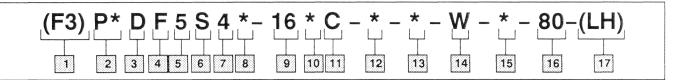
Model Code



- 1 Special Seals
- 2 Electrical Options

(Omit if not required)
PA - Insta plug valve with plug only PB - Insta plug valve with plug & receptacle

- **Directional Control Valve**
- 4 Flange Connections
- Solenoid Controlled Pilot Operated
- Sliding Spool
- 7 Flow Direction 4 - 4 Way
- 8 Electrical Accessories
- L Solenoid indicator lights Omitted - None

- 9 Valve Size
- 160 series 2 inch

13 Valve Type

A - Spring offset

C - Spring centered

(Omit if not required)

1 - Stroke adjustment 2 - Pilot choke adjustment

N - No spring detented

10 Main Stage Spool Types

B - Spring centered (one solenoid)

12 Spool Control Modifications

3 - Pilot choke & stroke adjustment 7 - Stroke adjustment "A" end only

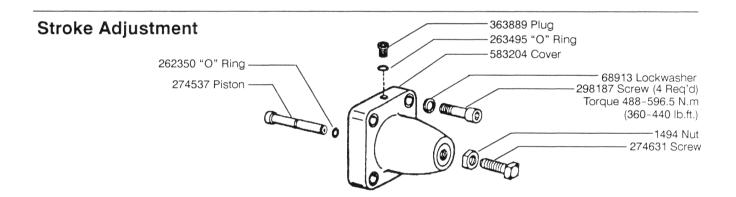
8 - Stroke adjustment "B" end only

- 0,1,2,3,4,6,8,9,31, & 33
 - - 16 Design

Offset to "B" (Omit for standard

- 13 Pilot Pressure
- E External pilot pressure Omitted - Internal pilot pressure
- 14 Pilot valve type
- W Wet armature
- 15 Coil identification letter
- 17 Left Hand Assembly

offset to "A" models)



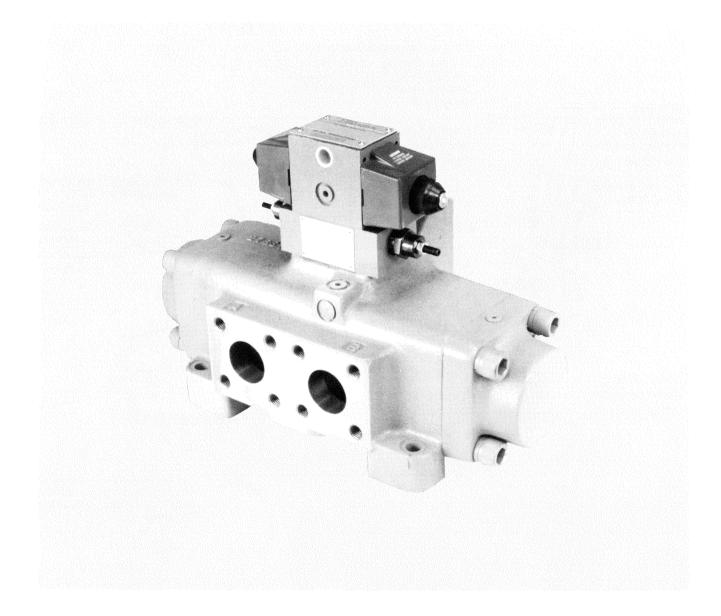


Vickers Incorporated 5445 Corporate Drive P. O. Box 302 Troy, Michigan 48007-0302 U.S.A.



Wet Armature Pilot Operated Directional Valves

DF5S4-16*A/B/C/N-*-*-*-*-80

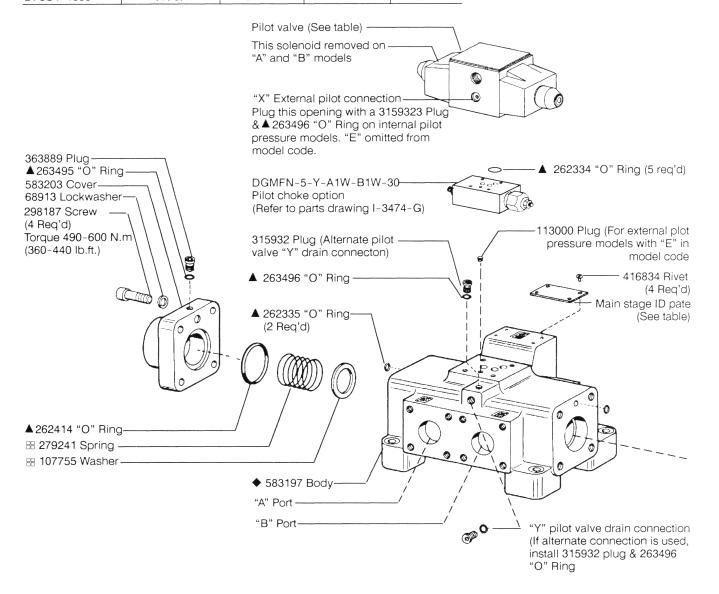


The right to modifications for technical improvements is reserved Printed in U.S.A. 1-3885-S Released 12-1-90

| VALVE MODEL CODE | | SPOOL | MAIN STAGE ID PLATE WITH CIRCUIT DIAGRAM | |
|------------------|------------|---------|--|--------|
| MODEL | VALVE TYPE | | А | B,C,N |
| DF5S4-160- | A/B/C/N | 273677 | 400975 | 400976 |
| DF5S4-161- | B/C | *386581 | | 400977 |
| DF5S4-162- | A/B/C/N | 273676 | | 400978 |
| DF5S4-163- | B/C | *275803 | | 400979 |
| DF5S4-164- | B/C | *273720 | | 400980 |
| DF5S4-166- | A/B/C/N | 275804 | | 400981 |
| DF5S4-168- | B/C | *275805 | | 400980 |
| DF5S4-169- | A/B/C/N | 275806 | | 400976 |
| DF5S4-1631- | B/C | *275803 | | 580475 |
| DF5S4-1633- | A/B/C/N | 317777 | | 400981 |

SPOOL ASSEMBLY NOTES

- * Assemble type 1 & 3 spools with taper towards "B" end. Type 31 spool is assembled with taper towards "A" end.
- * Assemble type 4 & 8 spools with wide undercut towards "A" end.



NOTE

Parts included in service kits are not sold separately.

- ▲ Included in F3 Seal Kit 919434
- ⊞ Remove on spring offset "A" models
- ♦ Not available for sale

Seal Kit Note

The -80 design valves are manufactured For satisfactory service life of these as shown with F3 seals used internally. Interface seals are standard Nitrile material and are converted to F3 in the seal kit. All seals in the seal kit are F3.

NOTE

components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 18/15 or cleaner.

| VALVE MODEL | MAIN STAGE SPOOL | PILOT VALVE MODEL | PILOT VALVE |
|---------------|------------------|---------------------|-------------|
| | | | DRAWING |
| DF5S4-16*A-80 | 0,2,6,9,33 | DG4S4-012A-60-S344 | I-3878-S |
| DF5S4-16*B-80 | 0,1,2,3,6 | DG4S4-016B-60-S344 | I-3879-S |
| | 9,31,33 | DG434-010B-00-3344 | |
| | 4 & 8 | DG4S4-0168B-60-S344 | |
| DF5S4-16*C-80 | 0,1,2,3,6 | DG4S4-016C-60-S344 | I-3879-S |
| | 9,31,33 | D454-010C-00-5544 | |
| | 4 & 8 | DG4S4-0168C-60-S344 | |
| DF5S4-16*N-80 | 0,2,6,9,33 | DG4S4-012N-60-S344 | I-3880-S |
| | | | |

NOTE

The -S344 pilot is the same as the valve shown on the pilot valve drawing except:

◆ 890136 body replaces ◆ 868960 body. Plug 407533 and 263493 "O" Ring are omitted.

| PILOT ATTACHING BOLT KITS | | | | |
|-----------------------------------|----------|--|--|--|
| MODEL | BOLT KIT | | | |
| Without pilot choke | 255633 | | | |
| With pilot choke | 255654 | | | |
| Torque 110-112 lb.in. (12-13 N.m) | | | | |

| PLUG TORQUES (OILED) | | | | | |
|----------------------|-----------|---------|--|--|--|
| PLUG | N.m. | lb. in. | | | |
| 113000 | 5.0-5.9 | 45-52 | | | |
| 315932 | 22.5-27.0 | 200-240 | | | |
| 363889 | 17_18 | 150-160 | | | |

