

Electromagnetic metering pumps

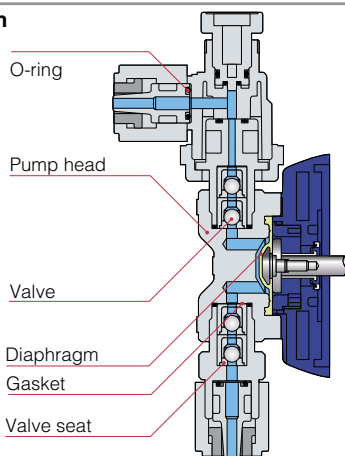
Our latest electromagnetic metering pump features water quality control functions and multivoltage operation.



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, cooling tower or residual chlorine 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	Almina ceramic	Hastelloy C276	Almina ceramic	Hastelloy C276
Valve seat	FKM	EPDM	FKM	EPDM
Gasket	PTFE+EPDM			
O-ring	PTFE			
Diaphragm	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

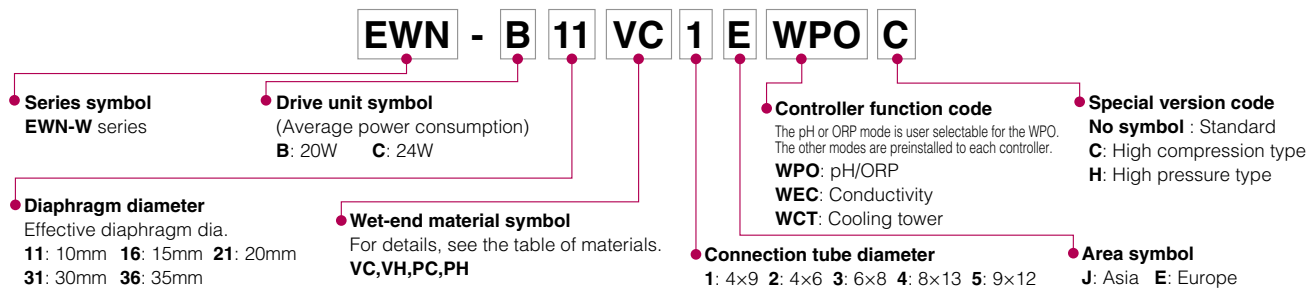
The EWN-W can be used in all countries thanks to the universal power supply(100-240VAC).

Pump body

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



Pump identification



Specifications of pump

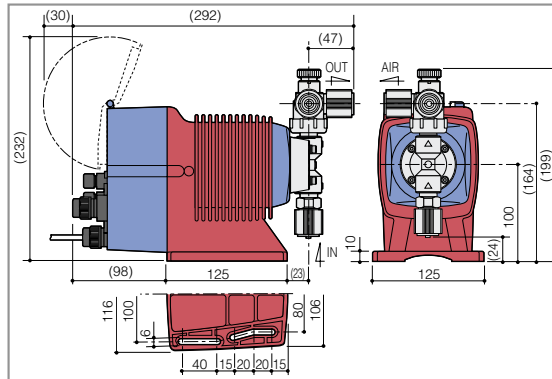
Model		VC/VH/PC/PH								
		B11	B16	B21	B31	C16	C21	C31	C36	
Max. pressure	MPa	1.0	0.7	0.4	0.2	1.0	0.7	0.35	0.2	
Max. capacity	mL/min	38	65	100	200	80	130	270	420	
Connection	mm	4×9		8×13			4×9		8×13	
Power Voltage		100 - 240 VAC 50/60Hz								
Air vent valve		○								
Average current		0.8A/20W				1.2A/24W				
Mass	kg	2.5				3.5				
Accessory	Check valve	CAN-1		CAN-2-L			CAN-1		CAN-2	CAN-2-L
	Braided hose	Ø4 × Ø9 or Ø8 × Ø13							made in PVC/3 m	

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 with stroke length 100%.

Note 2: 0.12MPa or more discharge pressure is needed to prevent over feeding (0.05MPa or more for the EHN-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 is 0 - 60 °C (0 - 40 °C for VC/VH)
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
	Average current	Blowoff control input (from WCT)
Output	Voltage contact	Applied voltage changes with power voltage Max 250VAC 8A (Resistive load)
	Braided hose	Applied voltage changes with power voltage

Specifications of controller

Model		WPO	WEC	WCT
Control modes		pH	Oxidation-reduction potential	Conductivity
Sensor		pH sensor	ORP sensor	Conductivity sensor
Control function		AUTO / MANUAL		
Function		Proportional control (PID control)		
Control method		6 keypads Start/Stop, △(Up), ▽(Down), SET, CAL, ESC		
Setting method		Backlit LCD 4×2 characters Measured value, Set value, Error indication		
Display		LCD		
LED		Red/Orange LED×1 Green/Orange LDE×1 Red LED×2		
STOP/PreSTOP		Red/Orange LED×1 (Red: Stop input Orange: PreSTOP input)		
Output(alarm)behavior		(The output turns on along with output setting.)		
Input		0.00 - 14.00pH	-2000 - 2000mV	0 - 400mS/m (0.00 - 4.00mS/cm)
Sensor input range		Auto(matic) temperature compensation		
Liquid temperature range (Temp. sensor type)		0 - 99.9°C (Pt1000)	—	0 - 99.9°C (Pt1000)
STOP/PreSTOP		Red LED lights and the pump stops at contact input. / Orange LED lights at contact input		
AUX		The pump runs at 360spm when the no voltage contact is on		
Interlock		The pump stops when the no voltage contact is on		
Output		The no voltage contact is on (Mechanical relay)AC250V3A 1. Upper limit output 2. Lower limit output 3. Batch*output (Select one feature)		
Output 1		The no voltage contact is on (Photo MOS relay)AC/DC24V V0.1A 1. Upper limit output 2. Lower limit output 3. Batch*output (Select one feature)		
Output 2		*Sensor failure, STOP, PreSTOP, Interlock and AUX outputs can be set to the batch output		
Calibration		AUTO calibration (2 point)MAN calibration	Measured value adjustment	Cell constant setting Measured value adjustment
Function		Selection of pH buffer solution, Measured value shift, Selection of automatic/manual temperature compensation, Keypad lock (with PIN number), Error indication		
Power Voltage		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.

⚠ Legal attention related to export.

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