

### Specifications

| Model Numbers      |                   | Max. Operating Pressure<br>MPa (PSI) | Pressure Adj. Range<br>MPa (PSI) | Max. Flow<br>L/min<br>(U.S.GPM) | Approx. Mass kg (lbs.) |             |                      |
|--------------------|-------------------|--------------------------------------|----------------------------------|---------------------------------|------------------------|-------------|----------------------|
|                    |                   |                                      |                                  |                                 | Double Sol.            | Single Sol. | With Vent Restrictor |
| Sub-plate Mounting | S-BSG-03-*-**-52* | 25 (3630)                            | ★ - 25<br>(★ - 3630)             | 100 (26.4)                      | 6.3 (13.9)             | 5.7 (12.6)  | 6.7 (14.8)           |
|                    | S-BSG-06-*-**-52* |                                      |                                  | 200 (52.8)                      | 7.2 (15.9)             | 6.6 (14.6)  | 7.6 (16.8)           |
|                    | S-BSG-10-*-**-52* |                                      |                                  | 400 (106)                       | 12.7 (28.0)            | 12.1 (26.7) | 13.1 (28.9)          |

★ For relief valves, low-noise type pilot operated relief valves are used. For minimum adjustment pressures and other characteristics, see page 18.

### Solenoid Ratings

Solenoid ratings are the same as for the conventional type. See Solenoid Ratings on page 20.

### Model Number Designation

| F-   | A-                                    | S-                   | BS                                       | G                    | -03        | -V   | -2B3A                                     | -A100                                 | -N   | -L  | 52            | *   |
|--|---------------------------------------|----------------------|--|----------------------|------------|--|---|---------------------------------------|--|---|---------------|---|
| Special Seals  | With Vent Restrictor                  | Low Noise Type       | Series Number                            | Type of Mtg.         | Valve size | High Venting Pres. Feature                                       | Vent Type                                 | Coil Type                             | Type of Electrical Connections   | Direction of Handle   | Design Number | Design Standards  |
| F:<br>Special Seals for Phosphate Ester Type Fluids (Omit if not required) | A: ★<br>With Vent Restrictor (option) | S:<br>Low Noise Type | BS:<br>Solenoid Controlled Relief Valves | G:<br>Sub-plate Mtg. | 03         | V: ★<br>For High Venting Pressure Feature (Omit if not required) | 2B3A<br>2B3B<br>2B2B<br>2B2<br>3C2<br>3C3 | AC: ★<br>A100<br>A120<br>A200<br>A240 | None:<br>Terminal Box Type<br>N:<br>With Plug-in Connector (DIN)<br>N:<br>With Plug-in Connector (DIN) | Viewed from pressure gauge Connection<br>L: Left (Normal)<br>R: Right | 52            | None:<br>Japanese Std. "JIS"<br>90:<br>N. American Design Std.<br>80:<br>European Design Std. |
|  |                                       |                      |  |                      | 06         |  |   | DC:<br>D12<br>D24<br>D48              |  |   |               |   |
|  |                                       |                      |  |                      | 10         |  |   | AC →DC:<br>R100<br>R200               |  |   |               |   |

★ 1. Models with vent restrictor are applicable only for the vent type 2B3A and 2B3B. For details, see page 32.

★ 2. Use high-venting-pressure types to reduce response time from unloading to onloading.

★ 3. The vent types are the same as for the conventional type solenoid controlled relief valves. For the details of the vent types, see page 21.

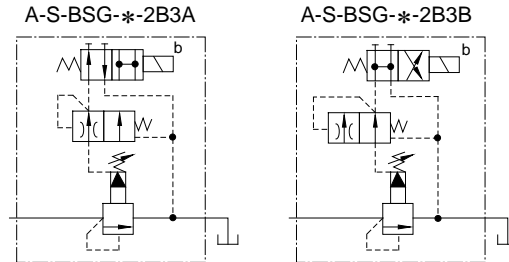
★ 4. The coil codes are the same as for the conventional type solenoid controlled valves. See the solenoid ratings on page 20.

#### Option

##### Models with vent restrictor

The type with a vent restrictor has a vent restrictor in vent types 2B3A and 2B3B added between a relief valve and a solenoid operated directional valve. It prevents shock to the main circuit by gradually lowering the venting pressure in the shift from the setting pressure to unloading.

Unloading pressures are the same as without a vent restrictor.



#### Sub-plate

| Valve Model Numbers | Japanese Standard "JIS" |             | European Design Standard |             | N. American Design Standard |             | Approx. Mass kg (lbs.) |
|---------------------|-------------------------|-------------|--------------------------|-------------|-----------------------------|-------------|------------------------|
|                     | Sub-plate Model Numbers | Thread Size | Sub-plate Model Numbers  | Thread Size | Sub-plate Model Numbers     | Thread Size |                        |
| S-BSG-03            | BGM-03-20               | Rc 3/8      | BGM-03-3080              | 3/8 BSP.F   | BGM-03-2090                 | 3/8 NPT     | 2.4(5.3)               |
|                     | BGM-03X-20              | Rc 1/2      | BGM-03X-3080             | 1/2 BSP.F   | BGM-03X-2090                | 1/2 NPT     | 3.1(6.8)               |
| S-BSG-06            | BGM-06-20               | Rc 3/4      | BGM-06-3080              | 3/4 BSP.F   | BGM-06-2090                 | 3/4 NPT     | 4.7(10.4)              |
|                     | BGM-06X-20              | Rc 1        | BGM-06X-3080             | 1 BSP.F     | BGM-06X-2090                | 1 NPT       | 5.7(12.6)              |
| S-BSG-10            | BGM-10-20               | Rc 1-1/4    | BGM-10-3080              | 1-1/4 BSP.F | BGM-10-2090                 | 1-1/4 NPT   | 8.4(18.5)              |
|                     | BGM-10X-20              | Rc 1-1/2    | BGM-10X-3080             | 1-1/2 BSP.F | BGM-10X-2090                | 1-1/2 NPT   | 10.3(22.7)             |

• Sub-plates are available. Specify the sub-plate model number from the table above. When sub-plates are not used, the mounting surface should have a good machined finish.

• The sub-plates are those for pilot operated relief valves. For dimensions, see page 13.

#### Attachment

##### Mounting Bolts

| Valve Model Numbers | Socket Head Cap Screw                        |                         | Qty. |
|---------------------|--|-------------------------|------|
|                     | Japanese Std. "JIS" and European Design Std. | N. American Design Std. |      |
| S-BSG-03            | M12 × 40 Lg.                                 | 1/2-13 UNC × 1-1/2 Lg.  | 4    |
| S-BSG-06            | M16 × 50 Lg.                                 | 5/8-11 UNC × 2 Lg.      | 4    |
| S-BSG-10            | M20 × 60 Lg.                                 | 3/4-10 UNC × 2-1/4 Lg.  | 4    |

#### Instructions

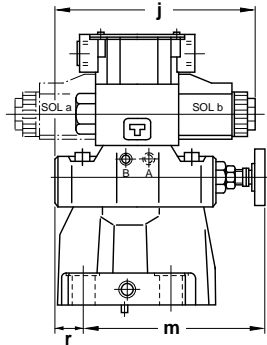
- If a remote control relief valve is used in the vent circuit, see page 3. In addition, if the internal volume of the vent line is too large, chattering is likely to occur. Thus, as far as possible reduce the inside Dia. and the length of the pipe.
- Pressure is limited by collars fitted. If a working pressure cannot be attained, remove some collars. One collar is equivalent to 10 MPa (1450 PSI).
- With a small flow, the setting pressure may be unstable. Use models numbered 03 and 06 with a flow rate above 5 L/min (1.3 U.S. GPM) and model 10 with 8 L/min (2.1 U.S. GPM).

### Installation Drawings

#### Terminal Box Type

Opposite Handle Position

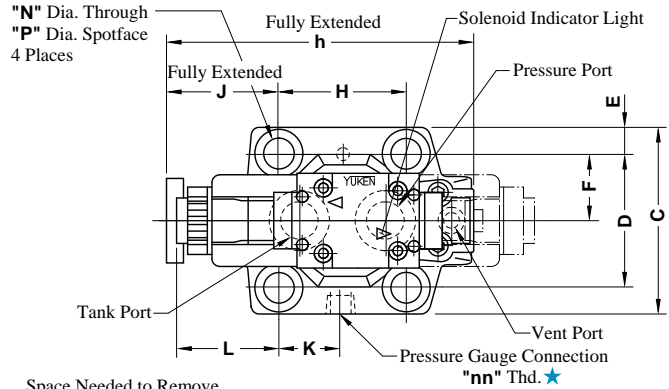
S-BSG-03  
06 -\*-\*-\*-R



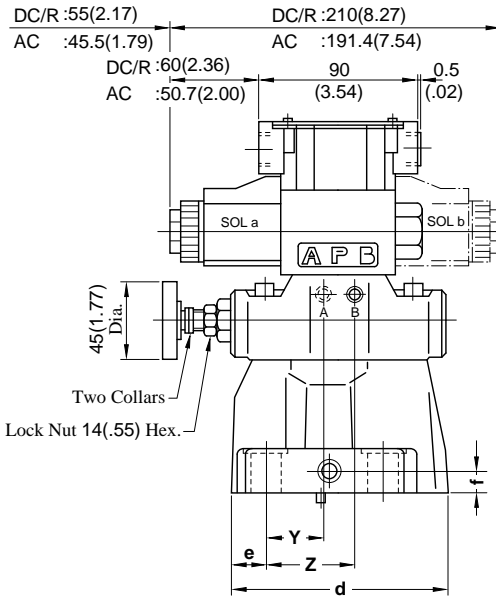
Note: For other dimensions, see the figures shown right

Mounting surface  
S-BSG-03: ISO 6264-AR-06-2-A  
S-BSG-06: ISO 6264-AS-08-2-A  
S-BSG-10: ISO 6264-AT-10-2-A

S-BSG-03  
06 -\*-\*-\*-L-52/5290  
S-BSG-10 -\*-\*-\*-L-52/5290

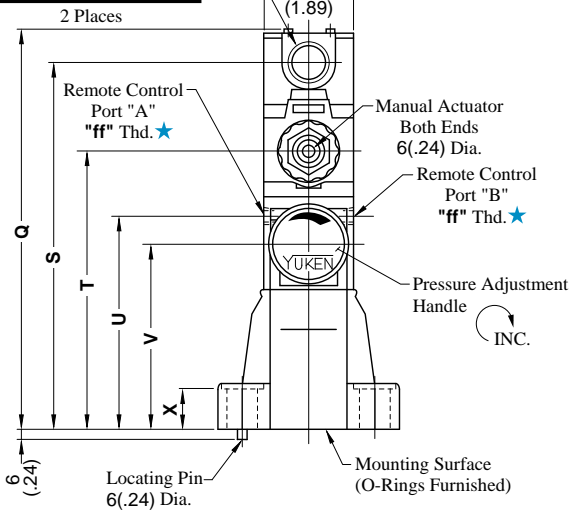


Space Needed to Remove Solenoid-Each End



Electrical Conduit Connection

| Design Std. | Thd. Size |
|-------------|-----------|
| 52          | G 1/2     |
| 5290        | 1/2 NPT   |



| Model Numbers | Dimensions mm (Inches) |                |               |                |                |                |                |               |              |                 |               |               |               |               |               |                |                |               |                |             |                 |                 |                |
|---------------|------------------------|----------------|---------------|----------------|----------------|----------------|----------------|---------------|--------------|-----------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|---------------|----------------|-------------|-----------------|-----------------|----------------|
|               | C                      | D              | E             | F              | H              | J              | K              | N             | P            | Q               | S             | T             | U             | V             | X             | Y              | Z              | d             | e              | f           | h               | m               | r              |
| S-BSG-03      | 76<br>(2.99)           | 53.8<br>(2.12) | 11.1<br>(.44) | 26.9<br>(1.06) | 53.8<br>(2.12) | 73.6<br>(2.90) | 26.9<br>(1.06) | 13.5<br>(.53) | 21<br>(.83)  | 218.3<br>(8.59) | 200<br>(7.87) | 153<br>(6.02) | 117<br>(4.61) | 103<br>(4.06) | 21.5<br>(.85) | 17.1<br>(.67)  | 36.6<br>(1.44) | 106<br>(4.17) | 26.1<br>(1.03) | 13<br>(.51) | 163.5<br>(6.44) | 127.4<br>(5.02) | 36.1<br>(1.42) |
| S-BSG-06      | 98<br>(3.86)           | 70<br>(2.76)   | 14<br>(.55)   | 35<br>(1.38)   | 66.7<br>(2.63) | 58.8<br>(2.31) | 33.7<br>(1.33) | 17.5<br>(.69) | 26<br>(1.02) | 218.3<br>(8.59) | 200<br>(7.87) | 153<br>(6.02) | 117<br>(4.61) | 103<br>(4.06) | 26<br>(1.02)  | 31.9<br>(1.26) | 51.4<br>(2.02) | 122<br>(4.80) | 19.3<br>(.76)  | 13<br>(.51) | 163.5<br>(6.44) | 142.2<br>(5.60) | 21.3<br>(.84)  |
| S-BSG-10      | 120<br>(4.72)          | 82.6<br>(3.25) | 18.7<br>(.74) | 41.3<br>(1.63) | 88.9<br>(3.50) | 46.1<br>(1.81) | 44.9<br>(1.77) | 21.5<br>(.85) | 32<br>(1.26) | 253.3<br>(9.97) | 235<br>(9.25) | 188<br>(7.40) | 149<br>(5.87) | 135<br>(5.31) | 34<br>(1.34)  | 43.2<br>(1.70) | 62.7<br>(2.47) | 155<br>(6.10) | 21.1<br>(.83)  | 18<br>(.71) | 180<br>(7.09)   | —               | —              |

| Model Numbers | AC Solenoid    |                 | DC/R Solenoid  |               |
|---------------|----------------|-----------------|----------------|---------------|
|               | L              | j               | L              | j             |
| S-BSG-03      | 68.8<br>(2.71) | 158.7<br>(6.25) | 78.1<br>(3.07) | 168<br>(6.61) |
| S-BSG-06      | 54<br>(2.13)   | 158.7<br>(6.25) | 63.3<br>(2.49) | 168<br>(6.61) |
| S-BSG-10      | 41.8<br>(1.65) | —               | 51.1<br>(2.01) | —             |

**DIMENSIONS IN  
MILLIMETRES (INCHES)**

★ For the port screws, see the Plug-in Connector type on page 34.

Note: For dimensions of the valve mounting surface, see the installation drawing (P.13) of the sub-plate used together.

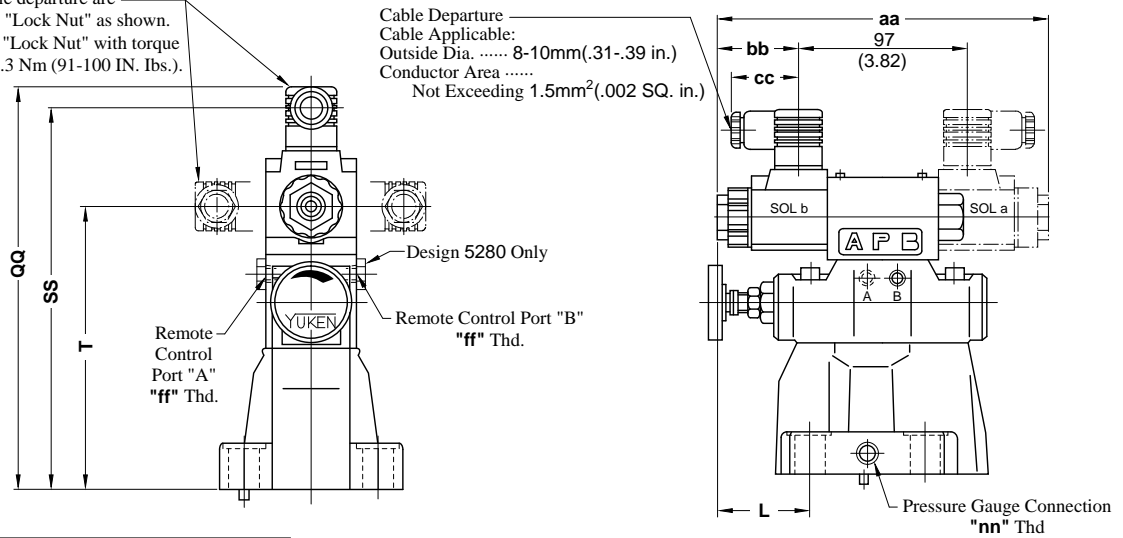


■ Plug-in Connector Type

S-BSG-03-\*\*-\*\*-N-L-52/5280/5290

S-BSG-10-\*\*-\*\*-N-52/5280/5290

Three positions of cable departure are available by loosening "Lock Nut" as shown. After location, tighten "Lock Nut" with torque in the range 10.3 to 11.3 Nm (91-100 IN. lbs.).



DIMENSIONS IN  
MILLIMETRES (INCHES)

| Model Numbers       | Dimensions mm (Inches) |               |                 |                |                 |                |              | Remarks               |
|---------------------|------------------------|---------------|-----------------|----------------|-----------------|----------------|--------------|-----------------------|
|                     | L                      | T             | SS              | QQ             | aa              | bb             | cc           |                       |
| S-BSG-03-**-**-A*-N | 68.8<br>(2.71)         | 153<br>(6.02) | 206<br>(8.11)   | 218<br>(8.58)  | 191.4<br>(7.54) | 47.2<br>(1.86) | 39<br>(1.54) | With AC Solenoid      |
| S-BSG-06-**-**-A*-N | 54<br>(2.13)           | 153<br>(6.02) | 206<br>(8.11)   | 218<br>(8.58)  |                 |                |              |                       |
| S-BSG-10-**-**-A*-N | 41.8<br>(1.65)         | 188<br>(7.40) | 241<br>(9.49)   | 253<br>(9.96)  |                 |                |              |                       |
| S-BSG-03-**-**-D*-N | 78.1<br>(3.07)         | 153<br>(6.02) | 217<br>(8.54)   | 229<br>(9.02)  | 210<br>(8.27)   | 56.5<br>(2.22) | 39<br>(1.54) | With DC Solenoid      |
| S-BSG-06-**-**-D*-N | 63.3<br>(2.49)         | 153<br>(6.02) | 217<br>(8.54)   | 229<br>(9.02)  |                 |                |              |                       |
| S-BSG-10-**-**-D*-N | 51.1<br>(2.01)         | 188<br>(7.40) | 252<br>(9.92)   | 264<br>(10.39) |                 |                |              |                       |
| S-BSG-03-**-**-R*-N | 78.1<br>(3.07)         | 153<br>(6.02) | 210.2<br>(8.28) | 232<br>(9.13)  | 210<br>(8.27)   | 56.5<br>(2.22) | 53<br>(2.09) | With AC → DC Solenoid |
| S-BSG-06-**-**-R*-N | 63.3<br>(2.49)         | 153<br>(6.02) | 210.2<br>(8.28) | 232<br>(9.13)  |                 |                |              |                       |
| S-BSG-10-**-**-R*-N | 51.1<br>(2.01)         | 188<br>(7.40) | 245.2<br>(9.65) | 267<br>(10.51) |                 |                |              |                       |

| Model Numbers    | Thread Size                       |           |                                      |           |   |           |
|------------------|-----------------------------------|-----------|--------------------------------------|-----------|---|-----------|
|                  | Japanese Standard "JIS" Design 52 |           | European Design Standard Design 5280 |           | N. American Design Standard Design 5290 |           |
|                  | "ff" Thd.                         | "nn" Thd. | "ff" Thd.                            | "nn" Thd. | "ff" Thd.                               | "nn" Thd. |
| S-BSG-03-**-**-N | Rc 1/8                            | Rc 1/4    | 1/8 BSP.F                            | 1/4 BSP.F | 1/8 NPT                                 | 1/4 NPT   |
| S-BSG-06-**-**-N |                                   |           |                                      |           |   |           |
| S-BSG-10-**-**-N |                                   |           |                                      |           |   |           |

#### Options-Models with Vent Restrictor

##### Terminal Box Type

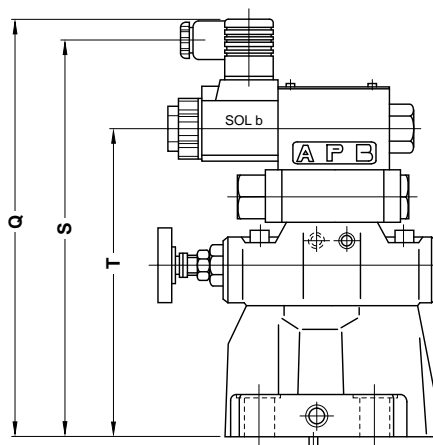
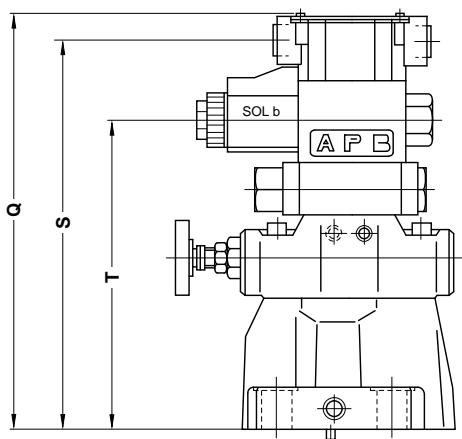
A-S-BSG-<sup>03</sup>/<sub>06</sub> -\*-\*\*-L-52/5290

A-S-BSG-10-\*\*-\*-52/5290

##### Plug-in Connector Type

A-S-BSG-<sup>03</sup>/<sub>06</sub> -\*-\*\*-N-L-52/5280/5290

A-S-BSG-10-\*\*-\*-N-52/5280/5290



| Model Numbers             | Dimensions mm (Inches) |              |           | Remarks                |
|---------------------------|------------------------|--------------|-----------|------------------------|
|                           | Q                      | S            | T         |                        |
| A-S-BSG-03-**-*-A*/D*/R*- | 248.3 (9.78)           | 230(9.06)    | 183(7.20) | Terminal Box Type      |
| A-S-BSG-06-**-*-A*/D*/R*- | 248.3(9.78)            | 230(9.06)    | 183(7.20) |                        |
| A-S-BSG-10-**-*-A*/D*/R*- | 283.3(11.15)           | 235(9.25)    | 188(7.40) |                        |
| A-S-BSG-03-**-*-A*-N-L    | 248(9.76)              | 236(9.29)    | 183(7.20) | Plug-in Connector Type |
| A-S-BSG-03-**-*-D*-N-L    | 259(10.20)             | 247(9.72)    |           |                        |
| A-S-BSG-03-**-*-R*-N-L    | 262(10.31)             | 240.2(9.46)  |           |                        |
| A-S-BSG-06-**-*-A*-N-L    | 248(9.76)              | 236(9.29)    | 183(7.20) |                        |
| A-S-BSG-06-**-*-D*-N-L    | 259(10.20)             | 247(9.72)    |           |                        |
| A-S-BSG-06-**-*-R*-N-L    | 262(10.31)             | 240.2(9.46)  |           |                        |
| A-S-BSG-10-**-*-A*-N      | 283(11.14)             | 271(10.67)   | 188(7.40) |                        |
| A-S-BSG-10-**-*-D*-N      | 294(11.57)             | 282(11.10)   |           |                        |
| A-S-BSG-10-**-*-R*-N      | 297(11.69)             | 275.2(10.83) |           |                        |

#### Lead Wire Connection

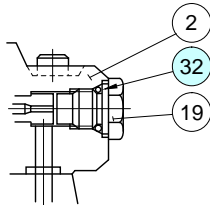
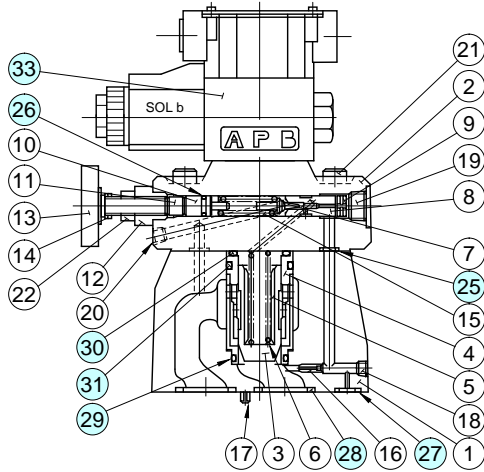
Lead Wire Connection is the same way as the conventional type solenoid controlled relief valves. See page 27.



### Spare Parts List

#### ● Terminal Box Type

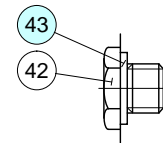
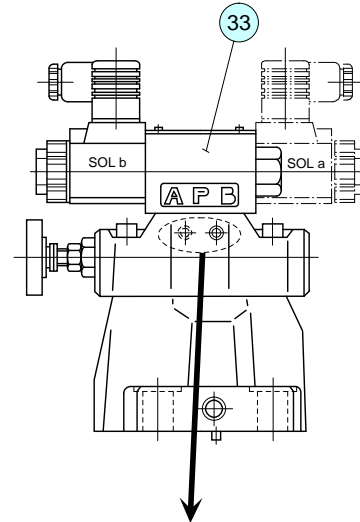
S-BSG-03,06,10-\*\*\*-52/5290



\*-S-BSG-10

#### ● Plug-in Connector Type

S-BSG-03,06,10-\*\*\*-N-52/5280/5290



Design 5280 Only

#### ● List of Seals

| Item | Name of Parts | Part Numbers |            |            | Qty. |
|------|---------------|--------------|------------|------------|------|
|      |               | S-BSG-03     | S-BSG-06   | S-BSG-10   |      |
| 25   | O-Ring        | SO-NB-P9     | SO-NB-P9   | SO-NB-P9   | 2    |
| 26   | O-Ring        | SO-NA-P9     | SO-NA-P9   | SO-NA-P9   | 1    |
| 27   | O-Ring        | SO-NB-P9     | SO-NB-P11  | SO-NB-P9   | 1    |
| 28   | O-Ring        | SO-NB-P18    | SO-NB-P28  | SO-NB-P32  | 2    |
| 29   | O-Ring        | SO-NB-A024   | SO-NB-A024 | SO-NB-A128 | 1    |
| 30   | O-Ring        | SO-NB-P28    | SO-NB-P28  | SO-NB-P36  | 1    |
| 31   | O-Ring        | SO-NB-P32    | SO-NB-P32  | SO-NB-P42  | 1    |
| 32   | O-Ring        | —            | —          | SO-NB-P14  | 1    |
| 38*  | O-Ring        | SO-NB-P8     |            |            | 2    |
| 40*  | O-Ring        | SO-NB-P14    |            |            | 2    |
| 43   | Bonded Seal   | SG-FB-1/8    | SG-FB-1/8  | SG-FB-1/8  | 2    |

★ The O-Rings for item 38, 40 are used only for the models with the vent restrictor.

Note: When ordering the seals, please specify the seal kit number from the table right. In addition to the above seals, seals for the pilot valves are included in the seal kit.

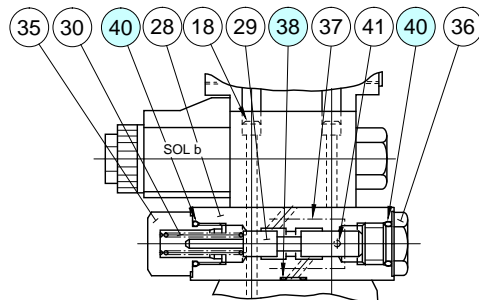
For the detail of the pilot valve seals, see the catalogue No. Pub. EC-0402.

#### ⚠ CAUTION

When making replacement of seals or solenoid assemblies, please do it carefully after reading through the relevant instructions in the Operator's Manual.

#### ■ Option-Models with Vent Restrictor

A-S-BSG-03,06,10-\*\*\*-52/5290  
N-52/5280/5290



#### ● List of Seal Kits

| Model Numbers | Seal Kit Numbers |
|---------------|------------------|
| S-BSG-03      | KS-S-BSG-03-51   |
| S-BSG-06      | KS-S-BSG-06-51   |
| S-BSG-10      | KS-S-BSG-10-51   |
| A-S-BSG-03    | KS-A-S-BSG-03-51 |
| A-S-BSG-06    | KS-A-S-BSG-06-51 |
| A-S-BSG-10    | KS-A-S-BSG-10-51 |

Note: No bonded seals are included in the seal kits.

#### ● Pilot Valves

See page 37 for the pilot valve model numbers to be used.



● **List of Pilot Valves**

| Type of Electrical Conduit Connection | Valve Model Numbers              | Pilot Valve Model Numbers | Remarks                 |
|---------------------------------------|----------------------------------|---------------------------|-------------------------|
| Terminal Box Type                     | *-S-BSG-03/06/10-*-2B3A-★-52     | DSG-01-2B3A-★-60          | Japanese Standard "JIS" |
|                                       | *-S-BSG-03/06/10-*-2B3B-★-52     | DSG-01-2B3B-★-60          |                         |
|                                       | *-S-BSG-03/06/10-*-2B2B-★-52     | DSG-01-2B2B-★-60          |                         |
|                                       | *-S-BSG-03/06/10-*-2B2-★-52      | DSG-01-2B2-★-60           |                         |
|                                       | *-S-BSG-03/06/10-*-3C2-★-52      | DSG-01-3C2-★-60           |                         |
|                                       | *-S-BSG-03/06/10-*-3C3-★-52      | DSG-01-3C3-★-60           |                         |
|                                       | *-S-BSG-03/06/10-*-2B3A-★-5290   | DSG-01-2B3A-★-6090        | N. American Design Std. |
|                                       | *-S-BSG-03/06/10-*-2B3B-★-5290   | DSG-01-2B3B-★-6090        |                         |
|                                       | *-S-BSG-03/06/10-*-2B2B-★-5290   | DSG-01-2B2B-★-6090        |                         |
|                                       | *-S-BSG-03/06/10-*-2B2-★-5290    | DSG-01-2B2-★-6090         |                         |
|                                       | *-S-BSG-03/06/10-*-3C2-★-5290    | DSG-01-3C2-★-6090         |                         |
|                                       | *-S-BSG-03/06/10-*-3C3-★-5290    | DSG-01-3C3-★-6090         |                         |
| Plug-in Connector Type                | *-S-BSG-03/06/10-*-2B3A-★-N-52   | DSG-01-2B3A-★-N-60        | Japanese Standard "JIS" |
|                                       | *-S-BSG-03/06/10-*-2B3B-★-N-52   | DSG-01-2B3B-★-N-60        |                         |
|                                       | *-S-BSG-03/06/10-*-2B2B-★-N-52   | DSG-01-2B2B-★-N-60        |                         |
|                                       | *-S-BSG-03/06/10-*-2B2-★-N-52    | DSG-01-2B2-★-N-60         |                         |
|                                       | *-S-BSG-03/06/10-*-3C2-★-N-52    | DSG-01-3C2-★-N-60         |                         |
|                                       | *-S-BSG-03/06/10-*-3C3-★-N-52    | DSG-01-3C3-★-N-60         |                         |
|                                       | *-S-BSG-03/06/10-*-2B3A-★-N-5280 | DSG-01-2B3A-★-N-60        | European Design Std.    |
|                                       | *-S-BSG-03/06/10-*-2B3B-★-N-5280 | DSG-01-2B3B-★-N-60        |                         |
|                                       | *-S-BSG-03/06/10-*-2B2B-★-N-5280 | DSG-01-2B2B-★-N-60        |                         |
|                                       | *-S-BSG-03/06/10-*-2B2-★-N-5280  | DSG-01-2B2-★-N-60         |                         |
|                                       | *-S-BSG-03/06/10-*-3C2-★-N-5280  | DSG-01-3C2-★-N-60         |                         |
|                                       | *-S-BSG-03/06/10-*-3C3-★-N-5280  | DSG-01-3C3-★-N-60         |                         |
|                                       | *-S-BSG-03/06/10-*-2B3A-★-N-5290 | DSG-01-2B3A-★-N-6090      | N. American Design Std. |
|                                       | *-S-BSG-03/06/10-*-2B3B-★-N-5290 | DSG-01-2B3B-★-N-6090      |                         |
|                                       | *-S-BSG-03/06/10-*-2B2B-★-N-5290 | DSG-01-2B2B-★-N-6090      |                         |
|                                       | *-S-BSG-03/06/10-*-2B2-★-N-5290  | DSG-01-2B2-★-N-6090       |                         |
|                                       | *-S-BSG-03/06/10-*-3C2-★-N-5290  | DSG-01-3C2-★-N-6090       |                         |
|                                       | *-S-BSG-03/06/10-*-3C3-★-N-5290  | DSG-01-3C3-★-N-6090       |                         |

Note: 1. Fill a coil type (a symbol representing current/voltage) in section marked ★.  
 2. For the details of the pilot valves, see the Catalogue No. Pub. EC-0402.

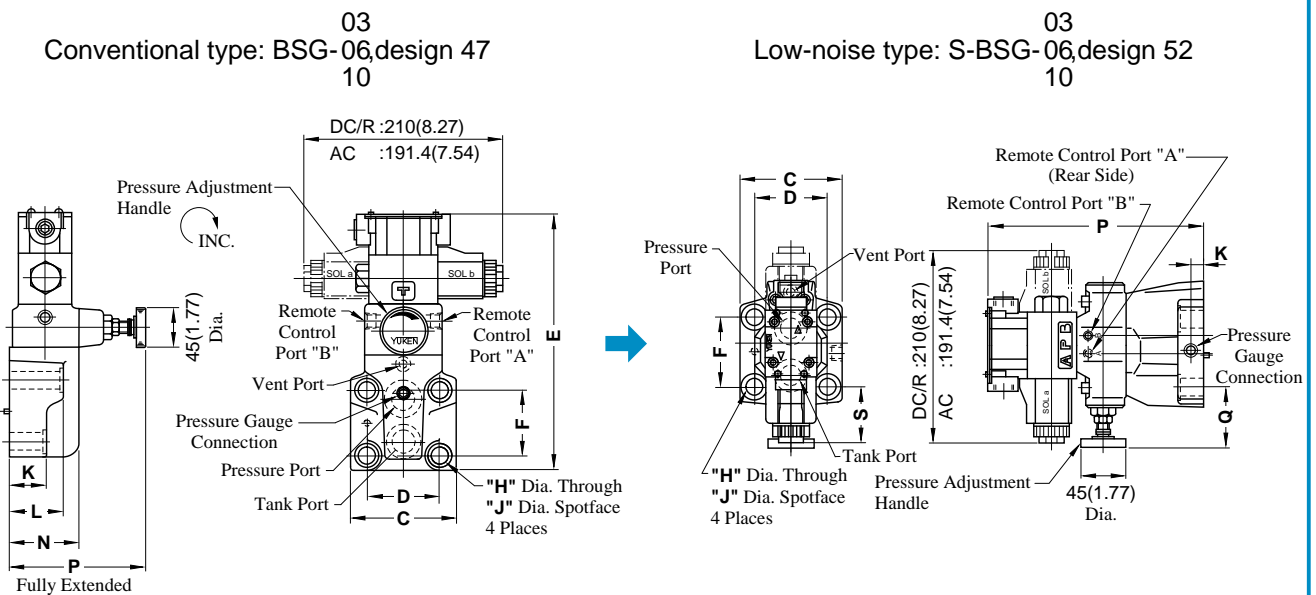
#### Interchangeability in Installation between Old and New Design

##### Interchangeability with old products

Design 52 valve is one on which DSG-01, design 60 is mounted as a pilot valve. It is interchangeable with old design (S-BSG-\*, design 51) in terms of specifications and mounting dimensions.

##### Interchangeability between conventional and low-noise type

Design 52 of the low-noise type is interchangeable for installation with design 47 of conventional types BSG-03-/06-/10. However, exterior shapes such as the position of the pressure adjustment handle are different.



| Model Numbers | Dimensions mm (Inches) |                |                  |                |               |              |              |              |              |               |
|---------------|------------------------|----------------|------------------|----------------|---------------|--------------|--------------|--------------|--------------|---------------|
|               | C                      | D              | E                | F              | H             | J            | K            | L            | N            | P             |
| BSG-03        | 82<br>(3.23)           | 53.8<br>(2.12) | 227.3<br>(8.95)  | 53.8<br>(2.12) | 13.5<br>(.53) | 21<br>(.83)  | 57<br>(2.24) | 78<br>(3.07) | 78<br>(3.07) | 145<br>(5.71) |
| BSG-06        | 104<br>(4.09)          | 70<br>(2.76)   | 251.3<br>(9.89)  | 66.7<br>(2.63) | 17.5<br>(.69) | 26<br>(1.02) | 40<br>(1.57) | 60<br>(2.36) | 78<br>(3.07) | 145<br>(5.71) |
| BSG-10        | 124<br>(4.88)          | 82.6<br>(3.25) | 285.3<br>(11.23) | 88.9<br>(3.50) | 21.5<br>(.85) | 32<br>(1.26) | 47<br>(1.85) | 67<br>(2.64) | 84<br>(2.31) | 146<br>(5.75) |

| Model Numbers | Dimensions mm (Inches) |                |                |               |              |             |                 |                |                |                |
|---------------|------------------------|----------------|----------------|---------------|--------------|-------------|-----------------|----------------|----------------|----------------|
|               | C                      | D              | F              | H             | J            | K           | P               | Q              | S              |                |
|               |                        |                |                |               |              |             |                 |                | AC             | DC/R           |
| S-BSG-03      | 76<br>(2.99)           | 53.8<br>(2.12) | 53.8<br>(2.12) | 13.5<br>(.53) | 21<br>(.83)  | 13<br>(.51) | 218.3<br>(8.59) | 73.6<br>(2.90) | 68.8<br>(2.71) | 78.1<br>(3.07) |
| S-BSG-06      | 98<br>(3.86)           | 70<br>(2.76)   | 66.7<br>(2.63) | 17.5<br>(.69) | 26<br>(1.02) | 13<br>(.51) | 218.3<br>(8.59) | 58.8<br>(2.31) | 54<br>(2.13)   | 63.3<br>(2.49) |
| S-BSG-10      | 120<br>(4.72)          | 82.6<br>(3.25) | 88.9<br>(3.50) | 21.5<br>(.85) | 32<br>(1.26) | 18<br>(.71) | 253.3<br>(9.97) | 46.1<br>(1.81) | 41.8<br>(1.65) | 51.1<br>(2.01) |