

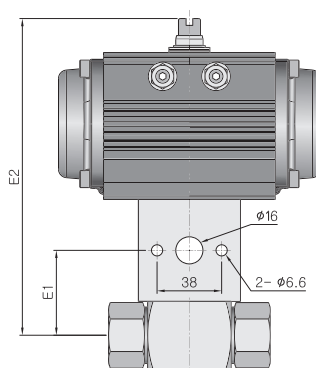
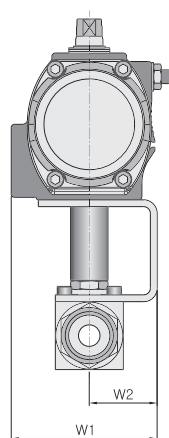
# Actuated Ball Valves (SBV60 Series)

## Features

- Rack and pinion pneumatic actuator.
- Double acting and spring return mode.
- Operating Pressure : 3 ~ 8bar
- Rotating Angle : 90° ±3°
- Temperature Range : -20°C (-4°F) to 80°C (176°F).



## Ordering Information and Dimensions



| Valve Series | Dimensions (mm) |       |      |      |
|--------------|-----------------|-------|------|------|
|              | E1              | E2    | W1   | W2   |
| SBV1H        | 40.0            | 154.0 | 40.0 | 86.0 |
|              | 40.0            | 154.0 | 40.0 | 86.0 |
| SBV2H        | 50.0            | 186.5 | 40.0 | 86.0 |
|              | 50.0            | 186.5 | 40.0 | 86.0 |
| SBV3H        | 55.0            | 211.0 | 45.0 | 94.5 |
|              | 55.0            | 211.0 | 45.0 | 94.5 |

**SBV1H-S-4T**

Valve Basic Ordering Number

**PDA**

Actuator Type Designator

- **PDA** : Double Acting (Normal Close)
- **PNO** : Spring Return (Normal Open)
- **PNC** : Spring Return (Normal Close)

**40**

Actuator Series Designator

- **40** : R40 Actuator
- **50** : R50 Actuator(Standard for SBV1H)
- **65** : R65 Actuator(Standard for SBV2H)
- **80** : R80 Actuator(Standard for SBV3H)

**S6**

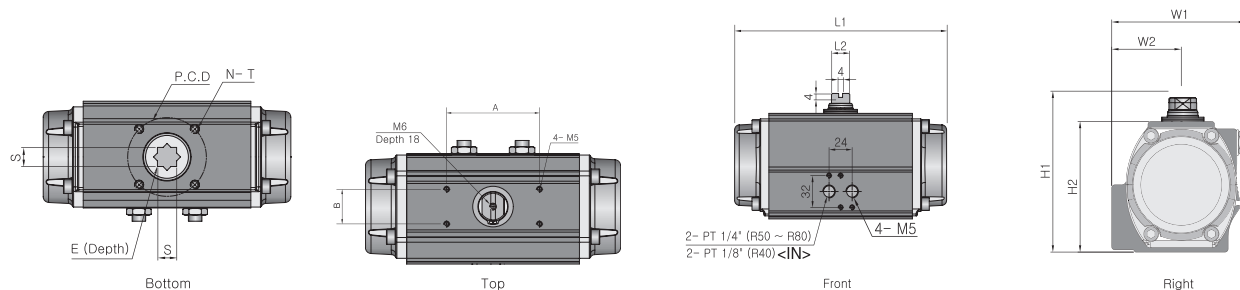
Valve Material Designator

- **S6** : 316 Stainless Steel

## Torque Table for SBV60 Series

| Valve Series | Torque (N·m) |          |          |          |          |          |
|--------------|--------------|----------|----------|----------|----------|----------|
|              | 1000psig     | 2000psig | 3000psig | 4000psig | 5000psig | 6000psig |
| SBV1H        | 1.0          | 1.8      | 2.5      | 3.3      | 4.0      | 4.8      |
| SBV2H        | 2.0          | 3.7      | 5.4      | 7.0      | 8.7      | 10.4     |
| SBV3H        | 4.7          | 9.0      | 13.3     | 17.6     | 21.9     | 26.3     |

## Actuator Dimensions



| Actuator Series | ISO Flange Type | P.C.D    | N- T        | Dimensions (mm) |      |       |       |       |      |      |      |      |      | Weight (kg) |     |
|-----------------|-----------------|----------|-------------|-----------------|------|-------|-------|-------|------|------|------|------|------|-------------|-----|
|                 |                 |          |             | L1              | L2   | H1    | H2    | W1    | W2   | S    | E    | A    | B    | RD          | RS  |
| R40             | F03/F05         | 36/50    | 4- M5/M6    | 97.0            | 9.0  | 75.0  | 55.0  | 63.0  | 32.0 | 9.0  | 9.0  | 50.0 | 25.0 | 0.5         | 0.6 |
|                 | *F04            | *42      | *4- M5      |                 |      |       |       |       |      |      |      |      |      |             |     |
| R50             | F03/F05/F07     | 36/50/70 | 4- M5/M6/M8 | 133.0           | 9.0  | 90.0  | 70.0  | 75.0  | 40.0 | 11.0 | 13.0 | 80.0 | 30.0 | 1.0         | 1.1 |
|                 | *F04            | *42      | *4- M5      |                 |      |       |       |       |      |      |      |      |      |             |     |
| R65             | F05/F07         | 50/70    | 4- M6/M8    | 154.0           | 13.0 | 106.5 | 86.5  | 89.0  | 46.0 | 14.0 | 16.0 | 80.0 | 30.0 | 1.4         | 1.5 |
|                 | *F07            | *70      | *4- M8      |                 |      |       |       |       |      |      |      |      |      |             |     |
| R80             | F07             | 70       | 4- M8       | 220.0           | 19.0 | 126.0 | 106.0 | 101.0 | 49.5 | 17.0 | 19.0 | 80.0 | 30.0 | 2.9         | 3.3 |

\* Option.

### Torque Table for RD Series - Double Acting

| Actuator Model | Supply Air (bar) |      |      |      |      |       |       |  |
|----------------|------------------|------|------|------|------|-------|-------|--|
|                | 3                | 4    | 4.5  | 5    | 6    | 7     | 8     |  |
|                | Torque (N·m)     |      |      |      |      |       |       |  |
| RD40-AL        | 5.5              | 7.4  | 8.4  | 9.2  | 11.1 | 13.0  | 14.8  |  |
| RD50-AL        | 9.4              | 12.5 | 14.3 | 15.9 | 19.1 | 22.5  | 25.8  |  |
| RD65-AL        | 18.3             | 24.7 | 27.8 | 30.8 | 36.8 | 42.9  | 49.2  |  |
| RD80-AL        | 44.5             | 58.9 | 66.5 | 74.4 | 89.3 | 104.3 | 117.8 |  |

### Torque Table for RS Series - Spring Return

| Actuator Model | Supply Air (bar) to Open |     |      |      |      |      |      |      |      |      |      |      |      |      |                 |      |
|----------------|--------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|------|
|                | 3                        |     | 4    |      | 4.5  |      | 5    |      | 6    |      | 7    |      | 8    |      | Spring to Close |      |
|                | 0°                       | 90° | 0°   | 90°  | 0°   | 90°  | 0°   | 90°  | 0°   | 90°  | 0°   | 90°  | 0°   | 90°  | 0°              | 90°  |
|                | Torque (N·m)             |     |      |      |      |      |      |      |      |      |      |      |      |      |                 |      |
| RS40-AL        | 1.0                      | -   | 2.9  | 0.5  | 3.8  | 1.2  | 4.8  | 2.1  | 6.7  | 3.8  | 8.6  | 5.1  | 10.5 | 6.4  | 5.9             | 3.9  |
| RS50-AL        | 4.1                      | 1.2 | 7.4  | 4.4  | 9.0  | 6.1  | 10.7 | 7.6  | 14.2 | 11.1 | 17.3 | 14.5 | 20.8 | 18.0 | 8.1             | 5.2  |
| RS65-AL        | 4.1                      | 1.2 | 8.7  | 3.6  | 14.7 | 9.5  | 17.9 | 12.5 | 21.1 | 15.7 | 27.2 | 22.0 | 33.3 | 28.1 | 13.7            | 8.4  |
| RS80-AL        | 21.1                     | 6.1 | 35.3 | 21.0 | 42.9 | 29.1 | 50.5 | 35.7 | 65.6 | 51.3 | 80.8 | 66.4 | 95.7 | 80.5 | 33.7            | 21.7 |