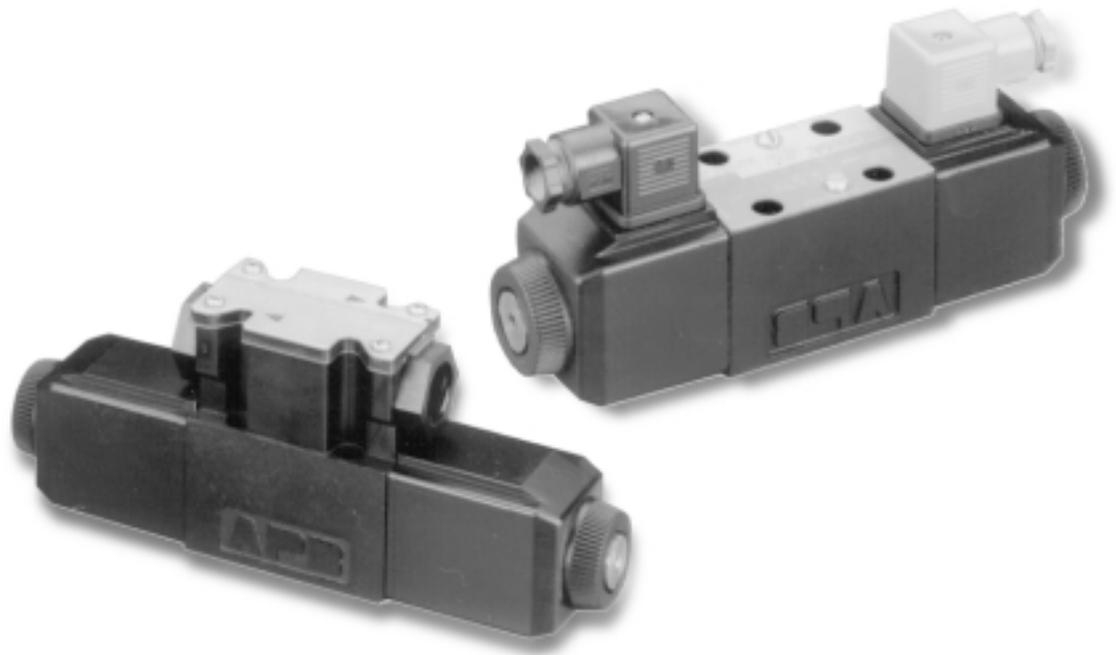


**Vickers®**  
Solenoid Operated Directional Valves

No. 06-05-0001  
EN-0301



**Parts Information**



**VICKERS**

**Optimized - Soft Shift Function**

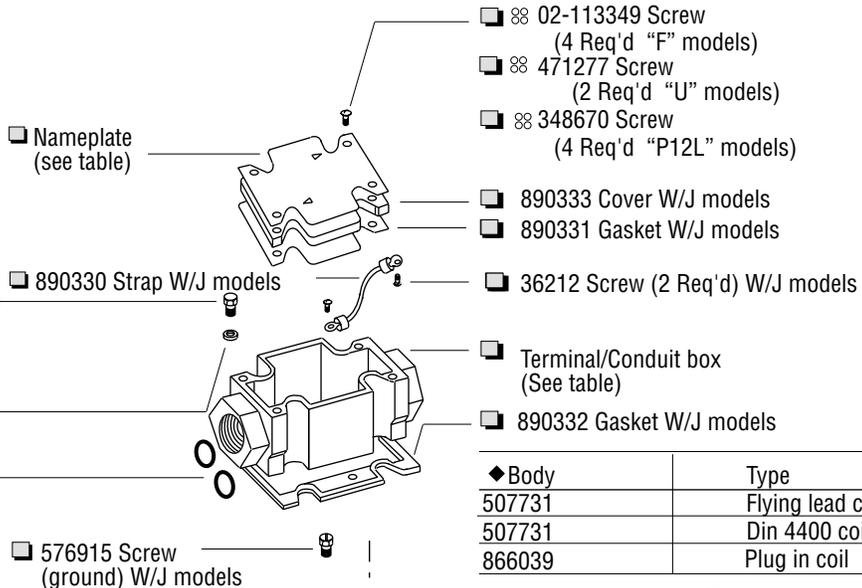
**DG4V-3 - \*\* (L) 3 - (P2) - (V) M - \*\*\*\* (L) - \*\* H \* - 60 - (P\* - A\* - B\* - T\*)**  
ISO 4401, Size 03; ANSI/B93.7M-D03

Model	Knob	* Core Tube S/A
DG4V-3-**(L) 3	998330	02-344643

Restrictor Plug  
Install In P,T,A, Or B As Required

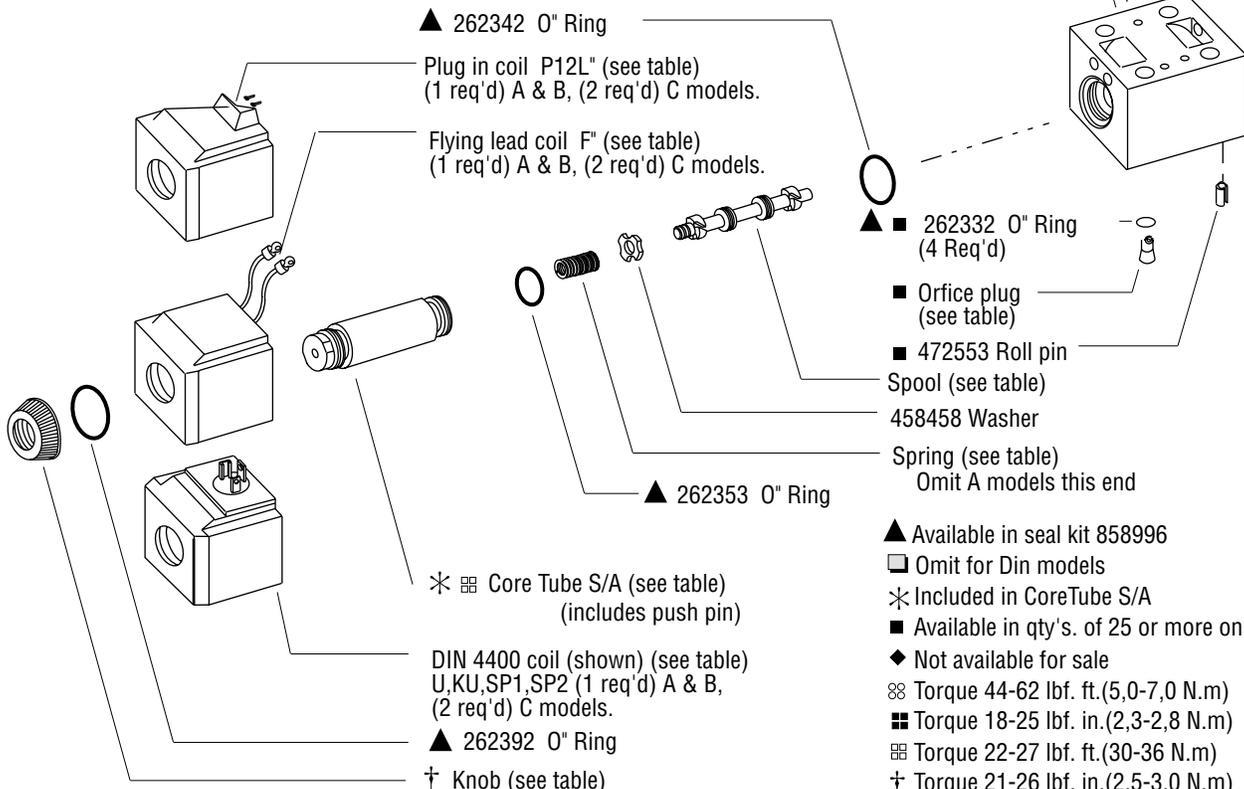
CODE	ORIFICE DIA.	PART #
03	0,30 (0.012)	694341
06	0,60 (0.024)	694342
08	0,80 (0.030)	694343
10	1,00 (0.040)	694344
13	1,30 (0.050)	694345
15	1,50 (0.060)	694346
20	2,00 (0.080)	694347
23	2,30 (0.090)	694348

- 473710 Screw W/J models (2 Req'd)
- 473269 Screw P12L models (2 Req'd)
- 471027 Washer P12L models (2 Req'd)
- ▲ 262327 "O" Ring P12L models (4 Req'd) "C" models



Body	Type
507731	Flying lead coil
507731	Din 4400 coil
866039	Plug in coil

◆ Body (See table)



- ▲ Available in seal kit 858996
- Omit for Din models
- \* Included in CoreTube S/A
- Available in qty's. of 25 or more only
- ◆ Not available for sale
- ⊗ Torque 44-62 lbf. ft.(5,0-7,0 N.m)
- Torque 18-25 lbf. in.(2,3-2,8 N.m)
- ⊗ Torque 22-27 lbf. ft.(30-36 N.m)
- † Torque 21-26 lbf. in.(2.5-3.0 N.m)

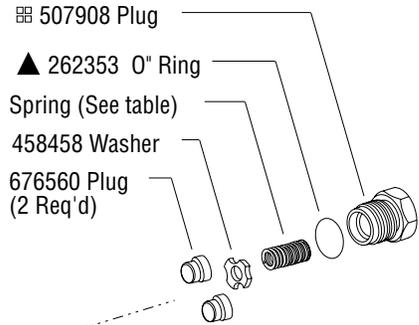
# DG4V-3 -60 Design



Blank Nameplates (DG4V-3-60 High Performance Valve)

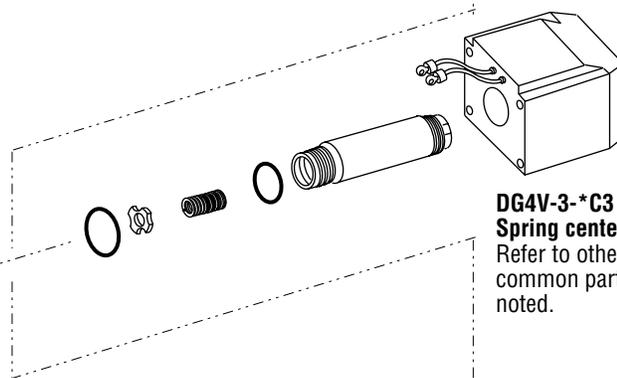
Model Code	Nameplate
DG4V-3-***-**-M-U-*7-60	694303
DG4V-3-***-**-M-U-*2/*6-60	694451
DG4V-3-***-**-M-F/FPA3/FPA5-*7-60	694387
DG4V-3-***-**-M-FPB-**-60	865929
DG4V-3-***-**-M-FPBL-**-60	865930
DG4V-3-C/N***-**-M-P-**-60	865933
DG4V-3-A/B/F***-**-M-P-**-60	865934
DG4V-3-AL/BL/FL***-**-M-P-**-60	865935

For more information on options refer to service drawing I-3886-S.



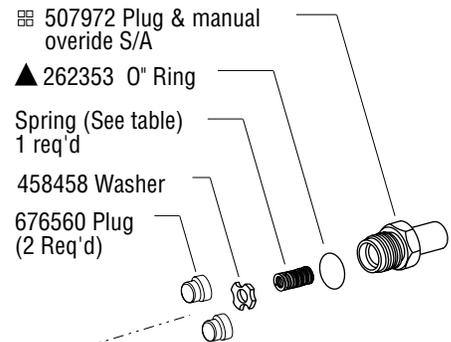
**DG4V-3-\*A3 -(V)M-FW-60**  
Spring offset to CYL. "A", shift to center.

**DG4V-3-\*B3 -(V)M-FW-60**  
Spring centered, Sol. "A" removed. Refer to other end of valve for common part numbers except as noted.



**DG4V-3-\*C3 -(V)M-FW-60**  
Spring centered, dual solenoid.

Refer to other end of valve for common part numbers except as noted.



**DG4V-3-\*A3 -\*P2-(V)M-FW-60**  
Manual override in end cover.

Refer to other end of valve for common part numbers except as noted.

### NOTE

Right hand assembly shown for all single solenoid valves, for left hand assembly all parts reversed except body (& spool on "B" builds) and electrical connectors (where applicable).

Model Code Coil Identification Letter

Coil letter	Coil S/A Voltage DC	Coil S/A "F" models	Coil S/A "U" models	Coil S/A "SP1" models	Coil S/A "SP2" models	Coil S/A "KU" models	Coil S/A "P12L" models
GH	12 VDC	02-123958	02-123938	02-123950	02-123942	02-140393	02-124274
DTH	18 VDC	02-124394	02-124392	02-124719	02-124389	02-148712	02-124511
HH	24 VDC	02-123959	02-123939	02-123951	02-123943	_____	02-124275
DJH	98 VDC	02-123960	02-123940	02-123952	02-123944	_____	02-124238
PH	110 VDC	02-123961	02-123941	02-123953	02-123945	_____	02-124276
SH	220 VDC	02-124260	02-124441	_____	_____	_____	_____

Type "F" flying lead coils must be powered by DC electrical signal. Type P12L coils must be powered by 110-120, 50-60 Hz AC. DIN rectified connectors ( 11" or 12" in model code) can be used to convert AC volts to DC voltage to power the valve.

Model Code	Terminal Box "W/J" Flying lead	Conduit Box "P12L" Plug in	Type
DG4V3-A/B/C-W	890341	_____	Single/double coil
DG4V3-A/B/C-J	890342	_____	
DG4V3(S)-C-P12L	_____	866000	Double coil with rectifier
DG4V3-A/B-P12L	_____	866001	Single coil with rectifier

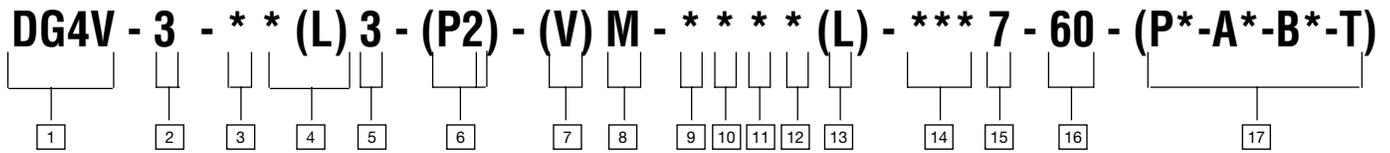
Rotate conduit box/rectifier/light assembly 180° for models AL, BL, and 8B with solenoid mounted on B port side of body.

Spool/Spring Arrangement DG4V3 Models

Model	Type	DG4V3 Spool	DG4V3 Spring
-*B/C	2*	892913	507889
	3*/31*	927027	507889
	6*	892914	694299
	8*	02-303660	927200
	33*	892915	507889
	0*	02-148720	507889
-*A	2A	892916	507889

Assemble type "3" spool in body with narrow center land towards A port.  
 Assemble type "31" spool in body with narrow center land towards B port.

## DG4V-3 Soft Shift Model Series



<p><b>1 Valve Type</b></p> <p>D - Directional control valve</p> <p>G - Subplate mounted</p> <p>4 - Solenoid operated</p> <p>V - Rated pressure (350 bar)</p> <hr/> <p><b>2 Interface</b></p> <p>3 - ISO 4401-03, CETOP 3 (NFPA D03)</p> <p>(High performance only)</p> <hr/> <p><b>3 Spool Types</b></p> <p>0 - Open center</p> <p>2 - Closed center (all ports)</p> <p>3 - P &amp; B closed, A to T</p> <p>6 - Closed center (P only)</p> <p>8 - Tandem center (open crossover)</p> <p>31 - P &amp; A closed, B to T</p> <p>33 - Closed center (bleed A &amp; B)</p> <hr/> <p><b>4 Spool/Spring Arrangement</b></p> <p>A - Spring offset, single solenoid</p> <p>AL - Spring offset, single solenoid (left hand build)</p> <p>B - Spring centered, single solenoid</p> <p>BL - Spring centered, single solenoid (left hand build)</p> <p>C - Spring centered</p> <hr/> <p><b>5 Soft Shift Valve - Optimized Fixed Orifice</b></p>	<p><b>6 Manual Override</b></p> <p>Blank - Override in solenoid end only</p> <p>P2 - Manual override in end cap and solenoid, A &amp; B models only.</p> <hr/> <p><b>7 Solenoid Energization identity</b></p> <p>Blank - ANSI B93 energize solenoid A to give flow P to A</p> <p>V - Solenoid identification determined by position of solenoid (i.e. solenoid A is at port A end of valve, solenoid B is at port B end of valve.)</p> <hr/> <p><b>8 Flag Symbol</b></p> <p>(Introduces electrical features and options)</p> <hr/> <p><b>9 Coil Types</b></p> <p>F - Flying lead type coils</p> <p>U - DIN 43650 coils</p> <p>SP1 - Single 1/4" male spade</p> <p>SP2 - Dual 1/4" male spade</p> <p>P12L - Plug-in coils w/rectifier in junction box, lights included.</p> <p>KU - Top exit flying leads</p> <hr/> <p><b>10 Coil Connectors</b></p> <p>(“U” type coils only, omit if not required)</p> <p>1 - Connector fitted</p> <p>6 - Connector with light fitted</p> <p>11 - Rectifier with lights fitted</p> <p>12 - Rectifier fitted</p> <hr/> <p><b>11 Electrical Connections</b></p> <p>(“F” type coils only, omit if not required)</p> <p>PA - Insta-plug male recpt. only</p> <p>PA3 - 3-pin receptacle</p> <p>PA5 - 5-pin receptacle</p> <p>PB - Insta-plug male &amp; female recpt.</p> <p>T - Terminal block</p>	<p><b>12 Wiring Housing Thread</b></p> <p>(“F” type coils only, omit if not required)</p> <p>W - 1/2" NPT</p> <p>J - M20 x 1.5 - 6H</p> <p>G - G1/2</p> <hr/> <p><b>13 Solenoid Indicator Lights</b></p> <p>(Not available on PA, U, SP1, SP2. Omit if not required.)</p> <hr/> <p><b>14 Coil Identification Letter</b></p> <p>GH - 12V DC</p> <p>DTH - 18V DC</p> <p>HH - 24VDC</p> <p>DJH - 98V DC (req'd. for P12L models)</p> <p>PH - 110V DC</p> <p>SH - 220V DC</p> <hr/> <p><b>15 Tank Pressure Rating</b></p> <p>7 - 210 bar (3045 psi)</p> <hr/> <p><b>15 Design Number</b></p> <hr/> <p><b>17 Port Orifices</b></p> <p>Blank - 00</p> <p>03 - 0.3 mm dia.</p> <p>06 - 0.6 mm dia.</p> <p>08 - 0.8 mm dia.</p> <p>10 - 1.0 mm dia.</p> <p>13 - 1.3 mm dia.</p> <p>15 - 1.5 mm dia.</p> <p>20 - 2.0 mm dia.</p> <p>23 - 2.3 mm dia.</p> <p>(Example: “P03” = 0.3 mm dia. orifice in P port of valve. Omit if not required.)</p>
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Eaton Hydraulics  
14615 Lone Oak Road  
Eden Prairie, MN 55344  
Telephone: 888-258-0222  
Fax: 952 974-7722  
www.eatonhydraulics.com

46 New Lane, Havant  
Hampshire PO9 2NB  
England  
Telephone: (44) 23 921 86451  
Fax: (44) 23 924 78110



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