

Electromagnetic metering pumps

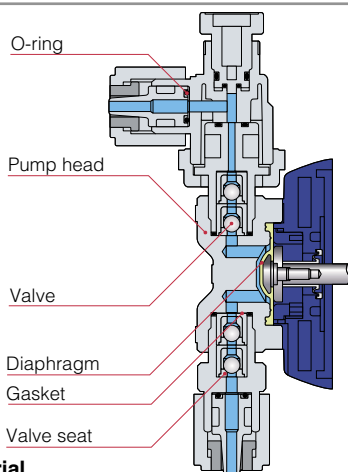
Our latest electromagnetic metering pump features water quality control functions and multivoltage operation.



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

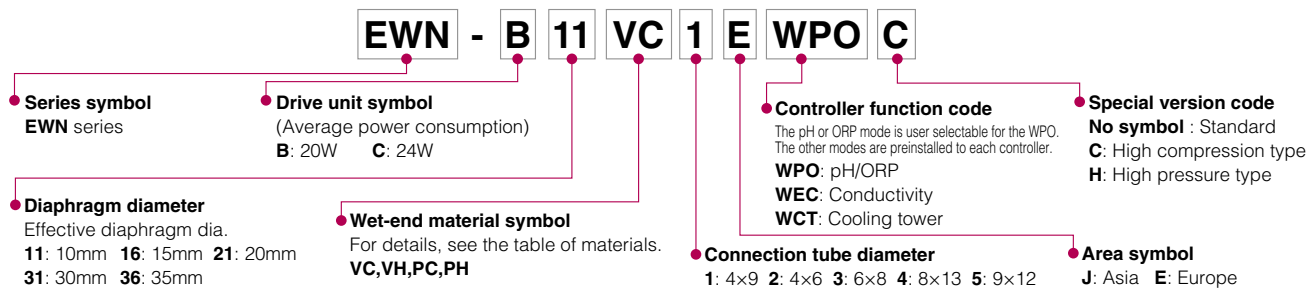
The EWN-W can be used in all countries thanks to the universal power supply(100-240VAC).

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



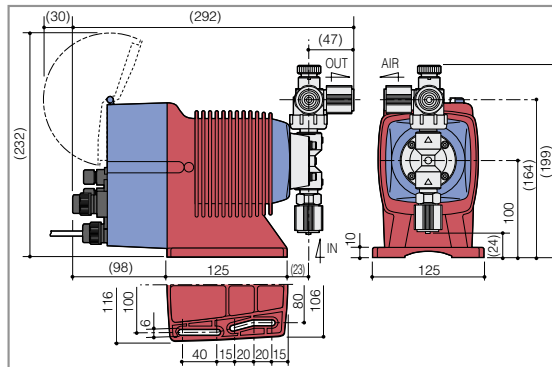
Specifications of pump

Model	VC/VH/PC/PH							
	B11	B16	B21	B31	C16	C21	C31	C36
Max. pressure	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		
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	Cooling tower
Sensor		pH 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)		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		100 - 240 VAC 50/60Hz			

www.iwakipumps.jp

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

EUROPE / U.S.A.

European office : IWAKI Europe GmbH TEL: (49)2154 9254 0 FAX: 2154 9254 48
Austria : IWAKI (Austria) GmbH TEL: (41)26 674 93 00 FAX: 26 674 93 02
Belgium : IWAKI Belgium N.V. TEL: (32)13 67 02 00 FAX: 13 67 20 30
Denmark : IWAKI Nordic A/S TEL: (45)48 24 2345 FAX: 48 24 2346
Finland : IWAKI Suomi Oy TEL: (358)9 2745810 FAX: 9 2742715
France : IWAKI France S.A. TEL: (33)1 69 63 33 70 FAX: 1 64 49 92 73
Germany : IWAKI Europe GmbH TEL: (49)2154 9254 50 FAX: 2154 9254 55
Holland : IWAKI Holland B.V. TEL: (31)297 241121 FAX: 297 273902
Italy : IWAKI Italia S.R.L. TEL: (39)02 990 3931 FAX: 02 990 42888
Norway : IWAKI Norge AS TEL: (47)66 81 16 60 FAX: 66 81 16 61
Spain : IWAKI Iberica Pumps, S.A. TEL: (34)943 630030 FAX: 943 628799
Sweden : IWAKI Sverige AB TEL: (46)8 511 72900 FAX: 8 511 72922
Switzerland : IWAKI (Schweiz) AG TEL: (41)26 674 93 00 FAX: 26 674 93 02
U.K. : IWAKI Pumps (UK) Ltd. TEL: (44)1743 231363 FAX: 1743 366507
U.S.A. : IWAKI America Inc. TEL: (1)508 429 1440 FAX: 508 429 1386

ASIA / OCEANIA

Australia : IWAKI Pumps Australia Pty Ltd. TEL: (61)2 9899 2411 FAX : 2 9899 2421
China : ()Country codes
Hong Kong : IWAKI Pumps Co., Ltd. TEL: (852)2607 1168 FAX: 2607 1000
Shanghai : IWAKI Pumps (Shanghai) Co., Ltd. TEL: (86)21 6272 7502 FAX: 21 6272 6929
Guangzhou : GFTZ IWAKI Engineering & Trading Co., Ltd. TEL: (86)20 8435 0603 FAX: 20 8435 9181
Beijing : GFTZ Iwaki Engineering & Trading Co., Ltd. (Beijing office) TEL: (86)10 6442 7713 FAX: 10 6442 7712
Korea : IWAKI Korea Co.,Ltd. TEL: (82)2 2630 4800 FAX: 2 2630 4801
Malaysia : IWAKI Sdn. Bhd. TEL: (60)3 7803 8807 FAX: 3 7803 4800
Singapore : IWAKI Singapore Pte Ltd. TEL: (65)6316 2028 FAX: 6316 3221
Indonesia : IWAKI Singapore (Indonesia Branch) TEL: (62)21 6906606 FAX: 21 6906612
Taiwan : IWAKI Pumps Taiwan Co., Ltd. TEL: (886)2 8227 6900 FAX: 2 8227 6818
Thailand : IWAKI (Thailand) Co.,Ltd. TEL: (66)2 322 2471 FAX: 2 322 2477
Vietnam : IWAKI Pumps Vietnam Co., Ltd. TEL: (84)6 13 933456 FAX: 613 933399

⚠ 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 the Export Trade Control Order Attachment List 1 of Japanese export control regulations, which includes complementary export control items. Please be reminded that export license, which is issued by the Ministry of Economy, Trade, and Industry in Japan could be required when products are exported from Japan.