The APV 185Q is a high performance homogeniser, capable of functioning at flow rates up to 50,000 litres per hour (13,209 gallons per hour) and pressures of 650 bar (9427.4 PSI). It provides the ideal solution for your homogenisation applications.

**INNOVATIVE SERVICE CONCEPT**

Special attention has also been given to ease of maintenance and performance monitoring to ensure that the homogeniser runs at optimum efficiency at all times. In the event that homogenisation 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” homogeniser. 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 185Q is equipped with a low noise cabinet as standard. Other environmentally friendly features include a cooling system, which minimises the use of water by engaging automatically only when the oil temperature moves outside the critical range of 40-50°C (104-122°F). The APV 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 185Q is conveniently lit for ease of inspection.

**BASIC MACHINE**

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

The APV 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 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® homogenising valve
• Motor starter
• Controllers for automatic pressure control
• Control cabinet, stainless steel
• Choice of materials for cylinder block, plungers, homogenising 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.
### Rannie/Three-Piece Valve Housing

#### Poppet/Ball Type Valves

<table>
<thead>
<tr>
<th>Type</th>
<th>U.S. Max. Capacity</th>
<th>Metric Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GPH</td>
<td>PSI</td>
</tr>
<tr>
<td>185Q-1.5</td>
<td>13200</td>
<td>1500</td>
</tr>
<tr>
<td>185Q-2.0</td>
<td>10600</td>
<td>2000</td>
</tr>
<tr>
<td>185Q-2.5</td>
<td>8500</td>
<td>2500</td>
</tr>
<tr>
<td>185Q-3.0</td>
<td>7400</td>
<td>3000</td>
</tr>
<tr>
<td>185Q-3.6</td>
<td>5600</td>
<td>3600</td>
</tr>
</tbody>
</table>

* Ball valves only

### Gaulin/Mono-Block Design

#### Dimensions

<table>
<thead>
<tr>
<th>Length (in./mm)</th>
<th>Width (in./mm)</th>
<th>Height (in./mm)</th>
<th>Dimensions Packed in a Crate LxWxH (cm)</th>
<th>Dimensions Packed in a Crate LxWxH (in.)</th>
<th>Cubic Measure m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>137/3480</td>
<td>84.6/2150</td>
<td>67.3/1710</td>
<td>384x245x220</td>
<td>151x96.5x86.6</td>
<td>20</td>
</tr>
</tbody>
</table>

**Gross weight in a crate, including motor: 18188 lb/8250 kg**

---

**SPX Flow Technology**

Oestmarken 7
DK-2860 Soeborg, Denmark
Phone: +45 70 278 222
Fax: +45 70 278 223

SPX reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spx.com.

The green “*” is a trademark of SPX Corporation, Inc.