

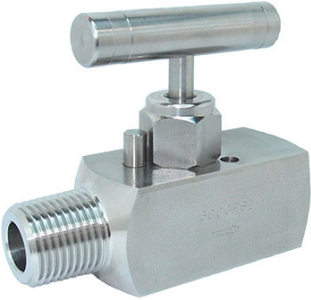

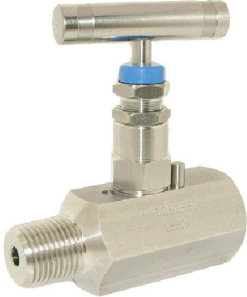
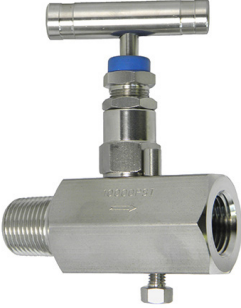
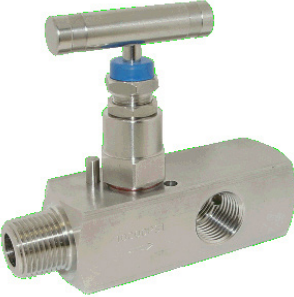



# NEEDLE VALVES

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.

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



# NVS "SUPER MINI" NEEDLE VALVE

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

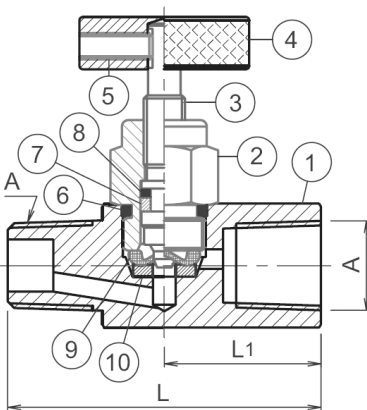
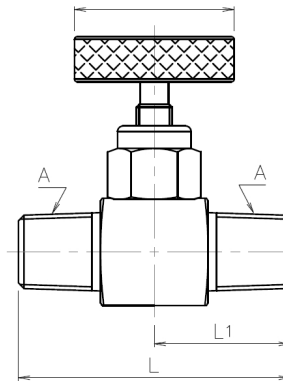
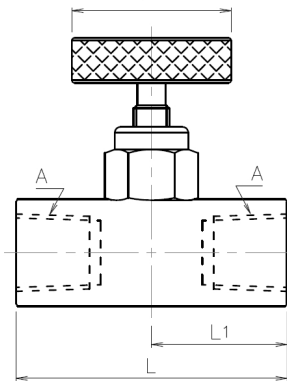
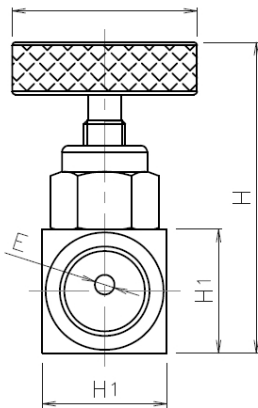
## SPECIFICATIONS

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



Part Number	Unit	A	L	L1	H	H1	E	Thumb Wheel
NVS-CS-1/4GS-180-MXF NVS-SS-1/4GS-180-MXF	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
NVS-CS-1/4GS-180-FXF NVS-SS-1/4GS-180-FXF	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
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

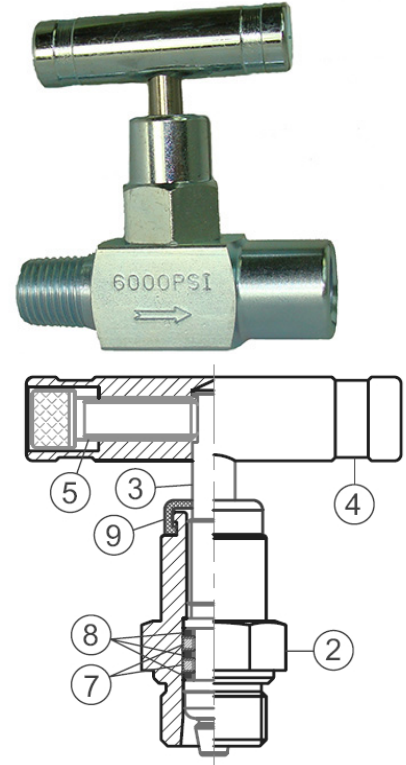
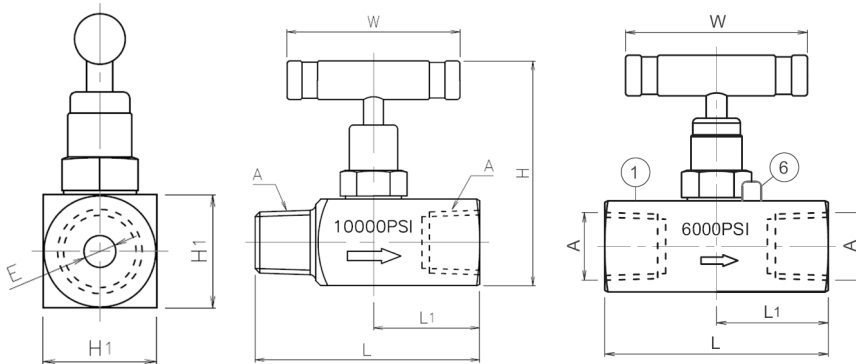
# NV-1/4 MINI NEEDLE VALVE



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

## SPECIFICATIONS

<b>Series Number</b>	"NV"
<b>Material</b>	Carbon steel or 316 stainless steel See chart below for component materials
<b>Pressure Rating</b>	Soft seat - 6000 psi at 200° F Hard seat - 10,000 psi at 200° F
<b>Connection Size</b>	1/4" NPT, male x female, female x female male x male
<b>Handle</b>	Tee
<b>Seat Material</b>	Soft Seat - POM Hard Seat - Integrated
<b>Box Quantity</b>	60 pieces
<b>Est. Unit Weight</b>	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	19.05	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

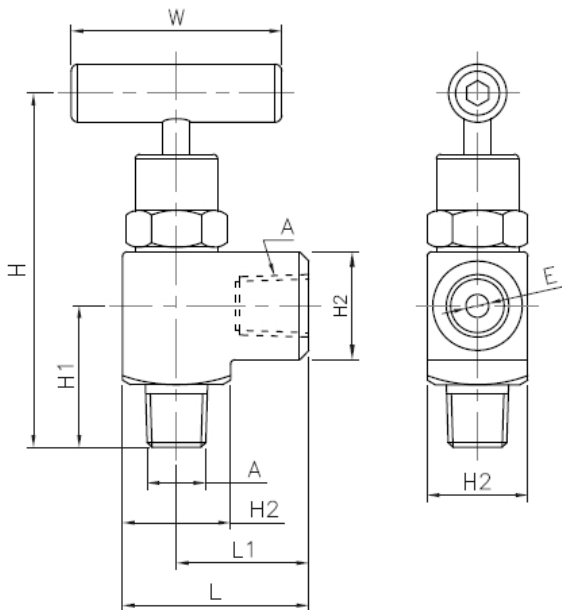
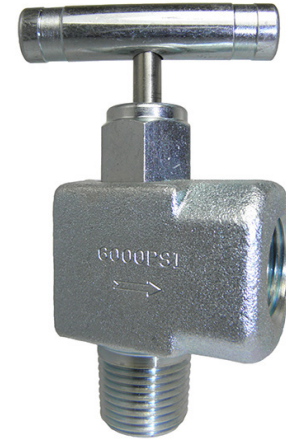
# NV-90 ANGLE NEEDLE VALVE



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

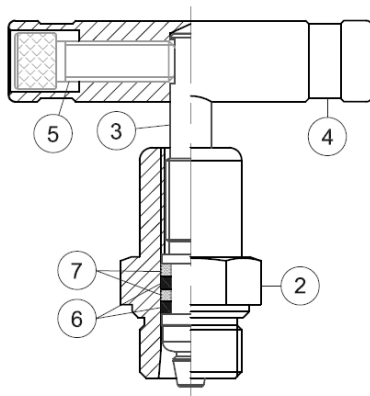
## SPECIFICATIONS

<b>Series Number</b>	"NV-90"
<b>Material</b>	Carbon steel or 316 stainless steel See chart below for component materials
<b>Pressure Rating</b>	Soft seat - 6000 psi at 200° F Hard seat - 10,000 psi at 200° F
<b>Connection Size</b>	1/4" or 1/2" NPT male x female, female x female
<b>Handle</b>	Tee
<b>Seat Material</b>	Soft Seat - POM; Hard Seat - Integrated
<b>Box Quantity</b>	1/4": 50 pieces 1/2": 15 pieces
<b>Est. Unit Weight</b>	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	In.	1/4" NPT	1.60"	1.10"	3.46"	1.26"
NV-CS-1/4-GS-90-MXF	mm		40.7	28	88	32
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						
NV-CS-1/2-GS-90-FXF	In.	1/2" NPT	1.81"	1.54"	4.09"	1.54"
NV-CS-1/2-GS-90-MXF	mm		46	39	104	39
NV-SS-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						

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



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

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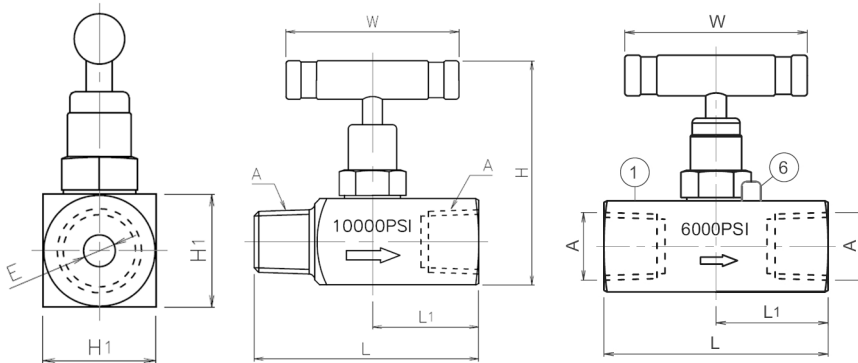
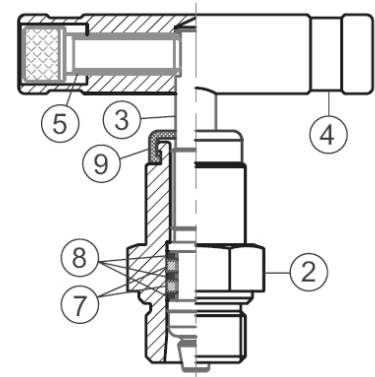
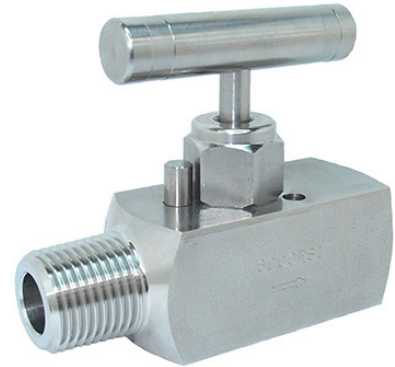


# NV/NVL FULL SIZE NEEDLE VALVE

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

## SPECIFICATIONS

<b>Series Number</b>	“NV” or “NVL” (1/4”)
<b>Material</b>	Carbon steel or 316 stainless steel See chart below for component materials
<b>Pressure Rating</b>	Soft seat - 6000 psi at 200° F Hard seat - 10,000 psi at 200° F
<b>Connection Size</b>	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
<b>Handle</b>	Tee
<b>Seat Material</b>	Soft Seat - POM
<b>Box Quantity</b>	15 pieces
<b>Est. Unit Weight</b>	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

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	3/8", 1/2"	82	35	77	29	4.5	57
NV-SS-1/2-GS-180-MXF		NPT						
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	3/8", 1/2"	75	35	77	29	4.5	57
NV-CS-1/2-GS-180-FXF		NPT						
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	3/8", 1/2"	82	35	77	29	6	57
NV-CS-1/2-HS-180-MXF		NPT						
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		3/8", 1/2"						
NV-SS-1/2-HS-180-FXF	mm	3/8", 1/2"	75	37.5	77	29	6	57
NV-SS-1/2-HS-180-FXF		NPT						

## AVAILABLE OPTIONS\*

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

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

\*Lead times/minimums may apply

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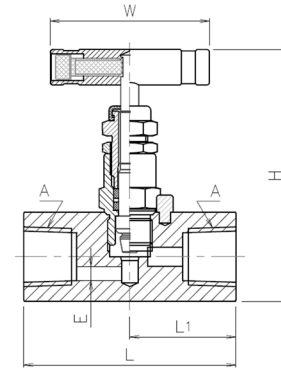
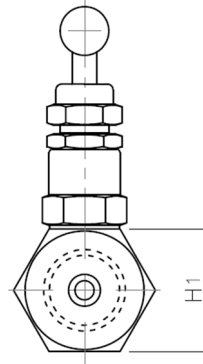
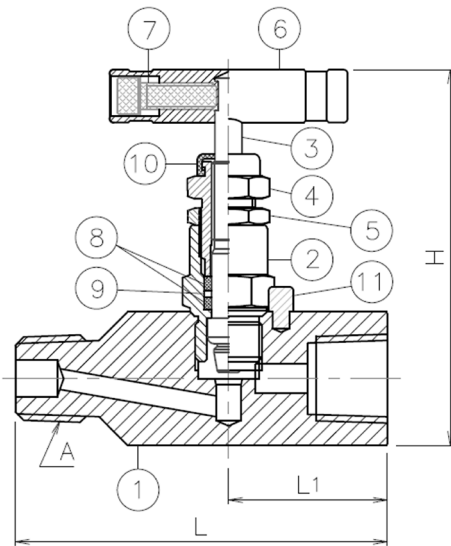
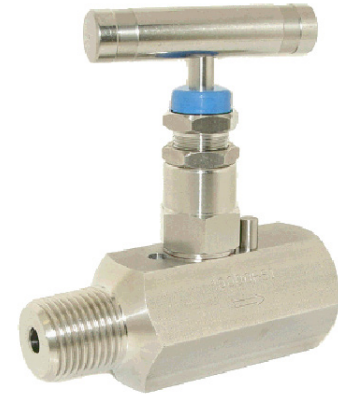
# HV HEX BODY - HARD SEAT NEEDLE VALVE



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

## SPECIFICATIONS

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

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	In.	3.2"	1.4"	3.9"	1.3"	0.2"	2.2"
	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	In.	3.0"	1.5"	3.9"	1.3"	0.2"	2.2"
	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"
	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"
	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

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

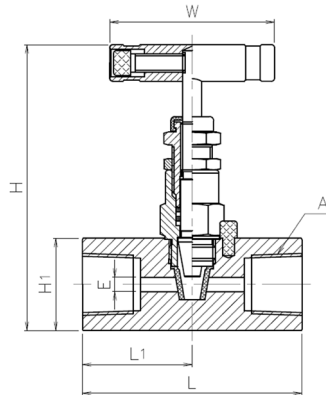
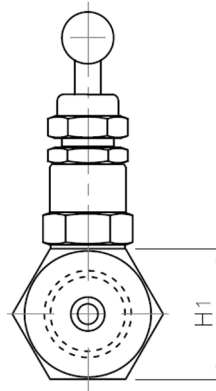
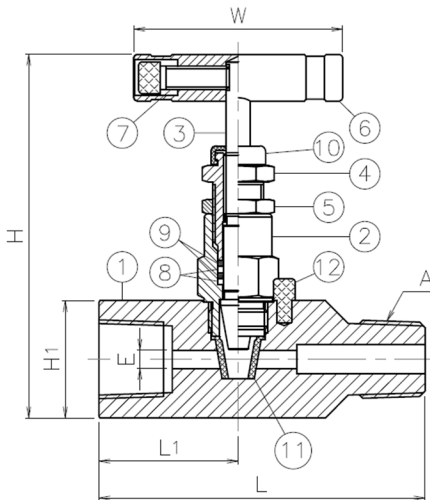
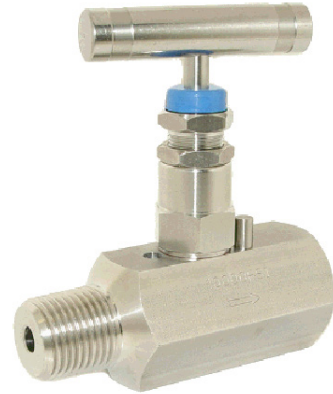


# HV HEX BODY - SOFT SEAT NEEDLE VALVE

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

## SPECIFICATIONS

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



7

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

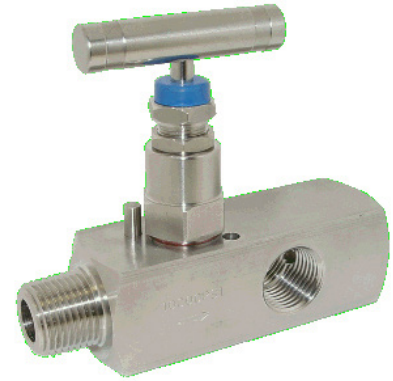
# GV MULTI-PORT GAUGE VALVE



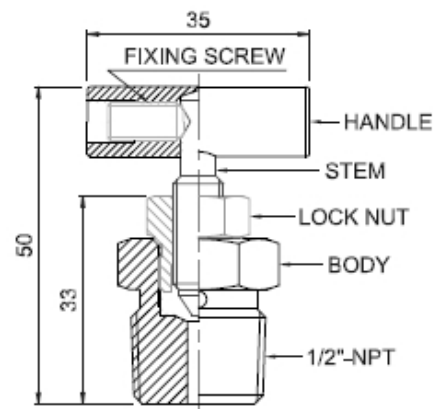
**Strong and durable, instrument grade multi-port gauge valve**  
**Pressures up to 6,000 psi soft seat, 10,000 psi hard seat**

## SPECIFICATIONS

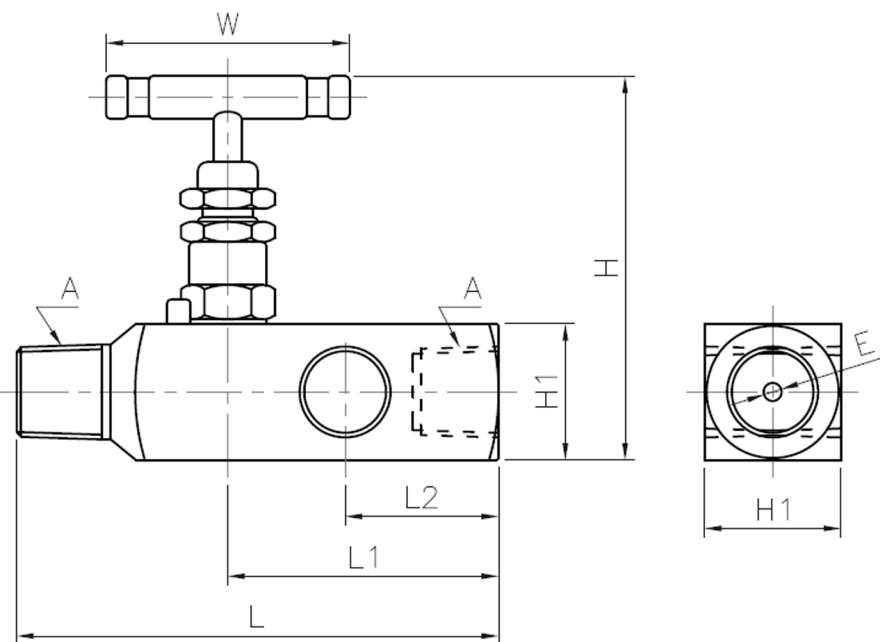
<b>Series Number</b>	"GV"
<b>Material</b>	316 Stainless steel body
<b>Pressure Rating</b>	6000 psi soft seat 10,000 psi hard seat
<b>Connection Size</b>	1/2" NPT male inlet x (3) 1/2" NPT female outlet 3/4" NPT male inlet x (3) 1/2" NPT female outlet
<b>Handle</b>	Tee
<b>Seat Material</b>	Soft Seat -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

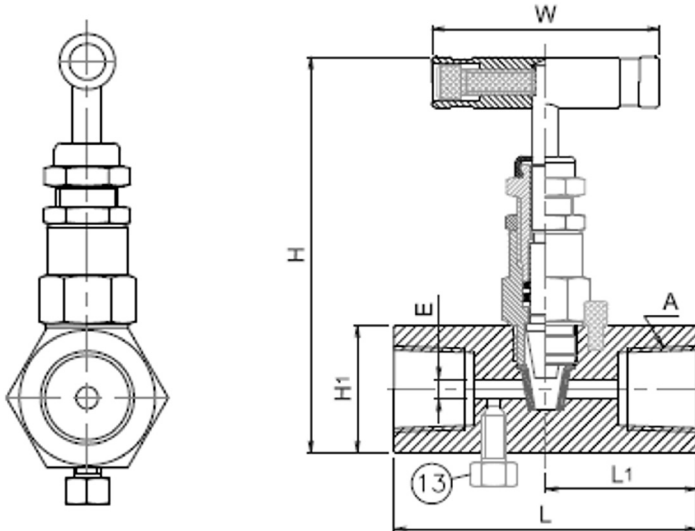


# BV BLOCK & BLEED VALVE

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

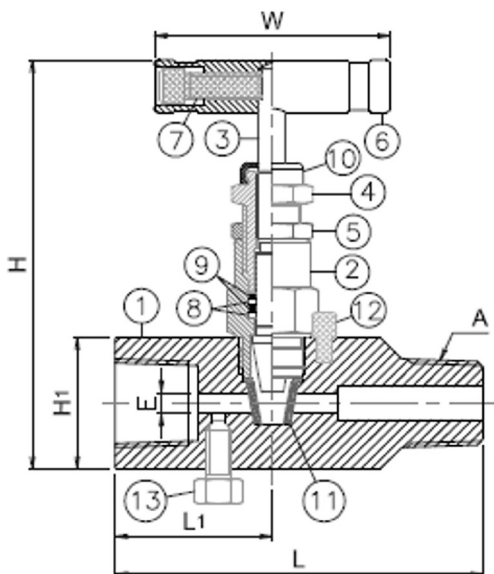
## SPECIFICATIONS

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



Part Number	Unit	A	L	L1	H
BV-SS-1/2-HS-180-MXF	In.	1/4" or 1/2"	3.23"	1.38"	1.50"
BV-SS-1/4-HS-180-MXF	mm				
BV-SS-1/2-GS-180-MXF	mm	82	35	98	
BV-SS-1/4-GS-180-MXF	mm				
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	mm	32	4.8	57	
BV-SS-1/2-GS-180-MXF	mm				
BV-SS-1/4-GS-180-MXF	mm				
Part Number	Unit	A	L	L1	H
BV-SS-1/2-HS-180-FXF	In.	1/4" or 1/2"	2.95"	1.47"	1.50"
BV-SS-1/4-HS-180-FXF	mm				
BV-SS-1/2-GS-180-FXF	mm	75	37.5	98	
BV-SS-1/4-GS-180-FXF	mm				
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	

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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