

Electromagnetic metering pumps

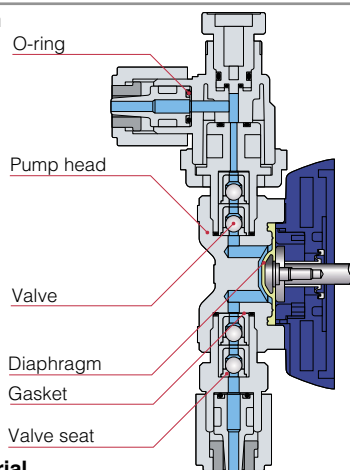
Our latest electromagnetic metering pump features water quality control functions and multivoltage operation.



Electromagnetic metering pumps

The EWN-W series is a diaphragm type electromagnetic metering pump and features water quality control functions and multi voltage operation. PH, ORP(oxidation-reduction potential), conductivity or cooling tower modes can be selected to customise the pump for specific applications. A large backlit LCD offers good legibility and the pump uses Iwaki's uniquely high stroke speed of 360spm. The EWN-W promises stable water quality control with fine flow adjustment in continuous chemical dosing situations.

Construction



Wet-end material

Material code	VC	VH	PC	PH
Pump head	PVC		GFRPP	
Valve	CE	HC	CE	HC
Valve seat	FKM	EPDM	FKM	EPDM
Diaphragm	PTFE+EPDM			
Gasket	PTFE			
O-ring	FKM	EPDM	FKM	EPDM

Controller variation

WPO(pH/ORP), WEC(conductivity) and WCT(cooling tower) controllers are available. Also, the extra large LCD improves legibility and ease of operation.

High resolution

Stroke speed adjustment in 1spm increments allows fine flow adjustment between 1 and 360spm in continuous chemical feeding.

Adjustable tube fitting

Newly-designed adjustable tube fittings eliminate tube twisting when fastening.

Multi voltage

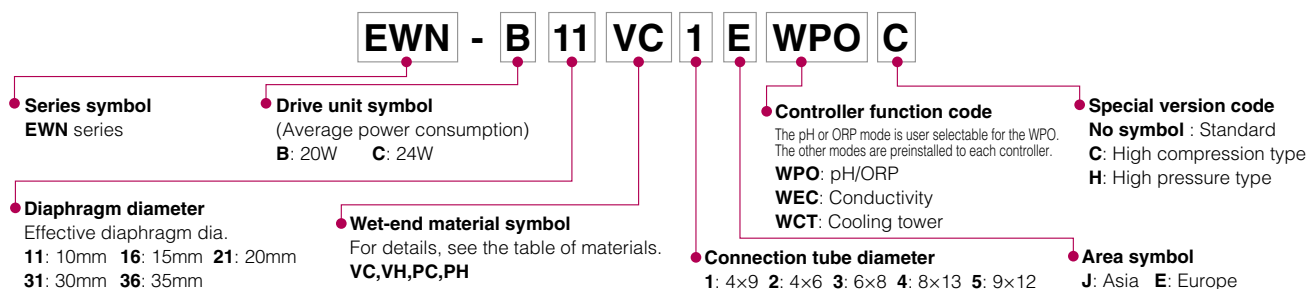
The EWN-W can be used in all countries thanks to the universal power supply(100-240VAC).

Pump body

The molded pump body with a minimum of sealing surfaces meets a high level (IP65 equivalent) of both waterproofness and dustproofness. The plastic casing cover further protects the pump when installed in severe environments.



Pump identification



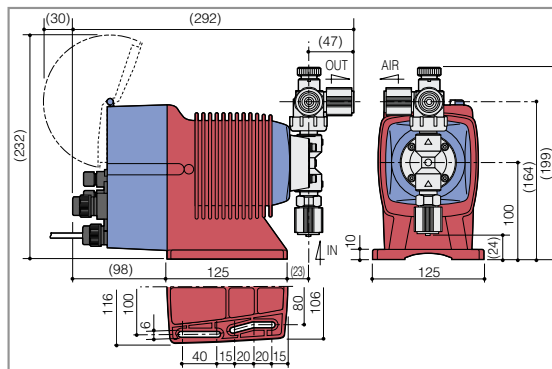
Specifications of pump

Model	VC/VH/PC/PH								
	B11	B16	B21	B31	C16	C21	C31	C36	
Max. pressure	MPa	1.0	0.7	0.4	0.2	1.0	0.7	0.35	0.2
Max. capacity	mL/min	38	65	100	200	80	130	270	420
Connection	mm	4×9, 4×6, 6×8			8×13, 9×12		4×9, 4×6, 6×8		
Power Voltage		100 - 240 VAC 50/60Hz							
Air vent valve		Yes							
Average current		0.8A/20W				1.2A/24W			
Mass	kg	2.5				3.5			

Note 1: The maximum discharge capacity of each model represents the figure when the pump is pumping clean water at maximum discharge pressure, rated voltage, ambient temperature, and 360 spm.
Note 2: 0.12MPa or more discharge pressure is needed to prevent over feeding (0.05MPa or more for the EWN-B31 and C36). If the discharge pressure is at or below the required MPa, install a check valve or back pressure valve.

Operating condition: Liquid temperature range · VC/VH types 0 - 40 °C · PC/PH types 0 - 60 °C
Ambient temperature range is 0 - 40 °C

Dimensions in mm



Specifications of relay box (for the WCT/cooling tower)

Model		TK-PC99-6RY
Input	Power Voltage	100-240VAC 50/60Hz
	Control method	Blowoff control input (from WCT)
Output	Voltage contact	Applied voltage changes with power voltage Max 250VAC 8A (Load resistance)
	Pump power source	Applied voltage changes with power voltage

Specifications of controller

Model		WPO		WEC	WCT
Control modes		pH	Oxidation-reduction potential	Conductivity	Cooling tower
Sensor		pH sensor	ORP sensor	Conductivity sensor	
Control function		AUTO / MANUAL			
Function		Proportional control (PID control)		Proportional control	Timer control
Setting method		6 keypads Start/Stop, Δ(Up), ▽(Down), SET, CAL, ESC			
Display		Backlit LCD 4×2 characters Measured value, Set value, Error indication			
LCD		Red/Orange 1×LED Green/Orange 1×LED Red 2×LED			
STOP/PreSTOP		Red/Orange 1×LED (Red: Stop input Orange: PreSTOP input)			
Output(alarm)behavior		(The output turns on along with output setting.)			
Input		Sensor input range		0 - 400mS/m (0.00 - 4.00mS/cm)	
Liquid temperature range (Temp. sensor type)		0.00 - 14.00pH Auto(matic) temperature compensation		-2000 - 2000mV	
STOP/PreSTOP		0 - 99.9°C (Pt1000)		—	
AUX		Red LED lights and the pump stops at contact input. / Orange LED lights at contact input			
Interlock		The pump runs at 360spm when the non voltage contact is on		Contact is on	
Output		The pump stops when the non voltage contact is on			
Output 1		The non voltage contact is on (Mechanical relay)AC250V3A 1. Upper limit output 2. Lower limit output 3. *Select of all functions (Select one function)			
Output 2		The non voltage contact is on (Photo MOS relay)AC/DC24V 0.1A 1. Upper limit output 2. Lower limit output 3. *Select of all functions 4. spm synchronous output(Select one function) *Sensor failure, STOP, PreSTOP, Interlock and AUX outputs can be set to the batch output			
Calibration		AUTO calibration (2 points)MAN calibration		Measured value adjustment	
Function		Cell constant setting Measured value adjustment			
Power Voltage		Selection of pH buffer solution, Measured value shift, Selection of automatic/manual temperature compensation, Key lock (with PIN number), Error indication			
		100 - 240 VAC 50/60Hz			

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⚠ Caution for safety use: Before use of pump, read instruction manual carefully to use the product correctly.
Actual pumps may differ from the photos. Specifications and dimensions are subject to change without prior notice. For further details please contact us.

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