

Service Data

Vickers®

# Directional Controls

---



## Air Pilot Operated Directional Control Valve

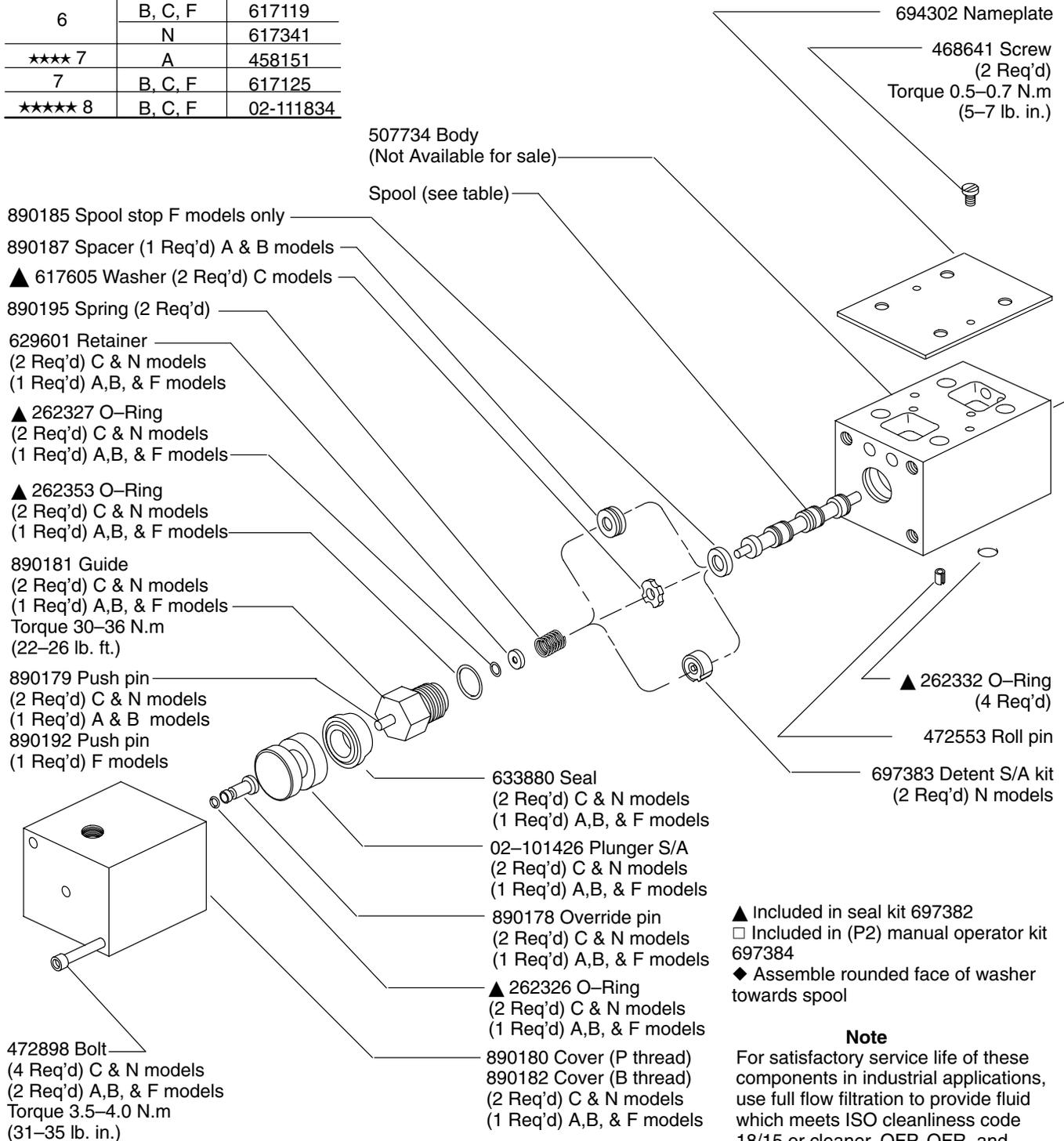
DG18V-3-\*A/B/F(L)-(P2)-(V)-\*-60/61

DG18V-3-\*C/N-(V)-\*-60/61

| Spool Type | Model   | Spool   |
|------------|---------|---------|
| ★ O        | A       | 617498  |
|            | B, C, F | 617121  |
|            | N       | 890189  |
| ★★ 1, 11   | B, C, F | 458263  |
| ★ 2        | A       | 617120  |
|            | B, C, F | 617118  |
|            | N       | 617126  |
| ★★★★ 22    | A       | 617122  |
| ★★★ 3, 31  | B, C, F | 617124  |
|            | 33      | B, C, F |
| ★ 6        | A       | 890188  |
| 6          | B, C, F | 617119  |
|            | N       | 617341  |
| ★★★★ 7     | A       | 458151  |
| 7          | B, C, F | 617125  |
|            | ★★★★ 8  | B, C, F |

### Spool Assembly Note

- ★ Assemble type "OA", "2A", and "6A" spool in body with longer end land opposite of operator.
- ★★ Assemble type "1" spool in body with narrow center land towards "A" port. Assemble type "11" spool in body with narrow center land towards "B" port.
- ★★★ 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.
- ★★★★ Assemble type "7A" and "22A" spool in body with reduced longer end Dia. towards operator.
- ★★★★★ "V" Option, operator "A" is at port "A" end of valve and/or operator "B" is at port "B" end of valve, independent of spool type. Type 8 spool valves will always have a "V" present in model code.



### Note

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 18/15 or cleaner. OFF, OFR, and OFRS series filters are recommended.

507724 End cap  
Torque 30–36 N.m  
(22–26 lb. ft.)

▲ 262353 O-Ring

890195 Spring (Ref.)

◆ 617605 Washer

**DG18V-3-\*A-60**  
Refer to opposite end for  
balance of part numbers.

507724 End cap  
Torque 30–36 N.m  
(22–26 lb. ft.)

▲ 262353 O-Ring

890195 Spring (Ref.)

◆ 617605 Washer

**DG18V-3-\*B-60**  
Refer to opposite end for  
balance of part numbers.

**DG18V-3-\*C-60**  
Refer to opposite end for  
balance of part numbers

507724 End cap  
Torque 30–36 N.m  
(22–26 lb. ft.)

▲ 262353 O-Ring

890195 Spring (Ref.)

◆ 617605 Washer

890186 Spacer

**DG18V-3-\*F-60**  
Refer to opposite end for  
balance of part numbers.

**DG18V-3-\*N-60**  
Refer to "C" layout  
for part numbers

#### Valve Assembly Note

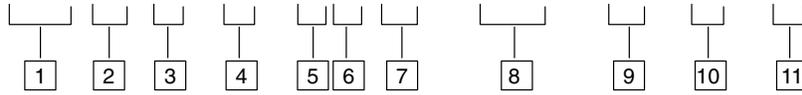
Right hand assembly shown for all single operator models.

For left hand assembly, **DG18V3-\*A-(P2)**, all parts are reversed except body.

For left hand assembly, **DG18V3-\*B-(P2)** and **DG18V3-\*F-(P2)**, all parts are reversed except body and spool.

# Model Code

**DG 18 V - 3 - \* \* (L) - (P2) - (V) - \* - 6 \***



**1** Directional control valve, subplate mounted

**2** Air pilot operated

**3** Rated pressure  
350 bar (5000 psi)

**4** Interface  
ISO 4401-03 (CETOP 3, NFPA D03)

**5** Spool type (Center condition)

- 0 – Open center (All ports)
- 1 – Open center (P & A to T)
- 2 – Closed center (All ports)
- 3 – Closed center (P & B)
- 6 – Closed center (P only)
- 7 – Open center (T blocked)
- 8 – Tandem center (P to T)
- 11 – Open center (P & B to T)
- 22 – Closed center (Two-way)
- 31 – Closed center (P & A)
- 33 – Closed center (Bleed A & B)

**6** Spool spring arrangement

- A – Spring offset to CYL. A, (Single operator)
- B – Spring centered, (Single operator)
- C – Spring centered (Dual operator)
- F – Spring offset, to CYL. A, shift to center (Single operator)
- N – No-spring, detented

**7** Build type

- L – Left hand build (Single operator only)
- Blank – Standard right hand build (Single operator only)

**8** Manual override option

- P2 – Manual operator in end cap, (single operators) (Applicable for A(L), B(L) & F(L) models only)
- Blank – Overrides in operator end only

**9** Actuator identity

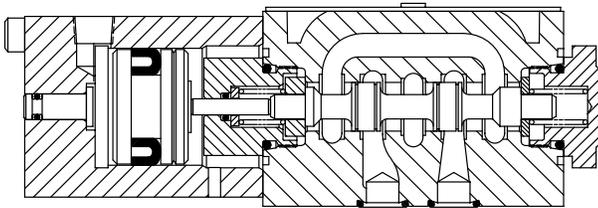
V – Actuator identifier included for all type 8 spools (Refer to spool assembly note ★★★★★)

**10** Thread connection type

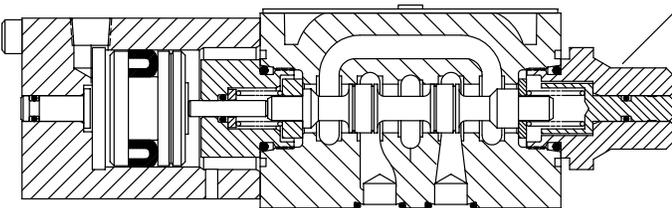
- P – 1/8" NPT threads
- B – 1/8 BSP threads

**11** Design number

- 60
- 61

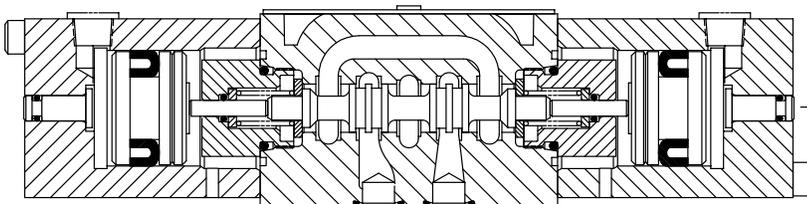


DG18V-3-\*A\*-60/61 Typical spring offset valve / single operator



□ 507971 Plug & pin S/A  
Torque 30-36 N.m (22-26 lb. ft.)

DG18V-3-\*\*-P2\*-60/61 With manual operator in end cap / single operator



DG18V-3-\*C\*-60/61 Typical spring centered valve / dual operator