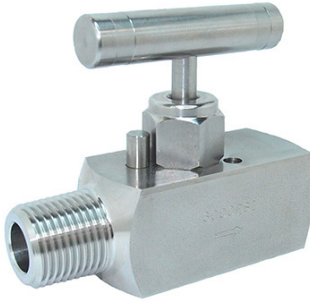
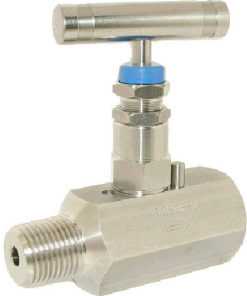
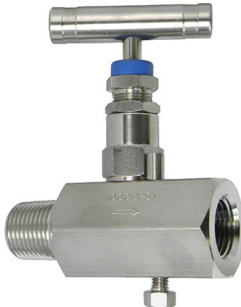
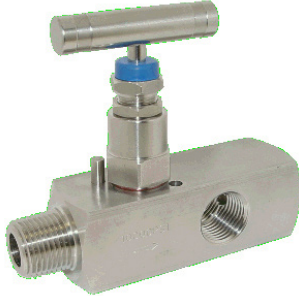


NEEDLE VALVES

Instrumentation grade needle valves are designed for heavy duty process applications or other industrial applications that require high pressure carbon steel or stainless steel shut off valves. PIC Gauges stocks a wide variety of needle valve configurations.

			
NVS "SUPER MINI"	NV-1/4	NV/NVL	NV-90 ANGLE
			
HV HEX BODY	BV BLOCK & BLEED VALVE	GV MULTI-PORT	PANEL MOUNT



NVS "SUPER MINI" NEEDLE VALVE

Strong and Durable, Super Compact Size Needle Valve
Pressures up to 6,000 psi

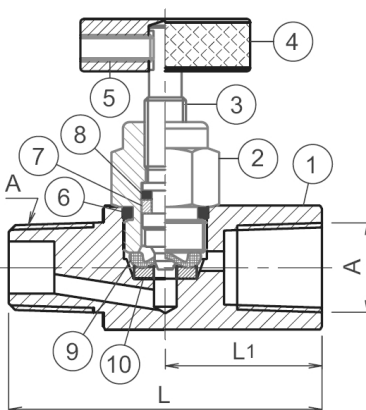
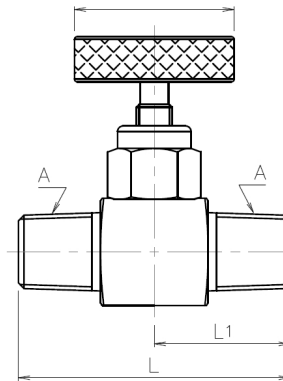
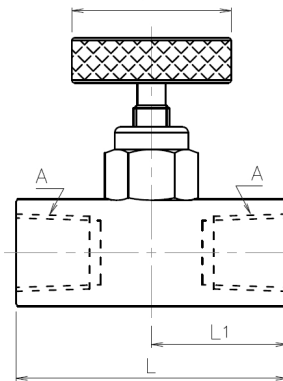
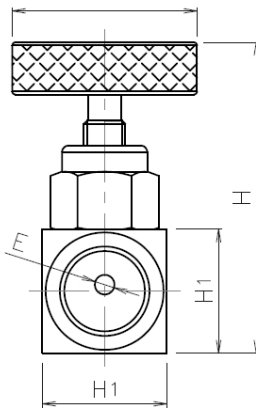
SPECIFICATIONS

Series Number	"NVS"
Material	Carbon steel or 316 stainless steel See chart below for component materials
Pressure Rating	Soft seat - 6000 psi at 200° F
Connection Size	1/4" NPT, male x female, female x female male x male
Handle	Round "thumb wheel"
Seat Material	Soft Seat - POM
Box Quantity	80 pieces
Est. Unit Weight	0.30 lb/0.16 kg



Part Number	Unit	A	L	L1	H	H1	E	Thumb Wheel
NVS-CS-1/4GS-180-MXF	In.	1/4"	1.85"	0.93"	1.97"	0.75"	0.13"	1.02"
NVS-SS-1/4GS-180-MXF	mm	NPT	47	23.5	50	19	3.3	26
NVS-CS-1/4GS-180-FXF	In.	1/4"	1.85"	0.93"	1.97"	0.75"	0.13"	1.02"
NVS-SS-1/4GS-180-FXF	mm	NPT	47	23.5	50	19	3.3	26
NVS-CS-1/4-GS-180-MXM	In.	1/4"	1.85"	0.93"	1.97"	0.75"	0.13"	1.02"
	mm	NPT	47	23.5	50	19	3.3	26

All dimensions shown in the catalog are approximate and subject to change.



Number	Description	316 Valve	Carbon Steel Valve
1	Body	316 SS	C.S.
2	Bonnet	316 SS	C.S.
3	Stem	316 SS	304 SS
4	Handle	303 SS	C.S.
5	Fixing Screw	302 SS	C.S.
6	O-Ring	Viton®	Viton®
7	O-Ring	Viton®	Viton®
8	Back-up Ring	PTFE	PTFE
9	Washer	316 SS	316 SS
10	Soft Seat	POM	POM

AVAILABLE OPTIONS*

- High Temperature
- T-handle
- Hard Seat
- Angle Valve (90°)
- Tube End Connection
- Alternate Connection Sizes

*Lead times/minimums may apply

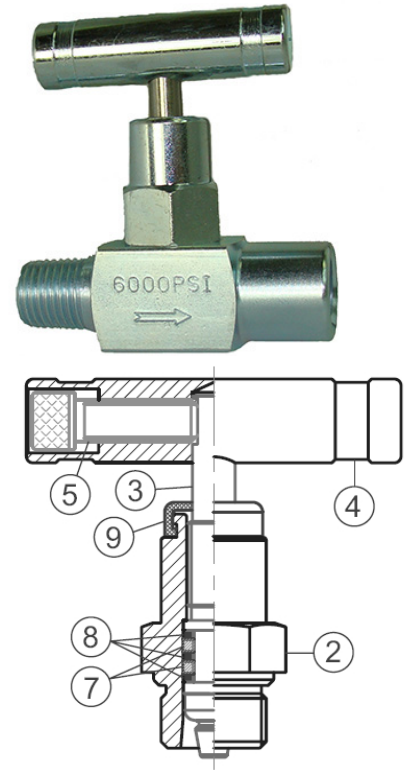
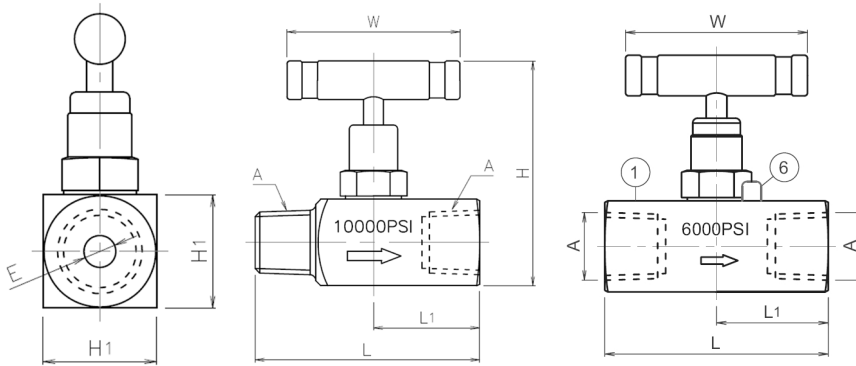
NV-1/4 MINI NEEDLE VALVE



Strong and Durable, Compact Size Needle Valve
Pressures up to 6,000 psi soft seat, 10,000 psi hard seat

SPECIFICATIONS

Series Number	"NV"
Material	Carbon steel or 316 stainless steel See chart below for component materials
Pressure Rating	Soft seat - 6000 psi at 200° F Hard seat - 10,000 psi at 200° F
Connection Size	1/4" NPT, male x female, female x female male x male
Handle	Tee
Seat Material	Soft Seat - POM Hard Seat - Integrated
Box Quantity	60 pieces
Est. Unit Weight	0.40 lb/0.20 kg



Part Number	Unit	A	L	L1	H	H1	E	W
NV-SS-1/4-GS-180-MXF	In.	1/4" NPT	2.28"	1.14"	2.48"	0.75"	0.17"	1.81"
NV-SS-1/4-GS-180-FXF								
NV-SS-1/4-HS-180-MXF								
NV-SS-1/4-HS-180-FXF	mm		58	29	63	19	4.2	46
NV-CS-1/4-GS-180-MXF								
NV-CS-1/4-GS-180-MXM								
NV-CS-1/4-GS-180-FXF								
NV-CS-1/4-HS-180-MXF								
NV-CS-1/4-HS-180-FXF								

Number	Description	316 Valve	Carbon Steel Valve
1	Body	316 SS	C.S.
2	Bonnet	316 SS	C.S.
3	Stem	316 SS	304 SS
4	Handle	303 SS	C.S.
5	Fixing Screw	302 SS	C.S.
6	Lock Pin	303 SS	C.S.
7	O-Ring	Viton®	Viton®
8	Back-up Ring	PTFE	PTFE
9	Dust Cap	NBR	NBR

All dimensions shown in the catalog are approximate and subject to change.

AVAILABLE OPTIONS*

- High Temperature
- Thumb Wheel Handle
- Panel Mount
- Bleed Screw
- Tube End Connection
- Alternate Connection Sizes

*Lead times/minimums may apply

NV-90 ANGLE NEEDLE VALVE

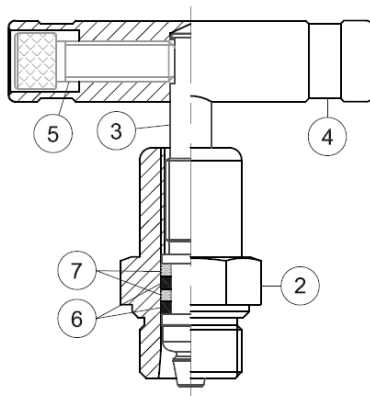
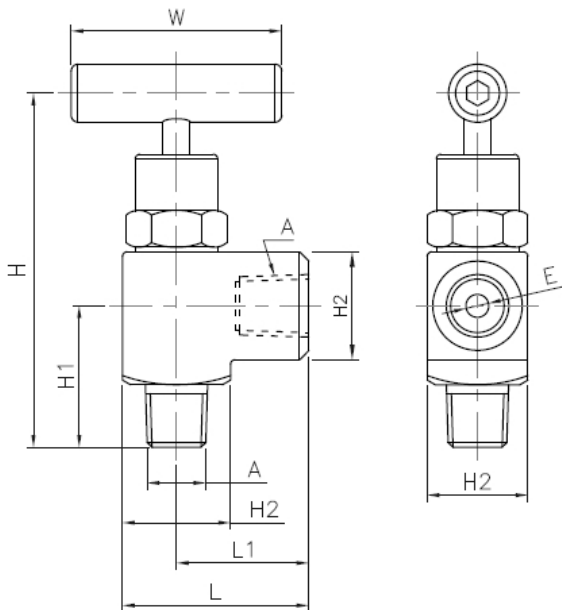
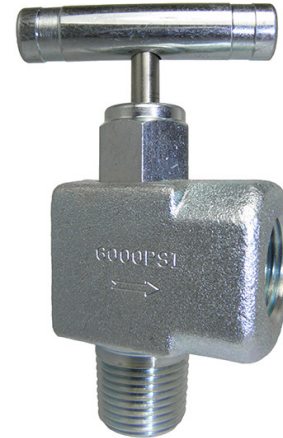


Strong and Durable, Angle Needle Valve

Pressures up to 6,000 psi soft seat, 10,000 psi hard seat

SPECIFICATIONS

Series Number	"NV-90"
Material	Carbon steel or 316 stainless steel See chart below for component materials
Pressure Rating	Soft seat - 6000 psi at 200° F Hard seat - 10,000 psi at 200° F
Connection Size	1/4" or 1/2" NPT male x female, female x female
Handle	Tee
Seat Material	Soft Seat - POM; Hard Seat - Integrated
Box Quantity	1/4": 50 pieces 1/2": 15 pieces
Est. Unit Weight	1/4": 0.55 lb/0.26 kg 1/2": 1.05 lb/0.46 kg



Part Number	Unit	A	L	L1	H	H1
NV-CS-1/4-GS-90-FXF NV-CS-1/4-GS-90-MXF NV-SS-1/4-GS-90-MXF NV-CS-1/4-HS-90-FXF NV-CS-1/4-HS-90-MXF NV-SS-1/4-HS-90-MXF	In. mm	1/4" NPT	1.60" 40.7	1.10" 28	3.46" 88	1.26" 32
NV-CS-1/2-GS-90-FXF NV-CS-1/2-GS-90-MXF NV-CS-1/2-HS-90-FXF NV-CS-1/2-HS-90-MXF NV-SS-1/2-HS-90-MXF	In. mm	1/2" NPT	1.81" 46	1.54" 39	4.09" 104	1.54" 39

Part Number (Cont'd)	Unit	A	H2	E	W
NV-CS-1/4-GS-90-FXF NV-CS-1/4-GS-90-MXF NV-SS-1/4-GS-90-MXF NV-CS-1/4-HS-90-FXF NV-CS-1/4-HS-90-MXF NV-SS-1/4-HS-90-MXF	In. mm	1/4" NPT	0.87" 22	0.13" 3.3	1.81" 46
NV-CS-1/2-GS-90-FXF NV-CS-1/2-GS-90-MXF NV-CS-1/2-HS-90-FXF NV-CS-1/2-HS-90-MXF NV-SS-1/2-HS-90-MXF	In. mm	1/2" NPT	0.79" 32	1.26" 32	2.24" 57

Number	Description	316 Valve	Carbon Steel Valve
1	Body	316 SS	C.S.
2	Bonnet	316 SS	C.S.
3	Stem	316 SS	304 SS
4	Handle	303 SS	C.S.
5	Fixing Screw	302 SS	C.S.
6	O-Ring	Viton®	Viton®
7	Back-Up Ring	PTFE	PTFE

All dimensions shown in the catalog are approximate and subject to change.

AVAILABLE OPTIONS*

- High Temperature
- Panel Mount
- Bleed Screw
- Tube End Connection
- Alternate Connection Sizes

*Lead times/minimums may apply

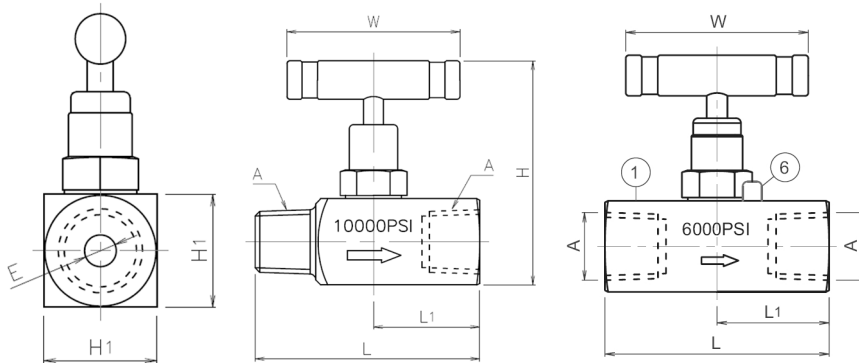
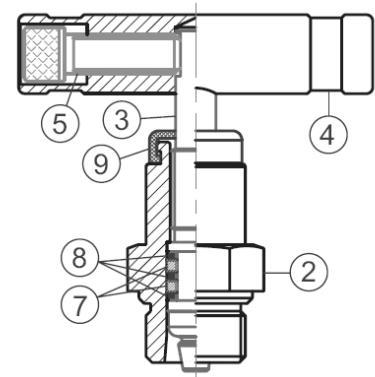
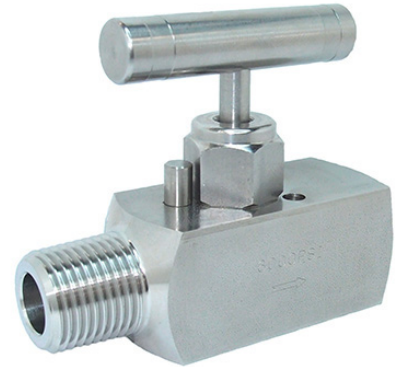


NV/NVL FULL SIZE NEEDLE VALVE

Strong and Durable, Full Size Needle Valve
Pressures up to 6,000 psi soft seat, 10,000 psi hard seat

SPECIFICATIONS

Series Number	"NV" or "NVL" (1/4")
Material	Carbon steel or 316 stainless steel See chart below for component materials
Pressure Rating	Soft seat - 6000 psi at 200° F Hard seat - 10,000 psi at 200° F
Connection Size	NV - 1/2" NPT, 3/8" NPT (316 SS only) NVL - 1/4" NPT For 3/4" or 1" sizes, see HV series page 128-129 male x female, female x female
Handle	Tee
Seat Material	Soft Seat - POM
Box Quantity	15 pieces
Est. Unit Weight	1.20 lb/0.54 kg



Number	Description	316 Valve	Carbon Steel Valve
1	Body	316 SS	C.S.
2	Bonnet	316 SS	C.S.
3	Stem	316 SS	304 SS
4	Handle	303 SS	C.S.
5	Fixing Screw	302 SS	C.S.
6	Lock Pin	303 SS	C.S.
7	O-Ring	Viton®	Viton®
8	Back-up Ring	PTFE	PTFE
9	Dust Cap	NBR	NBR

AVAILABLE OPTIONS*

- High Temperature
- Panel Mount
- Bleed Screw
- Tube End Connection
- Alternate Connection Sizes
- See HV for Additional Configurations, p. 124-125

Soft Seat Part Number	Unit	A	L	L1	H	H1	E	W
NVL-SS-1/4-GS-180-MXF	In.	1/4",	3.23"	1.38"	3.03"	1.14"	0.18"	2.24"
NVL-CS-1/4-GS-180-MXF		3/8", 1/2"						
NV-SS-3/8-GS-180-MXF	mm	NPT	82	35	77	29	4.5	57
NV-SS-1/2-GS-180-MXF								
NV-CS-1/2-GS-180-MXF								
NVL-CS-1/4-GS-180-FXF	In.	1/4",	2.95"	1.38"	3.03"	1.14"	0.18"	2.24"
NV-SS-3/8-GS-180-FXF		3/8", 1/2"						
NV-SS-1/2-GS-180-FXF	mm	NPT	75	35	77	29	4.5	57
NV-CS-1/2-GS-180-FXF								
Hard Seat Part Number	Unit	A	L	L1	H	H1	E	W
NVL-SS-1/4-HS-180-MXF	In.	1/4",	3.23"	1.38"	3.03"	1.14"	0.24"	2.24"
NVL-CS-1/4-HS-180-MXF		3/8", 1/2"						
NV-SS-3/8-HS-180-MXF	mm	NPT	82	35	77	29	6	57
NV-SS-1/2-HS-180-MXF								
NV-SS-3/8-HS-180-FXF	In.	3/8", 1/2"	2.95"	1.48"	3.03"	1.14"	0.24"	2.24"
NV-CS-1/2-HS-180-FXF	mm	NPT	75	37.5	77	29	6	57
NV-SS-1/2-HS-180-FXF								

All dimensions shown in the catalog are approximate and subject to change.

*Lead times/minimums may apply

A Division of Engineered Specialty Products, Inc.

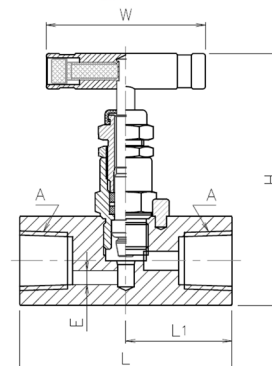
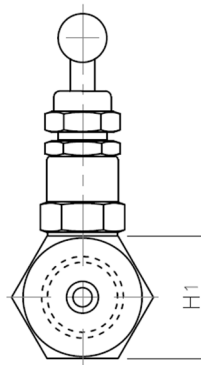
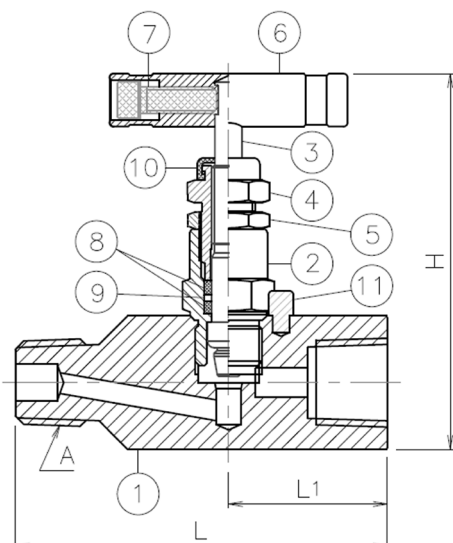
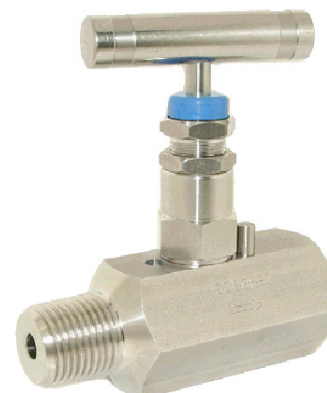
HV HEX BODY - HARD SEAT NEEDLE VALVE



Strong and durable, instrument grade hex body needle valve with hard seat
Pressures up to 10,000 psi hard seat

SPECIFICATIONS

Series Number	"HV"
Material	Carbon steel or 316 stainless steel body
Pressure Rating	Hard seat - 10,000 psi at 200° F
Connection Size	1/4", 1/2", 3/4" or 1" NPT male x female, female x female
Handle	Tee
Box Quantity	Standard: 15 pieces; 1": 10 pieces
Est. Unit Weight	Standard: 1.25 lb/0.58 kg; 1": 1.75 lb/0.80 kg
Working Temp.	-65° F to 842° F



Number	Description	316SS Valve	Carbon Steel Valve
1	Body	S316	C.S.
2	Bonnet	S316	C.S.
3	Stem	S316	S304
4	Adjuster	S316	C.S.
5	Lock Nut	S316	C.S.
6	Handle	S303	C.S.
7	Fixing Screw	S302	C.S.
8	Stem Seal	PTFE	PTFE
9	Stem Seal	Viton®	Viton®
10	Dust Cap	NBR	NBR
11	Locking Pin	S303	S303

All dimensions shown in the catalog are approximate and subject to change.

Hard Seat Part Number	Unit	L	L1	H	H1	E	W
HV-(X)S-1/4-HS-180-MXF 1/4" NPT	In.	3.2"	1.4"	3.9"	1.3"	0.2"	2.2"
HV-(X)S-1/2-HS-180-MXF 1/2" NPT	In.	3.2"	1.4"	3.9"	1.3"	0.2"	2.2"
HV-(X)S-3/4-HS-180-MXF 3/4" NPT	mm	82	35	98	32	4.8	57
HV-(X)S-1/4-HS-180-FXF 1/4" NPT	In.	3.0"	1.5"	3.9"	1.3"	0.2"	2.2"
HV-(X)S-1/2-HS-180-FXF 1/2" NPT	In.	3.0"	1.5"	3.9"	1.3"	0.2"	2.2"
HV-(X)S-3/4-HS-180-FXF 3/4" NPT	mm	75	37.5	98	32	4.8	57
HV-(X)S-1-HS-180-MXF 1" NPT	In.	3.7"	1.6"	4.4"	1.6"	0.3"	2.2"
HV-(X)S-1-HS-180-MXF 1" NPT	mm	95	41.5	112	41	7	57
HV-(X)S-1-HS-180-FXF 1" NPT	In.	3.1"	1.6"	4.4"	1.6"	0.3"	2.2"
HV-(X)S-1-HS-180-FXF 1" NPT	mm	80	40	112	41	7	57

(X)= C or S
C = Carbon Steel
S = 316 Stainless Steel

AVAILABLE OPTIONS*

- High Temperature
- NACE
- Tube End Connection
- Alternate Connection Sizes

*Lead times/minimums may apply

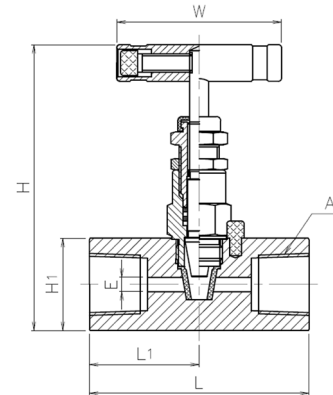
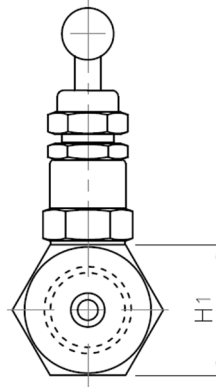
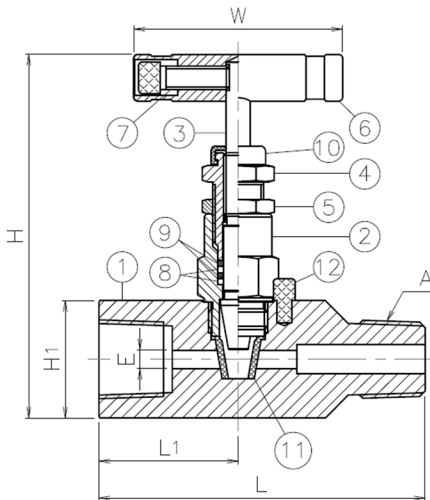
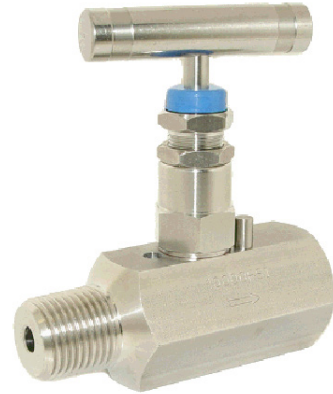


HV HEX BODY - SOFT SEAT NEEDLE VALVE

Strong and durable, instrument grade hex body needle valve with soft seat
Pressures up to 6,000 psi soft seat

SPECIFICATIONS

Series Number	"HV"
Material	Carbon steel or 316 stainless steel body
Pressure Rating	Soft seat - 6000 psi at 200° F
Connection Size	1/4", 1/2", 3/4" or 1" NPT male x female, female x female
Handle	Tee
Seat Material	Soft Seat - POM
Box Quantity	Standard: 15 pieces; 1": 10 pieces
Est. Unit Weight	Standard: 1.25 lb/0.58 kg; 1": 1.75 lb/0.80 kg
Working Temp.	-65° F to 464° F



Number	Description	316SS Valve	Carbon Steel Valve
1	Body	S316	C.S.
2	Bonnet	S316	C.S.
3	Stem	S316	S304
4	Adjuster	S316	C.S.
5	Lock Nut	S316	C.S.
6	Handle	S303	C.S.
7	Fixing Screw	S302	C.S.
8	Stem Seal	PTFE	PTFE
9	Stem Seal	Viton®	Viton®
10	Dust Cap	NBR	NBR
11	Soft Seat	POM	POM
12	Locking Pin	S303	S303

Soft Seat Part Numbers		Unit	L	L1	H	H1	E	W
HV-(X)S-1/4-GS-180-MXF	1/4" NPT	In.	3.2"	1.4"	3.9"	1.3"	0.2"	2.2"
HV-(X)S-1/2-GS-180-MXF	1/2" NPT	mm	82	35	98	32	6	57
HV-(X)S-3/4-GS-180-MXF	3/4" NPT							
HV-(X)S-1/4-GS-180-FXF	1/4" NPT	In.	3.0"	1.5"	3.9"	1.3"	0.2"	2.2"
HV-(X)S-1/2-GS-180-FXF	1/2" NPT	mm	75	37.5	98	32	6	57
HV-(X)S-3/4-GS-180-FXF	3/4" NPT							
HV-(X)S-1-GS-180-MXF	1" NPT	In.	3.7"	1.6"	4.4"	1.6"	0.3"	2.2"
		mm	95	41.5	112	41	7	57
HV-(X)S-1-GS-180-FXF	1" NPT	In.	3.1"	1.6"	4.4"	1.6"	0.3"	2.2"
		mm	80	40	112	41	7	57

(X)= C or S
 C = Carbon Steel
 S = 316 Stainless Steel

All dimensions shown in the catalog are approximate and subject to change.

AVAILABLE OPTIONS*

- High Temperature
- NACE
- Tube End Connection
- Alternate Connection Sizes

*Lead times/minimums may apply

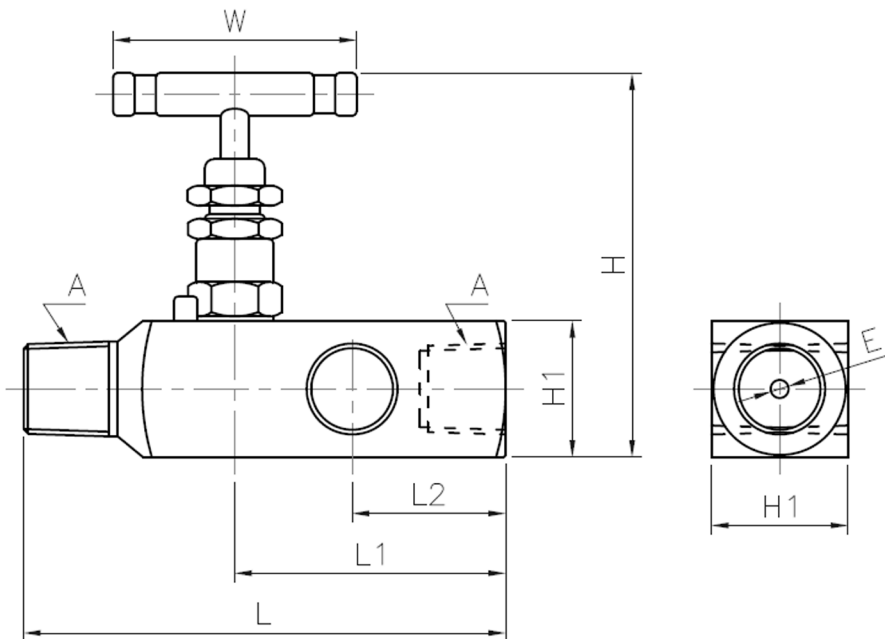
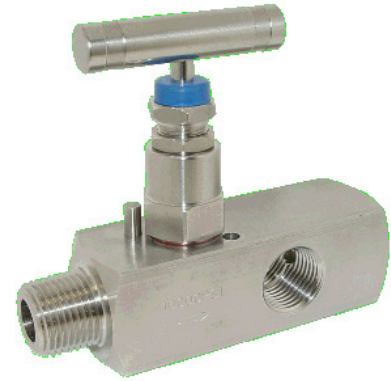
GV MULTI-PORT GAUGE VALVE



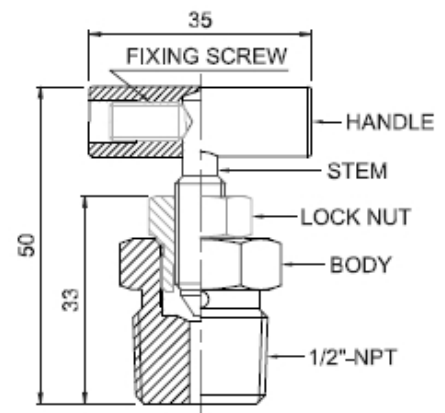
Strong and durable, instrument grade multi-port gauge valve
Pressures up to 6,000 psi soft seat, 10,000 psi hard seat

SPECIFICATIONS

Series Number	"GV"
Material	316 Stainless steel body
Pressure Rating	6000 psi soft seat 10,000 psi hard seat
Connection Size	1/2" NPT male inlet x (3) 1/2" NPT female outlet 3/4" NPT male inlet x (3) 1/2" NPT female outlet
Handle	Tee
Seat Material	Soft Seat - POM Hard Seat - Integrated
Box Quantity	12
Est. Unit Weight	1.80 lb/0.80 kg



OPTIONAL BLEED VALVE ACCESSORY



P/N: BLEED VALVE

Part Number	Unit	A	L	L1	L2	H	H1	E	W
GV-SS-1/2-HS-3W-MXF	In.	1/2"	4.45"	2.50"	1.42"	3.86"	1.26"	0.24"	2.24"
GV-SS-3/4-HS-3W-MXF	mm	or 3/4"	113	63.5	36	98	32	6	57
GV-SS-1/2-GS-3W-MXF	In.	1/2"	4.45"	2.50"	1.42"	3.86"	1.26"	0.19"	2.24"
GV-SS-3/4-GS-3W-MXF	mm	or 3/4"	113	63.5	36	98	32	4.8	57

All dimensions shown in the catalog are approximate and subject to change.

AVAILABLE OPTIONS*

- High Temperature
- Bleed Valve
- Hex Plug
- Tube End Connection
- Alternate Connection Sizes
- Carbon Steel Material

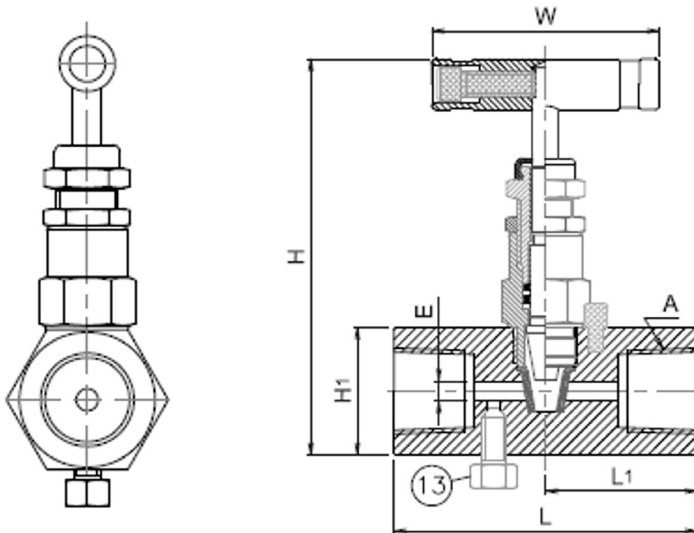
*Lead times/minimums may apply

BV BLOCK & BLEED VALVE

Strong and durable, instrument grade hex body needle valve with bleed screw
Pressures up to 6,000 psi soft seat, 10,000 psi hard seat

SPECIFICATIONS

Series Number	"BV"
Material	316 Stainless steel body
Pressure Rating	6000 psi soft seat 10,000 psi hard seat
Connection Size	1/4" NPT or 1/2" NPT male x female
Handle	Tee
Seat Material	Soft Seat - POM Hard Seat - Integrated
Box Quantity	15
Est. Unit Weight	1.25 lb/0.56 kg

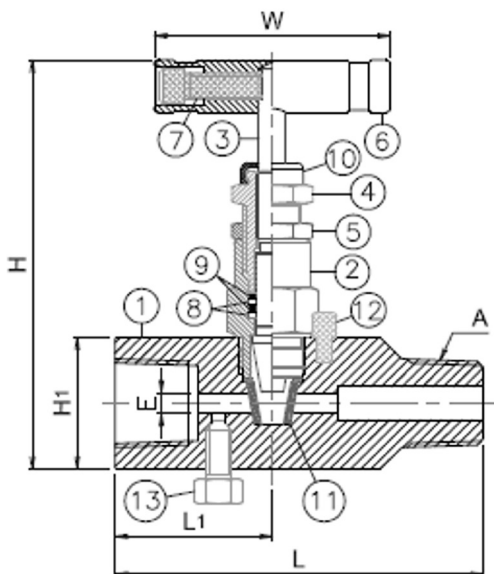


Part Number	Unit	A	L	L1	H
BV-SS-1/2-HS-180-MXF	In.	1/4"	3.23"	1.38"	1.50"
BV-SS-1/4-HS-180-MXF					
BV-SS-1/2-GS-180-MXF	mm	or 1/2"	82	35	98
BV-SS-1/4-GS-180-MXF					

Part Number (Cont'd)	Unit	H1	E	W
BV-SS-1/2-HS-180-MXF	In.	1.26"	0.18"	2.24"
BV-SS-1/4-HS-180-MXF				
BV-SS-1/2-GS-180-MXF	mm	32	4.8	57
BV-SS-1/4-GS-180-MXF				

Part Number	Unit	A	L	L1	H
BV-SS-1/2-HS-180-FXF	In.	1/4"	2.95"	1.47"	1.50"
BV-SS-1/4-HS-180-FXF					
	mm	or 1/2"	75	37.5	98

Part Number (Cont'd)	Unit	H1	E	W
BV-SS-1/2-HS-180-FXF	In.	1.26"	0.18"	2.24"
BV-SS-1/4-HS-180-FXF				
	mm	32	4.8	57



Number	Description	316SS Valve
1	Body	S316
2	Bonnet	S316
3	Stem	S316
4	Adjuster	S316
5	Lock Nut	S316
6	Handle	S303
7	Fixing Screw	S302
8	Stem Seal	PTFE
9	Stem Seal	Viton®
10	Dust Cap	NBR
11	Soft Seat	POM
12	Locking Pin	S303
13	Bleeding Screw	S316

All dimensions shown in the catalog are approximate and subject to change.

AVAILABLE OPTIONS*

- High Temperature
- Tube End Connection
- Alternate Connection Sizes
- Carbon Steel Material
- Female x Female Connection

*Lead times/minimums may apply