

VACUUM SEAL OFF VALVES & VALVE OPERATORS

SV2/SV3 SERIES

2 - 6 PSIG RELIEF



APPLICATIONS

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



FEATURES

- Vacuum tight seal
- Tamper Resistant
- Easy access to vacuum
- Functional & reliable
- Full flow design



TECHNICAL DATA

Operating Ranges:

Temperature..... -20 ° F to +150° F
(-29° C to +66° C)

Relief Pressure..... 2 to 6 PSIG

Materials of Construction:

Body..... 300 Series Stainless Steel
or 606 Aluminium

Plug..... Brass
(1" valve plug 300 Series SS)

Disc..... 300 Series Stainless Steel

O-ring..... FKM

Cap..... All SV2 - plastic
1/4" & 3/8" VS3 - plastic
1/2", 3/4", 1" SV 3 - 300 Series SS

Poppet..... 300 Series Stainless Steel
or 606 Aluminium

Qualification Tests:

Seat Leakage..... Mass Spec less than 1×10^{-9}
scc GHe/sec (exclusive of
o-ring permeability) at
ambient temp

Connection:

Valve..... Butt Weld

Operator..... ISO Flange or Tube

Valve Size: 1/4" - 1"



SV2/SV3 SERIES 2 - 6 PSIG

ORDERING GUIDE

SV3 - 088 - 1 W3

VACUUM SEAL-OFF VALVE

- SV2 - 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"

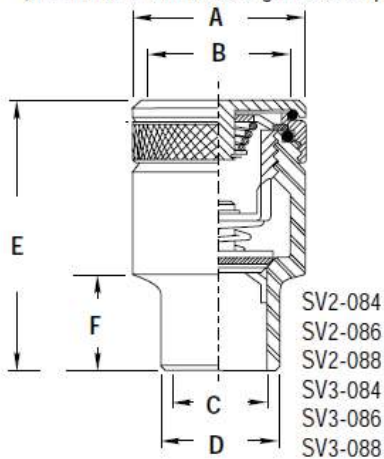
*VACUUM PUMP CONNECTION

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

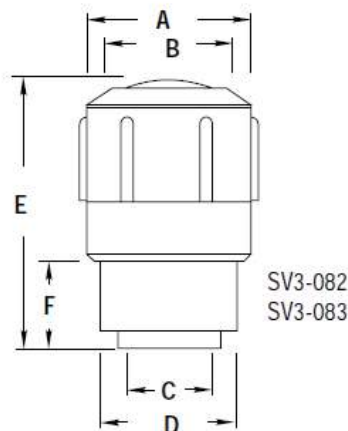


DIMENSIONS

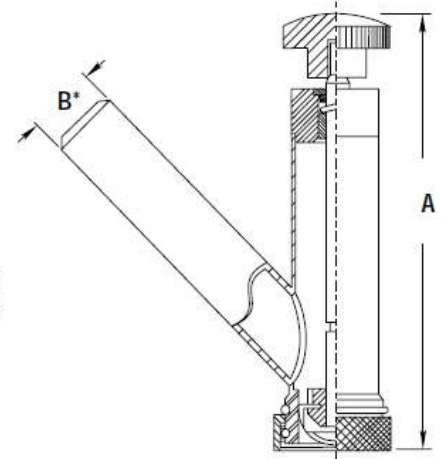
SV3 Seal-Off Valve with Metal Relieving Cap
(SV2 Similar, with Relieving Plastic Cap)



SV2-084
SV2-086
SV2-088
SV3-084
SV3-086
SV3-088



SV3-082
SV3-083



SV1 & SV3 SERIES VALVE DIMENSIONS

Part No.	A	B	C	D	E	F
SV2-084-	1.25	1.06	0.50	0.75	2.10	0.75
SV2-086-	1.63	1.38	0.75	1.00	2.50	0.75
SV2-088-	1.88	1.63	1.00	1.25	2.84	0.94
SV3-082-	0.75	0.56	0.31	0.63	1.32	0.38
SV3-083-	1.00	0.75	0.50	0.88	1.63	0.63
SV3-084-	1.19	1.06	0.50	0.75	2.00	0.39
SV3-086-	1.54	1.38	0.75	1.00	2.13	0.75
SV3-088-	1.75	1.63	1.00	1.25	2.75	0.88

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.