



# APV Vega V028 EasyFlow

- fully automated Binary-Drive frame for sanitary applications

## Description

APV Vega V028 is a new hygienic plate heat exchanger designed specifically for high viscosity products. Longer run time, rapid CIP and gentle product treatment combine to deliver significantly enhanced process efficiency and product output.

The Vega V028 also features the new, fully-automated APV Binary-Drive frame for easy opening and closing at the push of a button.

## Application

The Vega V028 is used for heating, cooling and pasteurising of products such as medium- to high-viscosity dairy products including yoghurt, juices with short fibres, and non-Newtonian products such as ketchup.

## Product features and benefits

The Vega V028 EasyFlow plate design is a further development of the renowned and widely used APV wide gap "R5" heat transfer area. It is designed to reduce the effect of pressure increase due to fouling and provide for long run times while still maintaining high thermal efficiency. It is also widely acclaimed for its longer production time, gentle product treatment and reduced fouling.

### ● Longer production time

The combination of a large, free-flow port area and a vastly reduced number of contact points on the plate reduces the risk of fouling by products containing fibres and/or particles.

### ● Uniform product quality

The diagonal flow reduces the risk of dead areas on the plate and ensures uniform temperature-time treatment of the product. This ensures more uniform product quality and retention of natural aromas and flavours.

### ● Shorter and more effective CIP

Up to 80% fewer contact points on the plate help to prevent fibre hang-up and facilitate irrigation during the cleaning cycle. Enhanced distribution of detergents on the plate means shorter and more efficient CIP.

### ● Speedy and trouble-free turn around

Vega V028 plates employ the patented "Corner Interlock" plate alignment mechanism and APV EasyClip gaskets. Plate packs can be assembled rapidly without misalignment, and the glue-free design of APV EasyClip gaskets ensures quick refit and plate pack turnaround.

### APV Binary-Drive frame - fully automated and 3A compliant

The new APV Binary Drive frame developed for Vega V028 is designed for hygienic applications requiring frequent and easy opening and closing with minimum operator involvement. A standard, manually operated frame is also available.

### ● Optimised plate and gasket life

Intelligent PLC ensures proper opening and closing, thus preventing damage due to plate misalignment or over-compression. An excessive torque shutdown feature stops the system if any obstruction is detected while closing the plate pack. Life-cycle testing equivalent to 10 years of daily openings provides high reliability.

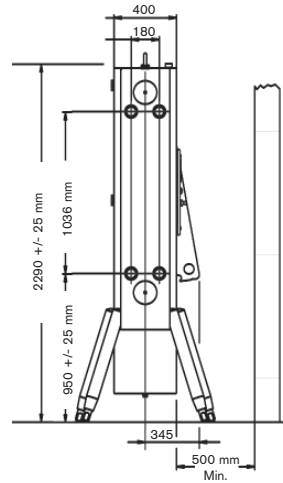
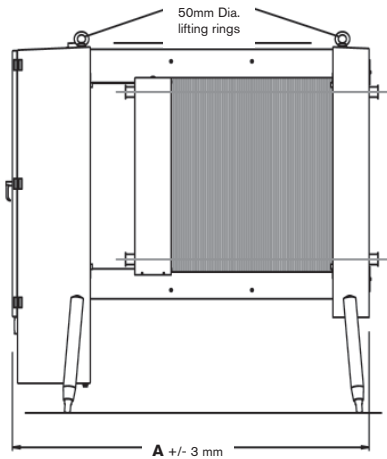
### ● Preventive maintenance

The simple user-interface facilitates easy operator input for changing opening dimensions. Total run time display since the last opening enables optimum maintenance planning.

### ● Reduced downtime and greater operator efficiency

Automatic operation and direct access to any plate in the rack mean faster inspection and maintenance by eliminating the need for component removal, lifting of heavy objects and use of tools. Automation also enables operators and maintenance staff to carry out other tasks while the unit is opening or closing.

# Product specifications

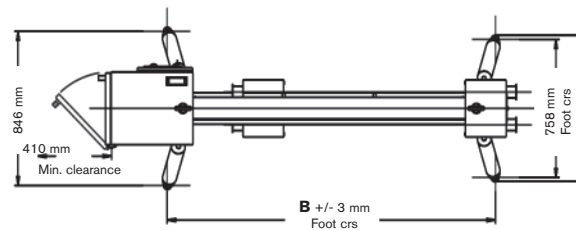


## APV Vega V028 EasyFlow plates and gaskets

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Plate materials:</b>  | AISI 316, Titanium and other alloys |
| <b>Gasket materials:</b> | Nitrile, EPDM and FKM               |

## APV Vega V028 Binary-Drive Frame

|                               |  |
|-------------------------------|--|
| <b>Material:</b>              | Stainless steel 304/304L cladding around ASME 516 grade 70 carbon steel core   |
| <b>Finish:</b>                | No. 4 polish on head, follower and end support. Glass blast top and bottom bar   |
| <b>Frame size:</b>            | 3 length variants up to a maximum of 530 plates  |
| <b>Connections:</b>           | Hygienic 2.5" Tri-clamp, ASME bevel seat, CB-I line and plain stub end for welding<br>Industrial 2.5" L/T lap joint and weld neck flanges<br>Finish: 150 grit finish meeting 3A. |
| <b>Max. temperature:</b>      | Up to 177°C (350°F) depending on gasket material   |
| <b>Max. design pressure:</b>  | 14 bar gauge (200 Psig)  |
| <b>Maximum flow rate:</b>     | 57 m <sup>3</sup> /h (250 GPM)   |
| <b>Approvals:</b>             | PED and 3A compliant   |
| <b>Power pack:</b>            | Consists of one 5 hp, three-phase motor and hydraulic pump, one hydraulic motor, and one 20 gallon integral oil tank (oil A/W 32).   |
| <b>Power requirements:</b>    | 230/460 VAC 3-phase. 30/15 amp mating connector supplied   |
| <b>Manual closing system:</b> | In the event of power failure, the frame may be opened and closed manually<br>Hexagon ratchet socket wrench provided   |
| <b>Control system:</b>        | PLC controlled, solenoid operated, hydraulic, 2-way valve  |
| <b>User interface:</b>        | Backlit, 5.7" LCD 4-colour touch screen monitor, 320x240 resolution, 4 shades  |
| <b>Tie bars:</b>              | Two hydraulic, motor-driven 1-3/4" ACME tie bars shrouded by top and bottom bar  |
| <b>Accessories:</b>           | Optional stainless steel protective plate pack shroud<br>Optional grids with up to 8 liquid connections<br>Optional solid divider plate  |



| Frame size | Frame weight in kg | Measurements in mm |      |
|------------|--------------------|--------------------|------|
|            |                    | A                  | B    |
| 1          | 1,186              | 2262               | 1813 |
| 2          | 1,246              | 3262               | 2813 |
| 3          | 1,307              | 4262               | 3813 |

Max. plate capacity based on 0.6 mm plate thickness  
A grid reduces the capacity by 17 plates.  
Gasketed AISI 316 plate weight: 1.86 kg (4.1 lb)

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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit [www.apv.com](http://www.apv.com).

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