



Electromagnetic Metering Pumps

EH-E



Extensive Flow Capacity Range
Powerful Electromagnetic Metering Pumps

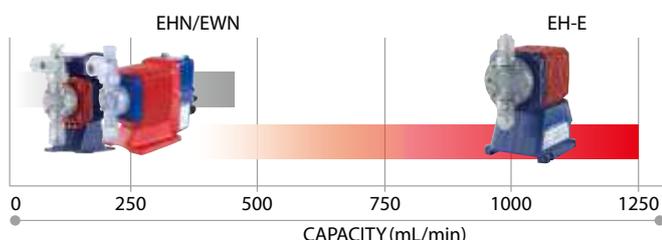
The Heart of Industry

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.



PVC



GFRPP



PVDF



SUS316



Functions of Controller

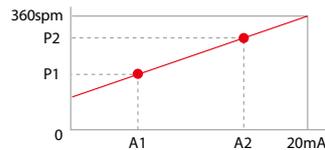
The controller features a control mode based on analog input (0 - 20mADC) and digital input (Pulse) as standard. The controlled operation can be performed in the control mode that best suits the purpose.

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.

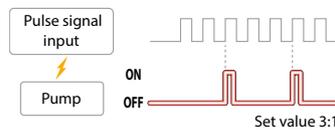
Proportional control mode

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



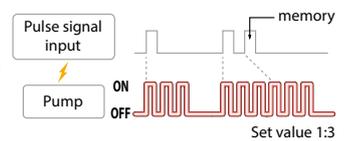
Divisor mode

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.



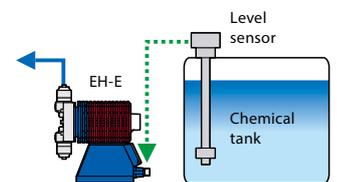
Multiplier mode

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

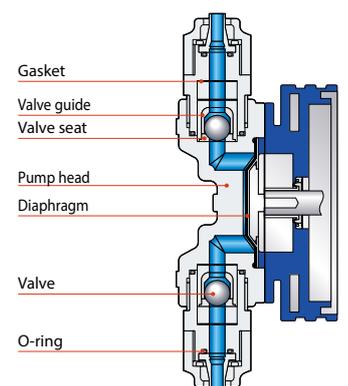
The pump can be stopped by an external contact signal. The pump operates when stop signal is released. This feature enables the pump ON/OFF control.



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

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			

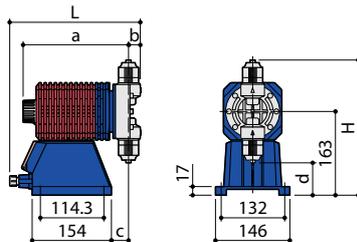
- The max. discharge capacity in the table above represents the performance measured with clean water under the max. discharge pressure. Actual discharge may increase if operation is conducted at a lower pressure.
- Set the discharge pressure at 0.12 MPa or higher to prevent over-feeding trouble. For 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

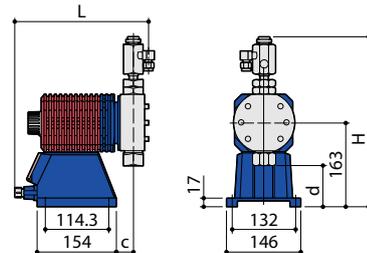
Display	4 digit, 14 segment, LCD		
Setting method	4 Operating Keys ▲, ▼, EXT, START/STOP		
Control function	Manual	1 - 360spm	
	External signal input	Proportional to input signal	Input signal : 0-20mA
		Count control (1: n)	Dry contact, n=1-999
		Pulse control (n : 1)	Dry contact, n=1-999
	STOP input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

Dimensions in mm

VC, V6, PC, VM, FC



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)	(27)	(97)
E36		(303)		(94)
E46	(254)	(328)	(38)	(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.iwakupumps.jp

European Headquarter Germany The Netherlands (Netherlands Branch) Italy (Italy Branch) Spain (Spain Branch) Poland (East Europe Branch) Denmark Finland Norway Sweden Belgium France	IWAKI Europe GmbH TEL: (49)2154 9254 0 IWAKI Europe GmbH TEL: (49)2154 9254 50 IWAKI Europe GmbH TEL: (31)74 2420011 IWAKI Europe GmbH TEL: (39)0445 561219 IWAKI Europe GmbH TEL: (34)934 741 638 IWAKI Europe GmbH TEL: (48)12 347 0755 IWAKI Nordic A/S TEL: (45)48 242345 IWAKI Suomi Oy TEL: (358)10 201 0490 IWAKI Norge AS TEL: (47)23 38 49 00 IWAKI Sverige AB TEL: (46)8 511 72900 IWAKI Belgium N.V. TEL: (32)13 670200 IWAKI France S.A. TEL: (33)1 69 63 33 70	TEL: (49)2154 9254 48 FAX: (49)2154 9254 55 TEL: (31)74 2420011 FAX: (49)2154 9254 48 TEL: (39)0445 569088 FAX: (39)0445 569088 TEL: (34)934 741 638 FAX: (34)934 741 638 TEL: (48)12 347 0900 FAX: (48)12 347 0900 TEL: (45)48 242345 FAX: (45)48 242345 TEL: (358)10 201 0490 FAX: (358)10 201 0490 TEL: (47)23 38 49 00 FAX: (47)23 38 49 00 TEL: (46)8 511 72900 FAX: (46)8 511 72900 TEL: (32)13 670200 FAX: (32)13 670200 TEL: (33)1 69 63 33 70 FAX: (33)1 64 49 92 73	U.S.A. Brazil China (Shanghai) China (Hong Kong) China (Guangzhou) Singapore Indonesia (Indonesia Office) Malaysia Korea Taiwan Thailand Australia	IWAKI America Inc. TEL: (1)508 429 1440 IWAKI Do Brasil Comercio De Bombas Hidraulicas LTDA. TEL: (55)19 3244 5900 IWAKI Pumps (Shanghai) Co., Ltd. TEL: (86)21 6272 7502 IWAKI Pumps Co., Ltd. TEL: (852)2607 1168 GFTZ IWAKI Engineering & Trading Co., Ltd. TEL: (86)20 84350603 IWAKI Singapore Pte Ltd. TEL: (65)6316 2028 IWAKI Singapore Pte Ltd. TEL: (62)21 6906606 IWAKim SDN. BHD. TEL: (60)3 7803 8807 IWAKI Korea Co.,Ltd. TEL: (82)2 6238 4800 IWAKI Pumps Taiwan Co., Ltd. TEL: (886)2 8227 6900 IWAKI (Thailand) Co.,Ltd. TEL: (66)2 322 2471 IWAKI Pumps Australia Pty Ltd. TEL: (61)2 9899 2411	FAX: (1)508 429 1386 FAX: (55)19 3244 5900 FAX: (86)21 6272 6929 FAX: (852)2607 1000 FAX: (86)20 84359181 FAX: (65)6316 3221 FAX: (62) 21 6906612 FAX: (60)3 7803 4800 FAX: (82)2 6238 4801 FAX: (886)2 8227 6818 FAX: (66)2 322 2477 FAX: (61)2 9899 2421
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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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