

Vickers®

Solenoid Operated Directional Valves



Parts Information



VICKERS

Optimized - Soft Shift Function

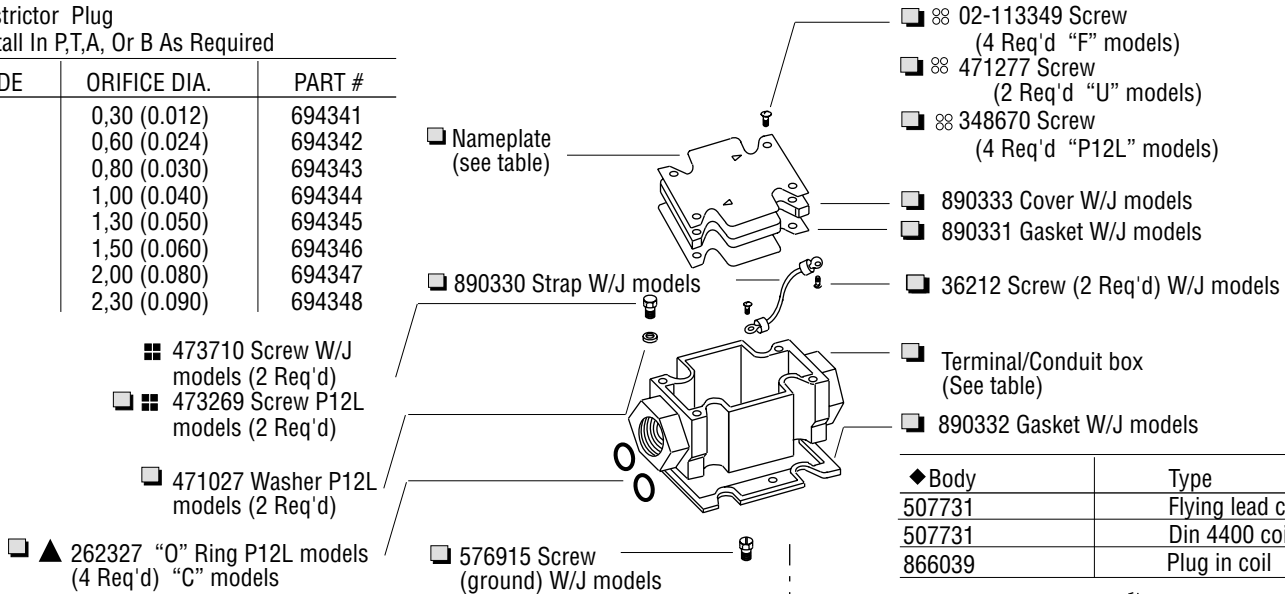
DG4V-3 -**(L) 3 - (P2) - (V) M - ****(L) - **H * - 60 - (P* - A* - B* - T*)

ISO 4401, Size 03; ANSI/B93.7M-D03

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

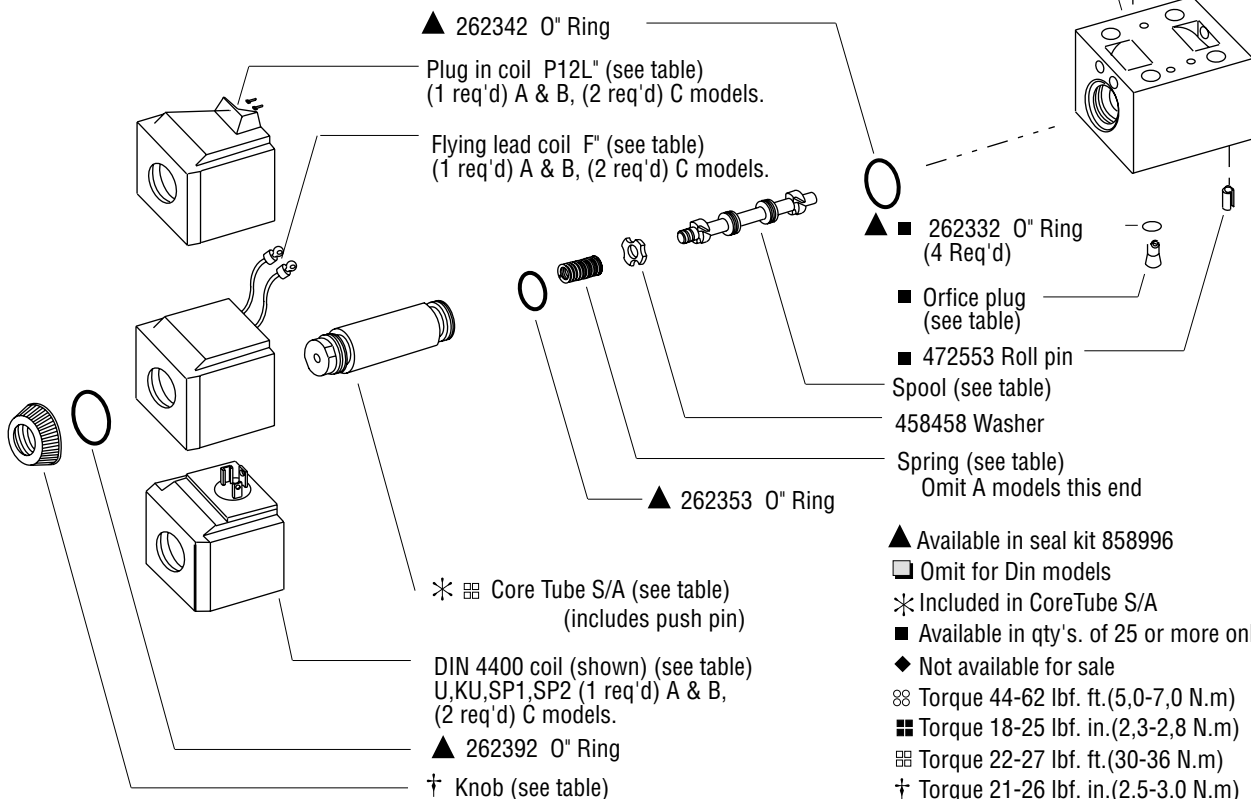
Restrictor Plug
Install In P,T,A, Or B As Required

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



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)

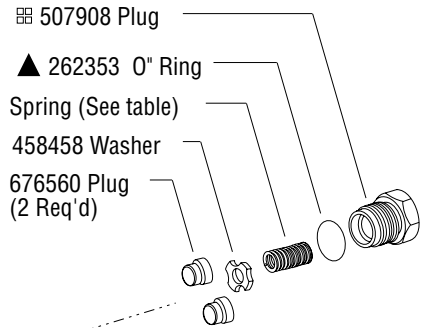
DG4V-3 -60 Design



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

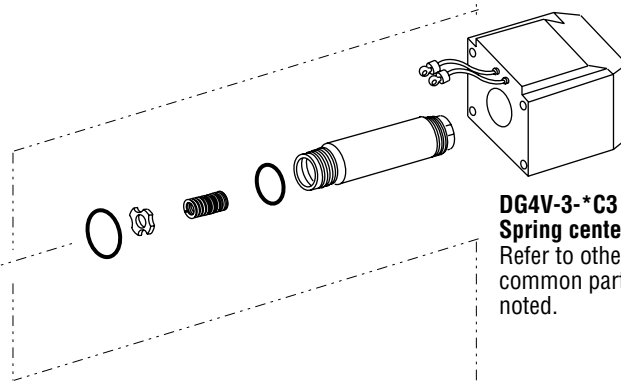
Model Code	Nameplate
DG4V-3-***-**-M-U-*7-60	694303
DG4V-3-***-**-M-U-*2/*6-60	694451
DG4V-3-***-**-M-F/FPA3/FPA5-*7-60	694387
DG4V-3-***-**-M-FPB-**-60	865929
DG4V-3-***-**-M-FPBL-**-60	865930
DG4V-3-C/N***-**-M-P-**-60	865933
DG4V-3-A/B/F***-**-M-P-**-60	865934
DG4V-3-AL/BL/FL***-**-M-P-**-60	865935

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



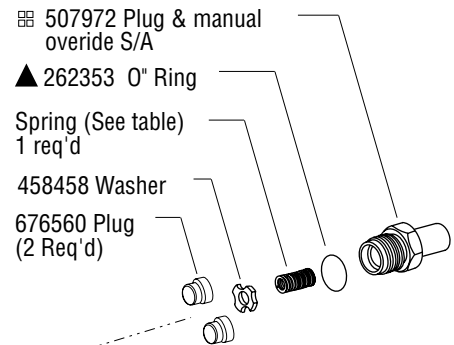
DG4V-3-*A3 -(V)M-FW-60
Spring offset to CYL. "A", shift to center.

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

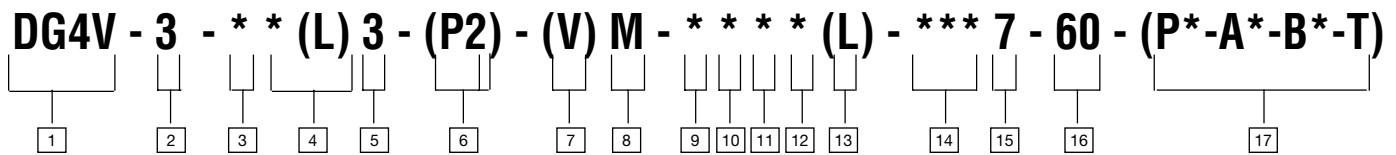
Rotate conduit box/rectifier/light assembly 180° for models AL, BL, and 8B with solenoid mounted on B port side of body.

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>1 Valve Type</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>2 Interface</p> <p>3 - ISO 4401-03, CETOP 3 (NFPA D03)</p> <p>(High performance only)</p> <hr/> <p>3 Spool Types</p> <p>0 - Open center</p> <p>2 - Closed center (all ports)</p> <p>3 - P & B closed, A to T</p> <p>6 - Closed center (P only)</p> <p>8 - Tandem center (open crossover)</p> <p>31 - P & A closed, B to T</p> <p>33 - Closed center (bleed A & B)</p> <hr/> <p>4 Spool/Spring Arrangement</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>5 Soft Shift Valve - Optimized Fixed Orifice</p>	<p>6 Manual Override</p> <p>Blank - Override in solenoid end only</p> <p>P2 - Manual override in end cap and solenoid, A & B models only.</p> <hr/> <p>7 Solenoid Energization identity</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>8 Flag Symbol</p> <p>(Introduces electrical features and options)</p> <hr/> <p>9 Coil Types</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>10 Coil Connectors</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>11 Electrical Connections</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 & female recpt.</p> <p>T - Terminal block</p>	<p>12 Wiring Housing Thread</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>13 Solenoid Indicator Lights</p> <p>(Not available on PA, U, SP1, SP2. Omit if not required.)</p> <hr/> <p>14 Coil Identification Letter</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>15 Tank Pressure Rating</p> <p>7 - 210 bar (3045 psi)</p> <hr/> <p>15 Design Number</p> <hr/> <p>17 Port Orifices</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>
--	--	---

Eaton
Fluid Power Group
Hydraulics Group USA
14615 Lone Oak Road
Eden Prairie, MN 55344
USA
Tel: 952-937-9800
Fax: 952-294-7722
www.eaton.com/hydraulics

Eaton
Fluid Power Group
Hydraulics Group Europe
Route de la Longeraie 7
1110 Morges
Switzerland
Tel: +41 (0) 21 811 4600
Fax: +41 (0) 21 811 4601

Eaton
Fluid Power Group
Hydraulics Group Asia Pacific
11th Floor Hong Kong New World Tower
300 Huaihai Zhong Road
Shanghai 200021
China
Tel: 86-21-6387-9988
Fax: 86-21-6335-3912