

BALL VALVE - CHECK VALVE - BLEED VALVE - RELIEF VALVE

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An ISO 9001:2000 Certified Company



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2 Piece Ball Valve

Pressure : 3,000 psi

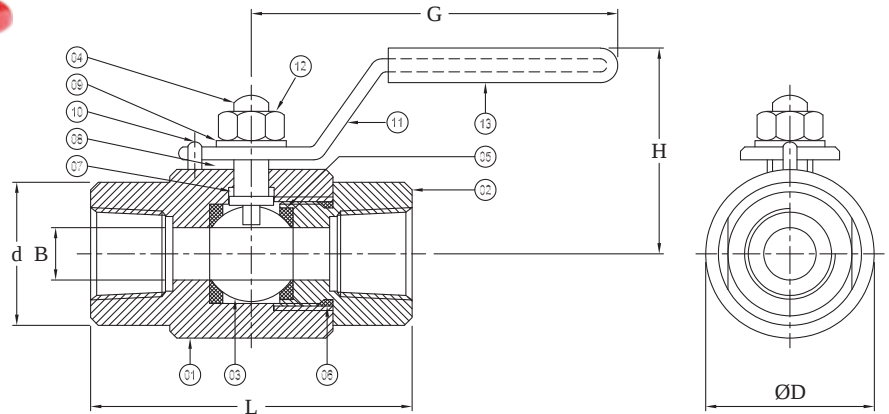
ARYA

DEFINING THE INSTRUMENTS

Design No. ABV/3K/FF

FEATURES

- Bar Stock design.
- Bi-directional valve.
- Panel mounting option available.
- Pressure rating : 3000 PSI.
- Thread : N=NPT, G=BSPP, R=BSPT, other option on request.



#	Description	Material of Construction			Qty.
1	Boby	SS 316	SS 304	CS A105	1
2	Adopter	SS 316	SS 304	CS A105	1
3	Ball	SS 316	SS 304	SS 304	1
4	Stem	SS 316	SS 304	SS 304	1
5	Seats	PT.F.E.	PT.F.E.	PT.F.E.	2
6	Joint Seal	Viton	Viton	Viton	1
7	Gland Seals	PT.F.E.	PT.F.E.	PT.F.E.	1

#	Description	Material of Construction			Qty.
8	Retainer	SS 304	SS 304	SS 304	1
9	Washer	SS 304	SS 304	CS Plated	1
10	Stop Pin	SS 304	SS 304	SS 304	1
11	Handle	SS 304	SS 304	CS Plated	1
12	Nut	SS 304	SS 304	CS Plated	1
13	Sleeve	P.V.C.	P.V.C.	P.V.C.	1

Part No.	INLET NPT-F	OUTLET NPT-F	Dimension						Cv
			L	d	D	B	H	G	
ABV/3K/FF-2N	1/8"	1/8"	58	25	32	4.5	38	95	1.12
ABV/3K/FF-4N	1/4"	1/4"	58	25	32	6.4	38	95	2.10
ABV/3K/FF-6N	3/8"	3/8"	58	25	32	9	38	95	8.35
ABV/3K/FF-8N	1/2"	1/2"	75	32	38	11.5	52	135	10.15
ABV/3K/FF-12N	3/4"	3/4"	80	38	45	19	54	135	16.80
ABV/3K/FF-16N	1"	1"	87	50	55	25	60	150	19.25

OPTIONAL

1. Male to Female connection
2. For BSPP connection use G instead of N. eg. ABV/3K/FF-2G.

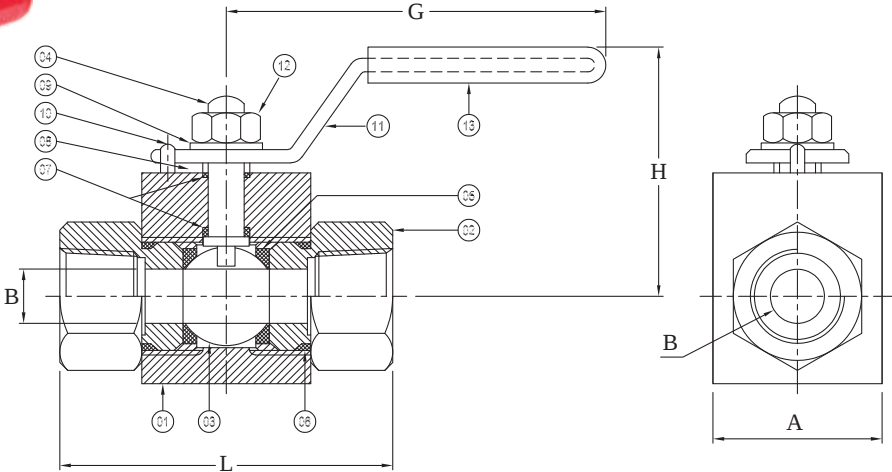
PRESSURE TEST

- Every Ball valve is factory tested.

Note : Dimensions are reference only and are subject to change.

FEATURES

- Bar Stock design.
- Bi-directional ball valve.
- Panel mounting option available.
- Pressure rating : 6000 PSI / 10000 PSI.
- Thread : N=NPT, G=BSPP, R=BSPT, other option on request.



#	Description	Material of Construction			Qty.	#	Description	Material of Construction			Qty.
1	Body	SS 316	SS 304	CS A105	1	8	Retainer	SS	SS	SS	1
2	Adopter	SS 316	SS 304	CS A105	2	9	Washer	SS	SS	C.S.	1
3	Ball	SS 316	SS 304	SS304	1	10	Stop Pin	SS	SS	SS	1
4	Stem	SS 316	SS 304	SS304	1	11	Handle	SS	SS	CS Plated	1
5	Seats	P.T.F.E.	PT.F.E.	PT.F.E.	2	12	Nut	SS	SS	CS Plated	1
6	Joint Seal	Viton	Viotn	Viton	2	13	Sleeve	P.V.C.	P.V.C.	P.V.C.	1
7	Gland Seals	PT.F.E.	PT.F.E.	PT.F.E.	2						

Part No.*	IN/OUTLET NPT-F	Dimension					Cv
		L	A	B	H	G	
ABV/6K/FF/4N	1/4"	66	30	6.4	44	120	9.6
ABV/6K/FF/6N	3/8"	71	32	9.5	48	120	9.6
ABV/6K/FF/8N	1/2"	84	35	12	55	140	9.6
ABV/6K/FF/12N	3/4"	95	50	19	75	192	13
ABV/6K/FF/16N	1"	110	56	25	80	192	13
ABV/6K/FF/20N	1 1/4"	118	70	32	90	195	13
ABV/6K/FF/24N	1 1/2"	130	80	38	110	220	16
ABV/6K/FF/32N	2"	140	98	50	120	270	16

OPTIONAL

- For BSPP connection use G instead of N. eg. ABV/6K/FF-2G.
- For 10,000 PSI, replace 6K with 10K in Part No.

PRESSURE TEST

- Every Ball valve is factory tested.

Note : Dimensions are reference only and are subject to change.

High Pressure Ball Valve (Tube End)



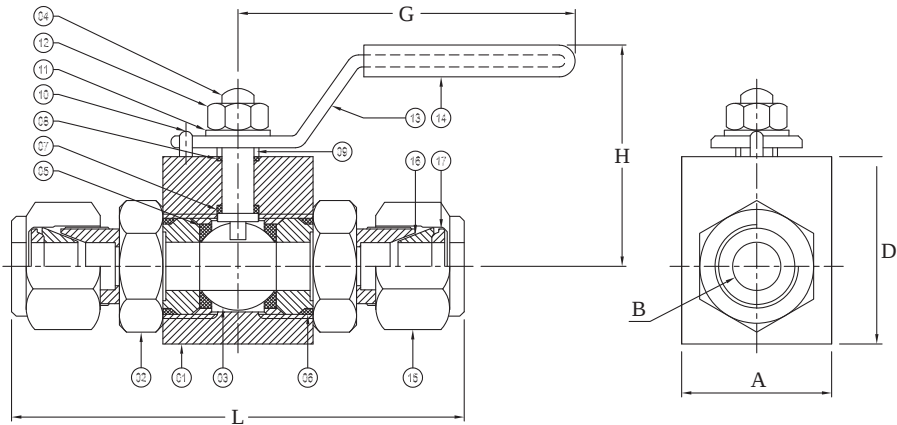
DEFINING THE INSTRUMENTS

Pressure : 6,000 psi

Design No. ABV/6K/T

FEATURES

- Bar Stock design.
- Bi-directional ball valve.
- Panel mounting option available.
- Pressure rating : 6000 PSI.



#	Description	Material of Construction	Qty.	#	Description	Material of Construction	Qty.
1	Body	SS 316	1	10	Stop Pin	SS 304	1
2	Adopter	SS 316	2	11	Washer	CS Plated	1
3	Ball	SS 316	1	12	Stem Nut	CS Plated	1
4	Stem	SS 316	1	13	Handle	CS Plated	1
5	Seats	P.T.F.E.	2	14	Sleeve	P.V.C.	1
6	Joint Seal	Viton	2	15	Nut	SS 316	2
7	Gland Seals	PT.F.E	1	16	Front Ferrule	SS 316	2
8	Back-up Seal	PT.F.E.	1	17	Back Ferrule	SS 316	2
9	Retainer	SS 304	1				

Part No.	INLET/ OUTLET OD	Dimension						Cv
		L	A	D	B	H	G	
ABV/6K/T-2I	1/8"	72	25	28	2.5	37	95	0.29
ABV/6K/T-4I	1/4"	80	25	30	4.8	38	95	1.30
ABV/6K/T-6I	3/8"	85	28	32	7	38	95	2.60
ABV/6K/T-8I	1/2"	97	32	38	10	52	135	9.85
ABV/6K/T-12I	3/4"	110	40	45	15	55	135	16.88
ABV/6K/T-16I	1"	120	42	45	19	55	150	18.80
ABV/6K/T-4M	4mm	72	25	28	2.5	37	95	0.29
ABV/6K/T-6M	6mm	80	25	30	4.8	38	95	1.30
ABV/6K/T-10M	10mm	85	28	32	7	38	95	2.60
ABV/6K/T-12M	12mm	97	32	38	10	52	135	9.85
ABV/6K/T-18M	18mm	110	40	45	15	55	135	16.88
ABV/6K/T-25M	25mm	120	42	45	19	55	150	18.80

PRESSURE TEST

- Every Ball valve is factory tested.

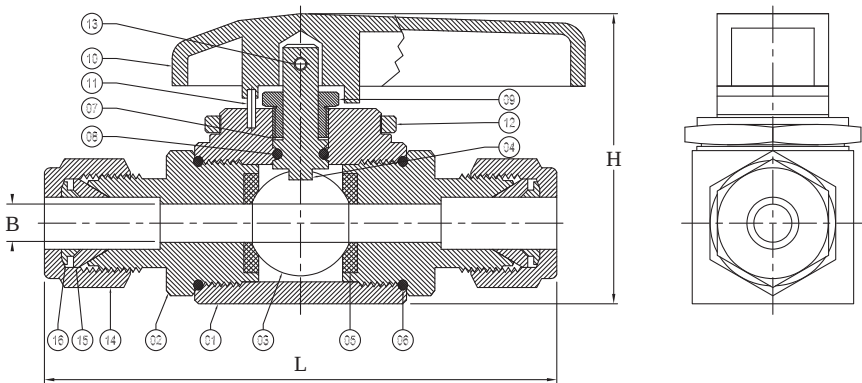
Note : Dimensions are reference only and are subject to change.

Pressure : 6,000 psi

Design No. ABV/6K/PT

FEATURES

- Bar Stock design.
- Bi-directional valve.
- Pressure rating : 6000 PSI.
- Phenolic Handle.
- Thread : N=NPT, G=BSPP, R=BSPT, other option on request.



#	Description	Material of Construction	Qty.	#	Description	Material of Construction	Qty.
1	Body	SS 316	1	9	Gland Nut	SS 316	1
2	Adopter	SS 316	2	10	Handle	Nyton	1
3	Ball	SS 316	1	11	Stop Pin	SS 316	1
4	Spindle	SS 316	1	12	Panel Nut	SS 316	1
5	Seat	PT.F.E.	2	13	L N Screw	SS 304	1
6	Joint Seal	Viton / Buna-N	2	14	Nut	SS 316	2
7	Gland Seal	PT.F.E	1	15	Front Ferrule	SS 316	2
8	'O' Ring	Viton / Buna-N	1	16	Back Ferrule	SS 316	2

Part No.	INLET/OUTLET	Dimension			Cv
	Tube OD	L	B	H	
ABV/6K/PT-2I	1/8"	73	2.4	55	0.26
ABV/6K/PT-4I	1/4"	78	4.8	55	1.04
ABV/6K/PT-6I	3/8"	83	7	55	2.34
ABV/6K/PT-8I	1/2"	102	10	60	5.80
ABV/6K/PT-12I	3/4"	115	15	65	6.42
ABV/6K/PT-16I	1"	135	19	70	7.82
ABV/6K/PT-4M	4mm	73	2.4	55	0.26
ABV/6K/PT-6M	6mm	78	4.8	55	1.04
ABV/6K/PT-10M	10mm	83	7	55	2.34
ABV/6K/PT-12M	12mm	102	10	60	5.80
ABV/6K/PT-18M	18mm	115	15	65	6.42
ABV/6K/PT-25M	25mm	135	19	70	7.82

OPTIONAL

- For BSPP connection use G instead of N. eg. ABV/6K/PT-2G

PRESSURE TEST

- Every Ball valve is factory tested.

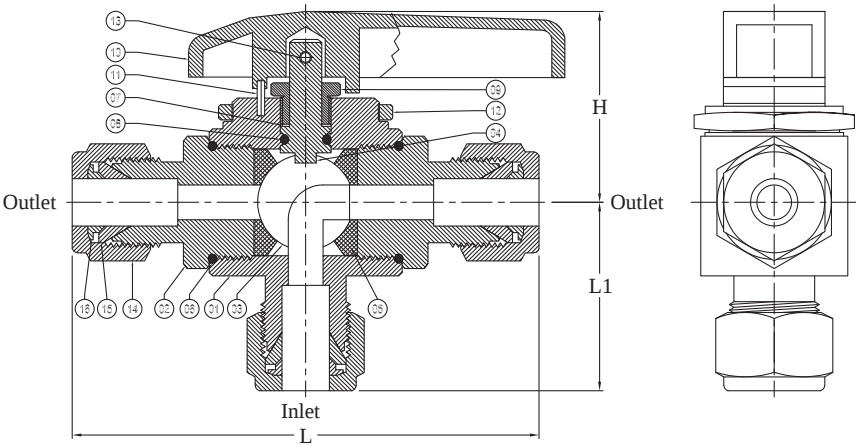
Note : Dimensions are reference only and are subject to change.

3 way Panel Ball Valve (Tube End)

Pressure : 6,000 psi Bottom port Inlet

FEATURES

- Bar Stock design.
- Tube-directional valve.
- Pressure rating : 6000 PSI.
- Phenolic Handle.
- Thread : N=NPT, G=BSPP, R=BSPT, other option on request.



#	Description	Material of Construction	Qty.	#	Description	Material of Construction	Qty.
1	Body	SS 316	1	9	Gland Nut	SS 316	1
2	Adopter	SS 316	2	10	Handle	Nyton	1
3	Ball	SS 316	1	11	Stop Pin	SS 316	1
4	Spindle	SS 316	1	12	Panel Nut	SS 316	1
5	Seat	PTFE / POM	2	13	L N Screw	SS 304	1
6	Joint Seal	Viton / Buna-N	2	14	Nut	SS 316	3
7	Gland Seal	PT.F.E	1	15	Front Ferrule	SS 316	3
8	'O' Ring	Viton / Buna-N	1	16	Back Ferrule	SS 316	3

Part No.	INLET/OUTLET Tube OD	Dimension			Cv
		L	H	L1	
ABV/6K/3PT-2I	1/8"	78	55	33	0.21
ABV/6K/3PT-4I	1/4"	82	55	36	0.70
ABV/6K/3PT-6I	3/8"	86	55	38	0.87
ABV/6K/3PT-8I	1/2"	92	60	44	1.35
ABV/6K/3PT-12I	3/4"	98	65	48	3.10
ABV/6K/3PT-16I	1"	110	70	52	4.10
ABV/6K/3PT-3M	3mm	78	55	33	0.21
ABV/6K/3PT-6M	6mm	82	55	36	0.70
ABV/6K/3PT-10M	10mm	86	55	38	0.87
ABV/6K/3PT-12M	12mm	92	60	44	1.35
ABV/6K/3PT-18M	18mm	98	65	48	3.10
ABV/6K/3PT-24M	24mm	110	70	52	4.10

OPTIONAL

- For BSPP connection use G instead of N. eg. ABV/6K/3T-2G.

PRESSURE TEST

- Every Ball valve is factory tested.

Note : Dimensions are reference only and are subject to change.

3 way Ball Valve (Side Port Inlet)

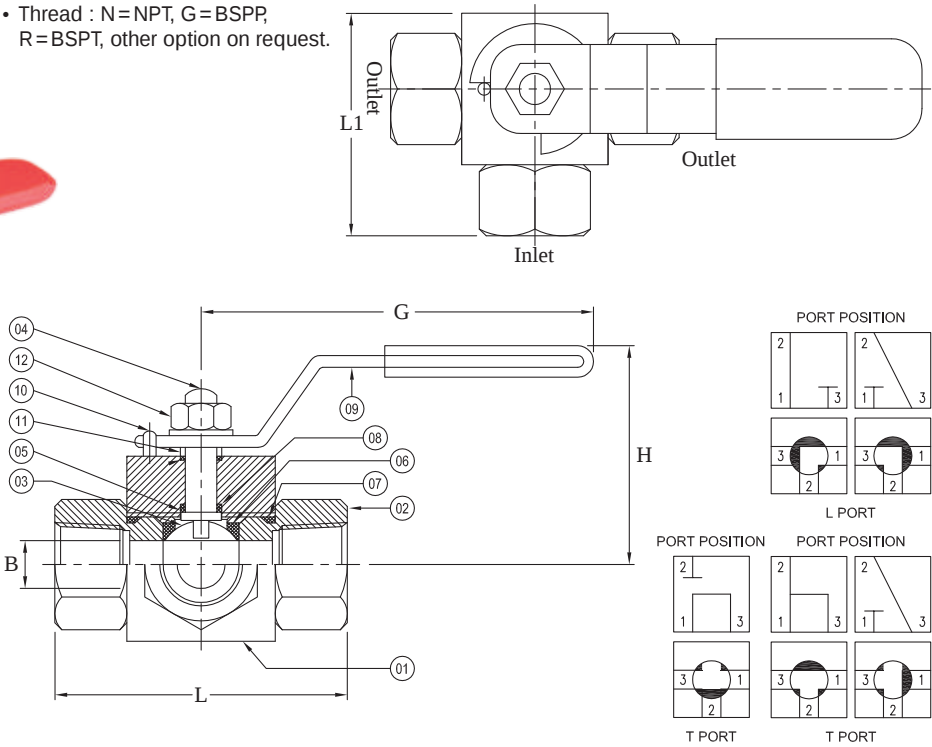
Instrumentation Valves & Accessories

Pressure : 6,000 psi

Design No. ABV/6K/3FF

FEATURES

- Bar Stock design.
- Bi-directional ball valve.
- Panel mounting option available.
- Pressure rating : 6000 PSI.
- Thread : N=NPT, G=BSPP,
R=BSPT, other option on request.



#	Description	Material of Construction	Qty.
1	Body	SS 316	1
2	Side Piece	SS 316	3
3	Ball	SS 316	1
4	Stem	SS 316	1
5	Seal ('O' Ring)	Viton / Nitril	2
6	Ball Seat	Viton / EPDM / Nitrile	1

#	Description	Material of Construction	Qty.
7	Body Seal	Viton / EPDM / Nitrile	3
8	Stem Seal	PT.F.E. / MOS2	1
9	Lever	CS Coated	1
10	Stoper Pin	CS Coated	1
11	Stapper Washer	SS 304	1
12	Nut with Washer	SS 304	1

Part No.	INLET/ OUTLET OD-NPT-F	Dimension				
		L	L1	B	H	G
ABV/6K/3FF-4N	1/4"	59	45.5	6.4	45	120
ABV/6K/3FF-6N	3/8"	67	53	9.5	52	120
ABV/6K/3FF-6N	3/8"	75	59	9.5	60	145
ABV/6K/3FF-8N	1/2"	79	62	12	62	145
ABV/6K/3FF-12N	3/4"	102	81	19	76	195
ABV/6K/3FF-16N	1"	112	92	25	85	195
ABV/6K/3FF-20N	1-1/4"	130	110	32	110	220
ABV/6K/3FF-24N	1-1/2"	144	120	38	120	220

OPTIONAL

1. Bottom port Inlet
2. For BSPP connection use G instead of N. eg. ABV/6K/3FF-4G.

PRESSURE TEST

- Every Ball valve is factory tested.

Note : Dimensions are reference only and are subject to change.

Check Valve

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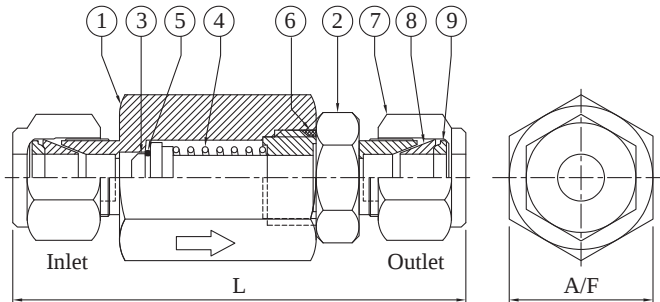
DEFINING THE INSTRUMENTS

Low Pressure Check Valves upto 6,000 PSI

Design No. ACV

FEATURES

- Instant shut off in upstream condition.
- Stops reverse flow in order to protect instrument.
- 100% factory tested for both crack & re-seal.



Material Construction

#	Component	Material
1,	Body	SS 316
2,	Adeptor	SS 316
3,	Poppet	SS 316
4,	Spring	SS 316
5,	O-ring	Viton
6,	Joint (O-ring)	Viton
7,	Nut	SS 316
8,	Front Ferrule	SS 316
9,	Back Ferrule	SS 316

	END CONNECTIONS		PRESSURE RATING 100°F (37°C) PSIG	DIMENSIONS MM		Cv
	INLET / OUT LET			L	A/F	
ACV/TO/02	FRACTIONAL TUBE FITTING	1/8"	6000	65	16	0.23
ACV/TO/04		1/4"	6000	75	19	0.47
ACV/TO/06		3/8"	6000	82	22	1.48
ACV/TO/08		1/2"	6000	88	27	1.70
ACV/TO/12		3/4"	5000	98	32	5.10
ACV/TO/16		1"	4700	108	38	8.12
ACV/TO/6M	METRIC TUBE FITTING	6mm	6000	75	19	0.47
ACV/TO/10M		10mm	6000	82	22	1.48
ACV/TO/12M		12mm	6000	88	27	1.70
ACV/TO/22M		22mm	5000	98	32	5.10
ACV/TO/25M		25mm	4700	108	38	8.12
ACV/MO/02	MALE NPT x TUBE FITTING	1/8"	6000	60	19	0.23
ACV/MO/04		1/4"	6000	68	22	0.47
ACV/MO/06		3/8"	6000	70	25	1.48
ACV/MO/08		1/2"	6000	82	27	1.70
ACV/MO/12		3/4"	5000	85	36	5.10
ACV/MO/16		1"	4700	92	45	8.12

SPECIFICATIONS

- Max. Working Pressure : up to 6,000 PSI (414 bar), 10,000 PSI on request
- Temperature Ratings : upto 400 F (204 °C)
- Nom. Cracking Pressure : 3, 10, 25 PSI (0.07, 0.69, 1.72 bar)
- Optional cracking pressures up to 100 PSI
- End Connections : Tube
NPT in male and female
ISO taper thread in male and female
DIN and JIC 37°

TYPICAL APPLICATIONS

- Gas
- Liquid
- Fluid handling for the chemical/petrochemical, research, and oil and gas industries

TYPICAL MATERIALS

- 316 Stainless Steel
- Other material on request.

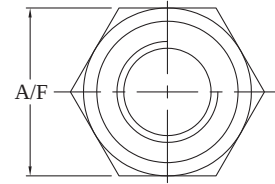
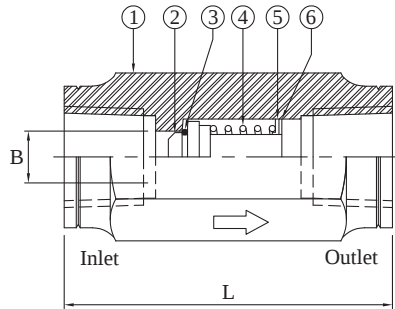
Note : Dimensions are reference only and are subject to change.

Check Valve

Instrumentation Valves & Accessories

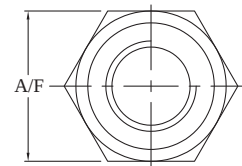
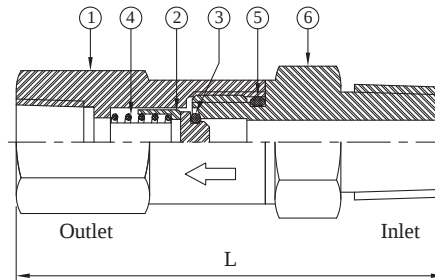
Low Pressure Check Valves upto 6,000 psi

Design No. ACV



Material Construction

#	Component	Material
1,	Body	SS 316
2,	Poppet	SS 316
3,	Seat Seal	Viton
4,	Spring	SS 316
5,	Spring Guide	SS 316
6,	Stopper	SS 316



Material Construction

#	Component	Material
1,	Body	SS 316
2,	Poppet	SS 316
3,	Seat Seal	Viton
4,	Spring	SS 316
5,	Joint Seal	Viton
6,	Adeptor	SS 316

	END CONNECTIONS		PRESSURE RATING 100°F (37°C) PSIG	DIMENSIONS MM		Cv
	INLET / OUT LET			L	A/F	
ACV/FF/02	FEMALE x FEMALE NPT	1/8"	6000	55	19	0.78
ACV/FF/04		1/4"	6000	58	22	1.31
ACV/FF/06		3/8"	6000	58	25	1.52
ACV/FF/08		1/2"	6000	65	27	1.68
ACV/FF/12		3/4"	4300	70	36	4.85
ACV/FF/16		1"	4100	82	45	8.30
ACV/MM/02	MALE x MALE NPT	1/8"	6000	60	19	0.82
ACV/MM/04		1/4"	6000	68	22	1.40
ACV/MM/06		3/8"	6000	70	25	1.52
ACV/MM/08		1/2"	6000	82	27	1.70
ACV/MM/12		3/4"	5000	85	36	4.85
ACV/MM/16		1"	4100	92	45	8.30
ACV/MF/02	MALE x FEMALE NPT	1/8"	6000	60	19	0.82
ACV/MF/04		1/4"	6000	68	22	1.40
ACV/MF/06		3/8"	6000	70	25	1.52
ACV/MF/08		1/2"	6000	82	27	1.70
ACV/MF/12		3/4"	4300	85	36	4.85
ACV/MF/16		1"	4100	92	45	8.30

Note : Dimensions are reference only and are subject to change.

Bleed (Vent) Valve

ARYA

DEFINING THE INSTRUMENTS

Design No. AVV (Type)

Pressure Rating upto 6,000 psi



FEATURES

- Bar Stock design.
- Pressure rating 6,000 PSI.
- Option of regulating method.

MATERIALS OF CONSTRUCTION

Parts	Valve Body Materials	
	316 Stainless Steel	Carbon Steel
Grade / ASTM Specification		
Stem	SS 316 / A 276	
Body*	SS 316 / A 276	1018 / A 108
Safety Back Stop Screw	SS 316 / A 276	
Safety Vent Tube	SS 316 / A 269	

*Carbon Steel bodies are plated with cadmium white dichromate for corrosion protection.

TECHNICAL DATA

Material	Temperature Rating	Pressure Rating
SS 316	-65°F to 850°F (-54°C to 454°C)	10000 psi (689 bar)@100°F (38°C)
Carbon Steel	-20°F to 450°F (-29°C to 232°C)	10000 psi (689 bar)@100°F (38°C)

PART No. & TABLE OF DIMENSIONS

Part No.	End Connection		Orifice mm	Cv	Dimensions (mm)				F Hex
	Inlet	Outlet			L	L1	L2	D	
AVV/02N	1/8" Male NPT	O.D. 3/16 Tube Stub	3.2	0.25	34.03	23.87	10.41	19.05	5/8"
AVV/04N	1/4" Male NPT		3.2	0.25	34.03	23.87	10.41	17.52	5/8"
AVV/06N	3/8" Male NPT		3.2	0.25	37.33	26.16	11.17	22.35	7/8"
AVV/08N	1/2" Male NPT		3.2	0.25	37.33	26.16	11.17	16.00	7/8"

All dimensions shown are for reference only and are subject to change.

APPLICATIONS

Bleed Valves are designed to vent the signal line pressure to atmosphere before an instrument is removed and to assist in calibration of control devices.

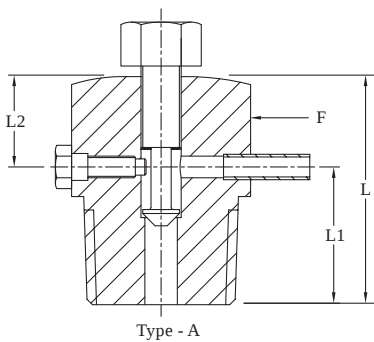
FACTORY TEST

Every Valve is tested with the Nitrogen @ 68 bar (1000 psi) for leakage.

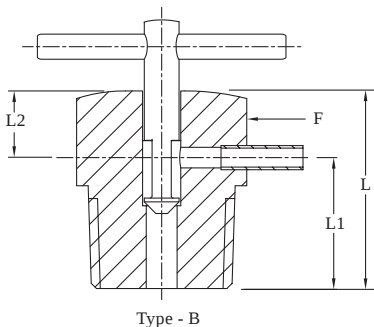
ORDERING INFORMATION, Please specify followings :

Σ Material of construction

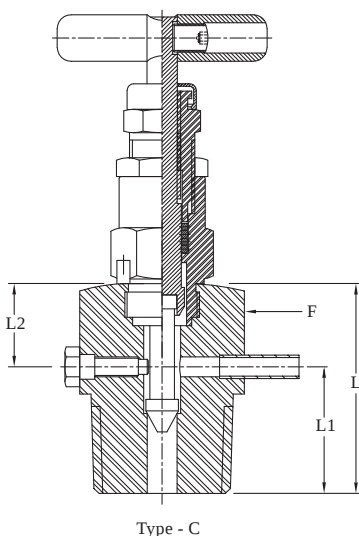
Σ Type of Vent valves



Type - A



Type - B



Type - C

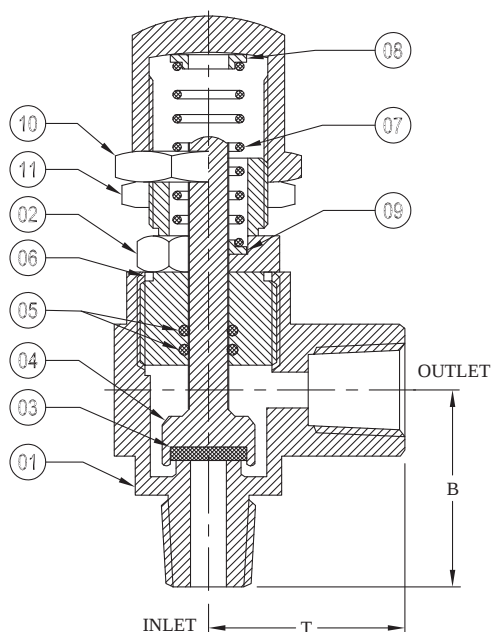
Note : Dimensions are reference only and are subject to change.

Pressure : 6,000 psi

Design No. ARV

FEATURES

- Bar Stock construction
- Pressure rating : 6000 PSI
- Cracking Pressure range : 50 to 5,000 PSI



#	Description	Material of Cons.	Qty.
1	Body	SS 316	1
2	Bonnet	SS 316	1
3	Seats	Viton / Buna N	1
4	Disc	SS 316	1
5	Stem Seal	Viton / Buna N	2
6	Body Seals	Viton / Buna N	1
7	Adjustable Spring	SS 316	1
8	Upper Guide	SS 316	1
9	Lower Guide	SS 316	1
10	Adjustable Cap	SS 304	1
11	Lock Nut	SS 304	1

Part No.	INLET NPT-M	OUTLET NPT-F	Dimension - mm		ORIFICE mm	CV
			L	B		
ARV/MF-4N	1/4"	1/4"	32	38	6	0.65
ARV/MF-6N	3/8"	3/8"	34	40	8	0.82
ARV/MF-8N	1/2"	1/2"	38	42	10	1.10
ARV/MF-12N	3/4"	3/4"	43	46	14	2.23
ARV/MF-16N	1"	1"	48	52	19	3.70

Part No.	NPT-M	Tube OD (Imperial)				
ARV/MT-4-4I	1/4"	1/4"	32	38	6	0.65
ARV/MT-6-6I	3/8"	3/8"	34	40	8	0.82
ARV/MT-8-8I	1/2"	1/2"	38	42	10	1.10
ARV/MT-12-12I	3/4"	3/4"	43	46	14	2.23
ARV/MT-16-16I	1"	1"	48	52	19	3.70

Part No.	NPT-M	Tube OD (Metric)				
ARV/M-4-4M	1/4"	6	32	38	6	0.65
ARV/M-6-10M	3/8"	10	34	40	8	0.82
ARV/M-8-12M	1/2"	12	38	42	10	1.10
ARV/M-12-18M	3/4"	18	43	46	14	2.23
ARV/M-16-25M	1"	25	48	52	19	3.70

Cracking Pressure range Specification :

Spring Code	Cracking Pressure PSI	Spring Code	Cracking Pressure PSI
A	50 to 350	E	2250 to 3000
B	350 to 750	F	3000 to 4000
C	750 to 1500	G	4000 to 5000
D	1500 to 2250	H	5000 to 6000

OPTIONAL

- Tube end to male connections.

PRESSURE TEST

- Every Pressure relief valve is factory tested.

ORDERING INFORMATION : Please specify,

1. Part Number
2. Cracking Pressure range (Spring code).

Note : Dimensions are reference only and are subject to change.

Warning for Your Safety

The system designer and user have the sole responsibility to select products suitable for their special application requirements to ensure the proper installation. Operation and maintenance of the product. Application details, material compatibility and product ratings should all be considered in the individual selection. Improper selection or use of products can cause property damage or personal injury. Arya accept no liability for any improper selection, installation, operation or maintenance.