Pilot Operated Directional Control Valves

DG3S-H8-*C*-*-*-*-20 Spring Centered
DG3S-H8-*-*-*-*-20 No Spring
**Model** | **Spool** | **I.D. Plate**
---|---|---
DG3S-H8-0(C)*-*-*-20 | 786350 | 400976
DG3S-H8-1(C)*-*-*-20 | *786557 | 400977
DG3S-H8-2(C)*-*-*-20 | 786349 | 400978
DG3S-H8-3(C)*-*-*-20 | *786558 | 400979
DG3S-H8-4(C)*-*-*-20 | 628162 | 400980
DG3S-H8-6(C)*-*-*-20 | 786559 | 400981
DG3S-H8-8(C)*-*-*-20 | 627221 | 400980
DG3S-H8-9(C)*-*-*-20 | 786561 | 400976
DG3S-H8-31(C)*-*-*-20 | *786558 | 580475
DG3S-H8-33(C)*-*-*-20 | 786562 | 400981

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**Plug torques (oiled)**

**Plug** | **Torque (N.m.)** | **Torque (lb. in.)**
---|---|---
113000 | 5.0 - 5.9 | 45-52
591768 | 9.8 - 10.2 | 87-90
591769 | 12.1 - 12.4 | 107-110
591770 | 15.0 - 16.6 | 133-147

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**Note**

Assemble Type 1 and 3 spools with narrow center land toward 'A' end of valve. 'A' end of valve is defined as being closest to cylinder port "A". The type 31 spool is installed in reverse of type 3, with narrow center land toward 'B' end of valve.

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**Model** | **Spring** | **Color**
---|---|---
DG3S-H8-(C)*-*-*-K-**-*-10 | 398130 | —
DG3S-H8-(C)*-*-*-R-**-*-10 | 398131 | Yellow
DG3S-H8-(C)*-*-*-S-**-*-10 | 398132 | Red

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**786523 Washer**

**783665 Spring**

**262403 "O" Ring**

**573674 Cover**

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**470884 Screw (4 req'd)**

Torque 49-59 N.m. (36-43.5 lb. ft.)

Remove Spring & Washer from both ends of valve on No-Spring models.

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**941157 Cover & Rest Pin S/A**

**262335 "O" Ring (2 req'd)**

**Pilot Choke**

**DGMFN-3-Y-A2W-B2W-21**

(See model code page for parts description.)

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**591768 Plug (2 req'd)**

**237588 Orifice Plug**

(For low shock models with "X" omitted from model code)

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**263492 "O" Ring (2 req'd)**

**591768 Plug (2 req'd)**

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**262332 "O" Ring (4 req'd)**

**416834 Rivet (4 req'd)**

**ID Plate with circuit diagram (See table)**

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**263492 "O" Ring (2 req'd)**

**580449 Valve**

**579693 Seat**

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**262494 "O" Ring (4 req'd)**

(A, B, P & T ports)

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**113000 Plug**

(Does not exist on check valve models)

**237588 Orifice Plug**

(For low shock models with "X" omitted from model code)
Not available for sale
Used on Check Valve models only

Note
- Parts included in service kits will not be sold separately.
- All threaded fasteners are metric.
- End cover screws are metric grade 12.9.

Included in F3 Seal Kit 920137
Included in Fastener Kit 941175
Included in Fastener Kit 941164
Included in Plug Kit 941167
Not available for sale
Used on Check Valve models only

Note
Parts shown included in Stroke Adjustment Kit 941156. Order two kits if stroke adjust for both ends is required.
Pilot Choke
DGMFN-3-Y-A2W-B2W-21

- 531435 Spring (2 req’d)★
- 531436 Poppet (2 req’d)
- ▲ 262337 “O” Ring (2 req’d)
- ▲ 262332 “O” Ring (4 req’d)
- 472553 Rollpin (2 req’d)★
- ▲ 920084 Seal kit
- ▲ 926456 Needle Valve Kit
- ★ Suffix symbol pertains only to Vickers Material Control.

531433 Body (Not available for sale)
416834 Rivet (2 req’d)★

Model Code

(F3) - DG3S - H8 - * - * - * - * - * - 20 (LH)

1 Seal Material
F3 - Special seals for mineral oil or fire resistant fluid

2 Model Series
DG3S - Directional valve, subplate mounted, pilot operated, rated pressure 210 bar (3000 psi)

3 Interface (High Flow)
H8 - CETOP 8

4 Spool Type

5 Valve Type
C - Spring centered
(omit for no-spring models.)

6 Fast Response “X”
(Omit for standard models.)

7 Spool Control Modification
(omit when not required)
2 - Pilot choke adjustments
7 - Stroke adjustment, cylinder “A” end only
8 - Stroke adjustment, cylinder “B” end only
2-7 - If both are required
2-8 - If both are required

8 Check Valve in Pressure Port
(Omit when not required.)
K - 0,35 bar (5 psi)
S - 5,20 bar (75 psi)

9 Design

10 Offset to “B”
(Omit for std. offset to “A” models.)

For satisfactory service life of these components, use full flow filtration to provide fluid which meets ISO cleanliness code 20/18/15 or cleaner. Selections from Eaton OFP, OFR and OFRS filter series are recommended.