**General Description**

Series 25100 and 25200 Exectrol directional control valves are solenoid controlled, pilot operated 4-way control valves. A slide and balanced seals are used which provides near zero leakage. The valves have a high tolerance to media contamination as each movement of the slide wipes the sealing surfaces clean which in turn results in long service life.

**Features**
- Shear-type positive seal.
- Zero leakage (8 drops per min. maximum).
- Ideal for water soluble systems (95-5).
- Pressures up to 414 Bar (6000 PSI).
- Long life, easy maintenance.
- Standard valves are interflow.
- No packing to wear or cut.
- High tolerance to contamination.
- High tolerance to sitting.
- Manual overrides are standard.

**Specifications**

<table>
<thead>
<tr>
<th>Service Applications</th>
<th>Flow</th>
<th>CV Factor</th>
<th>Pilot Valve Series</th>
<th>Weight Including Sequence Valve (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic oil. Water containing minimum of 5% soluble oil. Suggest water soluble oil with a sodium sulphonate-based emulsifier. Oil should have a viscosity of 250-350 SSU at 38°C (100°F). Others available on special order.</td>
<td>25100: 94.6 LPM (25 GPM)</td>
<td>25200: 107.3 LPM (45 GPM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Mounting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover, Body, Bottom Plate, Inserts, Washers, Spring Retainer, Screws, Retainer Plate, Sealing Ring Pistons Main End Caps: Name Plate, Pilot End Cap, Pilot Retainer Plate: Slide, Seals, Springs, Pilot Choke Plug:</td>
<td>Subplate. Mounting bolts furnished</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>Aluminum alloy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>Synthetic rubber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +107°C (-40°F to +225°F) (with Code 02 O-rings)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exectrol Directional Control Valves
Series 25100, 25200

Ordering Information

251
Catalog Number
25 GPM Main Valve
3 GPM Pilot Valve

252
45 GPM Main Valve
3 GPM Pilot Valve

04
Flow Pattern
114X
115X
116X

-73
Power Source
70
Air - Oil Operated

02
Operating Type
1 = 3 Position, Spring Centered, Flow Patterns 1-8, Double Solenoid or Air-Oil Operated
2 = 2 Position, Spring Offset, Flow Pattern 10, Solenoid A Operated
3 = 2 Position, Spring Offset, Flow Pattern 10, Solenoid B Operated
4 = 2 Position, Detented, Flow Pattern 10, Double Solenoid or Air Oil Operated
9 = 3 Position Pressure Centered Flow Patterns 1-8, Double Solenoid or Air-Oil Operated

01
Optional Features
00 No Options
01 Sequence Valve
02 Pilot Speed Control Valve
03 External Drain
04 Sequence Valve Pilot Speed Control Valve
05 Sequence Valve External Drain
06 Pilot Speed Control Valve External Drain
07 Sequence Valve Pilot Speed Control Valve External Drain

02
G-Ring Code
02 Commercial Nitrile
28 Fluorocarbon A
Exectrol Directional Control Valves
Series 25100, 25200

Minimum operating pilot pressure is 150 PSI.

**Internal Piloting:**
A sequence valve must be used to provide upstream minimum pilot pressure when using a single pressure source for both the slave and pilot valves.

**External Piloting:**
(No sequence valve used.) Minimum pilot pressure (150 PSI above exhaust pressure) must be supplied to the external pilot port of the pilot valve.

External exhaust for the pilot valve requires the use of part number 02050-2700-0000 installed as follows (see page 6-9 valve drawing):
1. Remove pilot valve.
2. Remove slave valve pilot cover.
3. Insert plug assembly into internal drain orifice.
4. Re-assemble valve and connect external drain at "F".

**Note:**
External drain should be used when pilot media is different from primary media.