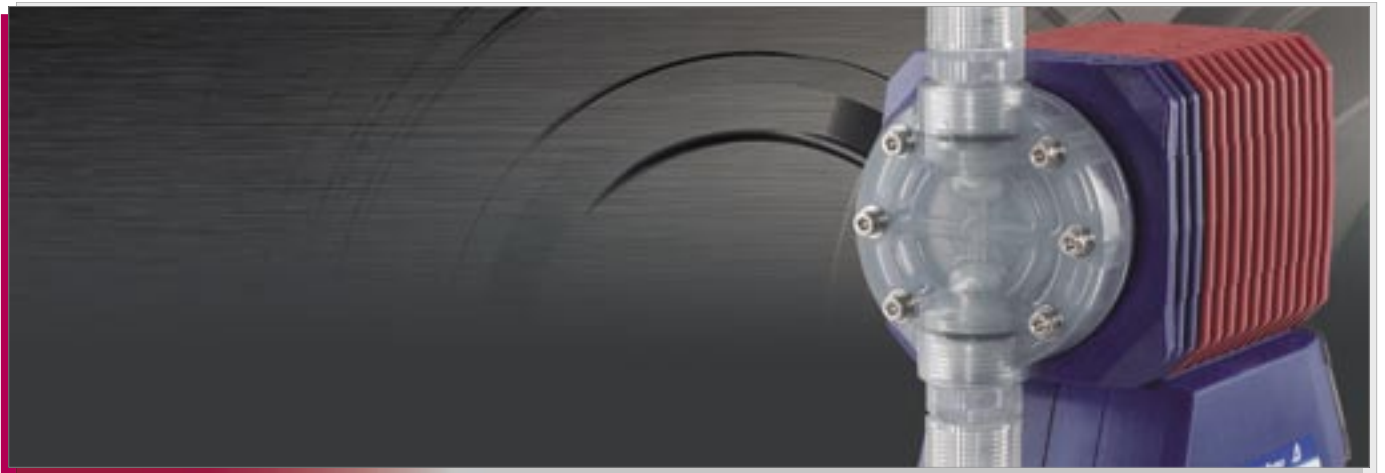


Electromagnetic metering pumps

High-tech combination of pump technology
and electronics technology



Electromagnetic Metering Pump EH Series features not only compact,
but also can achieve a maximum flow rate of 1.25 L/min.



High-tech combination of pump technology and electronics technology

Electromagnetic Metering Pump EH Series features not only compact, but also can achieve a maximum flow rate of 1.25 L/min.

The EH-E pump's controller includes a microcomputer that enables a single pump to provide not only manual operations, but also automatically controlled operations based on various input signals (current and pulse signals).



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 0 and 360 spm, which enables the EH-E pump to provide a wide range of flow rates.

Microcomputer built-in controller

The controller includes a microcomputer that enables a single pump to operate in four modes (manual / proportional control / pulse control / count control), switching between modes by means of the keys.

Water- and dust-proof structure

The pump body, aluminium die-cast frame is molded by reinforced plastics (GFRPP), has a water- and dust-proof structure that is immune to liquids and atmosphere corrosion. The water-proof level is IP65.

Chemical resistance features

Materials available for the pump head are PVC, GFRPP (Polypropylene), PVDF (Fluororesin), and SUS (Stainless steel). All other wetted-parts consist of corrosion-proof materials; Hastelloy C276, ceramic, fluoroelastomer, PTFE, etc.



Model for high flow and industrial process

Functions of the controller

Manual mode

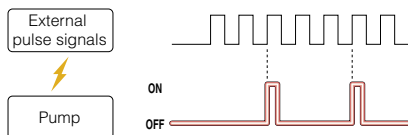
Stroke rate can be increased or decreased by 1-spm anywhere within the range 0 to 360 spm, and is able to set either during operation or stop.

Proportional control mode

The stroke rate can be proportionally controlled based on external DC0-20mA signals. Select an input signal by means of the keys.

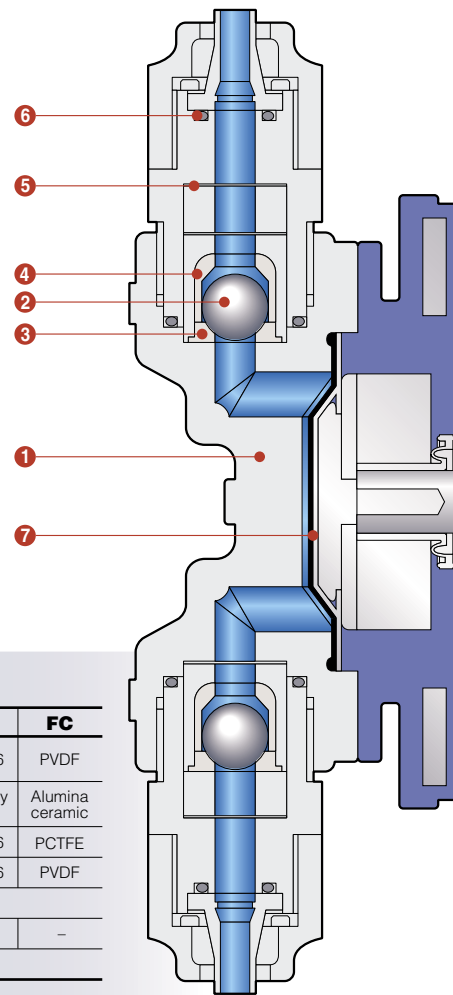
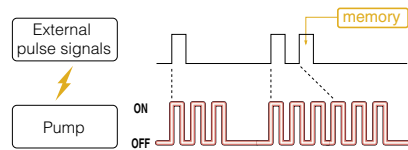
Pulse control mode

The EH-E pump performs division control operations in response to 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.



Count-control mode

The EH-E pump performs count-control operations in response to 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. 255 pulses). It is selectable to store the pulse input or not.

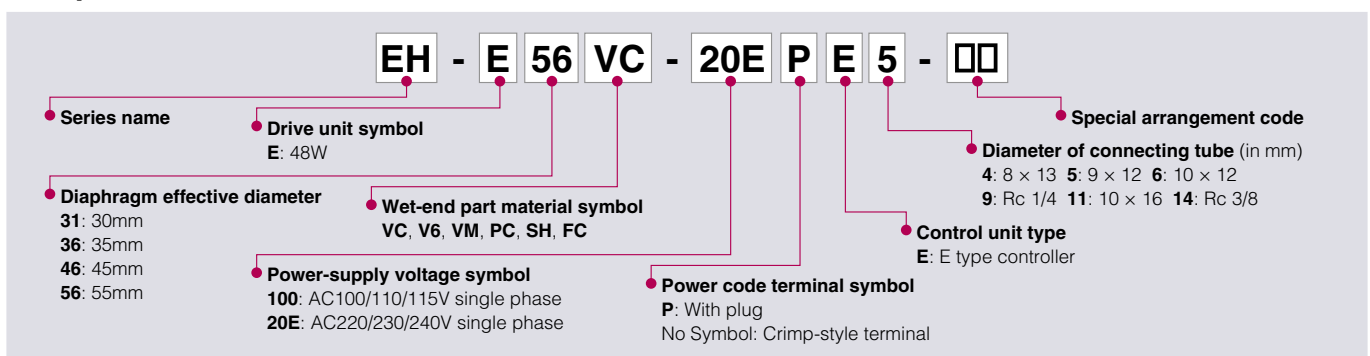


Wet-end part materials

Material symbol	VC	V6	VM (E56)	PC	SH	FC
1 Pump head	PVC	PVC	PVC (machined)	GFRPP	SUS316	PVDF
2 Valve	Alumina ceramic	SUS316	Alumina ceramic	Alumina ceramic	Hastelloy C276	Alumina ceramic
3 Valve seat	FKM	EPDM	FKM	FKM	SUS316	PCTFE
4 Valve guide	PVC	PVC	PVC	GFRPP	SUS316	PVDF
5 Gasket	PTFE					
6 O-ring	FKM	EPDM	FKM	FKM	-	-
7 Diaphragm	PTFE coated EPDM					

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

Pump identification



Specifications of pump

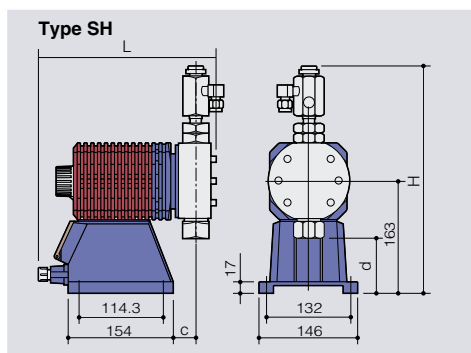
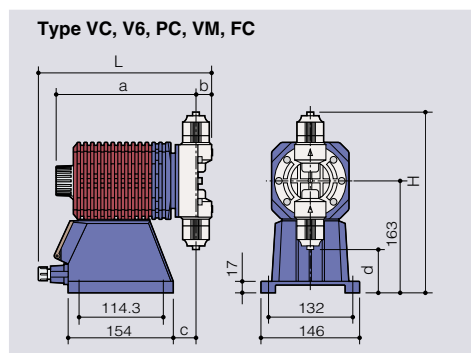
Model		E31	E36	E46	E56
Max.capacity	mL/min	340	520	750	1250
Max.capacity	L/hour	20.4	31.2	45	75
Max. discharge pressure	MPa	1.0	0.7 (SH : 0.6)	0.4	0.2
Power supply	(for both 50/60Hz)	AC100, 110, 115, 220, 230, 240V single phase			
Insulation type, etc.		E type insulation and built-in thermal protector, with a 1.5m or 2.0m power cable			
Stroke rate		0 - 360 spm			
Stroke length		20-100%			
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 X ø13, ø9 X ø12			ø10 X ø16, ø9 X ø12
Connection for type SH		Rc 1/4	Rc 1/4	Rc 3/8	Rc 3/8
Connection for type FC	mm	ø10 X ø12			
Average power consumption		48W			
Average current		AC100/110/115V: 1.8A, AC220/230/240V: 0.8A			

- The max. discharge value 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	0 - 360spm	
	External signal input	Proportional to input signal	
		Count control (1: n)	Input signal : DC4-20mA, 0-20mA, 20-4mA, 20-0mA No voltage contact, n=1-999, No. of stroke : Fixed at 360 spm, Count memory : Max. 255 pulse input
		Pulse control (n : 1)	No voltage contact, n=1-999, No. of stroke : Fixed at 360 spm, Count memory
	STOP input	No voltage contact (Make OFF)	

Dimensions in mm



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

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

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		
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
Philippines : IWAKI Chemical Pumps Philippines, Inc.	TEL: (63)2 888 0245	FAX: 2 843 3096
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 Joint Venture Co., Ltd.	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.