

Service Data

Vickers®

Relief Valves

Solenoid Controlled Pilot Operated Relief Valves



(F3)–C/G/S/T5–(H)–03/06***(V)**(V)–M–(S*)***** (L)*****–100/110–EN**

*** NOTE**

On CG5-(H)0***C-*(V)-100/110 dual solenoid models, pilot valve & cover S/A are rotated 90° clockwise from body. Refer to pilot valve drawing for parts breakdown.

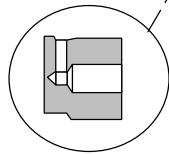
* Pilot Valve (See Table)
(DG4V-3(S)-*C-60 Shown)

▲ 232332 'O'Ring (4 Req'd)

▲■ 263497 'O'Ring

■ 329463 Plug
Torque 53-58 N.m.
(39-43 lb. ft.)

■ 285601 Seat



Assemble 285601 seat with cross hole facing up as shown.

▲■ 262361 'O'Ring

Inner Spring (See Table)

Outer Spring (See Table)

343154 Piston

Seat (See Table)

Sleeve ('H' High Flow Models Only)
(See Table)

696892 Bolt Kit (Includes 4 Bolts)
Torque 5.6 N.m. (50 lb. in.) Maximum

68905 Washer (4 Req'd)

1031 Screw (4 Req'd)
Torque 14.5-20.4 N.m. (11-15 lb. ft.)

■ Cover (See Table)

■ 343704 Plug &
▲ 263494 'O'Ring (See Table)

■ 398071 Plug &
▲ 263492 'O'Ring (See Table)

⊕◆■ 292230 Screw

■ 326317 Shim
(As req'd to obtain
proper adj. range)

■ 1485 Locknut

⊕◆■ 283949 Retainer

■ 64520 Washer

■ 283948 Plunger

▲■ 262332 'O'Ring

■ Washer (See Table)

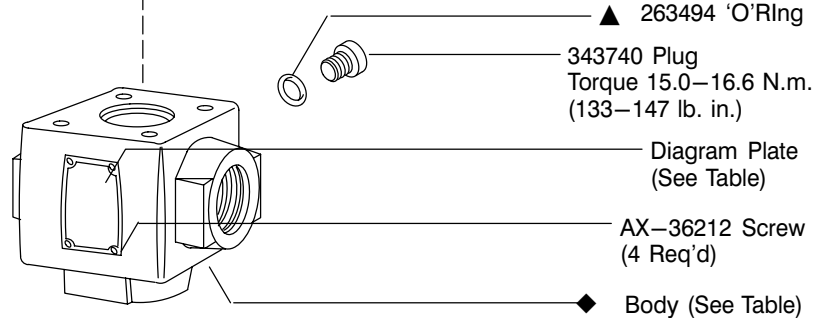
■ 422849 Spacer

■ Cover Spring
(See Table)

■ 290057 Piston

| MODEL | SEAT | SLEEVE |
|-----------|--------|--------|
| C*5-03/06 | 343153 | — |
| C*5-H06 | 589473 | 589472 |

| MODEL | ■ COVER S/A |
|----------------------------|-------------|
| C*5-(H)0*0A/F-B(V)-100/110 | 942432 |
| C*5-(H)0*0A/F-C(V)-100/110 | 942433 |
| C*5-(H)0*0A/F-F(V)-100/110 | 942434 |
| C*5-(H)0*1A-B(V)-100/110 | 942435 |
| C*5-(H)0*2A-B(V)-100/110 | |
| C*5-(H)0**C-B(V)-100/110 | 942436 |
| C*5-(H)0*1A-C(V)-100/110 | |
| C*5-(H)0*2A-C(V)-100/110 | 942437 |
| C*5-(H)0**C-C(V)-100/110 | |
| C*5-(H)0*1A-F(V)-100/110 | 942437 |
| C*5-(H)0*2A-F(V)-100/110 | |
| C*5-(H)0**C-F(V)-100/110 | |



▲ 263494 'O'Ring

343740 Plug
Torque 15.0-16.6 N.m.
(133-147 lb. in.)

Diagram Plate
(See Table)

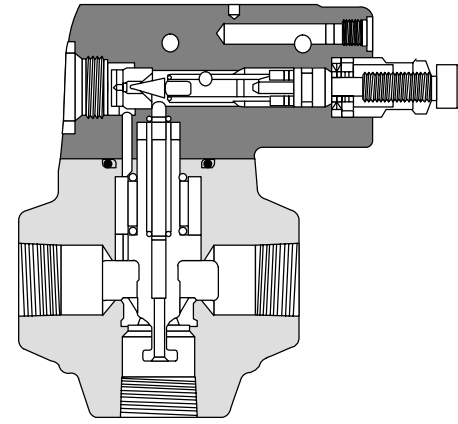
AX-36212 Screw
(4 Req'd)

◆ Body (See Table)

| MODEL | ◆ BODY |
|-----------------------|--------|
| CS5-03**-*-100/110 | 590407 |
| CS5-(H)06**-*-100/110 | 581701 |
| CT5-06**-*-100/110 | 590348 |

| MODEL | DIAGRAM PLATE | * PILOT VALVE |
|-------------------------------|---------------|---------------------|
| C*5-(H)0*0A(P)-*(V)-M-***-100 | 422864 | DG4V-3S-0BL-M***-60 |
| C*5-(H)0*0A(P)-*(V)-M-***-110 | | DG4V-3-0BL-M***-60 |
| C*5-(H)0*1A(P)-*(V)-M-***-100 | 422865 | DG4V-3S-2AL-M***-60 |
| C*5-(H)0*1A(P)-*(V)-M-***-110 | | DG4V-3-2AL-M***-60 |
| C*5-(H)0*2A(P)-*(V)-M-***-100 | 423814 | DG4V-3S-2BL-M***-60 |
| C*5-(H)0*2A(P)-*(V)-M-***-110 | | DG4V-3-2BL-M***-60 |
| C*5-(H)0*0C-*(V)-M-***-100 | 422862 | DG4V-3S-0C-M***-60 |
| C*5-(H)0*0C-*(V)-M-***-110 | | DG4V-3-0C-M***-60 |
| C*5-(H)0*2C-*(V)-M-***-100 | 422863 | DG4V-3S-2C-M***-60 |
| C*5-(H)0*2C-*(V)-M-***-110 | | DG4V-3-2C-M***-60 |
| C*5-(H)0*0F(P)-*(V)-M-***-100 | 477211 | DG4V-3S-0FL-M***-60 |
| C*5-(H)0*0F(P)-*(V)-M-***-110 | | DG4V-3-0FL-M***-60 |

* Refer to pilot valve drawing for parts breakdown.



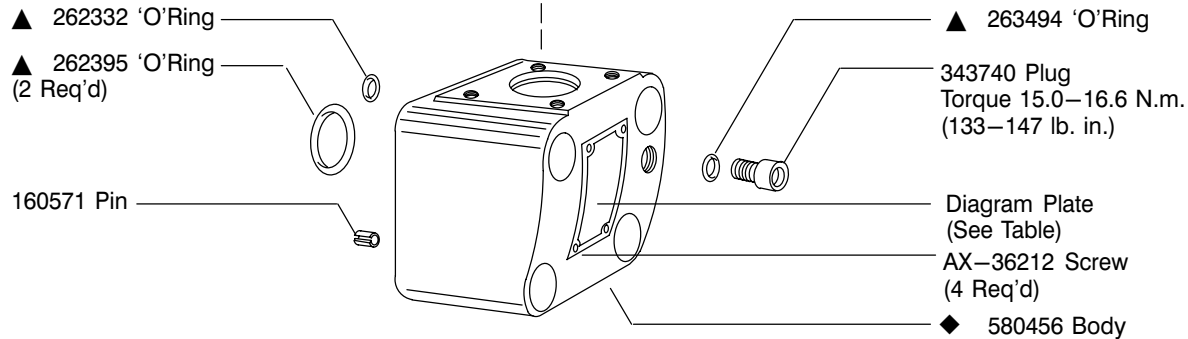
Relief valve sectional view without pilot valve

| MODEL | ■ COVER | ■ PLUG/'O'RING (2 REQ'D) | ■ PLUG/'O'RING |
|---------------------|---------|--------------------------|-----------------|
| C*5-(H)0*0A-100/110 | 422828 | — | — |
| C*5-(H)0*1A-100/110 | 424203 | 343740/▲ 263494 | 398071/▲ 263492 |
| C*5-(H)0*2A-100/110 | | | |
| C*5-(H)0**C-100/110 | | | |

| MODEL | ■ WASHER | INNER SPRING | OUTER SPRING | ■ COVER SPRING |
|----------------------|----------|--------------|--------------|----------------|
| C*5-0***-B-100/110 | — | 2077 | — | 2280 |
| C*5-H0***-BV-100/110 | | — | 184458 | |
| C*5-0***-C-100/110 | 233110 | 2077 | — | 583937 |
| C*5-H0***-CV-100/110 | | — | 184458 | |
| C*5-0***-F-100/110 | — | 2077 | — | 2281 |
| C*5-H0***-FV-100/110 | | — | 184458 | |

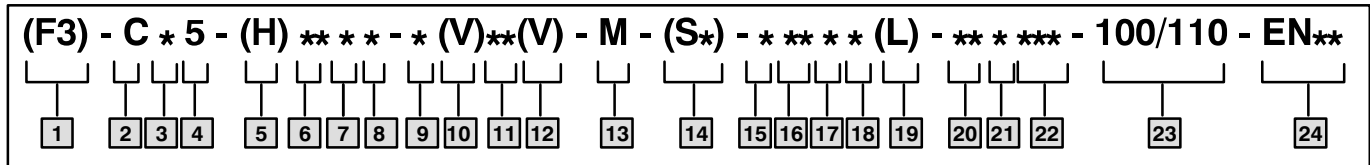
- Included In Cover S/A
- ⊕ Lubricate With Oil Before Assembly
- ▲ Included In F3 Seal Kit 696929 (includes pilot valve seals)
- ◆ Not Available For Sale

NOTE
Parts Prefixed With A Symbol Available Only In Kits.



CG5-(H)06

Model Code



- 1 Seals for mineral oil & fire resistant fluids**
 - 2 Relief valve**
 - 3 Connections**
G – Subplate mounting
S – Straight threads
T – NPTF threads
 - 4 Solenoid controlled**
 - 5 High flow**
Omit for standard models
 - 6 Valve size**
03 – 3/8"-.8750 straight thread
06 – 3/4"-1.0625 straight thread or 3/4" NPTF
 - 7 Pilot spool function**
0,1, or 2 Indicates venting condition
 - 8 Pilot spool spring arrangement**
A – Spring offset
C – Spring centered
F – Spring centered, shift to center
 - 9 Pressure range**
B – 125–1000 psi
C – 500–2000 psi
F – 1500–3000 psi
 - 10 High vent (Req'd for high flow models)**
Blank – Omit for low vent models
 - 11 Manual override options** (included in pilot valve model code)
Blank – Plain override solenoid ends only
H – Waterproof override solenoid ends only
H2 – Waterproof override both ends of single solenoid
M – Serviceable manual overrides in solenoid ends only
P2 – Plain override both ends of single solenoid
Y – Lockable manual overrides solenoid ends only
Z – No overrides in either end
 - 12 Solenoid energization identity**
Blank – Standard arrangement for ANSI B93 9 (energise 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)
 - 13 Flag symbol heading electrical options & features**
 - 14 Spool position monitoring switch** (tank pressure rating 10 bar only)
S1 – Switch, normally open, U coils only
S2 – Switch, normally closed, U coils only
S3 – Switch, wired normally open, P*
S4 – Switch, wired normally closed, P*
S5 – Switch, free leads, FW & FJ only
 - 15 Coil type**
U – ISO 4400
F – Flying lead
SP1 – Single 6,3 series spade to IEC 760
SP2 – Dual 6,3 series spade to IEC 760
 - 16 Electrical connections** (F type coil only) omit if not required
T – Wired terminal block
PA – Instaplug male receptacle only
PB – Instaplug male & female receptacle
PA3 – Three pin connector
PA5 – Five pin connector
 - 17 Housing (F type coils only)**
W – 1/2 NPT thread wiring housing
J – 20 mm thread wiring housing
 - 18 Electrical options**
1 – ISO with fitted plug, U type coils only
6 – ISO with fitted plug, with lights, U type coils only
 - 19 Solenoid indicator lights** (F build only) To be used with T terminal block models.
(Omit if not required)
 - 20 Coil identification**
 - 21 Pilot valve code (tank pressure rating)**
2 – 10 bar (145 psi) use with switch models S*
5 – 100 bar (1450 psi) DG4V-3S-60
6 – 160 bar (2300 psi) DG4V-3-60
7 – 210 bar (3000 psi) DG4V-3-60
 - 22 Pilot valve port orifices**
 - 23 Design**
100 – DG4V3S-60
Standard pilot valve
110 – DG4V3-60
High performance pilot valve
 - 24 Special modifications** (omit if not required)
- 11 Thru 22 included in pilot valve model code**