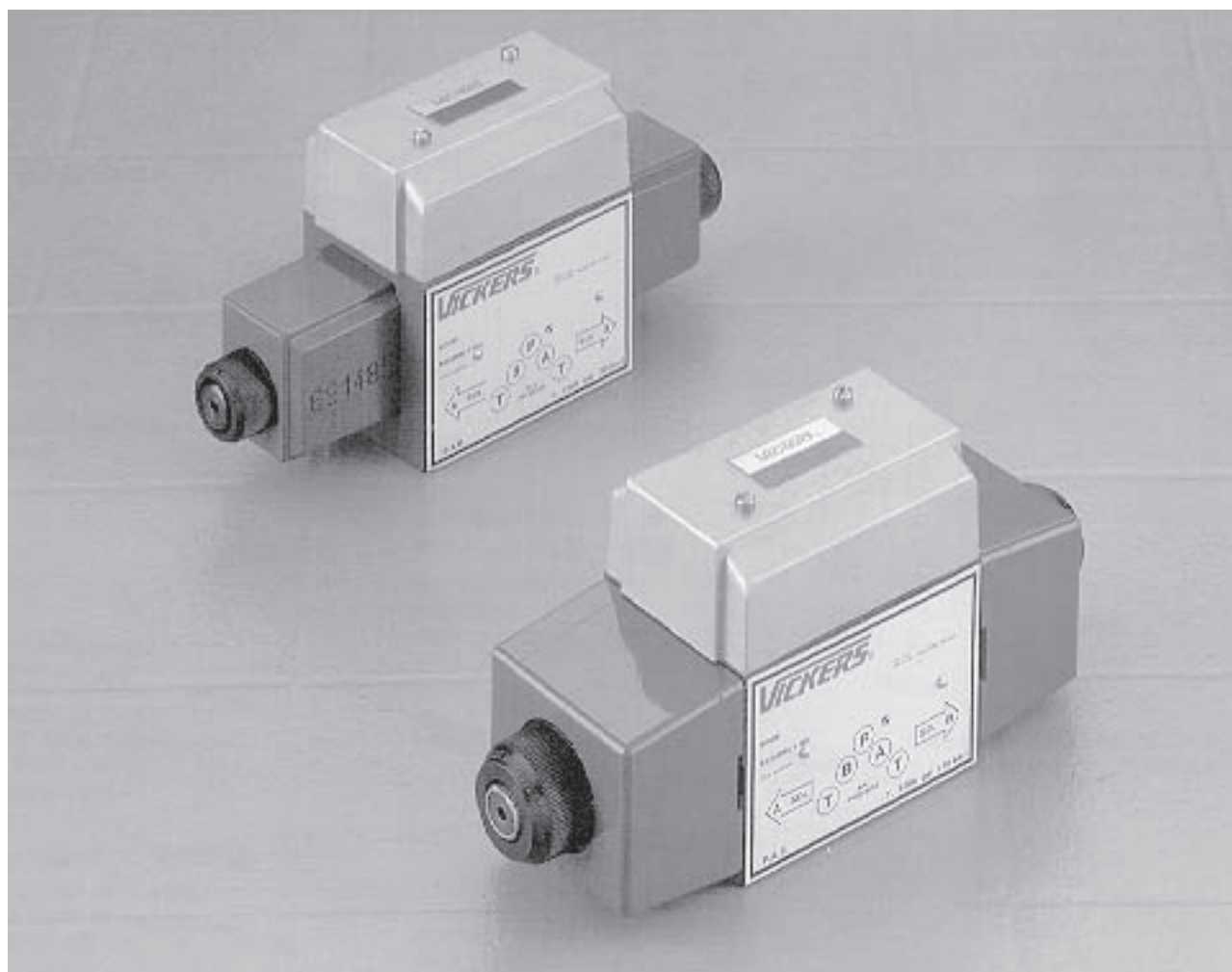


Directional Valves



Wet Armature Solenoid Operated Directional Control Valves

DG4V4-01, 1*



Spool Table	
Type	Part Number
0	691401
1	691404
2	691400
3	691403
6	691402
7	691405
8	691412
11	691404
31	691403
33	691407

Junction Box	
Model	Part Number
'G'	02-337082
'J'	02-337083
'W'	691418

▲501212 Screw
(4 req'd), Models C, N, A***S*
(2 req'd), Models A, AL, B, BL

500366 Terminal Block S/A

468641 Screw (2 req'd)
for 'U', 'U1', 'U6' Models

867798 ID Plate (Used
with DIN coil option)

Spool (See table)

691429 Spool Stop
for A(L) Models

*691415 Spool Stop
691424 Spool Stop
(Spool Type '8')
(2 req'd)

DIN Plug Connector
(See table)

691299 Screw (2 req'd)
Junction Box
(See table)

501633 Ground Screw

▲691419 Gasket

◆524778 Body S/A

▲262334 "O" Ring
(5 req'd)

691432 Plastic Plug
for A, AL, B, BL Models

DIN 43650 Coil S/A
(See table)
(Includes label)

Spring (See table)

691426 Push Pin
(2 req'd), Model C
(1 req'd), Models A, AL, B, BL
691467 Push Pin
(2 req'd), Model N

■▲691442 Manual Override S/A
407533 Plug (Symbol WO)

▲262338 "O" Ring (2 req'd)

Core Tube (See table)
Torque to 18-22 lb. ft.
(24-30 N.m)

▲691421 Solenoid Gasket
(2 req'd)

Coil (See table)

691425 Knob (AC)
(2 req'd for DC
models)

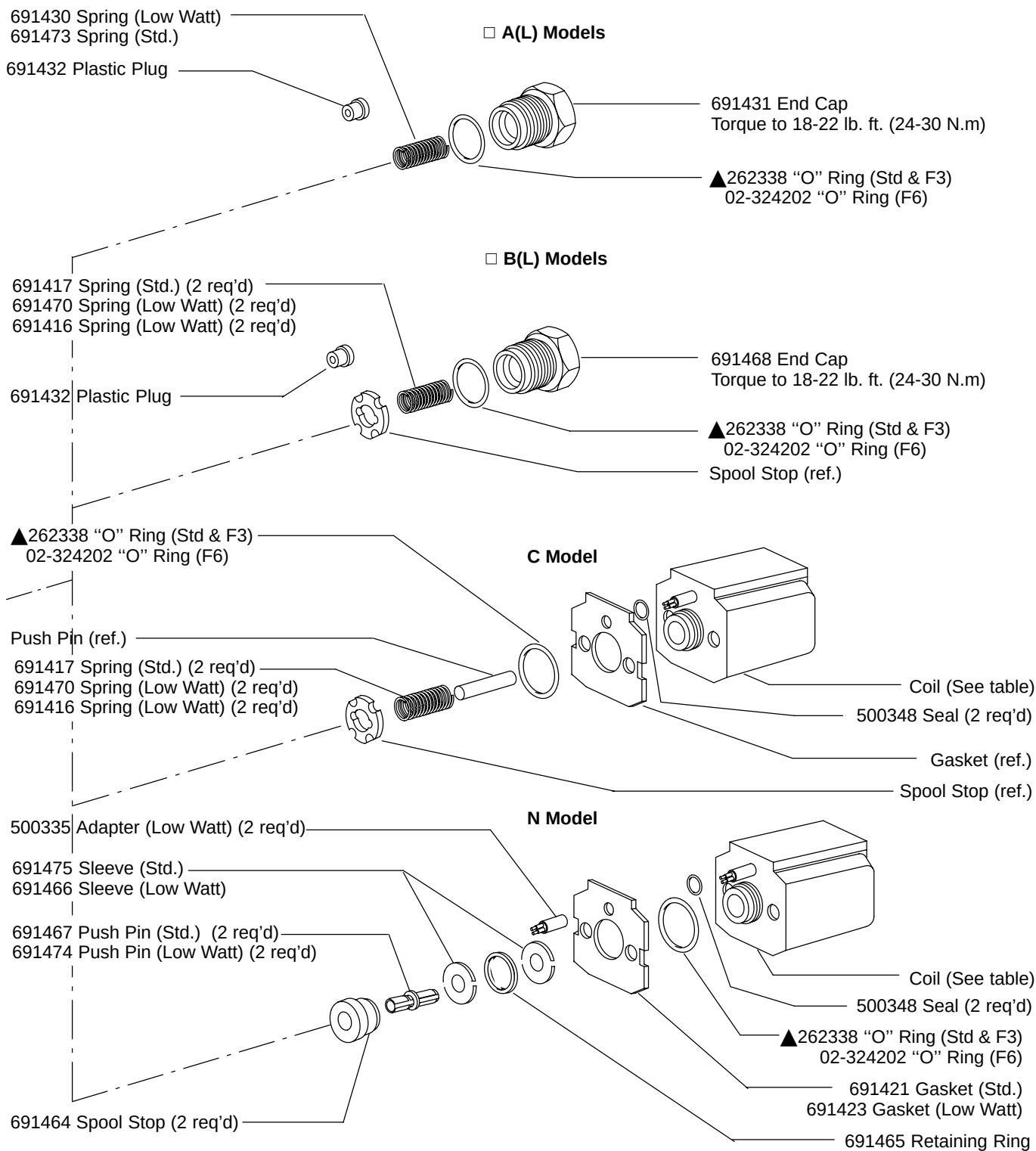
▲187000 "O" Ring (AC)
(2 req'd for DC models)

▲◇262325 "O" Ring (Std & F3)

▲◇02-324198 "O" Ring (F6)

▲□263493 "O" Ring (Std & F3)

▲□02-324203 "O" Ring (F6)



Spool Installation Note

Assemble 2N, 0N and 6N spools with notched end on 'A' port end.
 Assemble 2A/2AL, 0A, 0AL, and 22A, 22AL spools with small end toward actuator.
 Assemble 31C and 11C spools with notched end of spool on 'B' port end.
 Assemble 2C, 0C, 6C, 3C, 1C, 7C and 33C spools with notched end of spool on 'A' port end.

NOTE

Right hand assembly shown for single solenoid models A and B. Reverse parts (except body and spool) for models AL and BL assembly.

- Included in Manual Override Core Tube S/A
- Included in Manual Override S/A
- ▲ Included in Seal Kit 934628
- * Assemble washer with sharp edge toward body
- ◆ Not available for sale

DG4V4-A/B-PA3W

Terminal block with male receptacle

3 Lead (white)
wired here

2 Lead (black)
wired here

Sol. B

500366 Terminal
Block S/A

522956 Male receptacle

1 green lead (ground) on valve body

3 white lead to terminal block
(Negative)

02-126782
Male receptacle

2 black lead to terminal block
(Positive)

NOTE

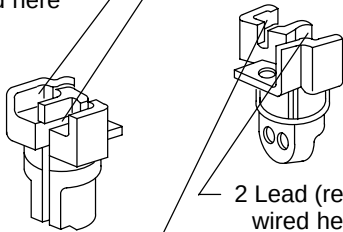
Light kits cannot be installed without a terminal strip.

DG4V4-A/B-PA5W

Terminal block with male receptacle

5 Lead (black)
wired here

1 Lead (white)
wired here



2 Lead (red)
wired here

4 Lead (orange)
wired here

522955 Male receptacle

1 white lead to terminal block
(Negative) (Sol. B)

5 black lead to terminal block
(Positive) (Sol. B)

4 lead capped

02-126783
Male receptacle

3 green lead (ground)
on valve body

2 lead capped

NOTE

Refer to valve model drawing for balance of part numbers.

DG4V4-C/N-PA5W

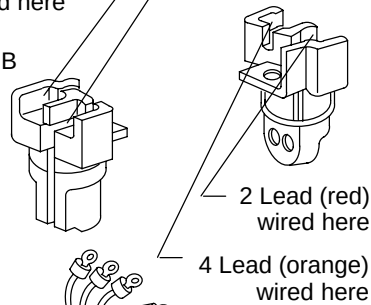
Terminal block with male receptacle

5 Lead (black)
wired here

1 Lead (white)
wired here

Sol. A

Sol. B



2 Lead (red)
wired here

4 Lead (orange)
wired here

522955 Male receptacle

1 white lead to terminal block
(Negative)

5 black lead to terminal block
(Positive)

4 orange lead to terminal
block (Negative)

02-126783
Male receptacle

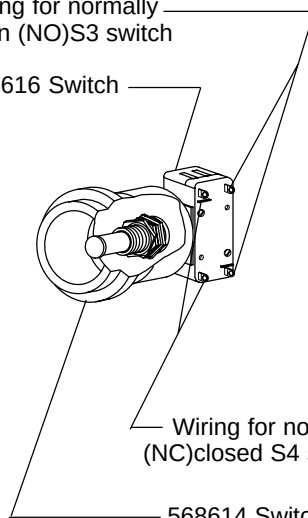
3 green lead (ground)
on valve body

2 red lead to terminal block
(Positive)

DG4V4-A/B-S3/S4-PA5W

Wiring for normally
open (NO) S3 switch

568616 Switch



Wiring for normally
(NC) closed S4 switch

568614 Switch S/A

DG4V4-*-PB

Instaplug male/female receptacle

522958 Lens (2 req'd)

522961 Rod (2 req'd)

522974 Thumbscrew
S/A (2 Req'd)

522975 Junction Box
691418 Junction Box

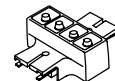


867579 Name Plate

522962 Gasket

522978 Female
receptacle S/A

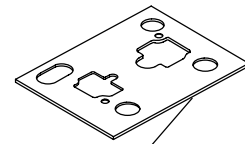
193245 Screw
(2 Req'd)



522984 Male
receptacle S/A

522971 Screw

522970 Screw
(ground)



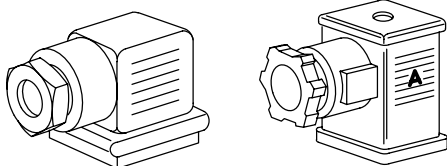
691419 Gasket

Available on DG4V4-*-PBL.



CAUTION

Electrical power must be disconnected before removing/replacing terminal block, receptacle plug, indicator lights or limit switch.



DIN Plug Connector w/Lights		
Solenoid A (Grey)	Solenoid B (Black)	Voltage
523059	523060	110 120
523061	523062	220 240
523063	523064	12 24

DIN Plug Connector	Without Lights
Solenoid A (Grey)	523057
Solenoid B (Black)	523058

Coil Chart

One required for 'A'(L) and 'B'(L) Models
Two required for 'C' and 'N' Models

Model	Standard		Low Watt	
	Plug-in	DIN	Plug-in	DIN
	S/A	S/A	S/A	S/A
B - 110/120 50/60	02-337020	02-337040	501508	522894
D - 240 (230) 60	02-337021	02-337041	522890	522896
ED - 240/50	02-337022	02-337042	522889	522895
C - 220/50	02-337023	02-337043	522892	522898
A - 110/50	02-337024	02-337044	522891	522897
NN - 24/50	02-337025	02-337045	695752	695757
NV - 24/60	02-337026	02-337046	695753	695758
T - 100/50/60	02-337027	02-337047	—	—
M - 440/460/50/60	02-337028	02-337048	—	—
OV - 200/50/60	02-337029	02-337049	—	—
K - 48/50/60	02-337030	02-337050	—	—
KK - 48/50	02-337031	02-337051	—	—
G - 12 VDC	02-337032	02-337052	501509	522899
H - 24 VDC	02-337033	02-337053	522893	522900
DM - 80 VDC	—	—	695754	—
OJ - 48 VDC	02-337035	02-337055	—	—
P - 110 VDC	02-337036	02-337056	695755	696759
DP - 125 VDC	02-337037	02-337057	—	—
X - 250 VDC	02-337038	02-337058	695756	695760
R - 100 VDC	02-337039	02-337059	—	—

Lights/Spool Control

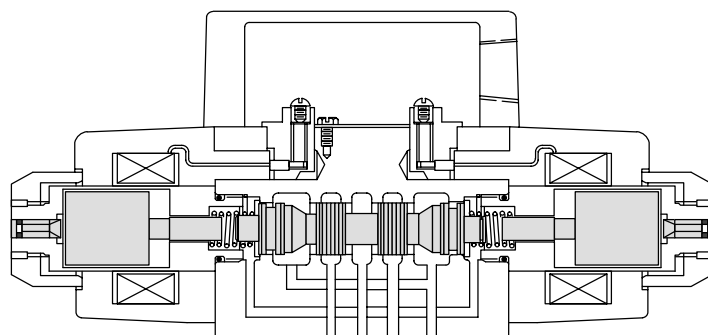
One required for 'A'(L) and 'B'(L) Models
Two required for 'C' and 'N' Models

Model	Part Number
110/120 AC	523049
220/240 AC	523051
12 VDC	523053
24 VDC	523055
125 VDC	525343

Core Tube Chart

One required for 'A'(L) and 'B'(L) Models
Two required for 'C' and 'N' Models

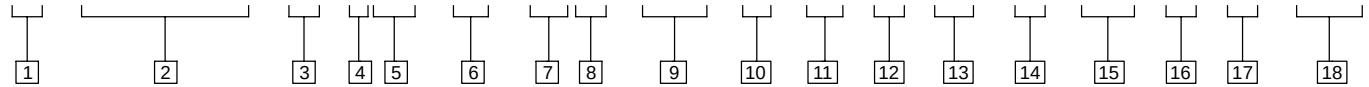
				Std. and F3		F6	
				Std. (W/O'ride)	"Z" Opt.	Std. (W/O'ride)	"Z" Opt.
"5" Tank Pressure Code	Standard	C, A (L) & B(L)	AC	501216	02-337073	02-325967	02-325968
			DC	501217	02-337074	02-325969	02-325970
		N	AC	522870	522872	02-325971	02-325972
			DC	522871	522873	02-325973	02-325974
"4" Tank Pressure Code	Low Watt	C, A (L) & B(L)	AC	501510	501512	02-336348	02-336349
			DC	501511	N/A	N/A	N/A
		N	AC	522874	522876	02-336875	02-336876
			DC	N/A	N/A	N/A	N/A



B P A T
Typical Section View
(QF-5M-*-10A3-*-*)

Model Code

F* - DG4V4-01 - ** - *(L) - (Z) - (V)M - (S*) - ** - * - * - (L) - ** - *(L) - * - 1* - S*****



1 Special Seals

Omit if not required.

F3 - Seals for fire retardant fluids

F6 - Seals for water glycol

2 Model Series

DG4V4-01 - Subplate mounting; solenoid operated. Pressure rating 315 bar (4570 psi) for ports P, A & B.

3 Spool Type

0 - Open center (all ports)

1 - Open center (P to A & T) B blocked

2 - Closed center (all ports)

3 - Open center (P & B blocked) A to T

6 - Closed center (P blocked) A & B to T

7 - Open center (P to A & B) T blocked

8 - Tandem center (P to T) open crossover

11 - Open center (P to B & T) A blocked

22 - Closed center (two way)

31 - Closed center (P & A blocked) B to T

33 - Closed center, bleed A & B to T

4 Spool/Spring Arrangement

A - Spring offset, end-to-end

B - Spring centered, end to center

C - Spring centered

N - No spring detented

5 Left Hand Build

Omit if not required.

6 Manual Override Options

Omit if serviceable.

Z - No manual override

7 Solenoid Energization Identity

V - Solenoid "A" is at port "A" end/or solenoid "B" is at port "B" end, independent of spool type.

Omit for U.S. ANSI B93.9 standard requiring solenoid "A" energization to connect P to A and/or solenoid "B" to connect P to B, independent of solenoid location.

8 Flag Symbol

M - Electrical options and features

9 Spool Indicator Switch

S3 - Switch, wired normally open

S4 - Switch, wired normally closed

10 Coil Type

Omit for plug-in.

U - ISO 4400 (DIN 43650) mounting ♦

U1 - Connector fitted

U6 - Connector fitted with lights

♦ Female connector to be supplied by customer.

11 Electrical Connector

PA - Insta-plug male receptacle only

PB - Insta-plug male & female receptacle

PA3 - Three pin connector

PA5 - Five pin connector

PM4 - Mini connector

12 Housing

G - G¹/₂ BSP thread wiring housing

J - 20 mm thread wiring housing

W - 1/2" NPT thread wiring housing

13 Solenoid Indicator Lights

Omit if not required.

L - Lights fitted

14 Coil Rating (Standard Power)

Omit for low power.

A - 110V AC 50 Hz

B - 110V AC 50 Hz/120V AC 60 Hz

C - 220V AC 50 Hz

D - 220V AC 50 Hz/240V AC 60 Hz

DP - 125V DC

ED - 240V AC 50 Hz

G - 12V DC

H - 24V DC

NN - 24V AC 50 Hz

OJ - 48V DC

X - 250V DC

15 Coil Rating (Low Power)*

Omit for standard power.

AL - 110V AC 50 Hz

BL - 110V AC 50 Hz/120V AC 60 Hz

CL - 220V AC 50 Hz

DL - 220V AC 50 Hz/240V AC 60 Hz

DML - 80V DC

EDL - 240V AC 50 Hz

NNL - 24V AC 50 Hz

NVL - 24V AC 60 Hz

PL - 110V DC

XL - 250V DC

* F6 seals not available with DC low power voltages.

16 Port T Code

4 - 70 bar (1000 psi) (Low power)

5 - 120 bar (1750 psi) (Standard power)

17 Design Number

Subject to change, installation dimensions remain as shown for design numbers 10 through 19.

18 Special Features

S - Special suffix

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