Relief Valves

Solenoid Controlled Pilot Operated Relief Valves

(F3)–C/G/S/T5–(H)–10***(V)**(V)–M–(S*)*****(L)******–100/110–EN**
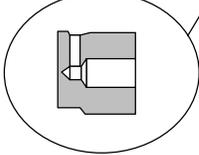
* Note

On CG5–(H)10***C–*–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)

■ 329463 Restriction plug

■▲ 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.

■▲ 262367 'O'Ring

Spring (See Table)

283952 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)

1074 Screw (4 Req'd)
Torque 54.2–67.7 N.m. (40–50 lb. ft.)

■ Cover (See Table)

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

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

⊖ ◆■ 292230 Screw

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

■ 1485 Locknut

⊖ ◆■ 283949 Retainer

■ 64520 Washer
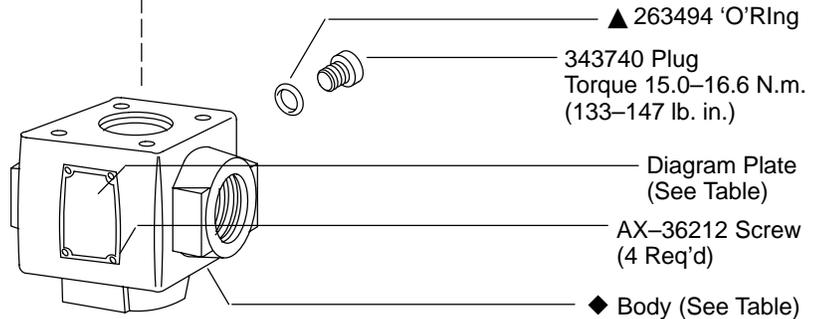
■ 283948 Plunger

▲■ 262332 'O'Ring

■ Washer (See Table)

■ 422849 Spacer

■ Cover Spring
(See Table)

■ 290057 Piston

▲ 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	SEAT	SLEEVE
C*5–10	283954	——
C*5–H10	587996	400730

MODEL	■ COVER S/A
C*5–(H)100A/F–B(V)–100/110	942456
C*5–(H)100A/F–C(V)–100/110	942457
C*5–(H)100A/F–F(V)–100/110	942458
C*5–(H)101A–B(V)–100/110	
C*5–(H)102A–B(V)–100/110	942459
C*5–(H)10*C–B(V)–100/110	
C*5–(H)101A–C(V)–100/110	
C*5–(H)102A–C(V)–100/110	942460
C*5–(H)10*C–C(V)–100/110	
C*5–(H)101A–F(V)–100/110	
C*5–(H)102A–F(V)–100/110	942461
C*5–(H)10*C–F(V)–100/110	

MODEL	◆ BODY
CT5–10**–*–100/110	590300
CS5–(H)10**–*–100/110	580430

MODEL	DIAGRAM PLATE	* PILOT VALVE
C*5 –(H)100A(P)–*(V)–M–***–100	422864	DG4V–3S–0BL–M***–60
C*5 –(H)100A(P)–*(V)–M–***–110		DG4V–3–0BL–M***–60
C*5 –(H)101A(P)–*(V)–M–***–100	422865	DG4V–3S–2AL–M***–60
C*5 –(H)101A(P)–*(V)–M–***–110		DG4V–3–2AL–M***–60
C*5 –(H)102A(P)–*(V)–M–***–100	423814	DG4V–3S–2BL–M***–60
C*5 –(H)102A(P)–*(V)–M–***–110		DG4V–3–2BL–M***–60
C*5 –(H)100C–*(V)–M–***–100	422862	DG4V–3S–0C–M***–60
C*5 –(H)100C–*(V)–M–***–110		DG4V–3–0C–M***–60
C*5 –(H)102C–*(V)–M–***–100	422863	DG4V–3S–2C–M***–60
C*5 –(H)102C–*(V)–M–***–110		DG4V–3–2C–M***–60
C*5 –(H)100F(P)–*(V)–M–***–100	_____	DG4V–3S–0FL–M***–60
C*5 –(H)100F(P)–*(V)–M–***–110		DG4V–3–0FL–M***–60

* Refer to pilot valve drawing for parts breakdown.
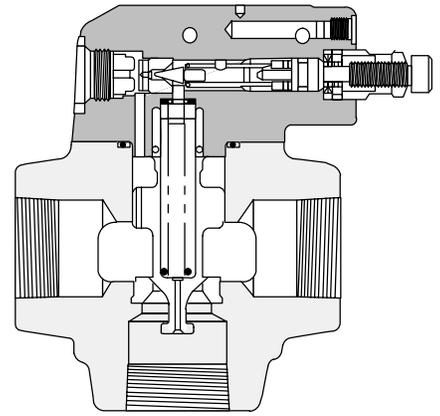
Relief valve sectional view
without pilot valve

MODEL	■ COVER	■ PLUG/'O'RING (2 REQ'D)	■ PLUG/'O'RING
C*5–(H)100A–100/110	422852	———	———
C*5–(H)101A–100/110	424204	343740/▲ 263494	398071/▲ 263492
C*5–(H)102A–100/110			
C*5–(H)10*C–100/110			

MODEL	■ WASHER	■ COVER SPRING	SPRING
C*5–10**–B–100/110	———	2280	291822
C*5–H10**–BV–100/110			291821
C*5–10**–C–100/110	233110	583937	291822
C*5–H10**–CV–100/110			291821
C*5–10**–F–100/110	———	2281	291822
C*5–H10**–FV–100/110			291821

■ Included In Cover S/A

▲ Included In F3 Seal Kit 696930
(includes pilot valve seals)

⊖ Lubricate With Oil Before Assembly

◆ Not Available For Sale

Note
Parts Prefixed With A Symbol Available
Only In Kits.

▲ 262332 'O'Ring

▲ 262399 'O'Ring
(2 Req'd)

160571 Pin

▲ 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)

◆ 581703 Body

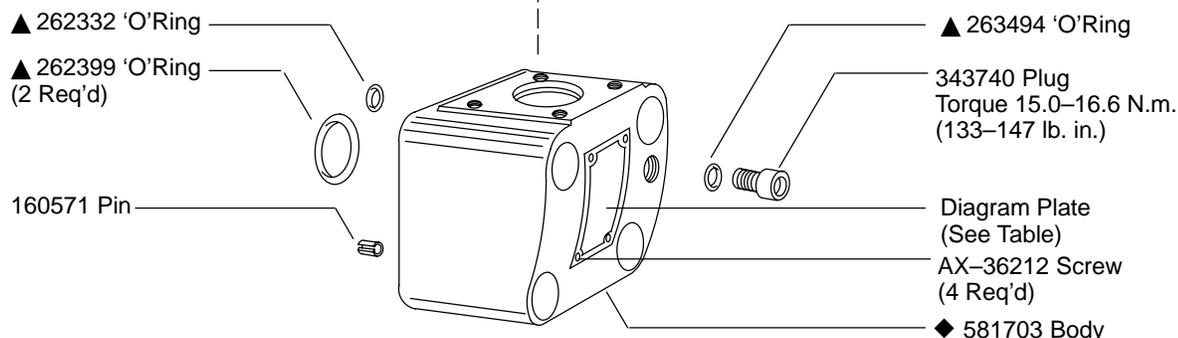
CG5–(H)10–*–100/110**

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 |
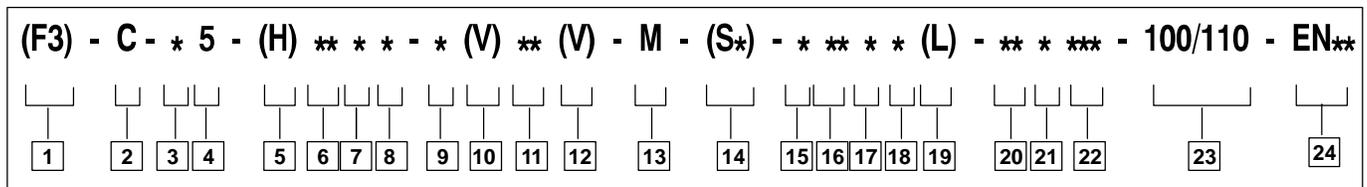
1 Seals for mineral oil & fire resistant fluids

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

10 – 1–1/4"–1.6250 straight thread or 1–1/4" 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 indentification

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