Solenoid Controlled
Pilot Operated Directional Valve

DF5S4(L)-16*A/B/C/N-(*)-(E)*-53
See back page for solenoid indicator lights.

### Part included in Kits will not be sold separately.

<table>
<thead>
<tr>
<th>Model</th>
<th>Screw (4 req’d)</th>
<th>Washer (4 req’d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W/O Pilot Choke</td>
<td>1034</td>
<td>68907</td>
</tr>
<tr>
<td>W/Pilot Choke</td>
<td>10938</td>
<td></td>
</tr>
</tbody>
</table>

Torque to 11.3 - 12.7 N.m (100-112 lb. in.)

See other page for Pilot Choke parts.

This Solenoid removed on "A" & "B" models

△ 199811 "O" Ring (Ref) (5 req’d)

Pilot Choke location (See model code page)

**113000 Plug**

For external pilot pressure models. Remove for internal pilot pressure.

△ 263496 "O" Ring

### 315932 Plug (Alternate Pilot Valve "Y" Drain Connection)

△ 173792 "O" Ring (2 req’d)

See other end of valve for part numbers

"Y" - Pilot Valve drain connection. If alternate connection is used, install the 315932 Plug & "O" Ring into this port.

Assemble type 4 & 8 Spools with wide undercut toward "A" end. "A" end of valve is defined as being closest to cylinder port "A".

Assemble type 1 & 3 Spools with taper toward "B" end. Type 31 Spool is assembled with taper toward "A" end.

*Spool Assembly

△ Included in Seal Kit 919405
F3 equivalent Seal Kit 919434
□ Included in Bolt Kit 255633
☑ Included in Bolt Kit 255654
◊ Included in Fastener Kit 941309
■ Plug Torquers (See table)
<table>
<thead>
<tr>
<th>Valve Model Code</th>
<th>Main Stage Spool Type</th>
<th>Pilot Valve Model Code (See back page)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF5S4-16<em>A</em>-53</td>
<td>0, 2, 6, 9, 33</td>
<td>DG4S4-012A*-50-S344</td>
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<tr>
<td>DF5S4-16<em>B</em>-53</td>
<td>0, 1, 2, 3, 6 9, 31, 33</td>
<td>DG4S4-016B*-50-S344</td>
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<tr>
<td>DF5S4-16<em>C</em>-53</td>
<td>0, 1, 2, 3, 6 9, 31, 33</td>
<td>DG4S4-016C*-50-S344</td>
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<td>DF5S4-16<em>N</em>-53</td>
<td>0, 2, 6, 9, 33</td>
<td>DG4S4-012N*-51-S344</td>
</tr>
</tbody>
</table>

**Stroke Adjuster Parts**

- **363889 Plug**
- **263495 "O" Ring**
- **68913 Lockwasher (8 Req'd)**
- **298187 Screw (4 Req'd)**
- **274537 Piston**
- **154008 "O" Ring**
- **274631 Adj. Screw**
- **583204 Cover**
- **1494 Nut**

**Note**

SAE straight thread plugs used on exterior of valve
### Solenoid S/A

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Std</th>
<th>F3</th>
<th>Std</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>115AC60</td>
<td>281291</td>
<td>317767</td>
<td>316011</td>
<td>317768</td>
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<tr>
<td>230AC60</td>
<td>281292</td>
<td>317769</td>
<td>298721</td>
<td>317770</td>
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<tr>
<td>460AC60</td>
<td>281293</td>
<td>317771</td>
<td>298722</td>
<td>317772</td>
</tr>
</tbody>
</table>
| For additional Solenoid S/A's See I-3544-S

**Use on "A" offset models**

- 185645 Screw (4 req'd)
  - Torque to 2.1-2.5 N.m (19-23 lb. in.)
- Δ281545 Gasket
- 287968 Cover

**Use on "B" models**

- 185645 Screw (4 req'd)
  - Torque to 2.1-2.5 N.m (19-23 lb. in.)
- Δ281545 Gasket
- 287968 Cover

**Use on "C" & "N" offset models**

- 236797 Snap Ring
- 281422 Guide
- Δ262354 "O" Ring
- 284931 Guide
- Δ262327 "O" Ring
- 294226 Limiter (2 req'd)
- 236451 Spring

**Note**

- Part numbers included in kits will not be sold separately.
- Included in 942132 Detent Kit
- Included in F3 Pilot Valve Seal Kit 919214
For single solenoid models right hand assembly shown. For left hand assembly all parts are reversed, except body & spool.

Ex. LH Model: DG4S4-01**-*-5*-S344-LH

A spool designation of (68B) indicates valve is assembled "LH" & is used as a pilot for two stage valves with "4" or "8" type main stage spools.

<table>
<thead>
<tr>
<th>Spool</th>
<th>Diagram Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;A&quot;</td>
</tr>
<tr>
<td>Type</td>
<td>Part</td>
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<tr>
<td>2</td>
<td>213131</td>
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<tr>
<td>6</td>
<td>213232</td>
</tr>
<tr>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

Use on "N" Detent models

Use on "A", "B", & "C" models

Use on "F3" Solenoid S/A for "F3" applications

Included in standard Solenoid S/A.

Solenoid Indicator Light

Identification Plate

298782 Gasket

Solenoid Indicator Light Kit
(Includes all parts identified)

Voltage Range | Kit
--- | ---
100 thru 127 | 941615
192 thru 233 | 941617

For models with Solenoid Indicator Lights
Model Code

**Pilot Choke DGMFN-5-Y-AW-BW-20**

- 263498 “O” Ring
- 575026 Stop
- 262330 “O” Ring
- 575028 Throttle
- 575031 Spring
- 248868 Rollpin

- 575025 Plug
  Torque 81.3-94.9 N.m (60-70 lb. ft.)
- 587607 Nut
- 591534 Adj. Screw
- 575035 Plate (Bond to plug)

- 407533 Plug (4 req’d)
  Torque to 3.4-4.0 N.m (30-35 lb. in.)
- ▲ 263493 “O” Ring
  (4 req’d)
- ▲ 36212 Rivet (2 req’d)
- ▲ 630318 Diagram Plate
  ▲ 262334 “O” Ring (5 Req’d)

**Model Series**

**DF5S** - Directional valve, flange connection, solenoid controlled, pilot operated, sliding spool

**Flow Directions**

4 - 4 way

**Indicator Lights**

L - Solenoid indicator light
Omitted - None

**Valve Size**

160 Series

- ▲ 263498 “O” Ring
- ▲ 575026 Stop
- ▲ 262330 “O” Ring
- ▲ 575028 Throttle
- ▲ 575031 Spring
- ▲ 248868 Rollpin

**Seal Material**

F3 - Seals for mineral oil and fire resistant fluids

**Type of Main Stage Spool**

A - Spring offset
B - Spring centered (one solenoid)
C - Spring centered
N - Detented

**Valve Type**

- ▲ 630318 Diagram Plate

**Spool Control Modification**

(omit if not required)

1 - Stroke adjustments
2 - Pilot choke
3 - Pilot choke & stroke adjustment
7 - Stroke adjustment "A" end only
8 - Stroke adjustment "B" end only

**Pilot Pressure**

E - External
Omitted - Internal pilot pressure

**Voltage and Frequency**

Omitted - 115AC 60 standard

**Design**

**Electrical Plug Feature**

(omit if not required)

PA - Insta-Plug, male receptacle only
PB - Insta-Plug, male & female receptacles
PA3 (3 pin) & PA5 (5 pin) - receptacles that meet NFPA hydraulic valve electrical standard T3. 5.29M-1980.

For satisfactory service life of these components, use full flow filtration to provide fluid which meets ISO cleanliness code 20/18/15 or cleaner. Selections from Eaton OFP, OFR, and OFRS series are recommended.