



# **Electromagnetic DC Metering Pump**



Iwaki HRP metering pumps enable high-speed, accurate flow in a compact package. Designed specifically for OEM applications, the HRP pump has been sized for easy integration into many types of systems. Multiple control options including proportional, 1:1 digital pulse following, and simple start/stop control, combined with horizontal and vertical configurations enable the HRP pump to be customized for many applications.

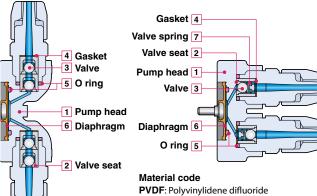
- **Reduce system size** Ultra-compact (4" x 2" x 3.5") design makes it easy to fit this pump into almost any system.
- Enhanced portability Available in 12 or 24 VDC allows for increased portability of your system.
- **Ease of Integration** From simple to sophisticated, internal or external control, HRP's 4 different integrated control options ensure a custom fit.
- **Simplify your fluid path** Vertical or horizontal porting configurations provide a smooth fluid path on every application.

#### **Standard applications**

- Sterilizing/Reprocessing Equipment
- Analytical Equipment
- Chemical Dosing
- Medical Devices
- Water Quality
- Car Wash



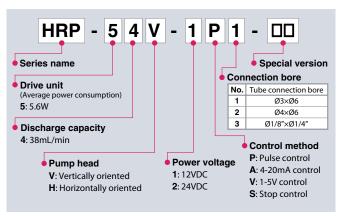
### Wet End Materials



**FKM**: Fluorine-contained rubber **PTFE**: Polytetrafluoroethylene

| Part         | Material        | Part                                   | Material  |  |  |  |  |  |
|--------------|-----------------|--|-----------|--|--|--|--|--|
| 1 Pump head  | PVDF            | 5 O-ring                               | FKM       |  |  |  |  |  |
| 2 Valve seat | FKM             | 6 Diaphragm                            | PTFE-EPDM |  |  |  |  |  |
| 3 Valve      | Alumina Ceramic | 7 Valve spring                         | PEEK      |  |  |  |  |  |
| 4 Gasket     | PTFE            | * Other materials available on request |           |  |  |  |  |  |

### **Model Identification**



HRP

series

#### Specifications

| Model       | Flow Rate<br>ml/min | Max<br>Discharge<br>Pressure<br>PSI (MPa) | Stroke<br>rate<br>spm | Tube connection                       | Power<br>Voltage<br>V | Power<br>consumption<br>W | Current<br>A | Weight Ibs<br>(kg) |  |
|-------------|---------------------|---|-----------------------|---------------------------------------|-----------------------|---------------------------|--------------|--------------------|--|
| HRP-54V/H-1 | 0.055 - 38          | 29 (0.2)                                  | 0-720                 | 1/8" x 1/4"<br>3mm x 6mm<br>4mm x 6mm | DC12                  | - 5.6                     | 1.5          | 1.1                |  |
| HRP-54V/H-2 |                     |   |                       |                                       | DC24                  |                           | 1.0          | (0.5)              |  |

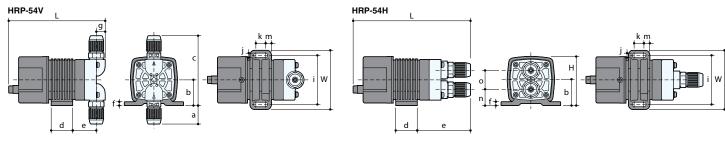
Liquid & ambient temperature 0 - 40°C

Allowable voltage deviation  $\pm 5\%$  of rated voltage

#### **Integrated Control Options**

| Control type | Max Speed       | Operation                                  | Input signal  |
|--------------|-----------------|--|---|
| Pulse        | 720 spm         | 1 stroke per pulse (synchronous operation) | Dry contact or open collector                       |
| 4-20mA       | 720 spm         | 4-20 mA proportional to 0 -720 spm         | Analog 4-20 mA DC                                   |
| 1-5VDC       | 720 spm         | 1-5 VDC proportional to 0-720 spm          | Voltage 1-5 VDC (Current capacity of 25 mA or more) |
| Start/Stop   | 720 spm (fixed) | Pump stops during contact input            | Dry contact or open collector                       |

## Dimensions



Dimensions in mm (nominal)

| Model   | W  | Н      | L     | а    | b  | с    | d    | e    | f   | g   | i    | j        | k  | m | n    | 0    |
|---------|----|--------|-------|------|----|------|------|------|-----|-----|------|----------|----|---|------|------|
| HRP-54V | 62 |        | (101) | (19) | 72 | (73) | 22.5 | (25) | 9.5 | 9.5 | F1 F | 51.5 4.5 | 10 | 6 |      |      |
| HRP-54H |    | (51.5) | (122) |      | 27 |      |      | 5(6) | 4   |     |      |          |    |   | 17.2 | 19.6 |



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