

Directional Controls



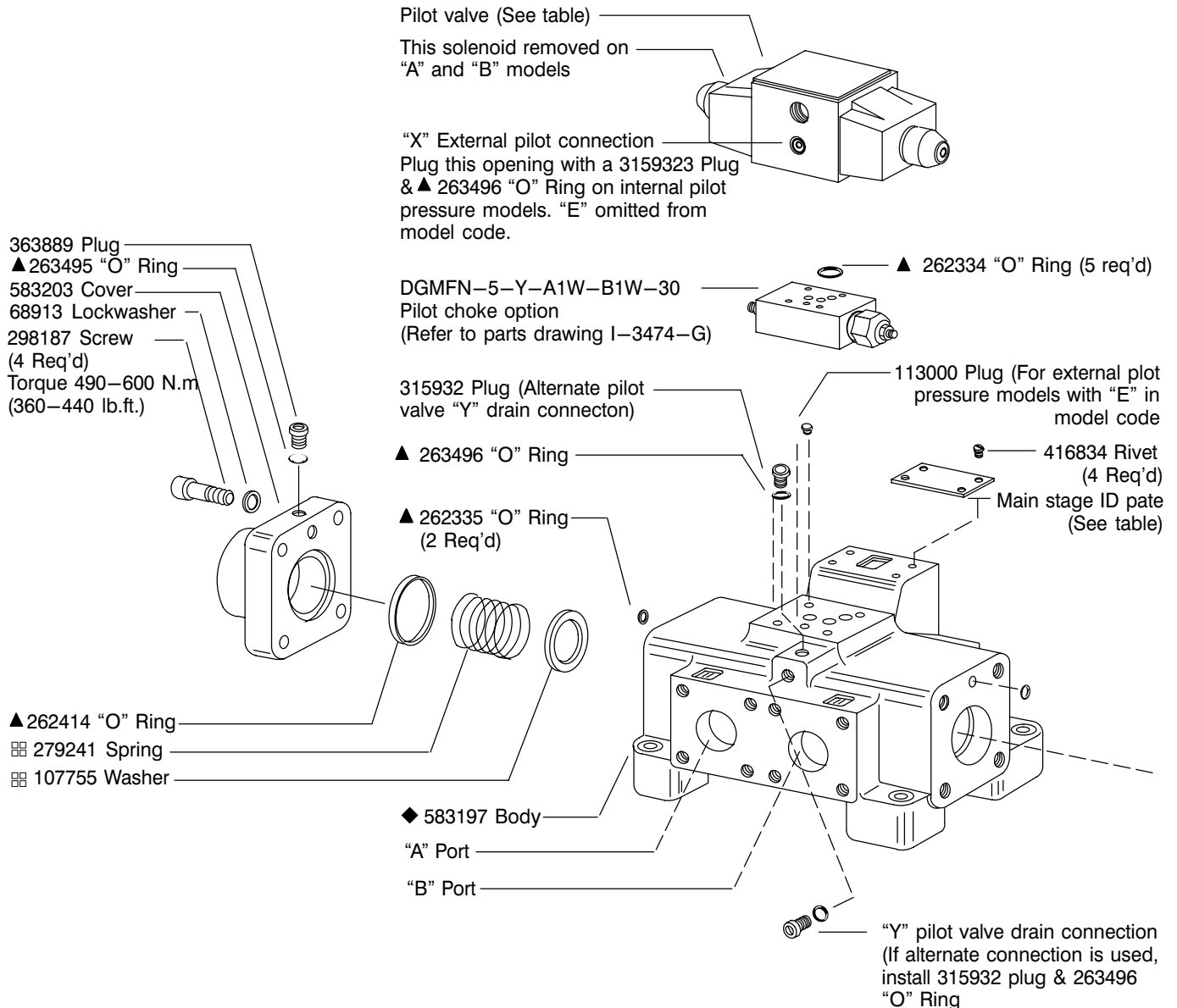
Wet Armature Pilot Operated Directional Valves

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 seals 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 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	DG4S4-0168B-60-S344	
	4 & 8		
DF5S4-16*C-80	0,1,2,3,6	DG4S4-016C-60-S344	I-3879-S
	9,31,33	DG4S4-0168C-60-S344	
	4 & 8		
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.

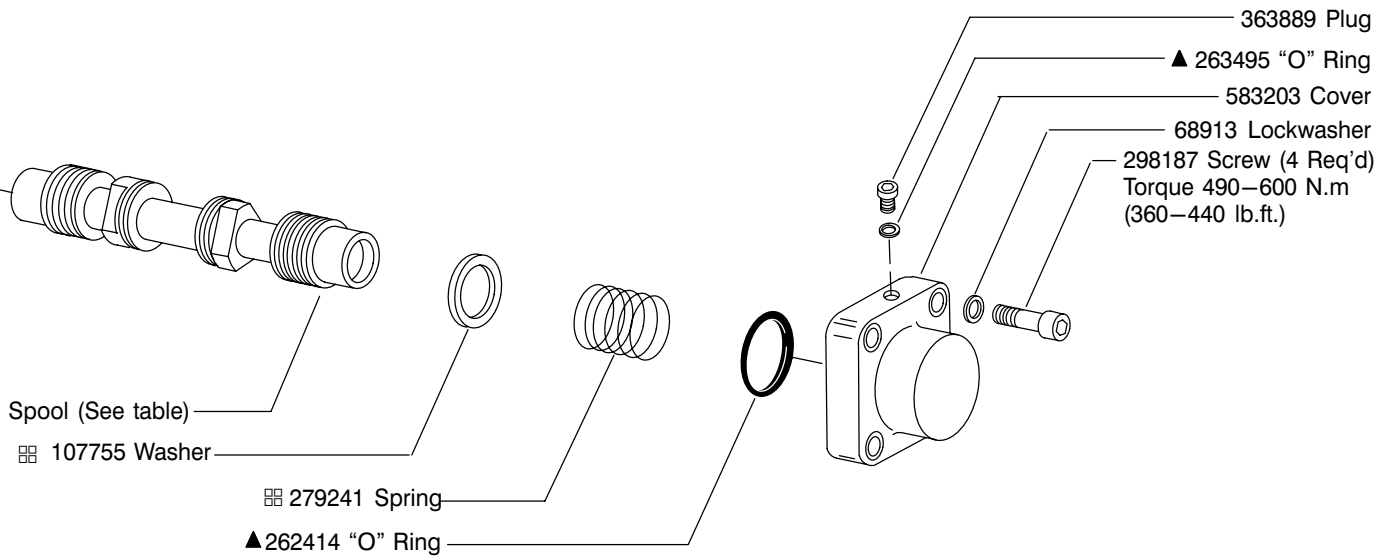
PILOT ATTACHING BOLT KITS

MODEL	BOLT KIT
Without pilot choke	255633
With pilot choke	255654

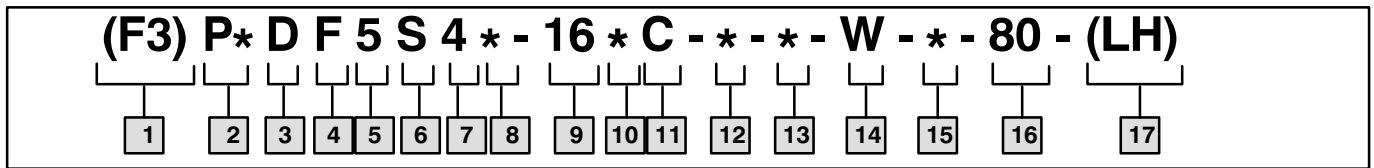
Torque 110-112 lb.in. (12-13 N.m)

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



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

3 Directional Control Valve

4 Flange Connections

5 Solenoid Controlled Pilot Operated

6 Sliding Spool

7 Flow Direction

4 – 4 Way

8 Electrical Accessories

L – Solenoid indicator lights
 Omitted – None

9 Valve Size

160 series – 2 inch

10 Main Stage Spool Types

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

13 Valve Type

A – Spring offset
 B – Spring centered (one solenoid)
 C – Spring centered
 N – No spring detented

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

13 Pilot Pressure

E – External pilot pressure
 Omitted – Internal pilot pressure

14 Pilot valve type

W – Wet armature

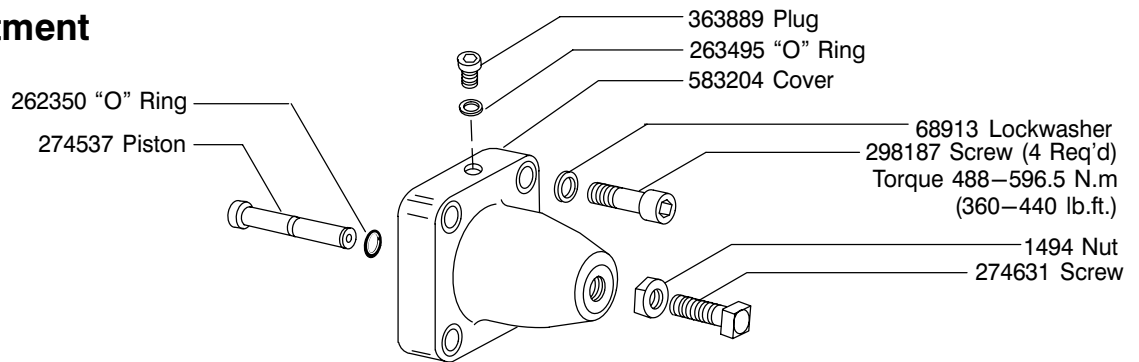
15 Coil identification letter

16 Design

17 Left Hand Assembly

Offset to “B” (Omit for standard offset to “A” models)

Stroke Adjustment



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