The Heart of Industry
IWAKI

NEW

Hi-Techno Pump IX-B-S6



High output, high precision, high controllability
High efficiency brushless motor driven diaphragm type metering pumps

A new stainless steel type was added to the diaphragm type metering pump IX-B series which adopted a brushless motor with high efficiency and high controllability.

Unique Motor Design

The IX-B pumps use brushless DC (BLDC) motors to control the pump stroke speed. Many similar metering pumps use a stepper-motor based design, however the efficiency of the BLDC motor provides a higher power output in a smaller package and allows the IX-B pumps to achieve 45L/H discharge flowrates.

Flexible Installation (Patent Pending)

The IX-B Pumps have been designed to be installed into various locations. The control unit can easily be repositioned by customers on-site. ❶

LED Status Bar

A large LED status bar provides simple visual indication of operating conditions at a glance. It is easily visible to see the pump status at a distance or in dark locations. ❷

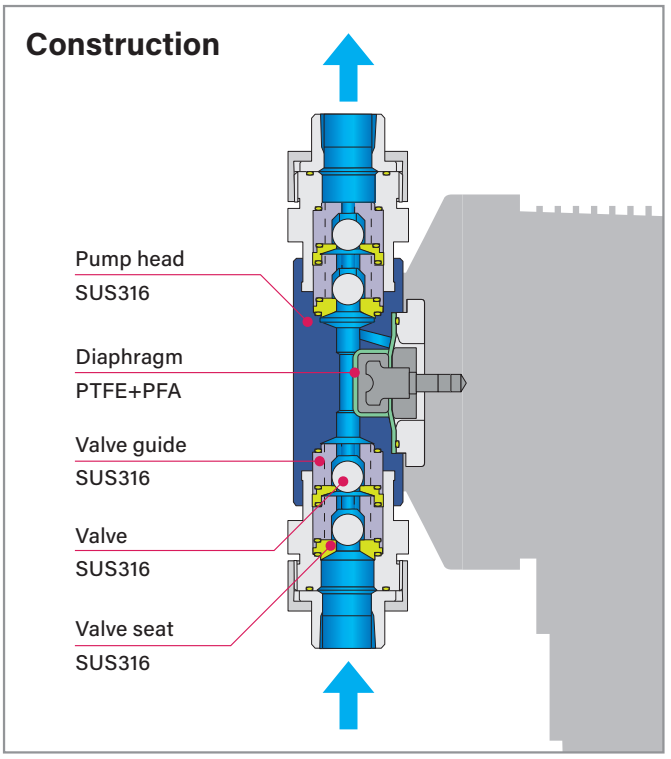
❶ : Upward 4 directions (every 90 degrees)
❷ : It's an image of lighting.

Note: IX-B-S6 can not be wall mounted installation.





Construction



Identification

IX	-	B	007	S6	R	-	E	☐☐
		①	②	③	④		⑤	⑥

① Drive unit
B

② Pump size
007.....7.5L/H
015.....15L/H
030.....30L/H
045.....45L/H

③ Liquid-end material
S6
Please refer to above figure.

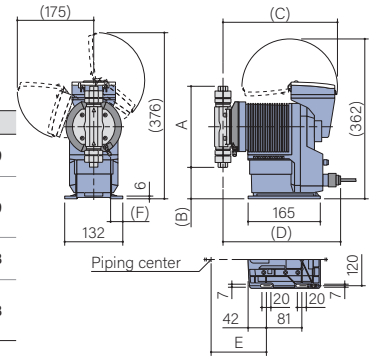
④ Connection
R.....Thread (Rc)
N.....Thread (FNPT)
FJ.....Flange (JIS)
FD.....Flange (DIN)
FA.....Flange (ANSI)

⑤ Type of power code
E.....Europe
U.....U.S.A. 115V
U2.....U.S.A. 230V
A.....Australia
J.....Asia

⑥ Special arrangement code

Dimensions (mm)

Moel		A	B	C	D	E	F
IX-B (007/015) S6	R N	161	82	260	275	94.5	29
	FJ FD FA	247	39	260	275	94.5	29
IX-B (030/045) S6	R N	183	72	262	278	97	28
	FJ FD FA	269	29	262	278	97	28



Specifications

Pump

Model		Capacity L/h	Max. Pressure MPa	Power comsuption W	Current A	Connection	Mass kg
IX-B007 S6	R	0.0075 - 7.5[Note]	1.7	17	0.4	Rc3/8	4.5
	N					3/8 FNPT	
	FJ		1.0			JIS 10K 15A	6.0
	FD					DIN PN10 DN15	
	FA					ANSI 150lb 1/2"	
IX-B015 S6	R	0.015 - 15[Note]	1.0	17	0.4	Rc3/8	4.5
	N					3/8 FNPT	
	FJ					JIS 10K 15A	6.0
	FD					DIN PN10 DN15	
	FA					ANSI 150lb 1/2"	

Note: Discharge flow rate may be less than set value.

Model		Capacity L/h	Max. Pressure MPa	Power comsuption W	Current A	Connection	Mass kg
IX-B030 S6	R	0.030 - 30[Note]	0.6	19	0.5	Rc3/8	5.0
	N					3/8 FNPT	
	FJ					JIS 10K 15A	6.5
	FD					DIN PN10 DN15	
	FA					ANSI 150lb 1/2"	
IX-B045 S6	R	0.045 - 45[Note]	0.4	19	0.5	Rc3/8	5.0
	N					3/8 FNPT	
	FJ					JIS 10K 15A	6.5
	FD					DIN PN10 DN15	
	FA					ANSI 150lb 1/2"	

- The above is the value at rated voltage, ambient temperature and clear water.
- Liquid temperature range: 0 - 80 °C (No viscosity change, Non freezing, No slurry.)
  0 - 50 °C (32 - 122 °F) for U.S.A. type

Controller

Operation mode	MAN (Manual)		Use the UP (↑) and DOWN (↓) keys to set a flow rate.
	EXT	Analog fixed operation	4-20, 0-20, 20-4, 20-0mA (Proportional to the discharge rate)
		Analog variable operation	Programmable 2-point setting (Input signal DC 0–20 mA, proportional to the discharge rate)
		Pulse control[Note1]	0.000625mL/PLS - 15.000000mL/PLS (IX-B007), 0.001250mL/PLS - 30.000000mL/PLS (IX-B015)
			0.002500mL/PLS - 60.000000mL/PLS (IX-B030), 0.003750mL/PLS - 90.000000mL/PLS (IX-B045)
		Batch control[Note1]	0.625mL/PLS - 15.000L/PLS (IX-B007), 1.250mL/PLS - 30.000L/PLS (IX-B015)
			2.500mL/PLS - 60.000L/PLS (IX-B030), 3.750mL/PLS - 90.000L/PLS (IX-B045)
		Interval batch control[Note1]	Day: 0 - 9, Hour: 0 - 23, Minute: 1 - 59
			0.625mL/PLS - 15.000L/PLS (IX-B007), 1.250mL/PLS - 30.000L/PLS (IX-B015) 2.500mL/PLS - 60.000L/PLS (IX-B030), 3.750mL/PLS - 90.000L/PLS (IX-B045)
		Profibus control[Note7]	Communication protocol: Profibus-DP-compliant international standard: EN50170 (IEC61158)
Monitors	LCD	16 digits × 2 lines, backlit character LCD	
	LED	White: When the pump is stopped etc., Green: During pump operation etc., Orange: When entering Pre-Stop etc., Red: When alarm such as abnormal pressure detection etc.	
Operation	Keypads	(⏻)Start/Stop, MENU, ESC, (↵)Enter, (↑)Up, (↓)Down, (←)Left and (→)Right keys	
Control function	STOP		Operation stops with input contact[Note2]
	PRIME		Max spm operation by pressing the (↑)UP and (↓)DOWN keys
	Keylock		Password setting to lock and release operation keys
	Interlock		Operation stops with input contact[Note2]
	AUX		Pump operates at the set discharge rate with input contact.
	Maximum discharge rate		Arbitrarily set the upper discharge limit in each operation mode.
	Buffer memory function		Store the number of pulses entered in batch operation.
	Analog input value display		Display the analog input value.
Input	STOP/Pre-Stop, AUX, Interlock		Non-voltage contact or open collector[Note3]
	Analogue		0 - 20mADC (Internal resistance is 200Ω.)
	Palse		Non-voltage contact or open collector Max pulse frequency is 100Hz. (Pulse ON: 5 msec or more)
Output	Alarm1 (OUT1)		Non-voltage contact (mechanical relay): AC 250 V, 3 A (resistive load) Each output item is selected by Enable/Disable. (Initial value: Leak Detection only Enable) Stop/Pre-Stop/Interlock/Leak Detection/Motor Overload/Batch Complete[Note4]/Drive Error
	Alarm2 (OUT2)		Non-voltage contact (photo MOS relay): AC/DC 24 V, 0.1 A (resistive load) Each output item is selected by Enable/Disable. (Initial value: Interlock only Enable) Stop/Pre-Stop/Interlock/Leak Detection/Motor Overload/Batch Complete[Note4]/Drive Error/Volume Prop. PLS[Note5]
	External power supply		DC12V 30mA or less
	Current		DC 0–20 mA, Two-point setting (allowable load resistance: 300 Ω)
Power voltage[Note6]			100-240VAC 50/60Hz

Note1: The minimum settings for pulse operation, batch operation, and interval batch operation are the flow rates per stroke corrected by calibration.
Also, the change rate of the setting value per pulse is the flow rates per stroke corrected by calibration.
Note2: Pump operation or pump stop can be selected at contact input.
Note3: The maximum voltage and current applied to the contact are 12 V and 5 mA. If you use a contact such as a relay, the minimum applicable load must be 5 mA or less.
Note4: When Batch Complete (batch operation complete output) is set to Enable, the other functions will be set to Disable.
Note5: When Volume Prop. PLS output is set to Enable, the other functions will be set to Disable.
Note6: Do not apply voltage out of the specified range. Doing so may cause malfunction or failure. The allowable voltage supply range is 90-264VAC only.
Note7: When conducting Profibus bus operation, a separate Profibus Conversion BOX (option) is required.

The Heart of Industry
IWAKI

https://www.iwaki.de
IWAKI Europe GmbH, Siemensring 115, 47877 Willich, Germany
TEL: +49 2154 9254 10 FAX: +49 2154 9254 48 E-Mail: sales@iwaki.de

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.