

Service Data

Vickers®

# Directional Controls

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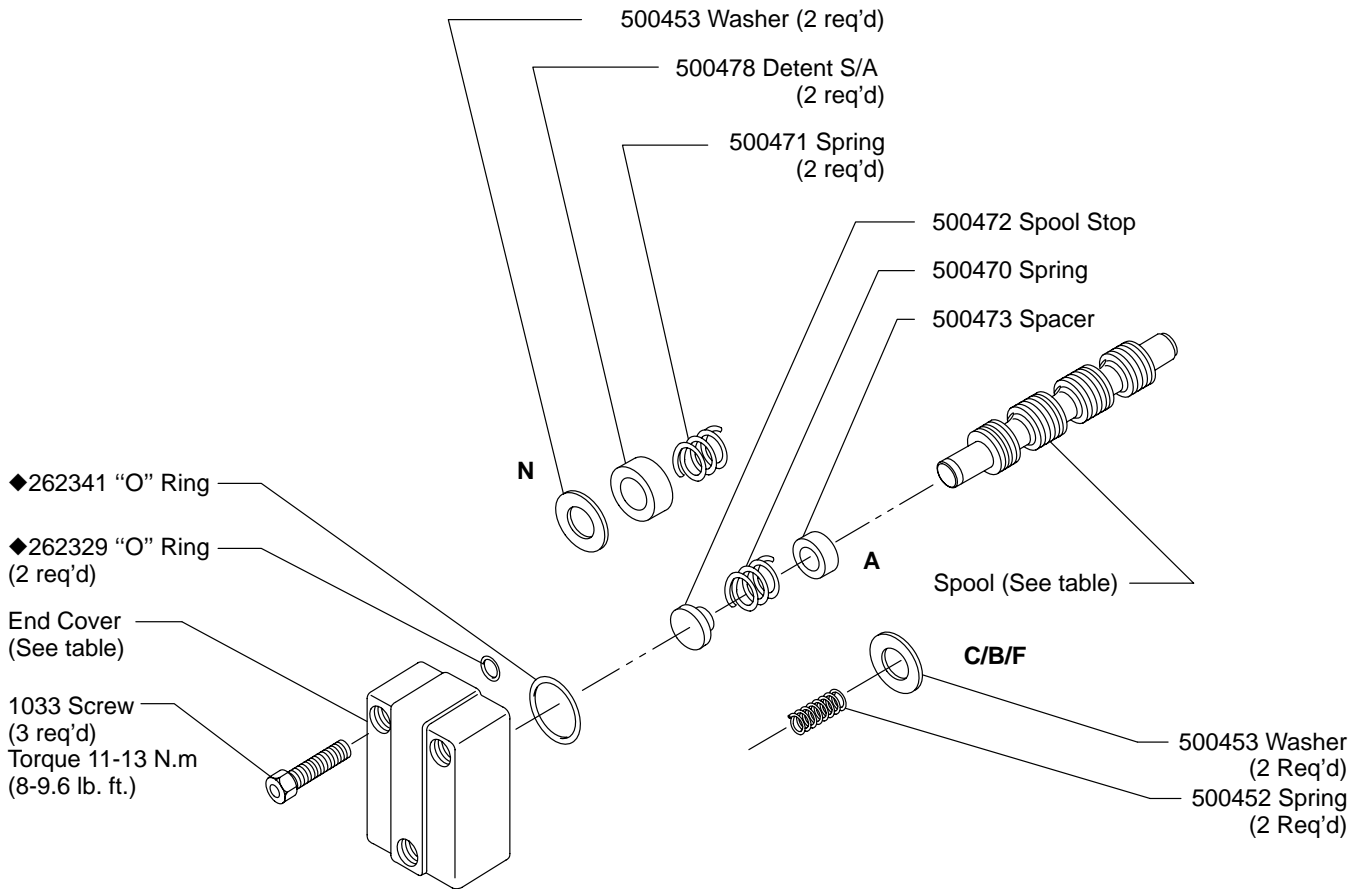
## Directional Control Valve

(F3) - DG5S4-02-\*\*(L)-30

Spool/Spring Arrangement			
Spool Type	A	B,C,F	N
0	500438	500438	500481
1*	_____	500442	_____
2	500437	500437	500480
3*	_____	500440	_____
4	_____	500450	_____
6	500439	500439	500482
7	_____	500444	_____
8	_____	500448	_____
9	500447	500447	500483
11**	_____	500442	_____
31**	_____	500440	_____
33	_____	500449	500484

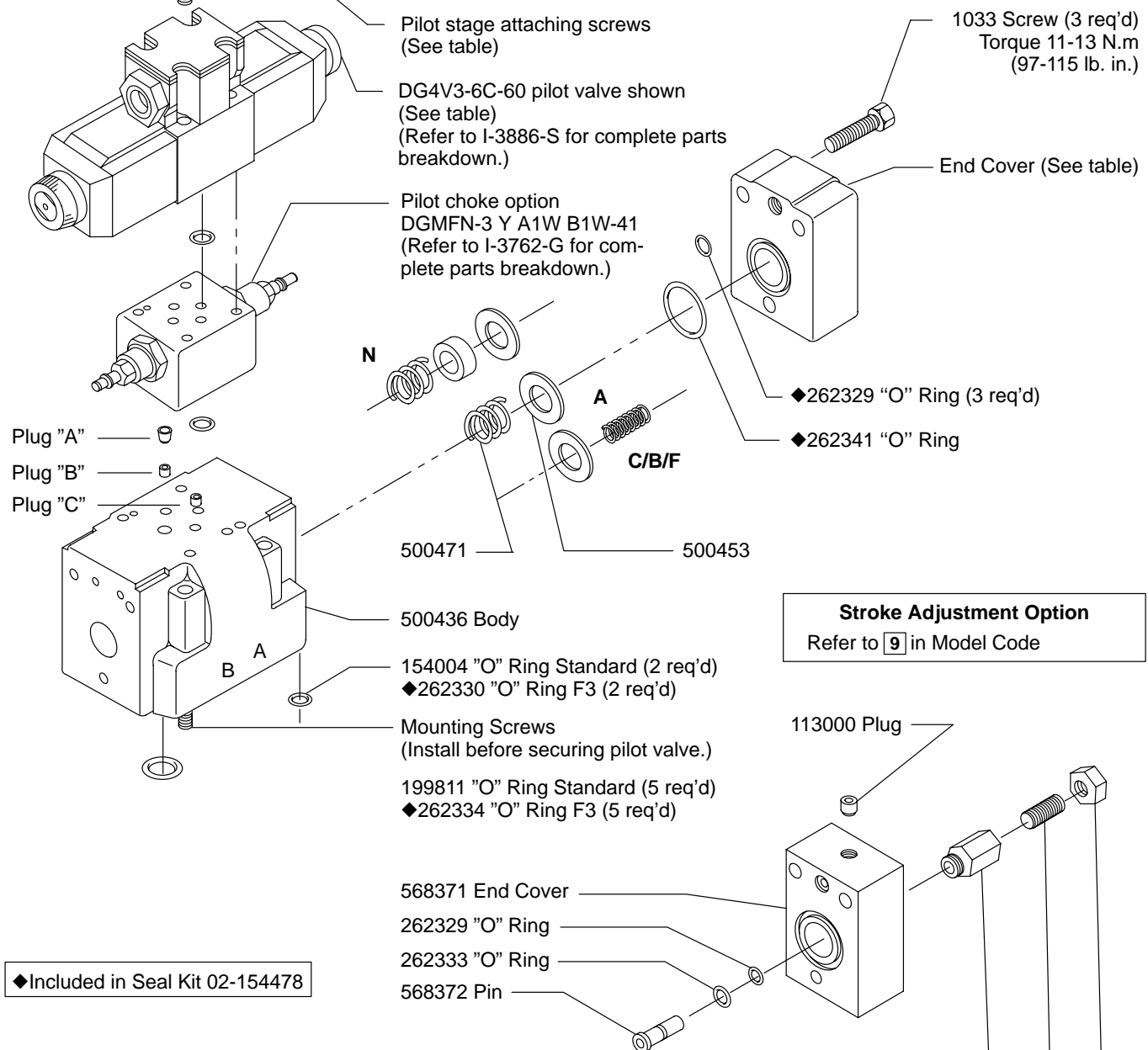
Model	End Cover
A,B,C,F	500451
N	500474
Stroke Adjustment	568371

\*Assemble type "1" and "3" spools with narrow center land toward "A" end of valve.  
 \*\*Assemble type "11" and "31" spools with narrow center land toward "B" end of valve.



<b>Pilot Stage Attaching Screws (4 req'd)</b>	
Without Pilot Choke and U, P, F, SP1, or SP2 coils	51969
Without Pilot Choke and X1, X2 coils	582176
With Pilot Choke and U, P, F, SP1, or SP2 coils	207897
With Pilot Choke and X1, X2 coils	207900

Torque 4.5-5.7 N.m (39.9-50.5 lb. in.)



<b>Plug Installation Table</b>			
Model	Plug "A"	Plug "B"	Plug "C"
DG5S4-02-*M-*-*-*0	237588	Omit	276761
DG5S4-02-X-M-*-*-*0	Omit	Omit	
DG5S4-02-*E-M-*-*-*0	237588	93676	Omit
DG5S4-02-*T-M-*-*-*0	237588	Omit	Omit
DG5S4-02-*E-T-M-*-*-*0	237588	93676	Omit
237588 Orifice Plug (∅ 0.062)			

Valve Model	Main Stage Spool	Pilot Valve Model
DG5S4-02-*A(P)(L)-*0	0,2,6,9	DG4V3-2A-60
DG5S4-02-*B/F(P)(L)-*0	0,1,2,3,6,7,9,11,31,33	DG4V3-6B/6F-60
	4,8,	DG4V3-68B/68F
DG5S4-02-*N-*0	0,2,6,9,33	DG4V3-2N-60
DG5S4-02-C-*0	0,1,2,3,4,6,7,8,9,11,31,33	DG4V-3-6C-60

# Model Code

(F3) - DG5S4- 02 - \* \* (L) - \*\* - \* - \* - \* - \* - \* - (V) (M) - (SX) - \* \* \* \* - (L) - \* \* \* - \* \* - \* 0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

## 1 Seal Material

**F3** - Seals for mineral oil and fire resistant fluids  
**Blank** - Standard seals

## 2 Model Series

**DG5S4** - Directional control valve, manifold or gasket mounted, solenoid controlled, pilot operated, sliding spool action, flow direction - four way

## 3 Valve Series

**02** - 20 series valve size

## 4 Spool Type

## 5 Spool/Spring Arrangement

**A** - Spring offset to A  
**B** - Spring centered, shift to offset  
**C** - Spring centered  
**F** - Spring offset, shift to center  
**N** - No spring, detented

## 6 Left Hand Assembly

**L** - Single solenoid models only (Omit for right hand assembly.)

## 7 Manual Operator in Pilot Valve End Cap

**H** - Overrides in solenoid ends only  
**H2** - Waterproof overrides in both ends of single solenoid  
**P2** - Overrides in both ends of single solenoid  
**Y** - Lockable manual overrides in solenoid ends only (DC only)  
**Z** - No overrides in either end

## 8 Response

**X** - Fast response (Omit for standard models.)

## 9 Spool Control Modifications (Omit if not required.)

**1** - Stroke adj. both ends (used w/B, C, and F spool/spring arrangement only)  
**2** - Pilot choke adjustments, all models  
**3** - Pilot choke & stroke adjustment, both ends (B, C, and F models only)

## 9 Spool Control Modifications (Con't)

**7** - Stroke adjustment cyl "A" end only (not available on N and AL)  
**8** - Stroke adjustment cyl "B" end only (not available on N and AL)  
**2-7** - Pilot choke & stroke adjustment, cyl "A" end (not available on N and AL)  
**2-8** - Pilot choke & stroke adjustment, cyl "B" end (not available on N and A models)

## 10 External Pilot Pressure

**E** - External pilot pressure (Omit for internal pilot pressure models.)

## 11 Pilot Drain

**T** - Internal pilot drain (Omit for external pilot drain.)

## 12 Mounting Screw Option

**Blank** - 2500 - 20 UNC-2A screws  
**M** - M6X1 - 6g screws

## 13 Solenoid Energization Identity

**Blank** - Standard arrangement for ANSI B93.9 (i.e. energize solenoid "A" to allow flow "P" to "A")  
**V** - Solenoid identification determined by position of solenoid (i.e. solenoid "A" at port "A" end/solenoid "B" at port "B" end).  
 Note: Type 4 & 8 spools are always V

## 14 Flag Symbol Heading Electrical Options & Features

## 15 Spool Position Monitor Switch (A, B, and F models only)

**S1\*** - Proximity switch, normally open  
**S2\*** - Proximity switch, normally closed  
**S3\*\*** - Limit switch, normally open  
**S4\*\*** - Limit switch, normally closed  
**S5\*\*\*** - Limit switch - unwired  
 \*Available on U models only  
 \*\*Available on PA, PB, PA5 models only  
 \*\*\*Available on FW & FJ models only

## 16 Coil Type

**U** - ISO 4400 (DIN 43650)  
**P** - Plug-in coil  
**F** - Flying lead  
**SP1** - Single 6.3mm spade to IEC 760  
**SP2** - Dual 6.3mm spade to IEC 760  
**X1** - Flame proof solenoids to EEX-O-11B-T4  
**X2** - Special protection solenoids to CSA/UL

## 17 Electrical Plug Features (F type coils only)

**T** - Wired terminal block  
**PA** - Insta-plug male connector only  
**PB** - Insta-plug male and female receptacles  
**PA3** - NFPA 3-pin conduit connector  
**PA5** - NFPA 5-pin conduit connector

## 18 Housing (F type coils only)

**W** - Wiring housing with 1/2" NPT thread connectors  
**J** - 20mm thread

## 19 Electrical Options

**1** - ISO 4400 with fitted plug (U type coils only)  
**7** - Surge damper

## 20 Solenoid Indicator Lights

**L** - For models with flying lead "F" and terminal block "T" only (Omit if not required.)

## 21 Coil Identification Letter (Refer to I-3886-S)

## 22 Tank Pressure Rating

**2** - 10 bar (145 psi) switch models  
**4** - 70 bar (1000 psi) hazardous models  
**6** - 160 bar (2285 psi) A.C. models  
**7** - 210 bar (3000 psi) D.C. models

## 23 Pilot Valve Port Orifices (Omit if not required.)

## 24 Design

**20** - DG4V3S - 60 pilot valve  
**30** - DG4V3 - 60 pilot valve

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. Selections from Eaton OFF, OFR, and OFRS series are recommended.