**Poppet Type**

2 Position 2 Way  
Normally Closed  
Bi-Directional

- Built-in thermal relief set at 36 bar 500 psi above rated pressure.
- One piece cartridge housing ensures internal concentricity.
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Interchangeable with 02 and 04 series poppet valves; Symmetrical coil can be reversed without affecting performance.

**Operation**

De-energized the spring behind the armature holds the pilot against its seat. Pressure on either port acts behind the poppet holding it firmly closed. Energized the armature pulls the pilot off its seat. Pressure acting on either port, creates pilot flow through the poppet and pilot stage causing a pressure imbalance lifting the poppet.

**Specifications**

<table>
<thead>
<tr>
<th>Basic Model Number</th>
<th>Standard GS06 80</th>
<th>High Pressure GS06 81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Nominal Flow at 1/4p = 5 bar 70 psi</td>
<td>190 l/min 50 USgpm</td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td>210 bar 3000 psi</td>
<td>350 bar 5000 psi</td>
</tr>
<tr>
<td>Minimum Up To Lift Poppet</td>
<td>3 bar 40 psi</td>
<td></td>
</tr>
<tr>
<td>Function</td>
<td>FREE FLOW IN BOTH DIRECTIONS WHEN SOLENOID IS ENERGIZED</td>
<td></td>
</tr>
<tr>
<td>Response Time At Nom. Flow &amp; Press.</td>
<td>SEE CHART</td>
<td></td>
</tr>
<tr>
<td>Max Internal Leak At 210 bar 3000 psi at 36 cSt 180 SSU</td>
<td>0.5 ml/min 5 drops/min</td>
<td></td>
</tr>
<tr>
<td>Series CC Coil Watts (100% Duty Cycle)</td>
<td>14w ('S' Coil) 19w ('P' Coil)</td>
<td></td>
</tr>
<tr>
<td>Min Amperage To Operate Valve at Max Rated Pressure &amp; Flow</td>
<td>75% of Nominal Amperage. Details: Coil Data Sheet page 204</td>
<td></td>
</tr>
<tr>
<td>Installation</td>
<td>UNRESTRICTED</td>
<td></td>
</tr>
<tr>
<td>Fluid +</td>
<td>MINERAL OIL OR SYNTHETIC FLUID WITH LUBRICANT PROPERTIES</td>
<td></td>
</tr>
<tr>
<td>Ideal Viscosity +</td>
<td>15-50 cSt 80-230 SSU</td>
<td></td>
</tr>
</tbody>
</table>
| Seal Material/ Temperature + | NITRILE (Std.) -30°C to +100°C  
BUNA-N -20°F to +210°F  
VITON -20°C to +150°C  
-4°F to +330°F |
| Filtration +       | 25 MICRONS (Nom.) OR BETTER |
| Cart Weight        | 0.4 kg 0.88 lb |
| Coil Weight        | 0.20 kg 0.44 lb |

*IMPORTANT: See pages 562-563 for additional notes on operating conditions. Specifications may change without notice.*

**Typical Performance**

Measured at 30cSt 140 SSU (For cartridge only)

![Pressure Drop vs. Flow Graph](image)

![Response Time vs. Flow Graph](image)
**SOLENOID DIRECTIONAL CHECK SEQUENCE PRESSURE REGULATOR**

**FLOW CONTROL LINE BODIES**

**CAVITY TECHNICAL DATA**

**PROPORTIONAL DIVERTERS SHUTTLE RELIEF CONTROL**

**DIMENSIONS**

<table>
<thead>
<tr>
<th>CAVITY CAV06-2: 1-5/16 Thread (16-2 Industry common cavity)</th>
</tr>
</thead>
</table>

**CARTRIDGE GS06**

**PRESSURE AND PERFORMANCE FEATURES (Normandy Closed)***
- 80 STANDARD ('S' Coil)
- 81 HIGH PRESSURE ('P' Coil)

**MANUAL OVERRIDE (Option)**
- 0 NOT REQUIRED
- 1 DETENTED M.O.
- 2 NON-DETENTED M.O.
- 3 CABLE INTERFACE M.O. (210 bar 3000 psi)

**FILTER SCREEN (Option)**
- 0 NOT AVAILABLE

**SEAL MATERIAL**
- N NITRILE BUNA-N (Std.)
- V VITON

**COIL CC**

**COIL WATTAGE**
- S STANDARD
- P PUSSANT

**COIL VOLTAGE**
- 012 12V DC
- 024 24V DC
- 115 115V AC
- 230 230V AC

**COIL TERMINAL**
- A AMP JR. (CC Coil Only, DC Only)
- AD AMP JR. WITH 3 AMP DIODE (CC Coils only, DC Only)
- C DOUBLE LEAD WIRE WITH CONDUIT CONNECTOR (AC Only)
- D DOUBLE LEAD (DC Only)
- LD DOUBLE LEAD WITH DEUTSCH CONNECTOR DT04-2P-EP04 (DC Only)
- LE DOUBLE LEAD WITH 3 AMP DIODE (DC Only)
- PF DOUBLE LEAD WIRE WITH PACKARD FEMALE WEATHER PACK CONNECTOR 1201 5792 (DC Only)
- PM DOUBLE LEAD WIRE WITH PACKARD MALE WEATHER PACK CONNECTOR 1201 0973 (DC Only)
- S DOUBLE SPADE (DC Only)
- W DOUBLE SCREW (DC only)
- WE DOUBLE SCREW WITH 3 AMP DIODE (DC Only)
- Y SINGLE SCREW (Internally Grounded, DC Only)

**LINE BODY LB10**

**PORTING**
- 573 1 SAE
- 575 1 BSP

**LINE BODY MATERIAL**
- A ALUMINIUM (Anodised)
- S STEEL (Zinc plated)

**SEAL KIT**
- SK30089N-1 (NITRILE-BUNA N)
- SK30089V-1 (VITON)

**CAVITY TOOLS FOR CAV06-2**

<table>
<thead>
<tr>
<th>PILOT DRILL Ø</th>
<th>STEP DRILL</th>
<th>REAMER (ALUM)</th>
<th>COUNTERBORE</th>
<th>TAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.50 1.08</td>
<td>8DS31351</td>
<td>BRM31064S</td>
<td>8TP31203</td>
<td></td>
</tr>
</tbody>
</table>

**MACHINING DETAILS PAGE 547**

**MILLIMETRES INCHES**

**COIL DETAILS**

*ADDITIONAL VOLTAGES AND OTHER TERMINALS ARE AVAILABLE. FOR DETAILS PLEASE CONSULT FACTORY* - COIL DETAILS PAGE 204

**LINE BODY DETAILS**

- LINE BODY DETAILS PAGE 515

**STERLING HYDRAULICS**

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