

APV Vega V028 Binary-Drive Series 2

FULLY AUTOMATED PLATE HEAT EXCHANGER FOR SANITARY APPLICATIONS



DESCRIPTION

APV brand Vega V028 Binary-Drive Series 2 is a new hygienic plate heat exchanger designed specifically for high viscosity products. Longer run time, rapid Clean-In-Place (CIP) and gentle product treatment combine to deliver significantly enhanced process efficiency and product

output. The Vega V028 Binary-Drive Series 2 is a fully-automated frame which opens and closes at the touch of a button, no tools are required.

APPLICATION

The Vega V028 Binary-Drive Series 2 is used for heating, cooling and pasteurizing of products such as medium- to high-viscosity dairy products including yogurt, juices with short fibers, and non-Newtonian products such as ketchup.

FEATURES AND BENEFITS

The Vega V028 EasyFlow plate design is a further development of the renowned and widely used APV 4 mm average 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 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 fibers 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 flavors.

▪ Shorter and more effective CIP

Up to 80% fewer contact points on the plate help to prevent fiber 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 brand EasyClip gaskets. Plate packs can be assembled rapidly without misalignment, and the glue-free design of APV brand EasyClip gaskets ensures quick refit and plate pack turnaround.

APV BRAND BINARY-DRIVE SERIES 2 FRAME - FULLY AUTOMATED AND 3-A COMPLIANT

The new APV brand V028 Binary-Drive Series 2 frame developed for Vega V028 is designed for hygienic applications requiring frequent and easy opening and closing with minimum operator involvement. A standard, manually opened frame is also available.

▪ Optimized plate and gasket life

Intelligent PLC ensures proper opening and closing, thus preventing damage due to plate misalignment or over-compression.

▪ Preventive maintenance

The simple user-interface facilitates easy operator input for changing plate quantity and compensating for gasket compression set when required. Total opening and closing time display enables optimum maintenance planning.

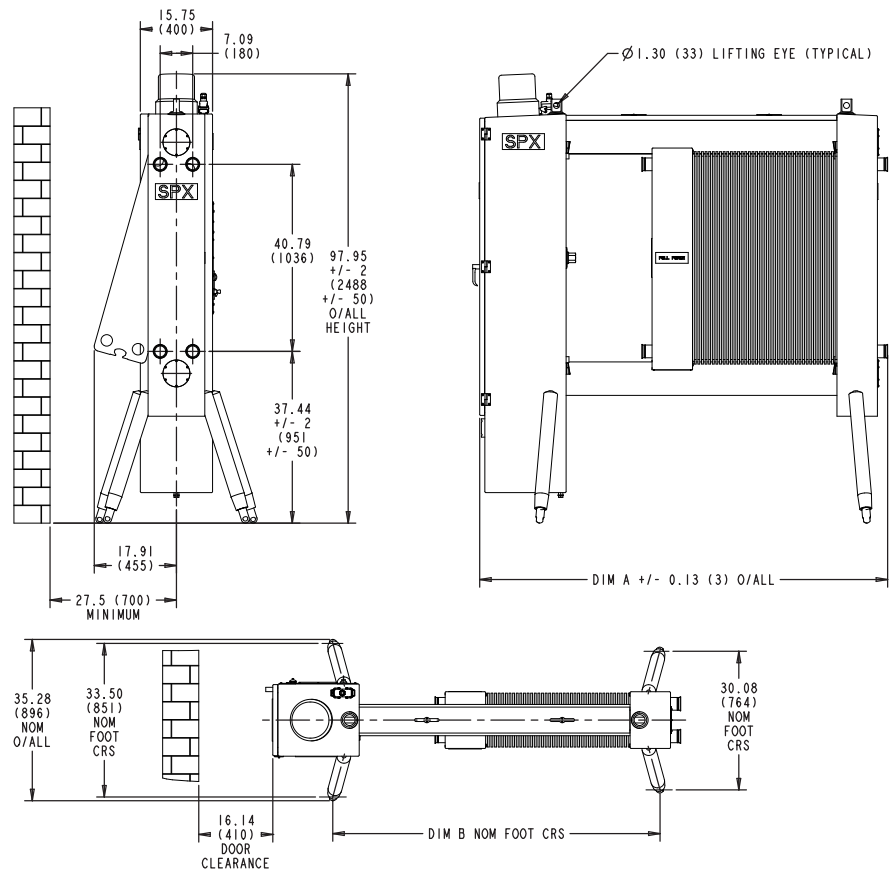
▪ Reduced downtime and greater operator efficiency

Automatic operation and direct access to any plate in the pack means 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 AND DIMENSIONS

APV VEGA V028 EASYFLOW PLATES AND GASKETS	
PLATE MATERIALS	AISI 316, Titanium and other alloys
GASKET MATERIALS	Nitrile, EPDM and FKM
APV VEGA V028 BINARY-DRIVE SERIES 2 FRAME	
MATERIAL	Stainless steel 304/304L cladding around ASME SA-516 grade 70 carbon steel core
FINISH	No. 4 polish on head, follower and end support. Glass blast top and bottom bar
FRAME SIZE	3 length variants up to a maximum of 496 plates*
CONNECTIONS	Hygienic 2.5" clamp, ACME bevel seat, CB I-line and plain stub end for welding Finish: 150 grit finish meeting 3-A
MAX. TEMPERATURE	Up to 350°F (177°C) depending on gasket material
MAX. DESIGN PRESSURE	200 psi (14 bar)
MAXIMUM FLOW RATE	250 gpm (57 m ³ /h)
APPROVALS	3-A and ASME VIII compliant
POWER PACK	Consists of one 5 hp, three-phase motor and hydraulic pump, one hydraulic motor, and one 20 gallon integral oil tank (Chevron FM ISO 32, food grade)
POWER REQUIREMENTS	230/460 VAC 3-phase, 30/15 amp. Mating connector supplied
MANUAL CLOSING SYSTEM	In the event of power failure, the frame may be opened and closed manually
CONTROL SYSTEM	PLC controlled, solenoid operated, hydraulic, 2-way valve
USER INTERFACE	Backlit LCD touch screen monitor
TIE BARS	Two power-driven 1.75" ACME tie bars shrouded by top and bottom bar
ACCESSORIES	Optional stainless steel protective plate pack shroud Optional grids with up to 8 liquid connections Optional solid divider plate

Dimensions = in (mm)



FRAME SIZE	FRAME WEIGHT IN LBS (KG)	MEASUREMENTS IN IN (MM)	
		A	B
1	2,615 (1,186)	89.05 (2,262)	71.38 (1,813)
2	2,747 (1,246)	128.42 (3,262)	110.75 (2,813)
3	2,881 (1,307)	167.79 (4,262)	150.12 (3,813)

*Max. plate capacity based on 0.5 mm plate thickness

A grid reduces the capacity by 17 plates.

Gasketed AISI 316 plate weight: 4.1 lb (1.86 kg)

Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a multi-industry manufacturing leader. For more information, please visit www.spxflow.com

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