

OVERVIEW

A new class of advanced metering pumps! Iwaki's IX Series are digitally controlled direct-drive diaphragm pumps. Years of experience in high-end motor technology result in extremely accurate and energy efficient metering pumps with high resolution. The IX Series meet today's demand for automated chemical delivery in industries from water treatment to chemical process. Highly precise control offers a solution for a variety of dosing applications.



750:1
Turndown

± 1%
High Accuracy

70%
Energy Savings

SUMMARY OF KEY BENEFITS



High Turndown Ratio

Motor control adjusts the discharge and suction speeds to meet a full and accurate turndown ratio of 750:1 (150 l/h to 200 ml/h).



High Accuracy

Combined with precise motor control, an efficient valve design maintains accurate flow rates to allow a low-cost, mechanically-driven diaphragm pump to achieve a high accuracy of $\pm 1\%$.



Energy Savings

Helical gears and return spring reduce power consumption by up to 70% compared to conventional mechanical diaphragm metering pumps.



High Compression Pump Head Design

A fixed stroke length maintains high compression in each stroke resulting in fast priming and no air-lock at any flow rate.

IX Series Features

» Suction vs. Discharge speed

- Suction speed is constant. Discharge speed is reduced as pump is turned down, helping to reduce pulsation and inertial forces on piping.

» Standard Diaphragm Leak Sensor

- Behind the diaphragm, a sensor monitors for any sign of rupture or leakage.



» Faulty Operation Detection

- Abnormal operation detection protects the pump and piping during discharge pressure spikes (valve closure) or increases (clogging)

» Universal Design

- Multi-voltage operation (100-240VAC) and compliant to UL & CE standards
- Drive/control units each sealed to IP65 ratings

» Cavitation Prevention

- The suction speed can be manually lowered for operation with highly viscous liquids or prevention of cavitation.

» "Foolproof" Valve Cartridge Design

- An orientation guide in the suction or discharge ports prevents valve cartridges from being incorrectly installed.

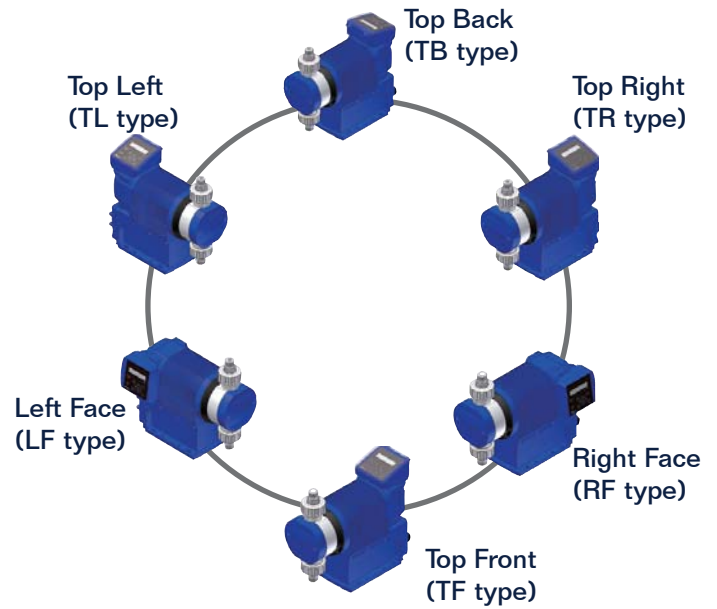


» Automatic Control

- Fully programmable analog or digital proportional control of the pump with Batch and Internal timer control features.

» Flexible, User-friendly Interface

- The controller position can be ordered in 6 positions for operator convenience.
- LCD display with LED backlight
- Multiple display languages.



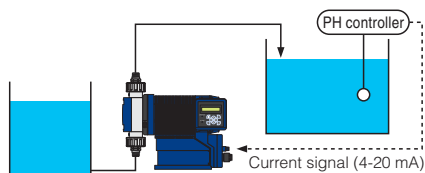
» Degassing Assist

- Keypad operation or a contact signal (AUX) runs the pump at the full speed (overriding any mode) assisting in air elimination and priming.

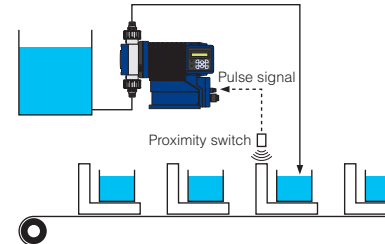
» Operation History

- The controller logs total power connect time, operation time, the number of strokes and the number of power-on cycles.

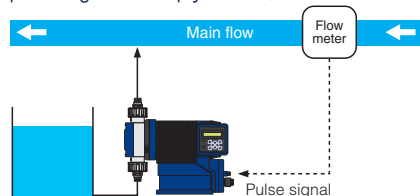
Analog Control:
The pump operates proportionally to an analog signal (4-20mA).



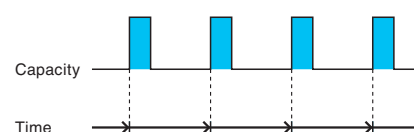
Batch:
The pump doses a set volume when receiving a pulse signal from an external switch.



Digital Control:
The pump doses in proportion to an external digital pulse signal (multiply/divide).



Interval Timer:
The pump doses a set volume at timed intervals.



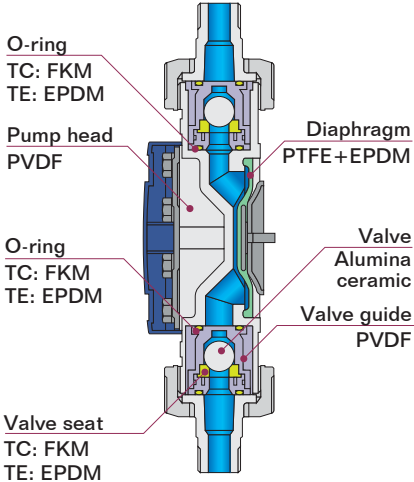
Specifications

Model	Max Capacity L/H (GPH)	Turndown Ratio	Max Pressure Mpa (PSI)	Average power consumption	Current Amps	Connection Code: Size	Weight Kg (lbs)
IX-C150TC	150 (39.6)	750:1 (0.2 - 150 L/H) (0.05 - 39.6 GPH)	0.4 (58)	62W	0.8	N: 3/4" NPTM	9.0 (19.9)
IX-C150TE		150:1 (1.0 - 150 L/H) (0.026 - 39.6 GPH)					
IX-C150S6						R: R 3/4	11.0 (24.3)

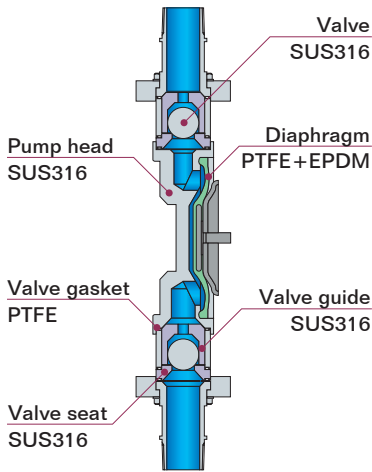
- Maximum discharge capacity is rated with clean water at ambient temperature at maximum discharge pressure. Output may increase as pressure decreases.
- Maximum viscosity: 1000 cps
- Liquid temperature range: 0 -50°C (TC, TE type), 0-80°C (S6 type). No viscosity change. Non freezing. No slurry.
- Operating temperature range: 0-50°C (Indoor use only)
- Operating humidity range: 0-90% RH (Non-condensing in the controller)
- Maximum dry suction lift is 6.5 ft. (2m).

Construction and Liquid End Materials

IX-C150TC, IX-C150TE



IX-C150S6



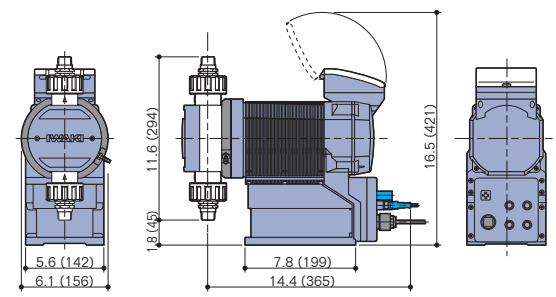
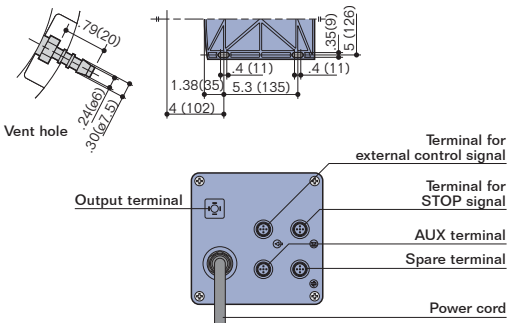
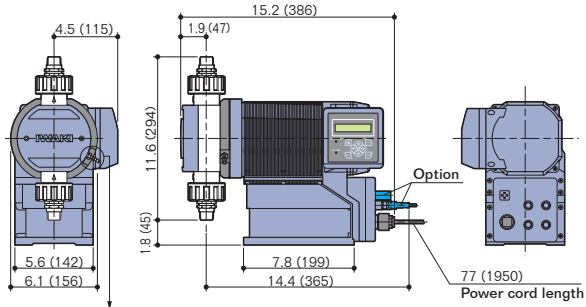
Safety Certification

The IX series metering pumps are tested by Intertek to UL and CSA standards.

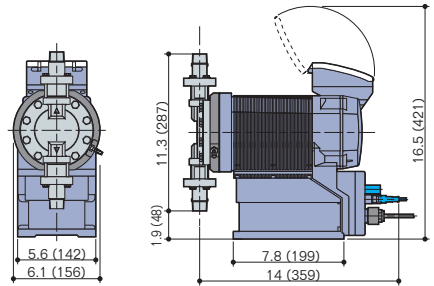


Dimensions in inches (mm)

IX-C150TC, IX-C150TE



IX-C150S6



ORDER INFORMATION

IX - **C** **150** **TC** **N** - **TB** **-** **U**
 1 2 3 4 5 6 7

1 DRIVE UNIT

C

2 PUMP SIZE

150: 150 l/hr

3 WET END MATERIALS

TC = PVDF/FKM/CE
 TE = PVDF/EPDM/CE
 S6 = 316SS/PTFE

4 CONNECTIONS

N = 3/4" NPTM
 R = R 3/4 Thread

5 CONTROLLER LOCATION

TB = Top Back TL = Top Left
 TF = Top Front RF = Right Face*
 TR = Top Right LF = Left Face*
 * No display cover

6 COMMUNICATION BUS

No code = No communication feature

7 POWER CORD

U = USA (115V)
 2 = USA (230V)
 E = Europe (220V DIN)



Webmaster®ONE

WebMasterONE is the most advanced online cooling tower and boiler controller in the water treatment industry. The flexible multi-I/O platform allows you to control multiple cooling towers, boilers, closed loops, and condensate lines with just one controller. An extensive assortment of integrated communications and data handling features are included that enable water treatment professionals to provide more effective water management services to their customers.



Metering Pumps

The E-Class is the most innovative and comprehensive metering pump product line in the world. Over 50 years of pump experience and a commitment to superior mechanical design has led to development of many industry firsts, including 360 stroke-per-minute technology, IP67 waterproof construction, and the world's highest capacity solenoid metering pumps.



WIND WebMaster® Industrial Water Controllers

Walchem's WebMaster Industrial (WIND) Controller sets a new standard for Industrial Water Treatment Controllers. WIND has a flexible multi-I/O platform, a wide range of analytical sensor measurement capabilities, and an extensive assortment of integrated communications and data handling features.



WebAlert Remote Monitor

Walchem's WebAlert is the first stand alone remote monitoring device that can web enable your installed equipment without having to replace or upgrade it.

ABOUT US

Walchem integrates its advanced sensing, instrumentation, fluid pumping and communications technologies to deliver reliable and innovative solutions to the global water treatment market.

Our in-house engineering is driven by quality, technology and innovation. For more information on the entire Walchem product line, visit: www.walchem.com



WALCHEM

An Iwaki America Company

Walchem, An Iwaki America Incorporated Company
 Five Boynton Road Hopping Brook Park
 Holliston, MA 01746 USA
 Phone: 508-429-1110
 Fax: 508-429-7433
www.walchem.com