

Isolation Valves

Manual Angle Valves



SPECIFICATIONS

Port ODs: 3/8 to 3 inches

Materials

Body: Electropolished 304 stainless steel
 Bellows: Welded AM-350 stainless steel
 Bonnet seal: Copper or Viton
 Poppet seal: Viton
Other O-ring compounds available

Actuation: Self-lubricating bronze nuts with ACME threads

Differential pressure

Maximum 20 psia across valve seat

Maximum temperature with Viton seals

Sustained: $\leq 150^{\circ}\text{C}$
 Intermittent: $\leq 204^{\circ}\text{C}$

Vacuum range

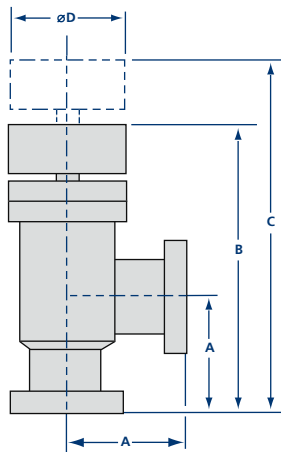
Viton bonnet seal: $\geq 1 \times 10^{-9}$ Torr - High Vacuum
 Copper bonnet seal: $\geq 1 \times 10^{-10}$ Torr - UHV

Options: Fittings and O-rings. See page 99

Thermal: Heater jackets and controllers available for all valves. Call for details

Manual Viton Seal Angle Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	PRICE
ESV-038	3/8	No flanges	1.50	4.06	4.44	2.25	CALL
ESV-0382-CF	3/8	Rotatable 1.33 CF	1.60	4.16	4.54	2.25	CALL
ESV-0382-NWNB	3/8	NW-10B	1.65	4.21	4.59	2.25	CALL
ESV-050	1/2	No flanges	1.50	4.06	4.56	2.25	CALL
ESV-0502-CF	1/2	Rotatable 1.33 CF	1.60	4.16	4.66	2.25	CALL
ESV-0502-NWNB	1/2	NW-10B	1.65	4.21	4.71	2.25	CALL
ESV-075	3/4	No flanges	2.00	4.56	5.31	2.25	CALL
ESV-0752-CF	3/4	Rotatable 1.33 CF	2.50	5.06	5.81	2.25	CALL
ESV-0752-NWNB	3/4	NW-16B	2.15	4.71	5.46	2.25	CALL
ESV-100	1	No flanges	1.88	4.32	5.32	2.25	CALL
ESV-1002-CF	1	Rotatable 2.12 CF	2.05	4.49	5.49	2.25	CALL
ESV-1002-NWNB	1	NW-25B	2.03	4.47	5.47	2.25	CALL
ESV-150	1 1/2	No flanges	2.25	5.63	7.13	3.00	CALL
ESV-1502-CF	1 1/2	Rotatable 2.75 CF	2.46	5.84	7.34	3.00	CALL
ESV-1502-NWNB	1 1/2	NW-40B	2.40	5.78	7.28	3.00	CALL
ESV-200	2	No flanges	3.25	7.85	9.85	3.50	CALL
ESV-2002-CF	2	Rotatable 3.38 CF	3.48	8.08	10.08	3.50	CALL
ESV-2002-NWNB	2	NW-50B	3.40	8.00	10.00	3.50	CALL
ESV-2002-ASA	2	Rotatable ASA-5-200R	3.50	8.10	10.10	3.50	CALL
ESV-250	2 1/2	No flanges	3.00	8.27	10.77	4.00	CALL
ESV-2502-CF	2 1/2	Rotatable 4.50 CF	3.38	8.65	11.15	4.00	CALL
ESV-2502-ISO	2 1/2	ISO-63-250-OF	3.25	8.52	11.02	4.00	CALL
ESV-2502-ASA	2 1/2	Rotatable ASA-5-250R	3.25	8.52	11.02	4.00	CALL
ESV-300	3	No flanges	3.25	8.68	11.68	4.50	CALL
ESV-3002-CF	3	Rotatable 4.62 CF	3.53	8.96	11.96	4.50	CALL
ESV-3002-ISO	3	ISO-80-300-OF	3.50	8.93	11.93	4.50	CALL
ESV-3002-ASA	3	Rotatable ASA-6-300R	3.50	8.93	11.93	4.50	CALL



Manual Copper Seal Bonnet Angle Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	PRICE
CSV-038	3/8	No flanges	1.50	4.06	4.44	2.73	CALL
CSV-0382-CF	3/8	Rotatable 1.33 CF	1.60	4.16	4.54	2.73	CALL
CSV-050	1/2	No flanges	1.50	4.06	4.56	2.73	CALL
CSV-0502-CF	1/2	Rotatable 1.33 CF	1.60	4.16	4.66	2.73	CALL
CSV-075	3/4	No flanges	2.00	4.56	5.31	2.73	CALL
CSV-0752-CF	3/4	Rotatable 1.33 CF	2.50	5.06	5.81	2.73	CALL
CSV-100	1	No flanges	1.88	4.32	5.32	2.73	CALL
CSV-1002-CF	1	Rotatable 2.12 CF	2.05	4.49	5.49	2.73	CALL
CSV-150	1 1/2	No flanges	2.25	5.63	7.13	3.25	CALL
CSV-1502-CF	1 1/2	Rotatable 2.75 CF	2.46	5.84	7.34	3.25	CALL
CSV-200	2	No flanges	3.25	7.85	9.85	4.05	CALL
CSV-2002-CF	2	Rotatable 3.38 CF	3.48	8.08	10.08	4.05	CALL
CSV-250	2 1/2	No flanges	3.00	8.27	10.77	4.61	CALL
CSV-2502-CF	2 1/2	Rotatable 4.50 CF	3.38	8.65	11.15	4.61	CALL
CSV-300	3	No flanges	3.25	8.68	11.68	5.62	CALL
CSV-3002-CF	3	Rotatable 4.62 CF	3.53	8.96	11.96	5.62	CALL

ESV O-ring Kits

MODEL NUMBER	PORT OD	PRICE
ESV-075-95	3/8-1	CALL
ESV-150-95	1 1/2	CALL
ESV-200-95	2	CALL
ESV-250-95	2 1/2	CALL
ESV-300-95	3	CALL

CSV O-ring & Gasket Kits

MODEL NUMBER	PORT OD	PRICE
CSV-075-95	3/8-1	CALL
CSV-150-95	1 1/2	CALL
CSV-200-95	2	CALL
CSV-250-95	2 1/2	CALL
CSV-300-95	3	CALL



Valve rebuild kits available. See page 109

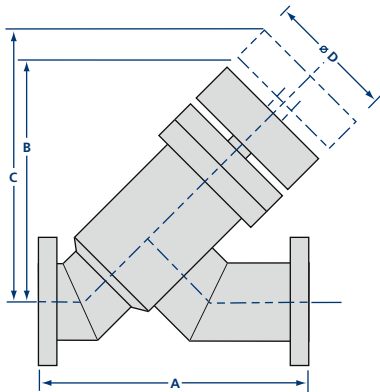
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Isolation Valves

Manual Angle-In-Line Valves



Manual Viton Seal Angle-In-Line Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	PRICE
AIV-075	3/4	No flanges	3.70	3.47	4.01	2.25	CALL
AIV-0752-CF	3/4	Rotatable 1.33 CF	4.70	3.47	4.01	2.25	CALL
AIV-0752-NWB	3/4	NW-16B	4.00	3.47	4.01	2.25	CALL
AIV-100	1	No flanges	3.90	3.42	4.14	2.25	CALL
AIV-1002-CF	1	Rotatable 2.12 CF	4.23	3.42	4.14	2.25	CALL
AIV-1002-NWB	1	NW-25B	4.20	3.42	4.14	2.25	CALL
AIV-150	1 1/2	No flanges	4.82	4.55	5.61	3.00	CALL
AIV-1502-CF	1 1/2	Rotatable 2.75 CF	5.24	4.55	5.61	3.00	CALL
AIV-1502-NWB	1 1/2	NW-40B	5.12	4.55	5.61	3.00	CALL
AIV-200	2	No flanges	6.70	6.19	9.15	3.50	CALL
AIV-2002-CF	2	Rotatable 3.38 CF	7.15	6.19	9.15	3.50	CALL
AIV-2002-NWB	2	NW-50B	7.00	6.19	9.15	3.50	CALL
AIV-250	2 1/2	No flanges	7.75	6.99	10.31	4.00	CALL
AIV-2502-CF	2 1/2	Rotatable 4.50 CF	8.50	6.99	10.31	4.00	CALL
AIV-2502-ISO	2 1/2	ISO-63-250-OF	8.25	6.99	10.31	4.00	CALL
AIV-300	3	No flanges	10.05	7.71	11.38	4.50	CALL
AIV-3002-CF	3	Rotatable 4.62 CF	10.61	7.71	11.38	4.50	CALL
AIV-3002-ISO	3	ISO-80-300-OF	10.55	7.71	11.38	4.50	CALL

Manual Copper Seal Bonnet Angle-In-Line Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	PRICE
CAIV-075	3/4	No flanges	3.70	3.47	4.01	2.73	CALL
CAIV-0752-CF	3/4	Rotatable 1.33 CF	4.70	3.47	4.01	2.73	CALL
CAIV-100	1	No flanges	3.90	3.42	4.14	2.73	CALL
CAIV-1002-CF	1	Rotatable 2.12 CF	4.48	3.42	4.14	2.73	CALL
CAIV-150	1 1/2	No flanges	4.82	4.55	5.61	3.25	CALL
CAIV-1502-CF	1 1/2	Rotatable 2.75 CF	5.24	4.55	5.61	3.25	CALL
CAIV-200	2	No flanges	6.70	6.19	9.15	4.05	CALL
CAIV-2002-CF	2	Rotatable 3.38 CF	7.15	6.19	9.15	4.05	CALL
CAIV-250	2 1/2	No flanges	7.75	6.99	10.31	4.61	CALL
CAIV-2502-CF	2 1/2	Rotatable 4.50 CF	8.50	6.99	10.31	4.61	CALL
CAIV-300	3	No flanges	10.05	7.71	11.38	5.62	CALL
CAIV-3002-CF	3	Rotatable 4.62 CF	10.61	7.71	11.38	5.62	CALL

SPECIFICATIONS

Port ODs: 3/8 to 3 inches

Materials

Body: Electropolished 304 stainless steel
 Bellows: Welded AM-350 stainless steel
 Bonnet seal: Copper or Viton
 Poppet seal: Viton
 Other O-ring compounds available

Actuation: Self-lubricating bronze nuts with ACME threads

Differential pressure

Maximum 20 psia across valve seat

Maximum temperature with Viton seals

Sustained: $\leq 150^{\circ}\text{C}$
 Intermittent: $\leq 204^{\circ}\text{C}$

Vacuum range

Viton bonnet seal: $\geq 1 \times 10^{-9}$ Torr - High Vacuum
 Copper bonnet seal: $\geq 1 \times 10^{-10}$ Torr - UHV

Options: Fittings and O-rings. See page 99

Thermal: Heater jackets and controllers available for all valves. Call for details

CAIVP O-Ring & Gasket Kits

AIV O-Ring Kits

MODEL NUMBER	PORT OD	PRICE
ESV-075-95	3/8-1	CALL
ESV-150-95	1 1/2	CALL
ESV-200-95	2	CALL
ESV-250-95	2 1/2	CALL
ESV-300-95	3	CALL

MODEL NUMBER	PORT OD	PRICE
CSVP-075-95	3/8-1	CALL
CSVP-150-95	1 1/2	CALL
CSVP-200-95	2	CALL
CSVP-250-95	2 1/2	CALL
CSVP-300-95	3	CALL

Prices subject to change without notice. - International product pricing will vary.

Isolation Valves

Manual In-Line Valves



Manual Viton Seal In-Line Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	E	F	PRICE
ILV-038	3/8	No flanges	1.50	0.94	1.50	4.06	2.25	4.44	CALL
ILV-0382-CF	3/8	Rotatable 1.33 CF	1.60	0.94	1.50	4.06	2.25	4.44	CALL
ILV-0382-NWB	3/8	NW-10B	1.65	0.94	1.50	4.06	2.25	4.44	CALL
ILV-050	1/2	No flanges	1.50	1.00	1.62	4.19	2.25	4.69	CALL
ILV-0502-CF	1/2	Rotatable 1.33 CF	1.60	1.00	1.62	4.19	2.25	4.69	CALL
ILV-0502-NWB	1/2	NW-10B	1.65	1.00	1.62	4.19	2.25	4.69	CALL
ILV-075	3/4	No flanges	2.00	1.12	1.87	4.44	2.25	5.19	CALL
ILV-0752-CF	3/4	Rotatable 1.33 CF	2.50	1.12	1.87	4.44	2.25	5.19	CALL
ILV-0752-NWB	3/4	NW-16B	2.15	1.12	1.87	4.44	2.25	5.19	CALL
ILV-100	1	No flanges	1.88	1.37	2.25	4.69	2.25	5.69	CALL
ILV-1002-CF	1	Rotatable 2.12 CF	2.05	1.37	2.25	4.69	2.25	5.69	CALL
ILV-1002-NWB	1	NW-25B	2.03	1.37	2.25	4.69	2.25	5.69	CALL
ILV-150	1 1/2	No flanges	2.25	1.88	3.12	6.52	3.00	8.02	CALL
ILV-1502-CF	1 1/2	Rotatable 2.75 CF	2.46	1.88	3.12	6.52	3.00	8.02	CALL
ILV-1502-NWB	1 1/2	NW-40B	2.40	1.88	3.12	6.52	3.00	8.02	CALL
ILV-200	2	No flanges	3.25	2.62	4.12	8.73	3.50	10.73	CALL
ILV-2002-CF	2	Rotatable 3.38 CF	3.48	2.62	4.12	8.73	3.50	10.73	CALL
ILV-2002-NWB	2	NW-50B	3.40	2.62	4.12	8.73	3.50	10.73	CALL
ILV-2002-ASA	2	Rotatable ASA-5-200R	3.50	2.62	4.12	8.73	3.50	10.73	CALL
ILV-250	2 1/2	No flanges	3.00	3.12	4.93	10.20	4.00	12.70	CALL
ILV-2502-CF	2 1/2	Rotatable 4.50 CF	3.38	3.12	4.93	10.20	4.00	12.70	CALL
ILV-2502-ISO	2 1/2	ISO-63-250-OF	3.25	3.12	4.93	10.20	4.00	12.70	CALL
ILV-2502-ASA	2 1/2	Rotatable ASA-5-250R	3.25	3.12	4.93	10.20	4.00	12.70	CALL
ILV-300	3	No flanges	3.25	3.68	5.62	11.04	4.50	14.04	CALL
ILV-3002-CF	3	Rotatable 4.62 CF	3.53	3.68	5.62	11.04	4.50	14.04	CALL
ILV-3002-ISO	3	ISO-80-300-OF	3.50	3.68	5.62	11.04	4.50	14.04	CALL
ILV-3002-ASA	3	Rotatable ASA-6-300R	3.50	3.68	5.62	11.04	4.50	14.04	CALL

SPECIFICATIONS

Port ODs: 3/8 to 3 inches

Materials

Body: Electropolished 304 stainless steel
 Bellows: Welded AM-350 stainless steel
 Bonnet seal: Copper or Viton
 Poppet seal: Viton
Other O-ring compounds available

Actuation: Self-lubricating bronze nuts with ACME threads

Differential pressure

Maximum 20 psia across valve seat

Maximum temperature with Viton seals

Sustained: $\leq 150^{\circ}\text{C}$
 Intermittent: $\leq 204^{\circ}\text{C}$

Vacuum range

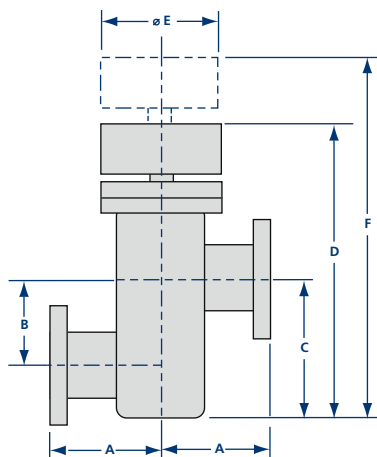
Viton bonnet seal: $\geq 1 \times 10^{-9}$ Torr - High Vacuum
 Copper bonnet seal: $\geq 1 \times 10^{-10}$ Torr - UHV

Options: Fittings and O-rings. See page 99

Thermal: Heater jackets and controllers available for all valves. Call for details

Manual Copper Seal Bonnet In-Line Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	E	F	PRICE
CILV-038	3/8	No flanges	1.50	0.94	1.50	4.06	2.73	4.44	CALL
CILV-0382-CF	3/8	Rotatable 1.33 CF	1.60	0.94	1.50	4.06	2.73	4.44	CALL
CILV-050	1/2	No flanges	1.50	1.00	1.62	4.19	2.73	4.69	CALL
CILV-0502-CF	1/2	Rotatable 1.33 CF	1.60	1.00	1.62	4.19	2.73	4.69	CALL
CILV-075	3/4	No flanges	2.00	1.12	1.87	4.44	2.73	5.19	CALL
CILV-0752-CF	3/4	Rotatable 1.33 CF	2.50	1.12	1.87	4.44	2.73	5.19	CALL
CILV-100	1	No flanges	1.88	1.37	2.25	4.69	2.73	5.69	CALL
CILV-1002-CF	1	Rotatable 2.12 CF	2.05	1.37	2.25	4.69	2.73	5.69	CALL
CILV-150	1 1/2	No flanges	2.25	1.88	3.12	6.52	3.25	8.02	CALL
CILV-1502-CF	1 1/2	Rotatable 2.75 CF	2.46	1.88	3.12	6.52	3.25	8.02	CALL
CILV-200	2	No flanges	3.25	2.62	4.12	8.73	4.05	10.73	CALL
CILV-2002-CF	2	Rotatable 3.38 CF	3.48	2.62	4.12	8.73	4.05	10.73	CALL
CILV-250	2 1/2	No flanges	3.00	3.12	4.93	10.20	4.61	12.70	CALL
CILV-2502-CF	2 1/2	Rotatable 4.50 CF	3.38	3.12	4.93	10.20	4.61	12.70	CALL
CILV-300	3	No flanges	3.25	3.62	5.55	11.04	5.62	14.04	CALL
CILV-3002-CF	3	Rotatable 4.62 CF	3.53	3.62	5.55	11.04	5.62	14.04	CALL



CILV O-Ring and Gasket Kits

ILV O-Ring Kits

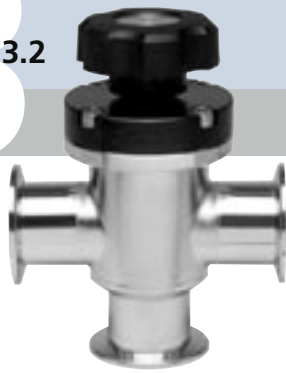
MODEL NUMBER	PORT OD	PRICE
ESV-075-95	3/8-1	CALL
ESV-150-95	1 1/2	CALL
ESV-200-95	2	CALL
ESV-250-95	2 1/2	CALL
ESV-300-95	3	CALL

MODEL NUMBER	PORT OD	PRICE
CSV-075-95	3/8-1	CALL
CSV-150-95	1 1/2	CALL
CSV-200-95	2	CALL
CSV-250-95	2 1/2	CALL
CSV-300-95	3	CALL

Prices subject to change without notice. - International product pricing will vary.

Isolation Valves

Manual Tee Valves



Manual Viton Seal Tee Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	PRICE
ESV-038T	3/8	No flanges	1.50	4.06	4.44	2.25	CALL
ESV-0383T-CF	3/8	Rotatable 1.33 CF	1.60	4.16	4.54	2.25	CALL
ESV-0383T-NWB	3/8	NW-10B	1.65	4.21	4.59	2.25	CALL
ESV-050T	1/2	No flanges	1.50	4.06	4.56	2.25	CALL
ESV-0503T-CF	1/2	Rotatable 1.33 CF	1.60	4.16	4.54	2.25	CALL
ESV-0503T-NWB	1/2	NW-10B	1.65	4.21	4.71	2.25	CALL
ESV-075T	3/4	No flanges	2.00	4.56	5.31	2.25	CALL
ESV-0753T-CF	3/4	Rotatable 1.33 CF	2.50	5.06	5.81	2.25	CALL
ESV-0753T-NWB	3/4	NW-16B	2.15	4.71	5.46	2.25	CALL
ESV-100T	1	No flanges	1.88	4.32	5.32	2.25	CALL
ESV-1003T-CF	1	Rotatable 2.12 CF	2.05	4.49	5.49	2.25	CALL
ESV-1003T-NWB	1	NW-25B	2.03	4.47	5.47	2.25	CALL
ESV-150T	1 1/2	No flanges	2.25	5.63	7.13	3.00	CALL
ESV-1503T-CF	1 1/2	Rotatable 2.75 CF	2.46	5.84	7.34	3.00	CALL
ESV-1503T-NWB	1 1/2	NW-40B	2.40	5.78	7.28	3.00	CALL
ESV-200T	2	No flanges	3.25	7.85	9.85	3.50	CALL
ESV-2003T-CF	2	Rotatable 3.38 CF	3.48	8.08	10.08	3.50	CALL
ESV-2003T-NWB	2	NW-50B	3.40	8.00	10.00	3.50	CALL
ESV-2003T-ASA	2	Rotatable ASA-5-200R	3.25	8.10	10.10	3.50	CALL
ESV-250T	2 1/2	No flanges	3.00	8.27	10.77	4.00	CALL
ESV-2503T-CF	2 1/2	Rotatable 4.50 CF	3.38	8.65	11.15	4.00	CALL
ESV-2503T-ISO	2 1/2	ISO-63-250-OF	3.25	8.52	11.02	4.00	CALL
ESV-2503T-ASA	2 1/2	Rotatable ASA-5-250R	3.25	8.52	11.02	4.00	CALL
ESV-300T	3	No flanges	3.25	8.68	11.68	4.50	CALL
ESV-3003T-CF	3	Rotatable 4.62 CF	3.53	8.96	11.96	4.50	CALL
ESV-3003T-ISO	3	ISO-80-300-OF	3.50	8.93	11.93	4.50	CALL
ESV-3003T-ASA	3	Rotatable ASA-6-300R	3.50	8.93	11.93	4.50	CALL

SPECIFICATIONS

Port ODs: 3/8 to 3 inches

Materials

Body: Electropolished 304 stainless steel
 Bellows: Welded AM-350 stainless steel
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 Poppet seal: Viton
Other O-ring compounds available

Actuation: Self-lubricating bronze nuts with ACME threads

Differential pressure

Maximum 20 psia across valve seat

Maximum temperature with Viton seals

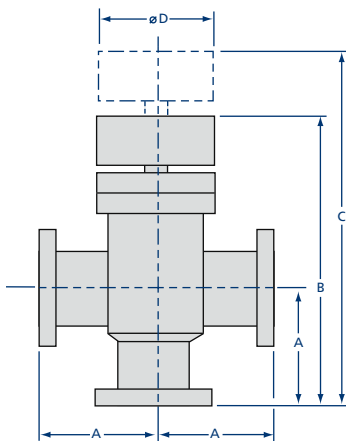
Sustained: $\leq 150^{\circ}\text{C}$
 Intermittent: $\leq 204^{\circ}\text{C}$

Vacuum range

Viton bonnet seal: $\geq 1 \times 10^{-9}$ Torr - High Vacuum
 Copper bonnet seal: $\geq 1 \times 10^{-10}$ Torr - UHV

Options: Fittings and O-rings. See page 99

Thermal: Heater jackets and controllers available for all valves. Call for details



Manual Copper Seal Bonnet Tee Valves

MODEL NUMBER	PORT OD	DESCRIPTION	A	B	C	D	PRICE
CSV-038T	3/8	No flanges	1.50	4.06	4.44	2.73	CALL
CSV-0383T-CF	3/8	Rotatable 1.33 CF	1.60	4.16	4.54	2.73	CALL
CSV-050T	1/2	No flanges	1.50	4.06	4.56	2.73	CALL
CSV-0503T-CF	1/2	Rotatable 1.33 CF	1.60	4.16	4.66	2.73	CALL
CSV-075T	3/4	No flanges	2.00	4.56	5.31	2.73	CALL
CSV-0753T-CF	3/4	Rotatable 1.33 CF	2.50	5.06	5.81	2.73	CALL
CSV-100T	1	No flanges	1.88	4.32	5.32	2.73	CALL
CSV-1003T-CF	1	Rotatable 2.12 CF	2.05	4.49	5.49	2.73	CALL
CSV-150T	1 1/2	No flanges	2.25	5.63	7.13	3.25	CALL
CSV-1503T-CF	1 1/2	Rotatable 2.75 CF	2.46	5.84	7.34	3.25	CALL
CSV-200T	2	No flanges	3.25	7.85	9.85	4.05	CALL
CSV-2003T-CF	2	Rotatable 3.38 CF	3.48	8.08	10.08	4.05	CALL
CSV-250T	2 1/2	No flanges	3.00	8.27	10.77	4.61	CALL
CSV-2503T-CF	2 1/2	Rotatable 3.38 CF	3.38	8.65	11.15	4.61	CALL
CSV-300T	3	No flanges	3.25	8.68	11.68	5.62	CALL
CSV-3003T-CF	3	Rotatable 4.62 CF	3.53	8.96	11.96	5.62	CALL

ESV-T O-Ring Kits

MODEL NUMBER	PORT OD	PRICE
ESV-075-95	3/8-1	CALL
ESV-150-95	1 1/2	CALL
ESV-200-95	2	CALL
ESV-250-95	2 1/2	CALL
ESV-300-95	3	CALL

CSV-T O-Ring & Gasket Kits

MODEL NUMBER	PORT OD	PRICE
CSV-075-95	3/8-1	CALL
CSV-150-95	1 1/2	CALL
CSV-200-95	2	CALL
CSV-250-95	2 1/2	CALL
CSV-300-95	3	CALL

Prices subject to change without notice. - International product pricing will vary.