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)

34154 Piston
Seat (See Table)

Sleeve (‘H’ High Flow Models Only)
(See Table)

| 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 | 942436 |  |  |
| C*5—(H)0*2A—C(V)—100/110 | 942437 |  |  |

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

Diagram Plate (See Table)

AX—36212 Screw (4 Req’d)

∧ Body (See Table)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COVER S/A</th>
<th>BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS5—03**—*—100/110</td>
<td>590407</td>
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<tr>
<td>CS5—(H)06**—*(V)—100/110</td>
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<td>CT5—06**—*—100/110</td>
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### MODEL

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DIAGRAM PLATE</th>
<th>* PILOT VALVE</th>
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<tbody>
<tr>
<td>C*5 — (H)*0A(P) — *(V) — M — *** — 100</td>
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<td>DG4V – 3S – 0BL – M*** – 60</td>
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* Refer to pilot valve drawing for parts breakdown.

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**Relief valve sectional view without pilot valve**

### MODEL

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<thead>
<tr>
<th>MODEL</th>
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<th>PLUG/O’RING (2 REQ’D)</th>
<th>PLUG/O’RING</th>
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<tr>
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<td>343740/ ▲ 263494</td>
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<tr>
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<td>424203</td>
<td>——</td>
<td>398071/ ▲ 263492</td>
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### MODEL

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<tr>
<th>MODEL</th>
<th>WASHER</th>
<th>INNER SPRING</th>
<th>OUTER SPRING</th>
<th>COVER SPRING</th>
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<td>——</td>
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**Includes In Cover S/A**

**Lubricate With Oil Before Assembly**

**Includes In F3 Seal Kit 696929 (includes pilot valve seals)**

**Not Available For Sale**

**NOTE**

Parts Prefix With A Symbol Available Only In Kits.

- 262332 ‘O’Ring
- 262395 ‘O’Ring (2 Req’d)
- 160571 Pin
- ▲ 343740 Plug
- ▲ 263494 ‘O’Ring
- Diagram Plate (See Table)
- AX – 36212 Screw (4 Req’d)
- 580456 Body

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**343740 Plug**

Torque 15.0 – 16.6 N.m. (133 – 147 lb. in.)
# Model Code

| (F3) - C * 5 - (H) ** * - * (V)**(V) - M - (S*) - ** * * * (L) - ** * * * - 100/110 - EN** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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. 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 B33.9 (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)

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**Thru 22 included in pilot valve model code**