

SV1 & SV3 SERIES

2 - 6 PSIG RELIEF



VACUUM SEAL-OFF VALVES AND VALVE OPERATORS

Features

- Vacuum Tight Seal
- Tamper Resistant
- Easy Access to Vacuum
- Functional & Reliable
- Full Flow Design
- Low Profile & Compact Design

Applications

- High Vacuum Tanks
- High Vacuum Dewars
- Low Pressure Gas Systems
- Vacuum Insulated Cryogenic Piping Systems
- Cold Box Vacuum Systems



Technical Data

Operating Ranges

Temperature-20°F to +150°F;
-29°C to +66°C

Relief Pressure2 to 6 PSIG

Materials of Construction

Body300 Series S/S
or 6061 Aluminum

PlugBrass (1" valve plug
300 Series S/S)

Disc300 Series S/S

O-RingViton®

CapBlack Plastic (ABS)
(300 Series S/S
1/2" to 1" sizes)

Poppet300 Series S/S or
6061 Aluminum

Tests

Seat LeakageMass spec. less than
 1×10^{-9} scc GHe/sec
(Exclusive of O-ring
Permeability) at
Ambient Temp.

Connection

Valve.....Butt Weld

OperatorISO Flange or Tube

Valve Size

1/4" to 1"

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How To Order

SV3 - 088 - 1 W3

VACUUM SEAL-OFF VALVE

- SV1 - Non-Relieving
- SV3 - Relieving

VALVE SIZE

- 082 - 1/4"
- 083 - 3/8"
- 084 - 1/2"
- 086 - 3/4"
- 088 - 1"

CONFIGURATION

- W3 - Welded
- S3 - Socket Connection

CONSTRUCTION

- 1 - 6061 Aluminum
- 5 - 300 Series Stainless Steel

Valve Operators used in conjunction with valves during pumping operation:

VO3 - 088 T

VALVE OPERATOR

VO3 Series

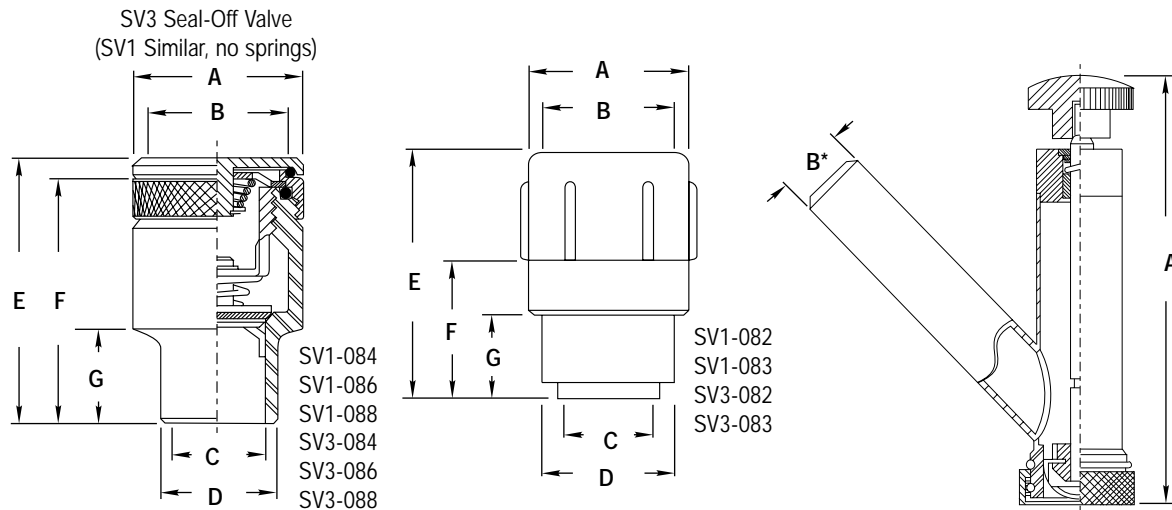
OPERATOR SIZE

- 082 - 1/4"
- 083 - 3/8"
- 084 - 1/2"
- 086 - 3/4"
- 088 - 1"

*VACUUM PUMP CONNECTION

- T - OD Tube
- F - ISO Flange
- 1/4" & 1/2" - DN16,
- 3/4" & 1" - DN25

Dimensions



SV1 & SV3 SERIES VALVE DIMENSIONS

| Part No. | A | B | C | D | E | F | G |
|----------|------|------|------|------|------|------|------|
| SV1-082- | 0.75 | 0.44 | 0.31 | 0.63 | 1.30 | 0.63 | 0.38 |
| SV1-083- | 1.00 | 0.75 | 0.38 | 0.63 | 1.75 | 0.94 | 0.63 |
| SV1-084- | 1.19 | 1.06 | 0.50 | 0.75 | 1.81 | 1.69 | 0.75 |
| SV1-086- | 1.50 | 1.38 | 0.75 | 1.00 | 1.80 | 1.94 | 0.75 |
| SV1-088- | 1.75 | 1.63 | 1.00 | 1.25 | 2.50 | 2.38 | 0.94 |
| SV3-082- | 0.75 | 0.56 | 0.31 | 0.63 | 1.30 | 0.63 | 0.38 |
| SV3-083- | 1.00 | 0.75 | 0.50 | 0.88 | 1.75 | 0.94 | 0.63 |
| SV3-084- | 1.19 | 1.06 | 0.50 | 0.75 | 2.00 | 1.81 | 0.56 |
| SV3-086- | 1.50 | 1.38 | 0.75 | 1.00 | 2.13 | 1.94 | 0.75 |
| SV3-088- | 1.75 | 1.63 | 1.00 | 1.25 | 2.75 | 2.38 | 0.94 |

VO3 SERIES OPERATORS STAINLESS STEEL DIMENSIONS

| Operator Part No. | A | B* |
|-------------------|------|-------|
| VO3-082- | 4.38 | 0.625 |
| VO3-083- | 4.38 | 0.625 |
| VO3-084- | 4.38 | 0.625 |
| VO3-086- | 4.63 | 0.875 |
| VO3-088- | 5.00 | 1.125 |

*Optional ISO Flange.