

### Electromagnetic metering pumps Chlorine dioxide type



- Metering pumps designed specifically for the handling and delivery of chlorine dioxide.
- Ideal for injection into cooling towers, food processing equipment (CIP), and wastewater treatment.
- A unique diaphragm design and new materials of construction combine to ensure long service life in chlorine dioxide applications.

## Pump specifications

| Model                     |         | EWN-B11                           | EWN-B16      | EWN-B21      | EWN-C16                           | EWN-C21      |
|---------------------------|---------|-----------------------------------|--------------|--------------|-----------------------------------|--------------|
| Max. discharge capacity   | mL/min  | 38                                | 65           | 100          | 80                                | 130          |
|                           | mL/shot | 0.05 to 0.11                      | 0.09 to 0.18 | 0.14 to 0.28 | 0.09 to 0.22                      | 0.14 to 0.36 |
| Max. discharge pressure   | MPa     | 1.0                               | 0.7          | 0.4          | 1.0                               | 0.7          |
| Stroke length             | %       | 50 to 100                         |              |              | 40 to 100                         |              |
| Stroke rate               | spm     | 1 to 360                          |              |              | 1 to 360                          |              |
| Power voltage             | V       | AC100 to 240 50/60Hz single phase |              |              | AC100 to 240 50/60Hz single phase |              |
| Current                   | A       | 0.8                               |              |              | 1.2                               |              |
| Average power consumption | W       | 20                                |              |              | 24                                |              |

- Max. discharge capacity shown is at max. discharge pressure (stroke length 100%, stroke rate 100%) and increases as the discharge pressure decreases.
- Test performance is based on pumping clean water at ambient temperature at rated voltage and is collected during shipping/inspection.

## Controller specifications

|                  |                                        |                                                                                                                                                   |                                                   |
|------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Operation mode   | MAN                                    | 0.1 to 100% stroke rate                                                                                                                           |                                                   |
|                  | EXT                                    | DIV (Dividing)                                                                                                                                    | /1 to 9999                                        |
|                  |                                        | MULT (Multiply)                                                                                                                                   | x1 to 9999                                        |
|                  |                                        | ANA,R (Analog, rigid)                                                                                                                             | 4 to 20, 0 to 20, 20 to 4, 20 to 0 mA             |
|                  | ANA,V (Analog, variable)               | 2 points 0.0 to 20.0 mA range 0.0 to 100% stroke rate                                                                                             |                                                   |
| Display          | LCD                                    | 14seg 5digits                                                                                                                                     | %, ml/m, L/H, GPH, STOP, PRIME, AUX etc           |
|                  | LED                                    | ON                                                                                                                                                | Green                                             |
|                  |                                        | Stop                                                                                                                                              | Orange/Red                                        |
| Keypad           | 5 Keys                                 | Start/Stop, ▲(UP), ▼(DOWN), EXT, DISP                                                                                                             |                                                   |
| Control function | STOP/Pre-Stop                          | Pump keeps running when Pre-STOP is activated. Pump stops when STOP is activated.                                                                 |                                                   |
|                  | Prime                                  | Pump runs at max. stroke rate while up and down keys are pushed.                                                                                  |                                                   |
|                  | Key lock                               | Key can be locked and unlocked.                                                                                                                   |                                                   |
|                  | Calibration                            | Discharge capacity per shot is calculated automatically by operating and stopping pump at calibration mode to make flow rate indication possible. |                                                   |
|                  | Buffer memory                          | ON or OFF is selectable. Max. 65535 stroke pulses are put in memory.                                                                              |                                                   |
|                  | Input                                  | Pulse                                                                                                                                             | Non Voltage contact or open collector, Max. 100Hz |
| Current          |                                        | DCD to 20 mA (Input resistance 200Ω)                                                                                                              |                                                   |
| Level sensor     |                                        | Non Voltage contact or open collector, 2- steps contact                                                                                           |                                                   |
| AUX              |                                        | Pump runs at max. stroke rate while AUX signal is input.                                                                                          |                                                   |
| Output           |                                        | Photo-MOS relay 24VAC/DC 0.1A                                                                                                                     |                                                   |
|                  |                                        | STOP, Synchronous with stroke                                                                                                                     |                                                   |
|                  |                                        | Synchronous with stroke is standard.                                                                                                              |                                                   |
| Power voltage    | 100 to 240 VAC 50/60Hz (90 to 264 VAC) |                                                                                                                                                   |                                                   |

Note 1: If the max. stroke rate by calculation exceeds 100% stroke rate because of the relation between the setting and input signal when the pump is in EXT operation, the operation is fixed at the maximum stroke rate speed of manual operation.

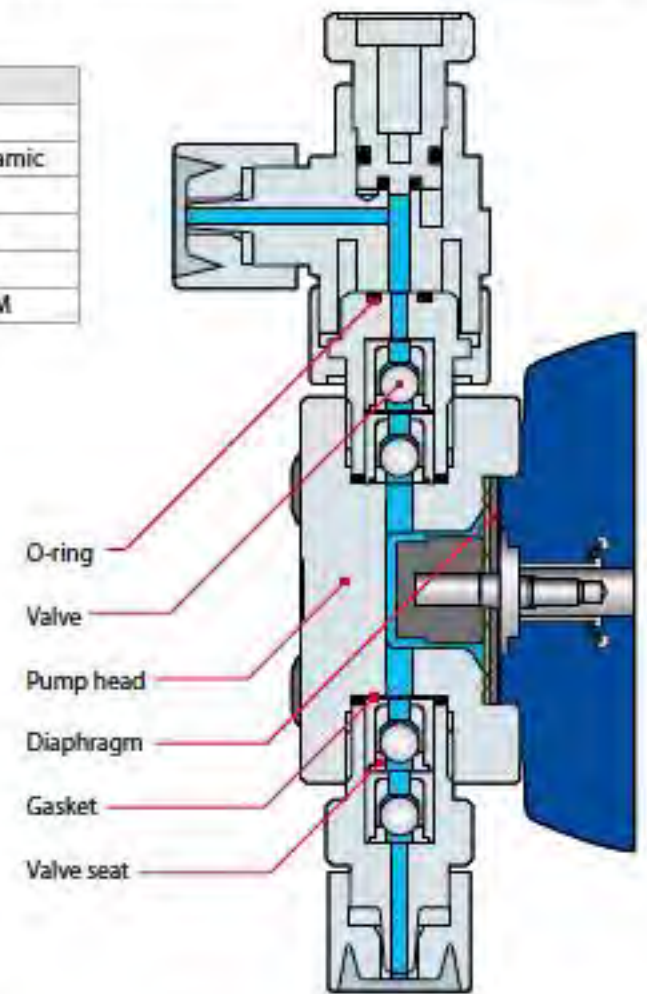
Note 2: By changing the setting, the pump can run when the contact signal comes in.

Note 3: The max. frequency of input pulse is 100Hz (Duty 50:50).

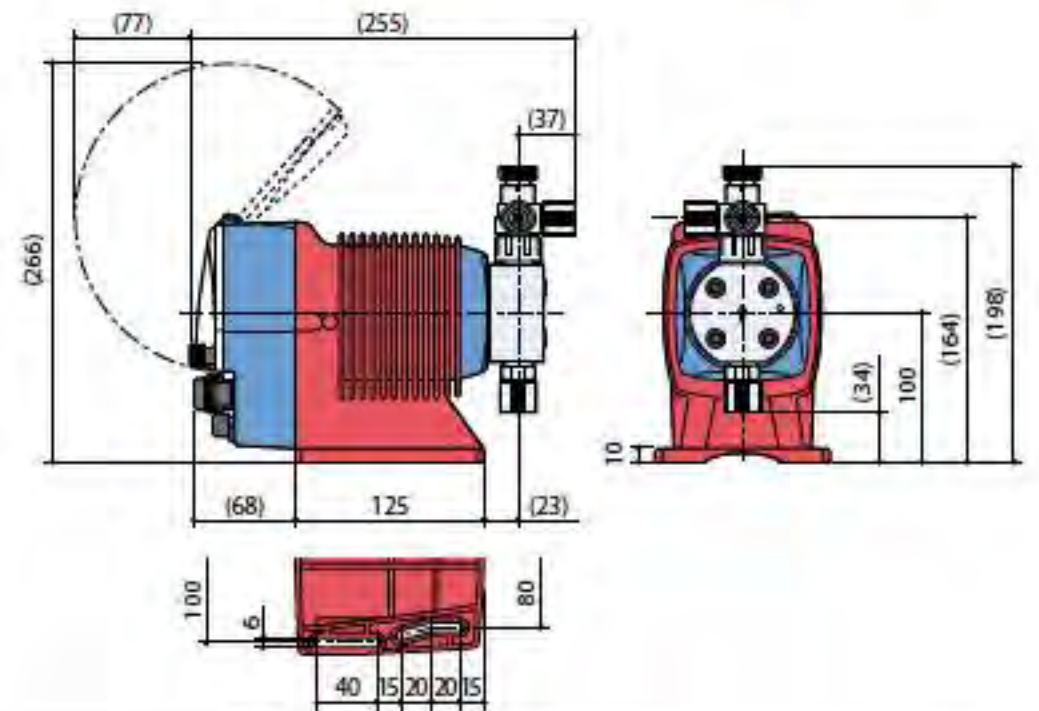
Note 4: The max. chargeable voltage to a contact is 12V and current is 2.3mA. If a contact such as relay is used, the minimum application load should be 1mA or below.

## Materials of construction

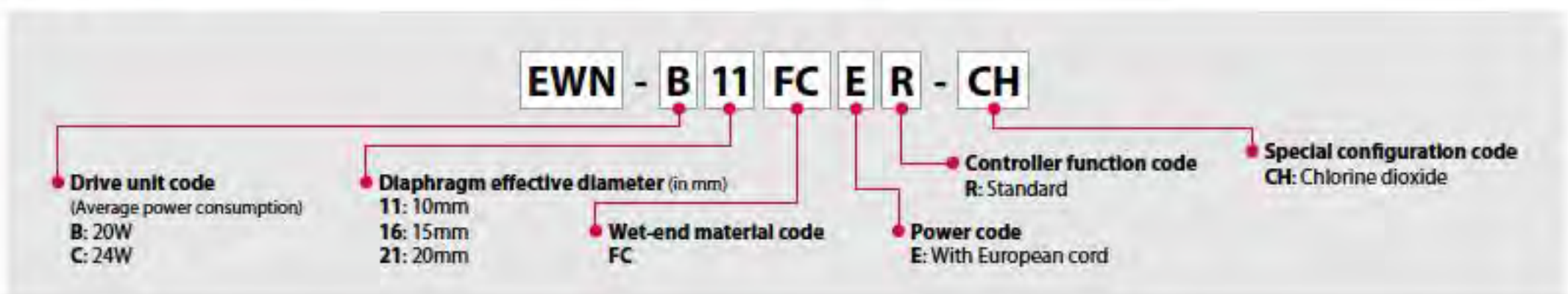
|               |                 |
|---------------|-----------------|
| Material code | FC              |
| Pump head     | PVDF            |
| Valve         | Alumina ceramic |
| Valve seat    | PCTFE           |
| Gasket        | PTFE            |
| O ring        | FFKM            |
| Diaphragm     | PTFE+FKM        |



## Dimensions in mm



## Pump Identification



[www.iwakipumps.jp](http://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

Sensys Ltd  
Unit 9 Pond Close  
Walkern Road  
Stevenage  
Herts SG1 3QP  
Tel: 01438 759595  
[www.sensys.co.uk](http://www.sensys.co.uk)

**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.

