



Electromagnetic metering pumps

EH-E



**Extensive flow capacity range
powerful electromagnetic metering pumps**

The Heart of Industry

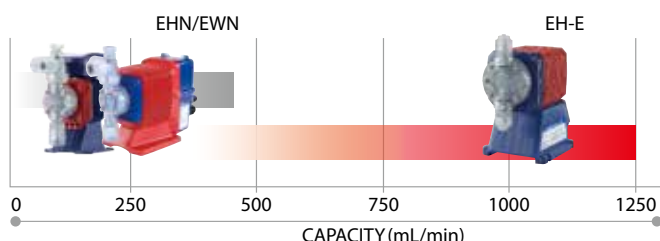
Powerful, Efficient and Durable

Large capacity metering pumps up to 1250ml/min



Large capacity

EH-E series is available in models with a max. discharge capacity of 340 to 1250mL/min. Combined with the IWAKI EHN and EWN series, it can further widen a range of flow capacity.



High resolution

The discharge volume is adjusted in terms of stroke length and rate. The stroke length can be adjusted between 20% and 100%, and the stroke rate can be set between 1 and 360 spm, which enables the fine adjustment of discharge capacity.



Pump head variation

Materials available for the pump head are PVC, GFRPP (Polypropylene), PVDF (Fluororesin), and SUS (Stainless steel).



Water / Dust - proof

The sealed drive unit and control unit assure IP65.

* The pump is not completely water -proof. Protect the pump with a cover when installing it outdoors.





Functions of controller

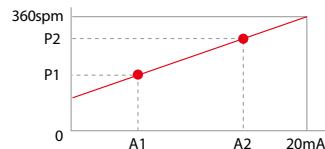
The controller features a control mode based on analog input (0 - 20mADC) and digital input (Pulse) as standard. The controlled operation can be performed in the control mode that best suits the purpose.

Manual mode

Stroke rate can be increased or decreased by 1-spm anywhere within the range 1 to 360 spm, and is able to set either during operation or stop.

Proportional control mode

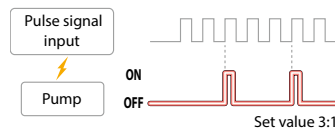
The stroke rate can be proportionally controlled based on external 0-20mADC signals.



Divisor mode

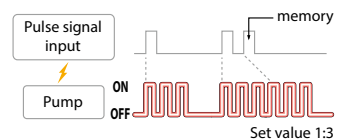
The pump runs for a preset divisor at every incoming external pulse signals. The pump provides one shot per (n) times pulse inputs.

Set the number (n) between 1 and 999 by means of the keys. If next pulse is input before a set number of shots have been completed, the pump is capable of storing that pulse signal (max. 64535 shots). It is selectable to store the pulse input or not.



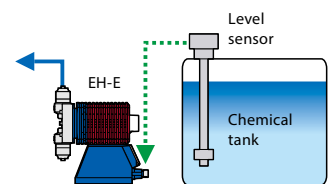
Multiplier mode

The pump runs for a preset multiplier per incoming external pulse signals. The pump provides (n) times shots per pulse input. Set the number (n) between 1 and 999 by means of the keys. If next pulse is input before a set number of shots have been completed, the pump is capable of storing that pulse signal (max. 64535 shots). It is selectable to store the pulse input or not.



STOP function

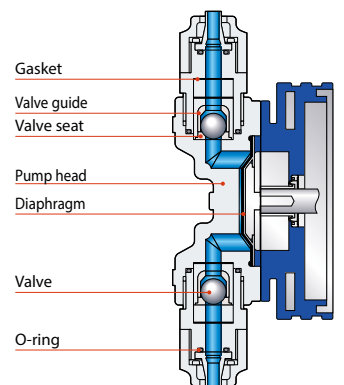
The pump can be stopped by an external contact signal. The pump operates when stop signal is released. This feature enables the pump ON/OFF control.



Wet-end part materials

Material symbol	VC	V6	VM(E56)	PC	SH	FC
Pump head	PVC	PVC	PVC (machined)	GFRPP	SUS316	PVDF
Valve	Alumina ceramic	SUS316	Alumina ceramic	Alumina ceramic	Hastelloy C276	Alumina ceramic
Valve seat	FKM	EPDM	FKM	FKM	SUS316	PCTFE
Valve guide	PVC	PVC	PVC	GFRPP	SUS316	PVDF
Gasket	PTFE					
O-ring	FKM	EPDM	FKM	FKM	-	-
Diaphragm	PTFE+EPDM (EPDM of diaphragm is not wet-end.)					

Note : Illustration shows EH-E46. EH-E31 & E36 employ 2 stage valve.



Pump identification

EH	-	E	56	VC	-	20E	P	E	5	-	□□
1		2	3	4		5	6	7	8		9
1 Series name		4 Wet-end part material code		6 Power cable terminal code		8 Diameter of connecting tube (in mm)					
2 Drive unit code		VC, V6, VM, PC, SH, FC		P: With plug		4: Ø8 × Ø13 9: Rc 1/4					
E: 48W		5 Power-supply voltage code		Blank: Crimp-style terminal		5: Ø9 × Ø12 11: Ø10 × Ø16					
3 Diaphragm effective diameter		100: 100/110/115VAC single phase		7 Control unit type		6: Ø10 × Ø12 14: Rc 3/8					
31: 30mm 46: 45mm		20E: 220/230/240VAC single phase		E: E type controller							
36: 35mm 56: 55mm				9 Special arrangement code							

Specifications of pump

Model	E31	E36	E46	E56	
Max.capacity	mL/min	340	520	750	1250
Max.capacity	L/hour	20.4	31.2	45	75
Max. discharge pressure	MPa	1.0	0.7 (SH : 0.6)	0.4	0.2
Power supply	(for both 50/60Hz)	100, 110, 115, 220, 230, 240VAC single phase			
Stroke rate		1 - 360 spm			
Stroke length		20 - 100% (E46/E56 FC, SH : 50 - 100%)			
Ambient temperature		0 - 40°C			
Range of liquid temperature		Type VC, V6, VM 0 - 40°C Type PC, SH, FC 0 - 60°C			
Ambient humidity		30 - 85%RH			
Connection for types VC, V6, PC, VM	mm	Ø8 × Ø13, Ø9 × Ø12		Ø10 × Ø16, Ø9 × Ø12	
Connection for type SH		Rc 1/4	Rc 1/4	Rc 3/8	Rc 3/8
Connection for type FC	mm	Ø10 × Ø12			
Average power consumption		48W			
Average current		100/110/115VAC: 1.8A, 220/230/240VAC: 0.8A			

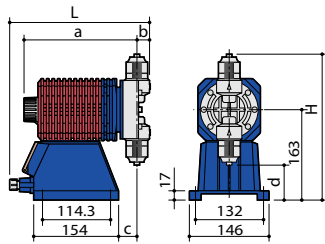
- The max. discharge capacity in the table above represents the performance measured with clean water under the max. discharge pressure. Actual discharge may increase if operation is conducted at a lower pressure.
- Set the discharge pressure at 0.12 MPa or higher to prevent over-feeding trouble. For E56, it should be 0.05 MPa or higher. If the pressure is to be lower than these levels, make sure to use a check valve or a back pressure valve, which is supplied as an optional item.

Specifications of controller

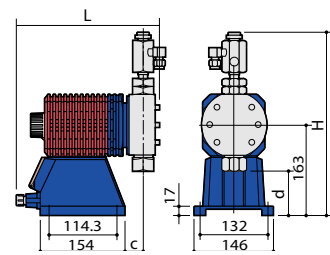
Display	4 digit, 14 segment, LCD		
Setting method	4 Operating Keys ▲, ▼, EXT, START/STOP		
Control function	Manual	1 - 360spm	
	External signal input	Proportional to input signal	Input signal : 0-20mA
		Count control (1 : n)	Dry contact, n=1-999
		Pulse control (n : 1)	Dry contact, n=1-999
	STOP input	Dry contact (Make OFF)	
Out put	Power source for sencer	12VDC 10mA or less	

Dimensions in mm

Type VC, V6, PC, VM, FC



Type SH



Model	L	H	a	b	c	d
EH-E31/36	(243)	(246)	(198)	16.5	(28) (27)	(78) (79)
E46	(247)	(255)	(199)	19	(29)	(70)
E56	(259)	(266)	(209)	21.5	(39)	(59)
E56VM	(261)		(210)	23		

Model	L	H	c	d
EH-E31	(249)	(300)		(97)
E36		(303)	(27)	(94)
E46	(254)	(328)		(92)
E56	(265)	(331)	(38)	(79)

IWAKI CO., LTD. 6-6 Kanda-Sudacho 2-chome Chiyoda-ku Tokyo 101-8558 Japan TEL : (81)3 3254 2935 FAX : 3 3252 8892 IWAKI has global net work. Please find your distributor location at www.iwakipumps.jp

European Headquarter : IWAKI Europe GmbH Germany : IWAKI Europe GmbH The Netherlands : IWAKI Europe GmbH (Netherlands Branch) Italy : IWAKI Europe GmbH (Italy Branch) Spain : IWAKI Europe GmbH (Spain Branch) Poland : IWAKI Europe GmbH (East Europe 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	TEL: (49)2154 9254 0 FAX: 2154 9254 48 TEL: (49)2154 9254 50 FAX: 2154 9254 55 TEL: (31)74 2420011 FAX: (49)2154 925448 TEL: (39)0444 371115 FAX: 0444 335350 TEL: (34)93 37 70 198 FAX: 93 47 40 991 TEL: (48)12 347 0755 FAX: 13 67 20 30 TEL: (32)13 67 02 00 FAX: 12 347 0900 TEL: (45)48 24 2345 TEL: (358)9 2745810 TEL: (33)1 69 63 33 70 FAX: 1 64 49 92 73 TEL: (47)23 38 49 00 TEL: (46)8 511 72900 ()Country codes	U.S.A. : IWAKI America Inc. Argentina : IWAKI America Inc. (Argentina Branch) Brazil : IWAKI Do Brazil Comercio De Bombas Hidraulicas LTDA. Singapore : IWAKI Singapore Pte Ltd. Indonesia : IWAKI Singapore (Indonesia Office) Malaysia : IWAKI Sdn. Bhd. Australia : IWAKI Pumps Australia Pty Ltd. China (Hong Kong) : IWAKI Pumps Co., Ltd. China (Guangzhou) : GFTZ IWAKI Engineering & Trading Co., Ltd. China (Shanghai) : IWAKI Pumps (Shanghai) Co., Ltd. Korea : IWAKI Korea Co., Ltd. Taiwan : IWAKI Pumps Taiwan Co., Ltd. Thailand : IWAKI (Thailand) Co., Ltd.	TEL: (1)508 429 1440 FAX: 508 429 1386 TEL: (54)11 4745 4116 TEL: (55)19 3244 5900 FAX: 19 3244 5900 TEL: (65)6316 2028 FAX: 6316 3221 TEL: (62)21 6906606 FAX: 21 6906612 TEL: (60)3 7803 8807 FAX: 3 7803 4800 TEL: (61)2 9899 2411 FAX: 2 9899 2421 TEL: (852)2607 1168 FAX: 2607 1000 TEL: (86)20 84350603 FAX: 20 84359181 TEL: (86)21 6272 7502 FAX: 21 6272 6929 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
--	---	---	--

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