

Rannie 185Q / Gaulin 185Q



Cost Efficient and Reliable

The 185Q homogenizer demonstrates exceptional operational efficiency. Its latest technology design combines low energy and water consumption with reliable operation. With flow rates ranging from 2,600-13,200 g/h (10,000 – 50,000 l/h), customers can select exactly the right version for their needs.

The APV brand 185Q is equipped with an innovative oil treatment unit. Extensive monitoring and controlling equipment ensures ideal oil conditions and long life of the power end parts. The extremely efficient Micro-Gap® valve is available for milk and other dairy applications. The Micro-Gap® is capable of operating at reduced pressure while increasing homogenization efficiency

SPX FLOW, Inc. (NYSE:FLOW) is a leading manufacturer of innovative flow technologies, many of which help define the industry standard in the market segments they serve. From its headquarters in Charlotte, North Carolina, it operates a sales and support network, centers of manufacturing excellence, and advanced engineering facilities, throughout the world. Its cutting-edge flow components and process equipment portfolio includes a wide range of pumps, valves, heat exchangers, mixers, homogenizers, separators, filters, UHT, and drying technology that meet many application needs. Its expert engineering capability also makes it a premium supplier of customized solutions and complete, turn-key packages to meet the most exacting of installation demands.

Incorporating many leading brands, SPX FLOW has a long history of serving the food and beverage, power and energy, and industrial market sectors. Its designs and engineered solutions help customers drive efficiency and productivity, increase quality and reliability, and meet the latest regulatory demands. In-depth understanding of applications and processes, state-of-the-art Innovation Centers, and advanced pilot/testing technology further assist in optimizing processes and reducing timescales to reliably meet production targets.

To learn more about SPX FLOW capabilities, its latest technology innovations and complete service offerings, please visit www.spxflow.com.

The latest technology combining operational efficiency with exceptional reliability

The APV brand 185Q is a high performance homogenizer, capable of functioning at flow rates up to 13,200 g/h (50,000 l/h) and pressures of 9,400 psi (650 bar). It provides the ideal solution for your homogenization applications.

INNOVATIVE SERVICE CONCEPT

Special attention is also given to ease of maintenance and performance monitoring to ensure that the homogenizing runs at optimum efficiency at all times. In the event that homogenization pressure, feed pressure, cooling water flow, oil pressure, oil level or oil temperature move from prescribed parameters, electric signals can be passed to the control room to alert the operator.

This sophisticated set of diagnostics, which provides unique operational advantages, is APV's latest step in the development of the "intelligent" homogenizer. Additionally, they allow key operating parameters to be collected and saved into a database for review in order to determine optimum performance.

In addition visual indicators are placed on the machine itself. The power end is prepared for installation of sensors for monitoring of roller bearings and gear wheel conditions.

ENVIRONMENTALLY FRIENDLY

The APV brand 185Q is equipped with a low noise cabinet as standard. Other environmentally friendly features include a cooling system, which minimizes the use of water by engaging automatically only when the oil temperature moves outside the critical range of 104-122°F (40-50°C). The APV brand 185Q is also designed to eliminate the risk of water contamination in the oil.

EASE OF INSPECTION

The low noise cabinet has panels and doors for inspection and maintenance. The interior of the APV brand 185Q is conveniently lit for ease of inspection.

BASIC MACHINE

The APV brand 185Q homogenizing, a five-plunger, reciprocating pump, is fitted with a single-stage homogenizing valve (optional two-stage) with hydraulic actuation.

The APV brand 185Q incorporates a durable slow-speed Power End that reduces vibration and noise. Easy access to the hydraulic actuation system, oil treatment unit and other auxiliary systems simplifies maintenance saving time and money.

Liquid End options include a three-piece valve housing (Rannie) and a mono-block design (Gaulin).

Design features of both Rannie and Gaulin simplify routine maintenance.

THE LIQUID END INCLUDES

- Inlet pressure gauge with low pressure switch
- Pressure gauge incl. 4-20 mA output for total product pressure (1st stage prepared for automatic control)
- Flow switch and solenoid valve for plunger lubrication
- Weld-stub product connections

THE POWER END CONTROL FEATURES INCLUDE

- Oil filter alarm switch
- Oil condition monitoring and control equipment
- External cooler

THE HVA UNIT INCLUDES

- Quick unloading valve
- Electrical proportional valve(s)
- Pressure gauges for total hydraulic pressure and individual actuator pressure(s)
- Oil temperature sensor (4-20 mA)

THE INSTRUMENTATION INCLUDES

- Emergency stop
- Potentiometers for manual pressure control
- Display for total product pressure
- All equipment wired to a terminal box. The APV brand 185Q is built into a low noise stainless steel cabinet.

STANDARD OPTIONS

- Two-stage hydraulic valve actuation (HVA)
- Aseptic cylinder design
- High-pressure outlet connections
- Micro-Gap® homogenizing valve
- Motor starter
- Controllers for automatic pressure control
- Control cabinet, stainless steel
- Choice of materials for cylinder block, plungers, homogenizing valves, packings, pump valves, valve seats, and seals.
- Pulsation dampener(s): inlet and outlet
- Flow meter for lubrication oil, monitoring slide bearings condition
- Pressure transducer for lubrication oil pressure (4-20 mA output)
- External cooling fan/main motor

SPECIAL OPTIONS

We will be happy to discuss any other requirements you may have.



Transmission (Power End)



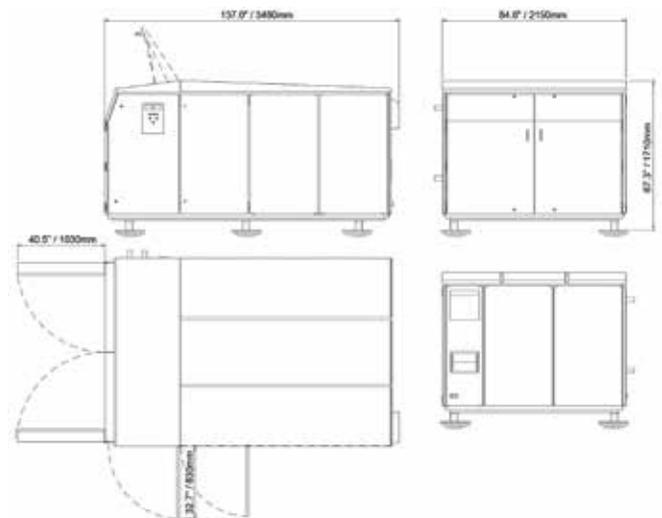
Oil and Hydraulic Units



Access to the Homogenizing



Liquid End (Gaulin)



APV brand 185Q - Base outline drawing

Rannie 185Q

Gaulin 185Q

APV HOMOGENIZERS



GAULIN/MONO-BLOCK DESIGN

TYPE	U.S. MAX. CAPACITY / MAX. PRESSURE		METRIC MAX. CAPACITY / MAX. PRESSURE	
	GPH	PSI	LPH	BAR
POPPET TYPE VALVES				
185Q-1,5	13,200	1,500	50,000	100
185Q-2,0	10,600	2,000	40,000	140
185Q-2,5	8,500	2,500	32,000	170
185Q-3,0	7,400	3,000	28,000	200
185Q-3,6	5,600	3,600	21,000	250
BALL TYPE VALVES				
185Q-2,0	10,000	2,000	38,000	140
185Q-2,5	8,000	2,500	30,000	170
185Q-3,0	7,100	3,000	27,000	200
185Q-3,6	5,300	3,600	20,000	250

RANNIE/THREE-PIECE VALVE HOUSING POPPET/BALL TYPE VALVES

TYPE	U.S. MAX. CAPACITY / MAX. PRESSURE		METRIC MAX. CAPACITY / MAX. PRESSURE	
	GPH	PSI	LPH	BAR
85.5140	11,800	2,100	45,000	150
75.5140	7,900	2,900	30,000	200
65.5140	6,000	3,600	23,000	250
54.5140	4,200	5,800	16,000	400
45.5140	2,600*	8,700	10,000*	600
42.5140	2,300*	9,400	9,000*	650

* Ball valves only

DIMENSIONS

LENGTH IN (MM)	WIDTH IN (MM)	HEIGHT IN (MM)	DIMENSIONS PACKED IN A CRATE LXWXH IN (CM)	CUBIC MEASURE M³
137 (3,480)	84.6 (2,150)	67.3 (1,710)	151X96.5X86.6 (384X245X220)	20

Gross Weight in a Crate, including Motor: 18,188 lb (8,250 kg)

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