual speed adjustment from 1-360 spm
T = Timer control module (available on 115V EZB pumps only)

VOLTAGE

1 = 115VAC, 50/60 Hz
2 = 230VAC, 50/60 Hz

LIQUID END

See chart on this page

OPTIONS

Blank = Standard manual air vent valve included, except with liquid end code -FC.

A = Automatic air vent valve installed. For VC liquid ends on B11, B16, C16 & C21 size pumps only. Pressure rating is reduced by 35 psi with valve installed.

M = Multi-function back pressure/anti-syphon valve installed. For PC, PE, VC and VE liquid ends on 11, 16 and 21 size pumps only. Not available with the AAVV feature.

All pumps also include a manual air vent valve with the exception of FC liquid ends. All pumps include one foot valve, one injection valve, 20 feet of polyethylene tubing and one ceramic weight.

Capacity/Pressure Rating

Size	Max Output Capacity		Max output per stroke	Max Pressure[1]		Connection Size (in) Tubing O.D.
	GPH	mL/min	mL	PSI	MPa	
B11	0.6	38	0.11	150	1.0	3/8
B16	1.0	65	0.18	105	0.7	3/8
B21	1.5	95	0.26	60	0.4	3/8
B31	3.2	200	0.56	30	0.2	1/2
C16	1.3	80	0.22	150	1.0	3/8
C21	2.0	130	0.36	105	0.7	3/8
C31	4.3	270	0.75	50	0.35	1/2
C36	6.3	400	1.17	30	0.2	1/2

1   Auto Air vent valve reduces maximum pressure approx. 35 PSI (0.2 MPa)

Liquid End Materials

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		
TC	PVDF		CE	FKM	FKM		

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

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