By-pass module E554 Series

Features

- Fits under 631 & 641 Series valves
- By-passes servovalve
- Causes actuator to extend, retract or float
- Suitable for 4 or 5 port valves
- Fail-safe design for dirt resistance
- Optional coil voltages
- Port pattern: CETOP 5

Description

This unit contains a spring loaded spool. This spool is moved against the spring by hydraulic pressure from a solenoid and orifice. When the solenoid is energised, the spool moves against the spring, connecting the servovalve control ports, C1 and C2, to their respective actuator ports J1 and J2.

When the solenoid is de-energised, the spring moves the spool to block the servovalve control ports and to connect the actuator ports to their respective by-pass ports. By selecting the appropriate plugs (X, Y, W and Z) in the by-pass ports, each actuator port can be connected to either pressure or return.

The plugs are field accessible. Should it be necessary to limit speeds during by-pass, the plugs may be replaced by orifices. Because a sliding spool is used, the E554 Module should not be relied upon to lock an actuator for long periods of time.

Specification

Operating pressure, 70 to 210 bar standard. High and low pressure versions available on request.

Seal material, Buna N for petroleum based hydraulic oils, water based emulsions or water/glycerol mixtures. Other seal materials available on request.

Coil rating, 24V DC, 500mA standard 12V DC, 1A 115V AC, 100mA optional 230V AC, 50mA

Coils are rated for continuous operation. (AC coil options incorporate full wave rectification rate at 1000 volts peak).

Connector, Hirose.

Operating sense, (standard), servovalve is by-passed when coil is de-energised.

Optional operation, servovalve is by-passed when coil is energised.

Solenoid leakage (when servovalve is by-passed), 0.4 l/min. at 70 bar supply 0.7 l/min. at 210 bar supply

Response time, Switch on (start up function) < 200mS. Switch off (abort function) < 75mS.

Flow rating, in a 4-way configuration and normal operation, flow rating is 25 l/min with a 10 bar pressure drop.
Installation

Dimensions in mm

Coil wiring

AC Options only

Ports
All port O-rings \(\Omega\) 2.0mm section x 12.0 mm I.D

Ordering information

<table>
<thead>
<tr>
<th>E</th>
<th>5</th>
<th>5</th>
<th>4</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>012</td>
<td>12V DC</td>
<td>024</td>
<td>24V DC</td>
<td>115</td>
<td>115V AC</td>
<td>230</td>
<td>230V AC</td>
<td></td>
</tr>
</tbody>
</table>

**PLUG CONFIGURATION**

<table>
<thead>
<tr>
<th>LETTER</th>
<th>PLUG W</th>
<th>PLUG X</th>
<th>PLUG Y</th>
<th>PLUG Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>REMOVED</td>
<td>FITTED</td>
<td>FITTED</td>
<td>REMOVED</td>
</tr>
<tr>
<td>C</td>
<td>FITTED</td>
<td>REMOVED</td>
<td>REMOVED</td>
<td>FITTED</td>
</tr>
<tr>
<td>D</td>
<td>REMOVED</td>
<td>REMOVED</td>
<td>FITTED</td>
<td>FITTED</td>
</tr>
<tr>
<td>E</td>
<td>ORIFICE</td>
<td>FITTED</td>
<td>ORIFICE</td>
<td>ORIFICE</td>
</tr>
<tr>
<td>F</td>
<td>FITTED</td>
<td>ORIFICE</td>
<td>ORIFICE</td>
<td>FITTED</td>
</tr>
</tbody>
</table>

Moog Controls Ltd pursue a policy of continuous development and reserve the right to alter designs and specifications without prior notice. Information contained herein is for guidance only and does not form part of a contract.