

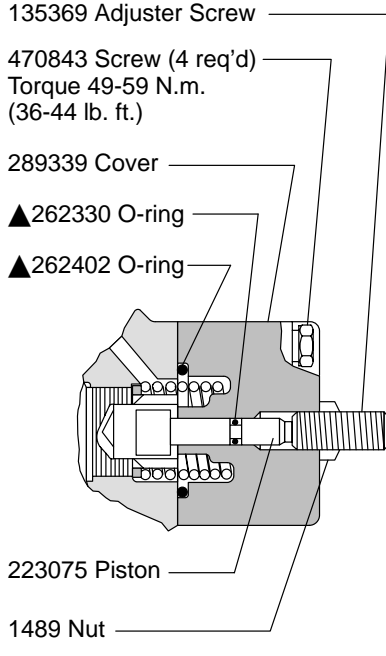
Directional Controls



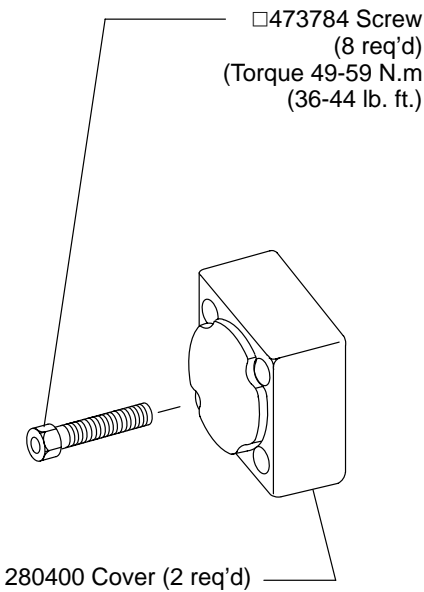
Solenoid Controlled Pilot Operated Directional Valve

DG5S-8-**(L)-(*)-(X)-(*)-(E)-(T)(*)-(V)M-(S*)-*(**)**(L)-***-***-30/40

Parts shown included in stroke adjuster kit 941154. Order two kits if stroke adjuster is required both ends.



■ Plug	Torques (oiled)	
	N.m.	lb. in.
113000 237588	5.0-5.9	45-52
343740	15.0-16.0	133-142
398071	9.8-10.2	87-90
407533	12.1-12.4	107-110



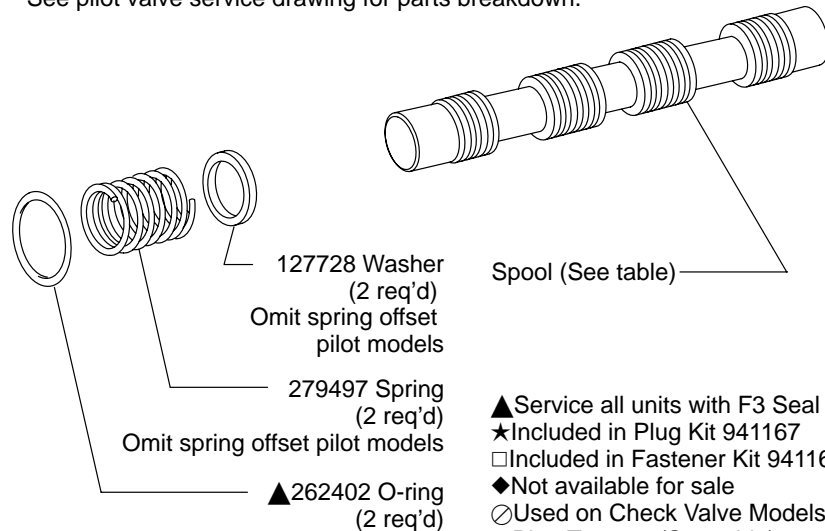
Main Stage Spool Type	Available Spool Valve Type	Spool	Main Stage ID Plate			
			"A" Only	B/C/F/N		
0	A/B/C/F/N	363495	400975	400976		
1		*276623		400977		
2		363496		400978		
3		*276625		400979		
4		276626		400980		
6		363498		400981		
8		363499		400980		
9		363500		400976		
11		*276623		632700		
31		*276625		580475		
33		363501		400981		
52/521		C		*420583		573685

***Spool Assembly Note**

Assemble type 1 and 3 spools with narrow center land toward "A" end of valve. "A" end of valve is defined as being closest to cylinder port "A". Type 11 and 31 spools are installed in reverse of type 1 and 3, with narrow center lands toward "B" end of valve. Assemble type 52 spool with two narrow land ends toward cylinder port "B" end of valve. Assemble type 521 spool with two narrow center lands toward cylinder port "A" end of valve.

Valve Model Code	Main Stage Spool Type	Pilot Valve Model Code
DG5S-8-*A-30	0, 1, 2, 3, 6, 9, 11, 31, 33	DG4V-3S-2A-60
DG5S-8-*A-40		DG4V-3-2A-60
DG5S-8-*A-30		DG4V-3S-28A-60
DG5S-8-*A-40	4 & 8	DG4V-3-28A-60
DG5S-8-*B-30	0, 1, 2, 3, 6, 9, 11, 31, 33	DG4V-3S-6B-60
DG5S-8-*B-40		DG4V-3-6B-60
DG5S-8-*B-30		DG4V-3S-68B-60
DG5S-8-*B-40	4 & 8	DG4V-3-68B-60
DG5S-8-*C-30	0, 1, 2, 3, 6, 9, 11, 31, 33, 52, 521	DG4V-3S-6C-60
DG5S-8-*C-40		DG4V-3-6C-60
DG5S-8-*C-30		DG4V-3S-68C-60
DG5S-8-*C-40	4 & 8	DG4V-3-68C-60
DG5S-8-*F-30	0, 1, 2, 3, 6, 9, 11, 31, 33	DG4V-3S-6F-60
DG5S-8-*F-40		DG4V-3-6F-60
DG5S-8-*F-30		DG4V-3S-68F-60
DG5S-8-*F-40	4 & 8	DG4V-3-68F-60
DG5S-8-*N-30	0, 1, 2, 3, 6, 9, 11, 31, 33	DG4V-3S-6N-60
DG5S-8-*N-40		DG4V-3-6N-60
DG5S-8-*N-30		DG4V-3S-68N-60
DG5S-8-*N-40	4 & 8	DG4V-3-68N-60

See pilot valve service drawing for parts breakdown.

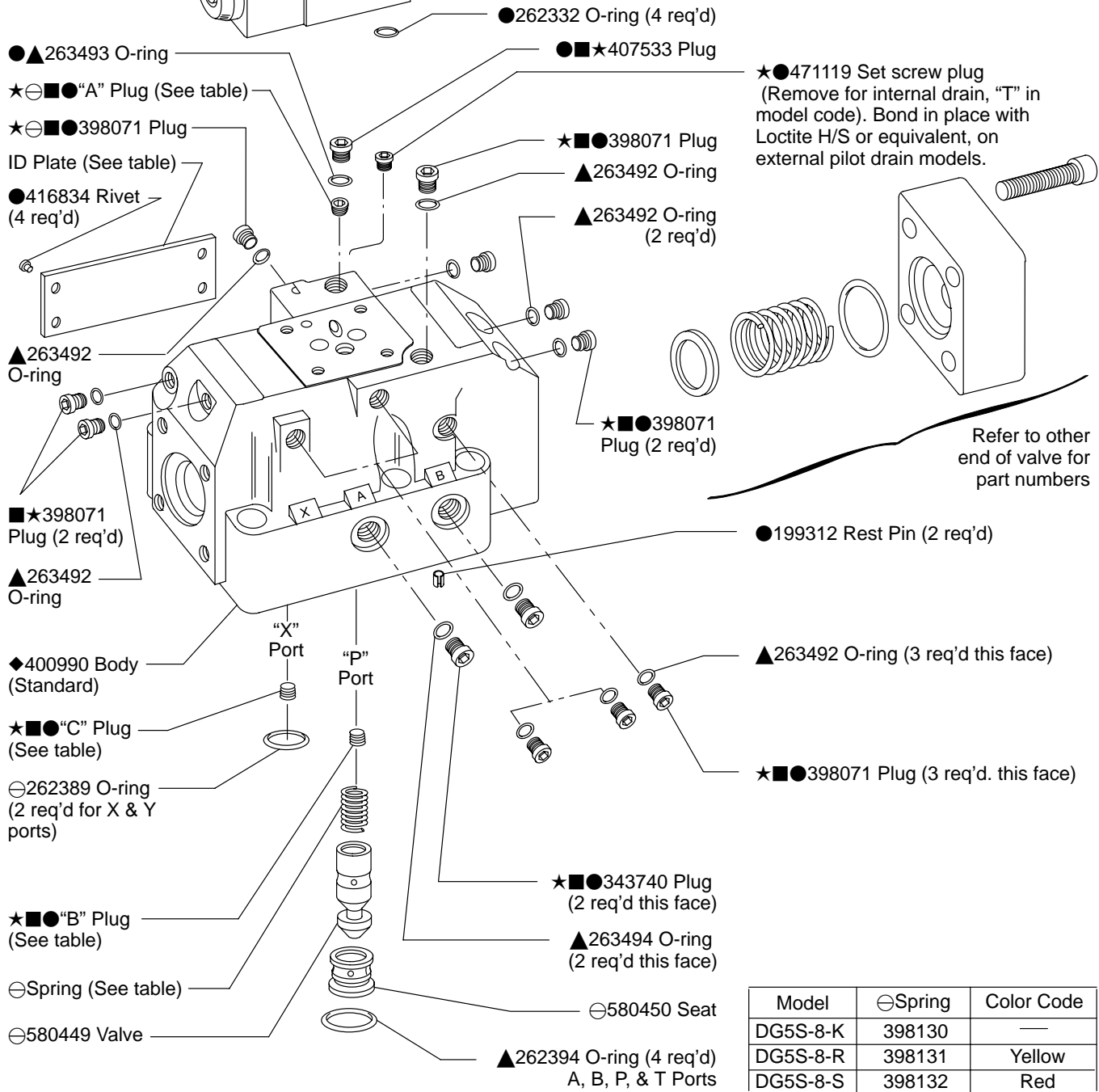


- ▲ Service all units with F3 Seal Kit 696894
- ★ Included in Plug Kit 941167
- Included in Fastener Kit 941165
- ◆ Not available for sale
- Used on Check Valve Models only
- Plug Torques (See table)
- Available only in kit of 25 each

Pilot Stage Bolt Kit (includes 4 attaching bolts)	
Model	Bolt Kit
Without Pilot Choke	696892
W/Pilot Choke	696893
Torque to 4.5-5.7 N.m (39.8-50.4 lb. in.)	
See pilot choke service drawing for parts breakdown.	

This solenoid removed on right hand A, B, & F models. Refer to service drawings for more detailed information on left hand valves.

■ Plug Installation Table			
Model	"A" Plug	"B" Plug	"C" Plug
DG5S-8-**	Does Not Exist	237588	—
DG5S-8-**-E		113000	237588
DG5S-8-**-X		—	—
DG5S-8-**-X-E		113000	
DG5S-8-**-KRS	237588	Does Not Exist	237588
DG5S-8-**-E-KRS	113000		
DG5S-8-**-X-KRS	—		—
DG5S-8-**-X-E-KRS	113000		
113000 Solid Plug		237588 Orifice Plug	



Model	○Spring	Color Code
DG5S-8-K	398130	—
DG5S-8-R	398131	Yellow
DG5S-8-S	398132	Red

Model Code

(F3) DG5S-8- ** (L) (*) (X) - (*) - (E) - (T) (*) - (V) M - (S*) * () ** (L) - ** 5 - *** - 30/40**

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

2 Model Series

DG5S - Directional control valve, manifold or subplate mounted, solenoid controlled, pilot operated, rated pressure 210 Bar (3000 psi)

3 Interface

8 - NFPA-D06 (ISO-4401-08)

4 Spool Type

(See table)

5 Spool/Spring Arrangement

A - Spring offset, to cylinder "A"
B - Spring centered, solenoid "A" removed
C - Spring centered
F - Spring offset, to cylinder "A" shift to center
N - No spring detented

6 Left Hand Assembly

L - Left hand (single solenoid only)
Blank - Omit when not required

7 Manual Override option

Blank - Plain override solenoid ends only
H - Waterproof override solenoid ends only
H2 - Waterproof override both ends of single solenoid
P2 - Plain override both ends of single solenoid
Y - Lockable manual overrides solenoid ends only/DC only
Z - No overrides in either end

8 Response Type

X - Fast response
Blank - Standard low shock models

9 Spool Control Modifications

1 - Stroke adjustment
2 - Pilot choke adjustment
3 - Pilot choke & stroke adjustment
7 - Stroke adj cylinder "A" end
8 - Stroke adj cylinder "B" end
2-7 - Dual pilot choke & stroke adjustment port "A" end only
2-8 - Dual pilot choke & stroke adjustment port "B" end only
Blank - Omit when not required

10 Pilot Pressure

E - External pilot pressure
Blank - Internal pilot pressure

11 Pilot Drain

T - Internal pilot drain
Omitted - External pilot drain

12 Pressure Port Check Valve

K - 0.35 bar (5 psi) cracking pressure
R - 3.45 bar (50 psi) cracking pressure
S - 5.20 bar (75 psi) cracking pressure
Blank - Omit when not required

13 Solenoid Energization Identity

Blank - Standard arrangement for ANSI, B93.9 (energize solenoid "A" for flow "P" to "A" port)
V - Solenoid identification determined by position of solenoid. (Solenoid "A" at port "A" end and/or solenoid "B" at port "B" end. (All 4 & 8 spools are always V code.)

14 Flag Symbol

M - Electrical options & features

15 Spool Indicator Switch

(Available on high performance models, DG4V-3 only.) Omit when not required.

S1 - Options available on U only
S2 - Options available on U only
S3 - Options available on P* only
S4 - Options available on P* only
S5 - Options available on FW/FJ only

16 Coil Type

U - ISO 4400
F - Flying lead
SP1 - Single 6,3 MM spade to IEC760
SP2 - Dual 6,3 MM spade to IEC760

17 Electrical connections

(F type coil only) Omit when not required.

T - Wired terminal block
PA - Instaplug male receptacle only
PB - Instaplug male & female receptacle
PA3 - Three pin connector
PA5 - Five pin connector

18 Housing (F type coils only)

W - 1/2 NPT thread wiring housing
J - 20 MM thread wiring housing

19 Electrical Options

1 - ISO with fitted plug, U type coils only
6 - ISO with fitted plug, & lights U type coils only

20 Solenoid Indicator Lights

(F build only) Use with T terminal block models. (Omit if not required)

21 Coil Identification

22 Pilot Valve Code

(tank pressure rating)

2 - 10 bar (145 psi) DG4V3-60
5 - 100 bar (1450 psi) DG4V3S-60
6 - 160 bar (2285 psi) DG4V3-60
7 - 210 bar (3000 psi) DG4V3-60

23 Pilot Valve Port Orifices

24 Design

30 - DG4V3S-60 pilot valve
40 - DG4V3-60 pilot valve

6 Thru 23 included in pilot valve model code

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.