

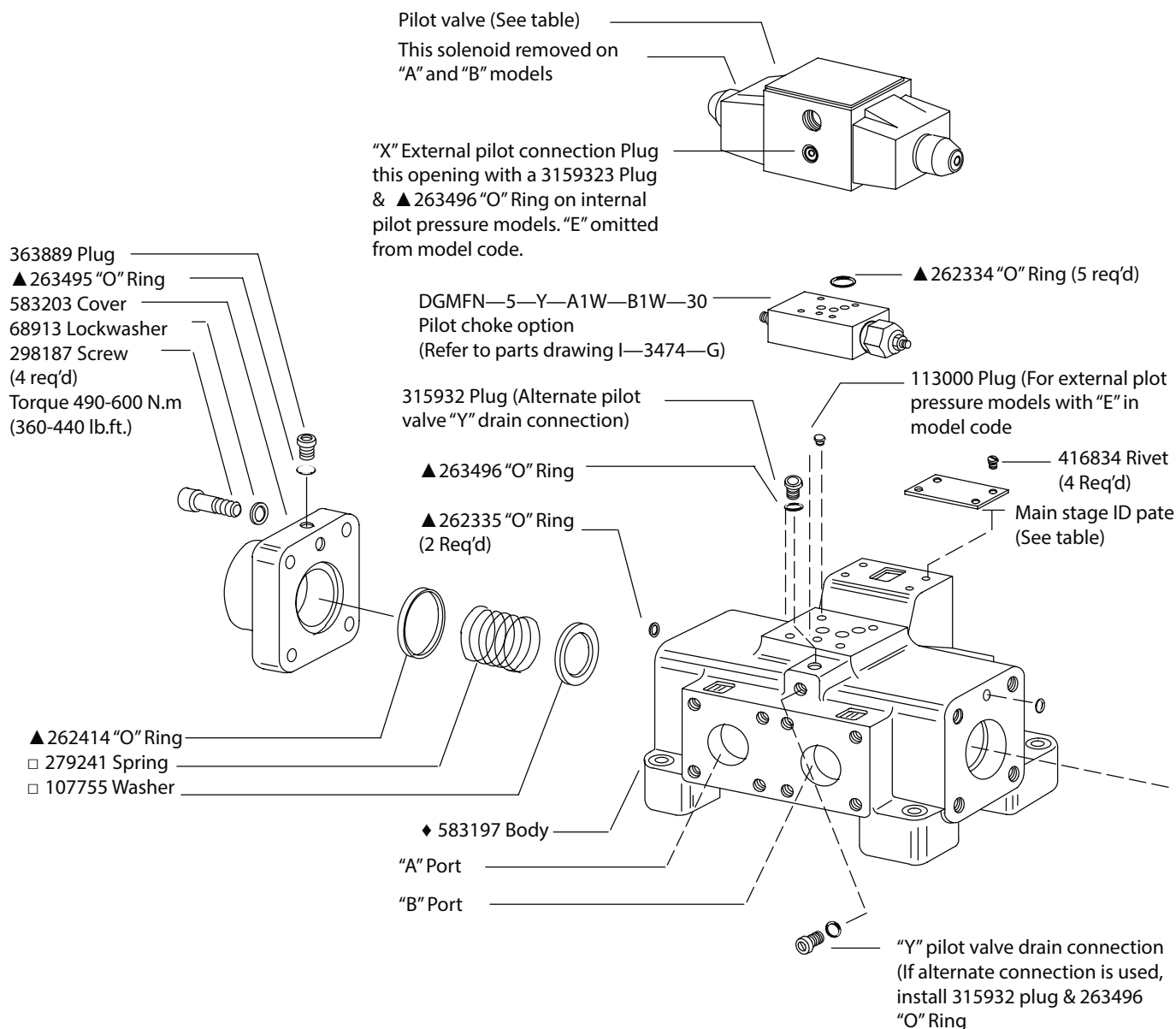
Wet Armature Pilot Operated Directional Valves

DF5S4—16*A/B/C/N—*—*—*—*—*—*—80

VALVE MODEL CODE		SPOOL	MAIN STAGE ID PLATE WITH CIRCUIT DIAGRAM	
MODEL	VALVE TYPE		A	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 as shown with F3 seals used internally. Interface sels are standard Nitrile material and are converted to F3 in the seal kit. All seals in the seal kit are F3.

NOTE

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 18/15 or cleaner.

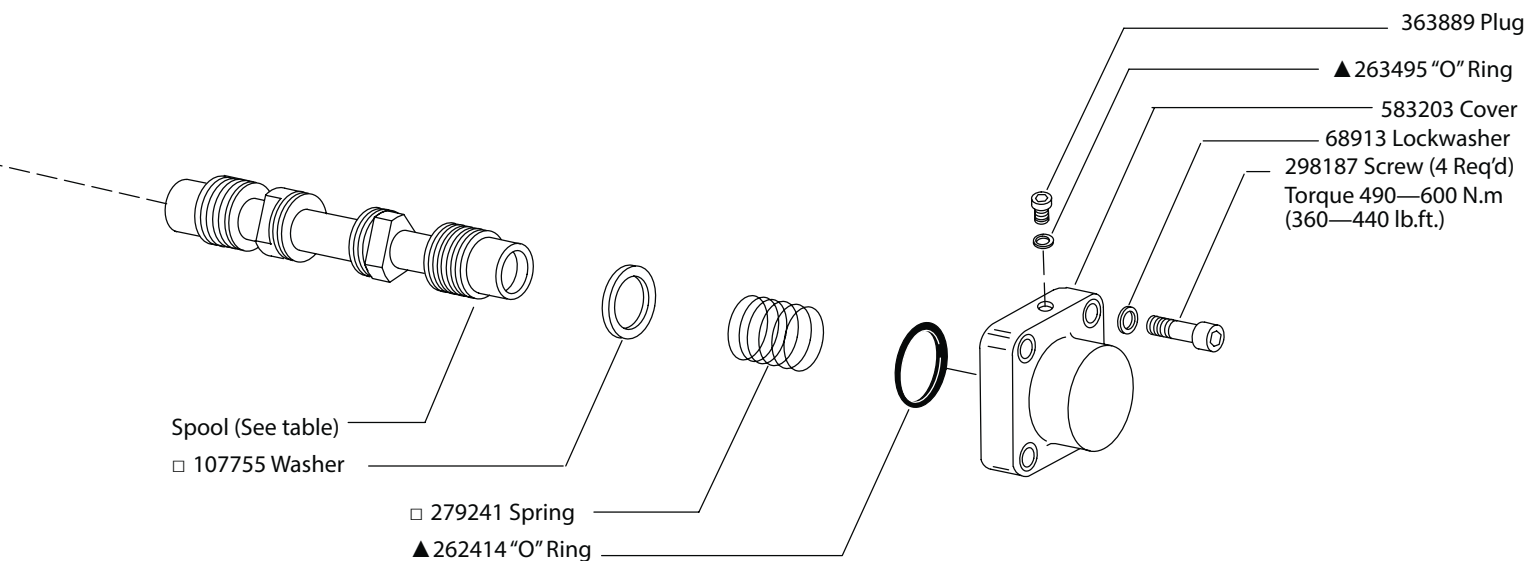
VALVE MODEL	MAIN STAGE POOL	PILOT VALVE MODEL	PILOT VALVE DRAWING
DF5S4—16*A—80	0,2,6,9,33	DG4S4—012A—60—S344	I—3878—S
DF5S4—16*B—80	0,1,2,3,6	DG4S4—016B—60—S344	I—3879—S
	9,31,33		
	4 & 8	DG4S4—0168B—60—S344	
DF5S4—16*C—80	0,1,2,3,6	DG4S4—016C—60—S344	I—3879—S
	9,31,33		
	4 & 8	DG4S4—0168C—60—S344	
DF5S4—16*N—80	0,2,6,9,33	DG4S4—12N—60—S344	I—3880—S

NOTE

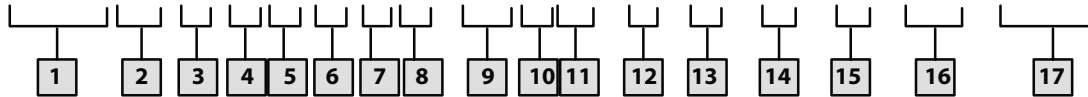
The — S344 pilot is the same as the valve shown on the pilot valve drawing except:
 ♦ 890136 body replaces ♦ 868960 body. Plus 407533 and 263493 "O" Ring are omitted.

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

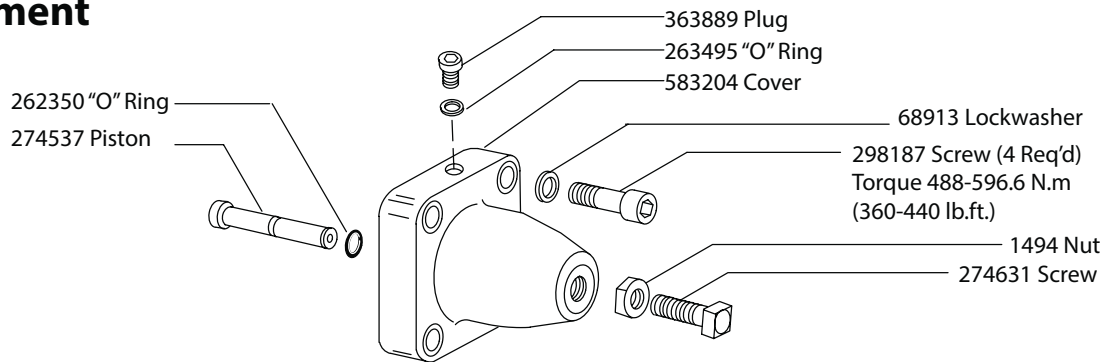


(F3) P* D F 5 S 4 * - 16 * C - * - * - W - * - 80 - (LH)



- | | | | | | |
|----------|---|-----------|--|-----------|---|
| 1 | Special Seals | 9 | Valve Size
160 series — 2 inch | 13 | Pilot Pressure
E — External pilot pressure
Omitted — Internal pilot pressure |
| 2 | Electrical Options
(Omit if not required)
PA — Insta plug valve with plug only
PB — Insta plug valve with plug & receptacle | 10 | Main Stage Spool Types
0,1,2,3,4,6,8,9,31 & 33 | 14 | Pilot valve type
W — Wet armature |
| 3 | Directional Control Valve | 13 | Valve Type
A — Spring offset
B — Spring centered (one solenoid)
C — Spring centered
N — No spring detented | 15 | Coil Identification letter |
| 4 | Flange Connections | 12 | Spool Control Modifications
(Omit if not required)
1 — Stroke adjustment
2 — Pilot choke adjustment
3 — Pilot choke & stroke adjustment
7 — Stroke adjustment "A" end only
8 — Stroke adjustment "B" end only | 16 | Design |
| 5 | Solenoid Controlled Pilot Operated | | | 17 | Left Hand Assembly
Offset to "B" (Omit for standard offset to "A" models) |
| 6 | Sliding Spool | | | | |
| 7 | Flow Direction | | | | |
| 8 | Electrical Accessories
L — Solenoid indicator lights
Omitted — None | | | | |

Stroke Adjustment



Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

Danfoss Power Solutions – your strongest partner in mobile hydraulics and mobile electrification.

Go to www.danfoss.com for further product information.

We offer you expert worldwide support for ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide you with comprehensive global service for all of our components.

Local address:

Hydro-Gear

www.hydro-gear.com

Daikin-Sauer-Danfoss

www.daikin-sauer-danfoss.com

**Danfoss
Power Solutions (US) Company**
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

**Danfoss
Power Solutions GmbH & Co. OHG**
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

**Danfoss
Power Solutions ApS**
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

**Danfoss
Power Solutions Trading
(Shanghai) Co., Ltd.**
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 2080 6201