Proportional Pressure Reducing - Relieving Valve, Manually Operated

PVRR1-063  M20x1.5  •  Qmax 20 l/min (5 GPM)  •  pmax 30 bar (435 PSI)

Technical Features

› Excellent stability throughout flow range with the rapid response to manually adjusted spool position and to dynamic operating pressure changes
› Low hysteresis, accurate pressure control and low pressure drop
› Integrated relief function for protection against pressure peaks
› In the basic position of actuator the output channel A is relieved by connecting to the tank
› Pressure range up to 10 bar
› Hardened precision parts
› In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

A mechanically direct-operated, spool-type pressure reducing-relieving valve in the form of a screw-in cartridge. Reduced pressure is proportional to manually adjusted stroke of the actuating system. This valve is intended for use as a pressure limiting device. Note: Consult factory for special OEM versions of this product.

Symbol

Technical Data

<table>
<thead>
<tr>
<th>Valve size / Cartridge cavity</th>
<th>M20x1.5 / QE3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. pressure (port P)</td>
<td>bar (PSI)</td>
</tr>
<tr>
<td>Min. reduced pressure</td>
<td>30 (435)</td>
</tr>
<tr>
<td>Max. reduced pressure</td>
<td>3.5 (51)</td>
</tr>
<tr>
<td>Max. flow rate P-A</td>
<td>l/min (GPM)</td>
</tr>
<tr>
<td>Fluid temperature range (NBR)</td>
<td>°C (°F)</td>
</tr>
<tr>
<td>Fluid temperature range (Viton)</td>
<td>°C (°F)</td>
</tr>
<tr>
<td>Mass</td>
<td>kg (lbs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data sheet</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>General information</td>
<td>GI_0060</td>
</tr>
<tr>
<td>Cavity details</td>
<td>SMT_0019</td>
</tr>
<tr>
<td>Spare parts</td>
<td>SP_8010</td>
</tr>
</tbody>
</table>

Characteristics measured at \( v = 32 \text{ mm/s} \) (115 SUS)

Reduced pressure related to stroke of actuating system

Pressure drop related to flow rate

A-T, relieving function
P-A, reducing function
Ordering Code

Proportional Pressure Reducing
- Relieving Valve,
Manually Operated

Valve cavity
M20x1.5 / QE3

Model
screw-in cartridge

Range of regulated pressure
3.5 - 10 bar (51 - 145 PSI)

Surface treatment
zinc-coated (ZnCr-3), ISO 9227 (240 h)

No designation
V

Seals
NBR
FPM (Viton)

Actuator
shaft with spring pin