

IWAKI  
ELECTROMAGNETIC  
METERING  
PUMPS

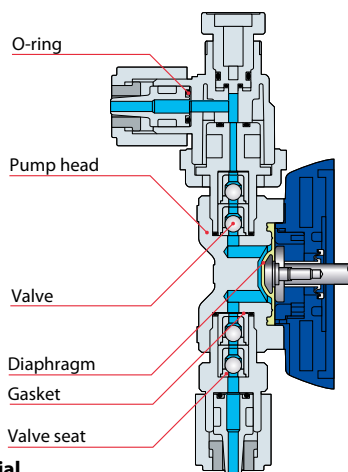
**EWN-W**



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

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	Alumina ceramic	Hastelloy C276	Alumina ceramic	Hastelloy C276
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.

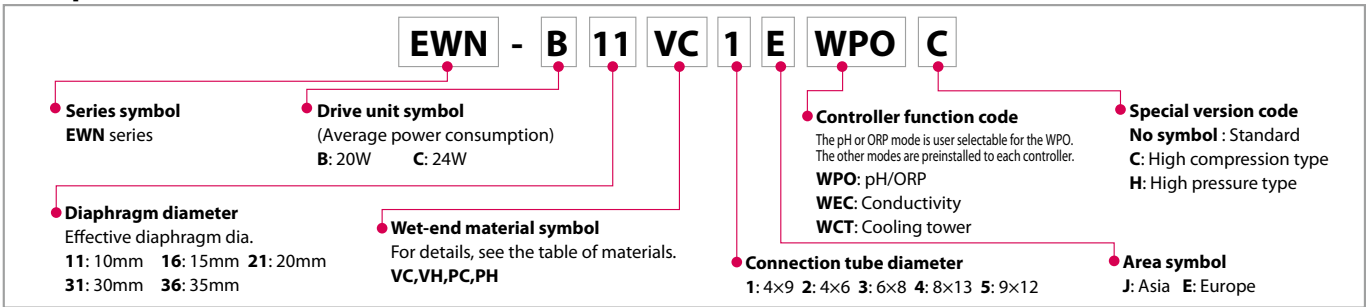
### Multi voltage

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

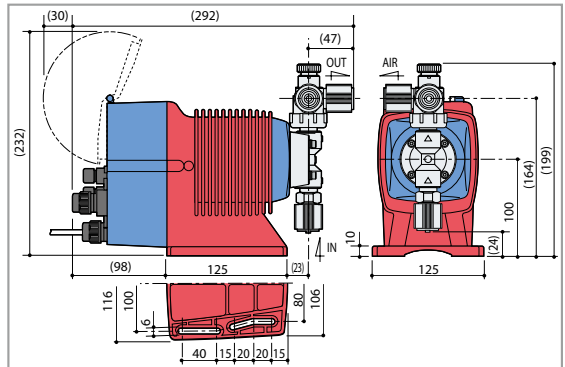


## Specifications of pump

Model	VC/VH/PC/PH							
	B11	B16	B21	B31	C16	C21	C31	C36
Max. pressure	1.0	0.7	0.4	0.2	1.0	0.7	0.35	0.2
Max. capacity	38	65	100	200	80	130	270	420
Connection	4×9, 4×6, 6×8			8×13, 9×12		4×9, 4×6, 6×8		8×13, 9×12
Power Voltage	100 - 240 VAC 50/60Hz							
Air vent valve	Yes							
Average current	0.8A/20W				1.2A/24W			
Mass	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	Voltage is depend on power supply Max 250VAC 8A (Load resistance)	
	Pump power source	Voltage is depend on power supply	



## 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)		Proportional control	Timer control
Setting method		6 keypads Start/Stop, Δ(Up), ▽(Down), SET, CAL, ESC			
Display		Backlit LCD 4x2 characters Measured value, Set value, Error indication			
LCD		Red/Orange 1xLED Green/Orange 1xLED Red 2xLED			
STOP/PreSTOP		Red/Orange 1xLED (Red: Stop input Orange: PreSTOP input)			
Output(alarm)behavior		(The output turns on along with output setting.)			
Input		0.00 - 14.00pH		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 non voltage contact is on			Contact is on
Interlock		The pump stops when the non voltage contact is on			
Output		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 1		The non voltage contact is on (Photo MOS relay)AC/DC24V V0.1A 1. Upper limit output 2. Lower limit output 3. *Select of all functions 4. spm synchronous output(Select one function)			
Output 2		*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		Selection of pH buffer solution, Measured value shift, Selection of automatic/manual temperature compensation, Key lock (with PIN number), Error indication			
Power Voltage		100 - 240 VAC 50/60Hz			

### IWAKI CO., LTD.

6-6 Kanda-Sudacho 2-chome Chiyoda-ku Tokyo 101-8558 Japan TEL : (81)3 3254 2935 FAX : 3 3252 8892

[www.iwakupumps.jp](http://www.iwakupumps.jp)

The posting and copying from this catalogue without permission is not accepted firmly.

European office : IWAKI Europe GmbH  
 Germany : IWAKI Europe GmbH  
 Holland : IWAKI Europe GmbH (Netherlands Branch)  
 Italy : IWAKI Europe GmbH (Italy Branch)  
 Spain : IWAKI Europe GmbH (Spain Branch)  
 Belgium : IWAKI Belgium N.V.  
 Denmark : IWAKI Nordic A/S  
 Finland : IWAKI Suomi Oy  
 France : IWAKI France S.A.  
 Norway : IWAKI Norge AS  
 Sweden : IWAKI Sverige AB  
 Switzerland : IWAKI (Schweiz) AG  
 U.K. : IWAKI Pumps (UK) Ltd.

TEL: (49)2154 9254 0 FAX: 2154 9254 48  
 TEL: (49)2154 9254 50 FAX: 2154 9254 55  
 TEL: (31)547 293 160 FAX: 547 292 332  
 TEL: (39)0444 371115 FAX: 0444 335350  
 TEL: (34)93 37 70 198 FAX: 93 47 40 991  
 TEL: (32)13 67 02 00 FAX: 13 67 20 30  
 TEL: (45)48 24 2345 FAX: 48 24 2346  
 TEL: (358)9 2745810 FAX: 9 2742715  
 TEL: (33)1 69 63 33 70 FAX: 1 64 49 92 73  
 TEL: (47)23 38 49 00 FAX: 23 38 49 01  
 TEL: (46)8 511 72900 FAX: 8 511 72922  
 TEL: (41)26 674 93 00 FAX: 26 674 93 02  
 TEL: (44)1743 231363 FAX: 1743 366507

U.S.A. : IWAKI America Inc.  
 Argentina : IWAKI America Inc. (Argentina Branch)  
 Singapore : IWAKI Singapore Pte Ltd.  
 Malaysia : IWAKI Sdn. Bhd.  
 Indonesia : IWAKI Singapore (Indonesia Branch)  
 Australia : IWAKI Pumps Australia Pty Ltd.  
 China : IWAKI Pumps Co., Ltd.  
 Korea : IWAKI Korea Co., Ltd.  
 Taiwan : IWAKI Pumps Taiwan Co., Ltd.  
 Thailand : IWAKI (Thailand) Co., Ltd.  
 Vietnam : IWAKI Pumps Vietnam Co., Ltd.

TEL: (1)508 429 1440 FAX: 508 429 1386  
 TEL: (54)11 4745 4116 FAX: 3 7803 4800  
 TEL: (65)6316 2028 FAX: 6316 3221  
 TEL: (60)3 7803 8807 FAX: 2 9899 2421  
 TEL: (62)21 6906606 FAX: 21 6906612  
 TEL: (61)2 9899 2411 FAX: 2 9899 2421  
 TEL: (852)2607 1168 FAX: 2607 1000  
 TEL: (82)2 2630 4800 FAX: 2 2630 4801  
 TEL: (886)2 8227 6900 FAX: 2 8227 6818  
 TEL: (66)2 322 2471 FAX: 2 322 2477  
 TEL: (84)613 933456 FAX: 613 933399

( )Country codes

**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.**  
 Our products and/or parts of products fall in the category of goods contained in control list of international regime for export control. Please be reminded that export license could be required when products are exported due to export control regulations of countries.

