

DAWSONS-TECH[®]

OVER 35 YEARS OF EXPERIENCE

INSTRUMENTATION NEEDLE / GAUGE / BLOCK & BLEED / BLEED VALVES



***Most Cost Effective, World Class Quality
Flow Control Components for Wide Range
of Industries and Applications***

THE COMPANY

DAWSONS-TECH is an ISO 9001:2015 certified manufacturing company offers wide range of **Consistent and Reliable World Class Quality Flow Control Components** used in Fluid / Gas Control systems in a wide range of Industries.

MANUFACTURING :

DAWSONS-TECH established its comprehensive state of art manufacturing and testing facility installing various CNC Turning Centre and CNC Turnmill Centre, Vertical Machining Centre, etc. with the highly motivated and dedicated team of employees in place. This facilitate us to design and manufacture our product range under stringent quality checks and measurements that ensures **"A TOTAL CUSTOMER SATISFACTIONS WITH ZERO DEFECT PRODUCTS"**.

QUALITY :

DAWSONS-TECH persues not only performance of its products but also ensures **"TOTAL QUALITY CONTROL MANAGEMENT SYSTEMS IN ACCORDANCE TO ISO 9001:2015"** which is achieved by alerting and educating each and every employee, the importance of quality and by implementing the quality control procedures at every stage of production to final inspection from incoming raw material to finish products.

		
OUR CAPABILITIES	CERTIFICATIONS	DEMAND IN INDUSTRIES
<ul style="list-style-type: none"> • Over 35 Years of Experience • Excellent Technical Knowledge • Latest Design Equipment's & Software • Modern Manufacturing Facilities • Highly Motivated Team of Employees • Excellent Inspection Facilities • Product Performance Testing Facilities 	<ul style="list-style-type: none"> • ISO 9001-2015 • PED 2014/68/EU • ASTM F1387-19 • MSS SP-99-2016a • Helium Leak Test • Hydro Static Proof Test • Pneumatic Proof Test 	<ul style="list-style-type: none"> • Original Equipment Manufacturers • Chemical & Petrochemical • Oil & Gas • Power • Compressed Natural Gas (CNG) • Pharmaceutical • Semiconductor
	B E N E F I T S <ul style="list-style-type: none"> • High Quality • Proven Design for Leak Free Connections • Effective Operations 	<ul style="list-style-type: none"> • High Efficiency • Technical Expertise • Prompt Reply • Maximum Flexibility • Maximum Safety in Operation • Substantial Cost Saving

RESEARCH & DEVELOPMENT :

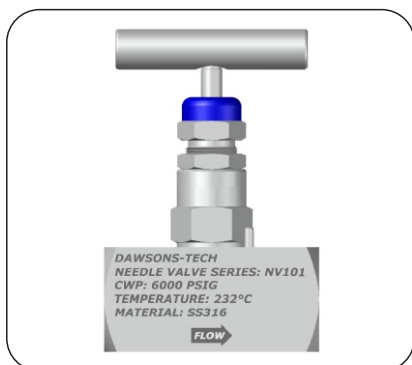
With our long experience, expertise and continues Research & Development with incorporation of advanced technology and high-tech cutting-edge machineries, **DAWSONS-TECH** is committed to constant upgradation and expand its product range to meet the requirements of its customer to their entire satisfaction at every time.

CUSTOMER SATISFACTION :

We strive to achieve total customer satisfaction and continuously work to set higher goals to provide the reliable quality, timely delivery of our products and prompt services in the best interest of our customers with very competitive price.

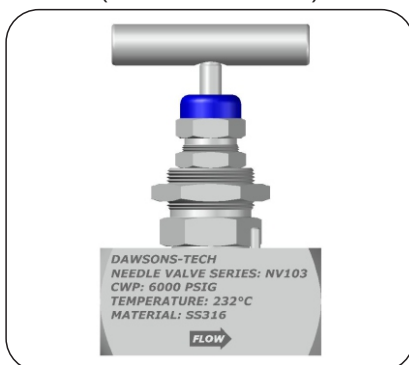
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Needle Valve
Series : NV101



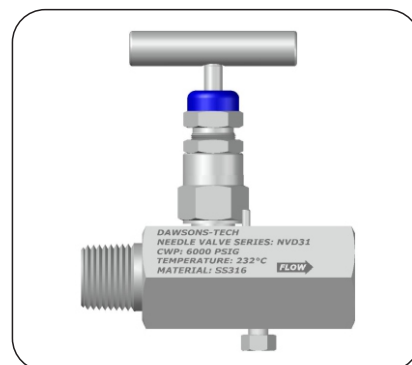
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Needle Valve Series : NV103
(Panel Mountable)



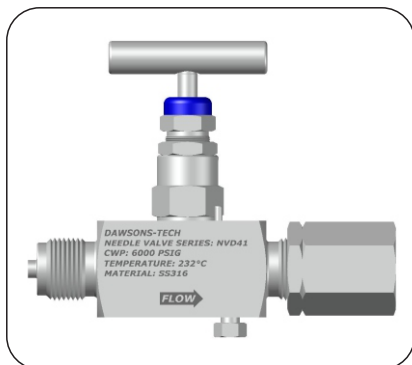
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Bleeder Screw Gauge Valve
Series : NVD31



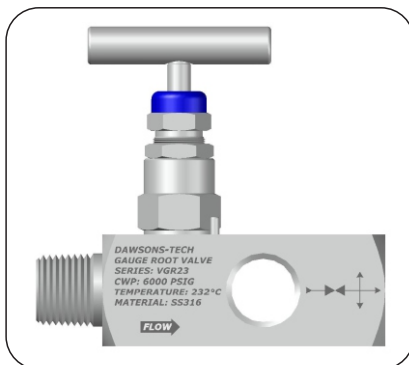
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Bleeder Screw Gauge Valve
Series : NVD41



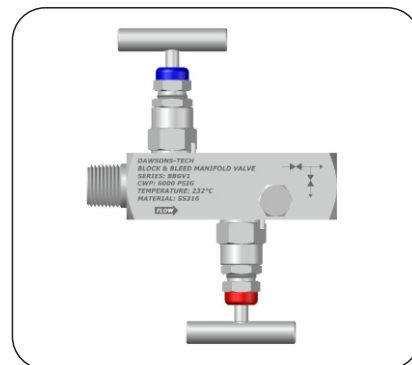
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Gauge / Root Valve
Series : VGR23



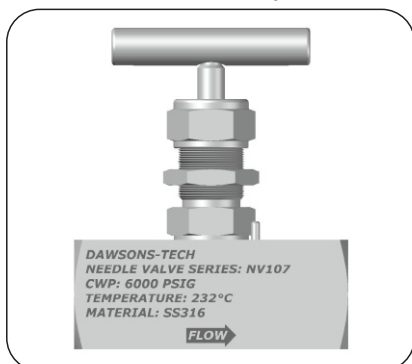
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Block & Bleed Gauge Valve
Series : BBGV1



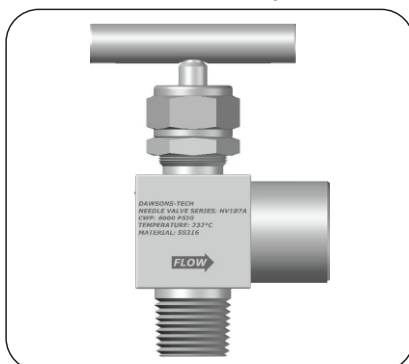
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Needle Valve Series : NV107
(With Live Load System)



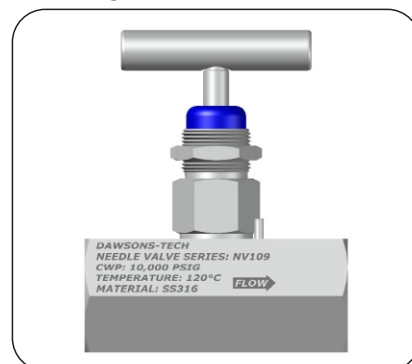
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Angle Needle Valve Series : NV107A
(With Live Load System)



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Needle Valve Series : NV109
(For High Pressure 10,000 PSIG)



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Bleed Valve Series : VBL03



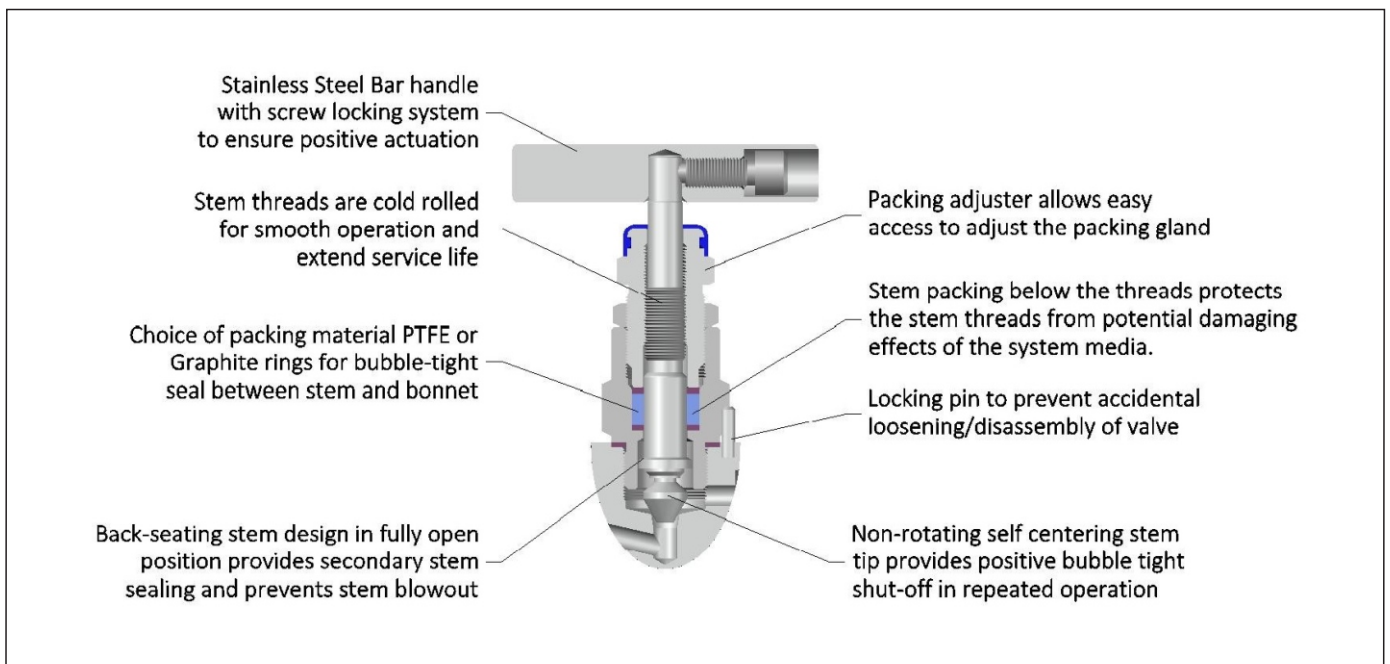
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General Information :

DAWSONS-TECH offers most Cost-Effective Needle Valves, Gauge Valves, Block and Bleed Gauge Valves and Bleed Valves which have been design very carefully and manufactured to close tolerances to provide leak free performance for mounting on Pressure Gauges, Pressure Transmitters, Pressure Switches, etc.

Features / Benefits :

- Compact and Rugged Design.
- Bar stock body in straight patterns.
- Low operating torque.
- Anti blow-out stem.
- Flow Coefficient (Cv) from 0.25 to 1.8.
- Orifice size : 4.3mm, 6.3mm and 9.5mm.
- Available in Material SS316, all wetted parts in accordance with NACE MR01-75.
- Available with Male, Female NPT, BSP, BSPT Pipe Thread, Socket Weld and Tube O.D. end connections.
- Every Valve is pressure tested.



Product Range & Operating Parameters :

- Pressure Rating : UPTO 6000 PSIG (413 Bar at CWP).
- Temperature Rating : -54° C to 232° C with PTFE Packing.
-96° C to 426° C with Graphite Packing.

Applications :

- General Plant Services
- Hydraulic & Pneumatic
- Instrumentation Isolations
- Pressure Measurement Devices
- Venting

General Information :

Stem Type : **DAWSONS-TECH** Valves are available with choice of optional stem to provide greater flexibility.

Non-Rotating (NR) : It is standard self-centering non-rotating stem tip typically used in high cycle application to extend the Valves life.

'V' Stem (VS) : It is used for general purpose liquid and gases.

Soft Seat (SF) : A soft seat stem requires a lower sealing torque.
It is replaceable and suitable for temperature UPTO 120°C.

Regulating Stem (RS) : It is used where some degree of flow control required.

Technical Data :

The temperature and pressure rating for a standard Valve with PTFE packing.

Temperature	Pressure	
	PSIG	Bar
-54°C to 38°C	6000	413
-54°C to 93°C	5160	351
-54°C to 148°C	4660	317
-54°C to 204°C	4280	291
-54°C to 232°C	4130	289

Type Test Approvals :

The design of **DAWSONS-TECH** Valves Series : NV101, NV103, NVD31, VGR23, BBGV1 & VBL03 have been tested for Hydrostatic Proof and Burst Test in accordance with MSS SP-99-2016a Clause 5.5 & 5.6.

Testing :

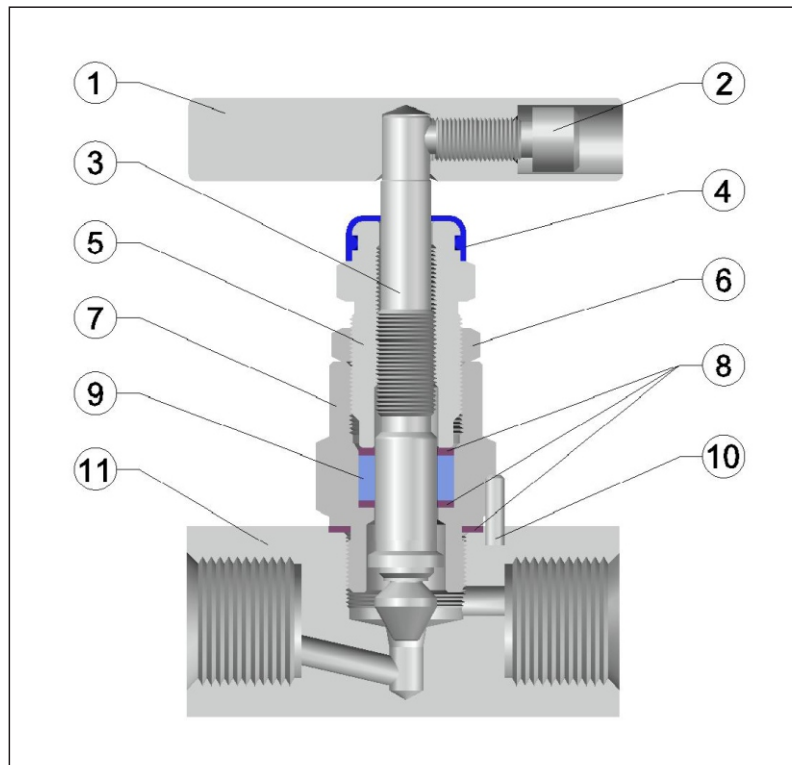
- Standard Test : Each Valve is pressure tested with Nitrogen at 2000 PSIG (138 Bar) for leakage at the seat and packing.
- Optional Hydrostatic Test : This test is performed with De-ionized water at 1.5 times the working pressure.

Certification :

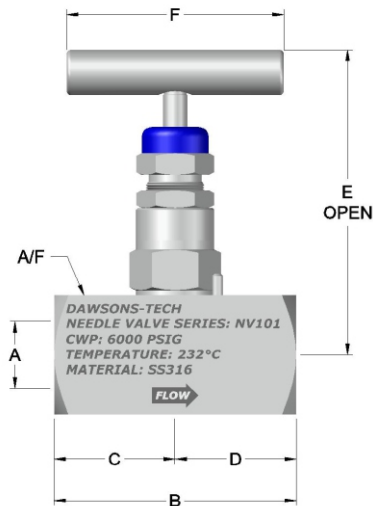
The certificate to 3.1 acc. to EN10204 for Valves Body Material and pressure test will be provided on request.

DAWSONS-TECH most cost effective Needle Valves Series : NV101 is having compact and rugged Bar Stock Square Body design and construction. This Valve is most suitable for a variety of applications including Instrumentation, Hydraulic and Pneumatic systems.

Material of Construction:



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Dust Cap	PVC
5	Packing Adjustment Screw	SS316
6	Lock Nut	SS316
7	Bonnet	SS316
8	Washer	SS316
9	Packing	PTFE / Graphite
10	Safety Pin	SS316
11	Valve Body	SS316



STANDARD CONFIGURATION DIMENSIONS

End Connection		Flow Data		Dimensions in mm						Dawsons-Tech Part No.
Type	Size - A	Orifice (mm)	Cv	B	C	D	E	F	A/F	
Tube OD to Tube OD (Fractional)	1/4"	4.3	0.37	72.8	36.4	36.4	79.0	54.0	25.40	NV101-TT4
	3/8"	4.3	0.37	72.8	36.4	36.4	79.0	54.0	25.40	NV101-TT6
	1/2"	6.3	0.73	80.0	40.0	40.0	80.0	58.0	28.57	NV101-TT8
	3/4"	9.5	1.80	85.4	42.7	42.7	84.0	63.0	31.75	NV101-TT12
Tube OD to Tube OD (Metric)	6mm	4.3	0.37	72.8	36.4	36.4	79.0	54.0	25.40	NV101-TT6M
	8mm	4.3	0.37	73.0	36.5	36.5	79.0	54.0	25.40	NV101-TT8M
	10mm	6.3	0.73	73.2	36.6	36.6	80.0	54.0	28.57	NV101-TT10M
	12mm	6.3	0.73	80.0	40.0	40.0	80.0	54.0	28.57	NV101-TT12M
Female to Female NPT	1/4"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	25.40	NV101-FF4N
	3/8"	4.3	0.37	60.0	30.0	30.0	80.0	54.0	28.57	NV101-FF6N
	1/2"	6.3	0.73	65.0	32.5	32.5	84.0	58.0	31.75	NV101-FF8N
	3/4"	9.5	1.80	70.0	35.0	35.0	87.0	63.0	34.92	NV101-FF12N
	1"	9.5	1.80	80.0	40.0	40.0	98.0	68.0	44.40	NV101-FF16N
Male to Female NPT	1/4"	4.3	0.37	60.0	31.0	29.0	79.0	54.0	25.40	NV101-MF4N
	3/8"	4.3	0.37	62.0	32.0	30.0	80.0	54.0	28.57	NV101-MF6N
	1/2"	6.3	0.73	70.0	37.5	32.5	84.0	58.0	31.75	NV101-MF8N
	3/4"	9.5	1.80	75.0	40.0	35.0	87.0	63.0	34.92	NV101-MF12N
	1"	9.5	1.80	85.0	45.0	40.0	98.0	68.0	44.40	NV101-MF16N
Female to Female BSP	1/4"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	25.40	NV101-FF4RG
	3/8"	4.3	0.37	60.0	30.0	30.0	80.0	54.0	28.57	NV101-FF6RG
	1/2"	6.3	0.73	65.0	32.5	32.5	84.0	58.0	31.75	NV101-FF8RG
	3/4"	9.5	1.80	70.0	35.0	35.0	87.0	63.0	34.92	NV101-FF12RG
	1"	9.5	1.80	80.0	40.0	40.0	98.0	68.0	44.40	NV101-FF16RG
Socket Weld to Socket Weld	1/4"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	25.40	NV101-SW4
	3/8"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	25.40	NV101-SW6
	1/2"	6.3	0.73	65.0	32.5	32.5	80.0	54.0	28.57	NV101-SW8
	3/4"	6.3	0.73	70.0	35.0	35.0	84.0	58.0	31.75	NV101-SW12

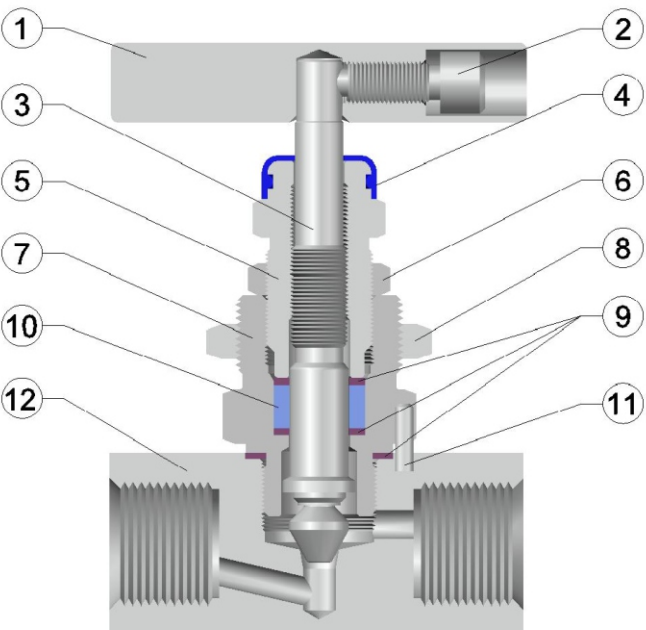
Dimensions are for reference only and subject to change.

NEEDLE VALVES SERIES : NV103

(Panel Mountable)

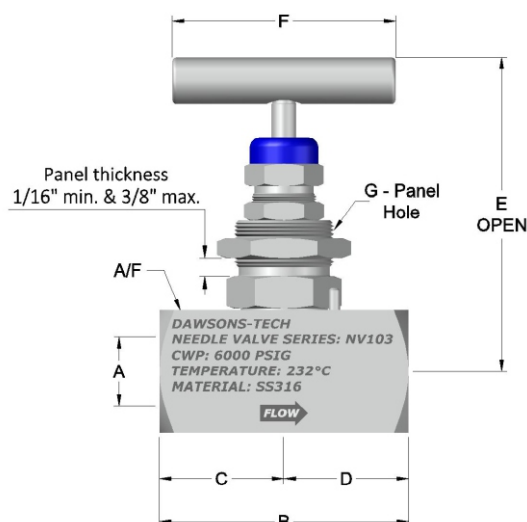
DAWSONS-TECH offers most cost effective Panel Mountable Needle Valve Series : NV103 is having compact and rugged Bar Stock Square Body design and construction. This Valve is typically used in Severe Environments, Sampling Systems, High Pressure Shutdown Systems and Test Stands.

Material of Construction:



The diagram is an exploded view of the NV103 Needle Valve. It shows the following components from top to bottom: 1. Handle (a rectangular block), 2. Screw (a small screw), 3. Valve Stem (a long threaded rod), 4. Dust Cap (a cap for the stem), 5. Packing Adjustment Screw (a small screw), 6. Lock Nut (a nut), 7. Bonnet (the upper housing), 8. Panel Nut (a nut), 9. Washer (a flat washer), 10. Packing (a ring), 11. Safety Pin (a small pin), and 12. Valve Body (the main body with two ports). The components are shown in a disassembled state to illustrate their assembly.

Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Dust Cap	PVC
5	Packing Adjustment Screw	SS316
6	Lock Nut	SS316
7	Bonnet	SS316
8	Panel Nut	SS316
9	Washer	SS316
10	Packing	PTFE / Graphite
11	Safety Pin	SS316
12	Valve Body	SS316



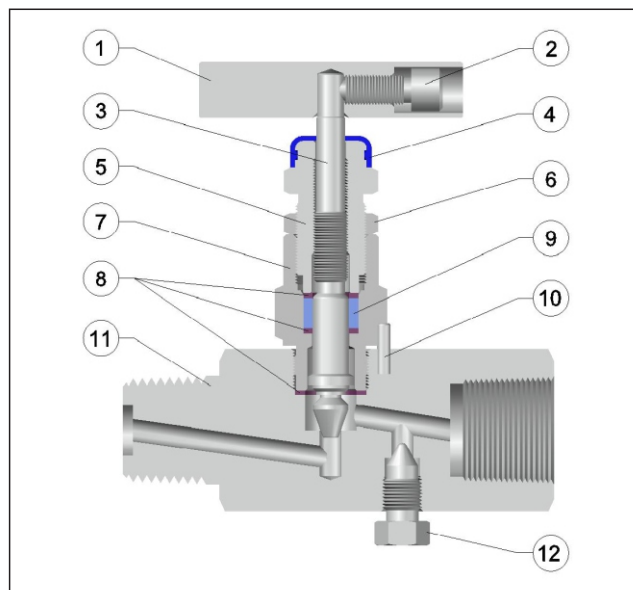
STANDARD CONFIGURATION DIMENSIONS

End Connection		Flow Data		Dimensions in mm							Dawsons-Tech Part No.
Type	Size - A	Orifice (mm)	Cv	B	C	D	E	F	G	A/F	
Tube OD to Tube OD (Fractional)	1/4"	4.3	0.37	72.8	36.4	36.4	79.0	54.0	19.8	25.40	NV103-TT4
	3/8"	4.3	0.37	72.8	36.4	36.4	79.0	54.0	19.8	25.40	NV103-TT6
	1/2"	6.3	0.73	80.0	40.0	40.0	80.0	58.0	22.5	28.57	NV103-TT8
	3/4"	9.5	1.80	85.4	42.7	42.7	84.0	63.0	22.5	31.75	NV103-TT12
Tube OD to Tube OD (Metric)	6mm	4.3	0.37	72.8	36.4	36.4	79.0	54.0	19.8	25.40	NV103-TT4M
	8mm	4.3	0.37	73.0	36.5	36.5	79.0	54.0	19.8	25.40	NV103-TT6M
	10mm	6.3	0.73	73.2	36.6	36.6	80.0	54.0	22.5	28.57	NV103-TT8M
	12mm	6.3	0.73	80.0	40.0	40.0	80.0	54.0	22.5	28.57	NV103-TT12M
Female to Female NPT	1/4"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	19.8	25.40	NV103-FF4N
	3/8"	4.3	0.37	60.0	30.0	30.0	80.0	54.0	19.8	28.57	NV103-FF6N
	1/2"	6.3	0.73	65.0	32.5	32.5	84.0	58.0	26.0	31.75	NV103-FF8N
	3/4"	9.5	1.80	70.0	35.0	35.0	87.0	63.0	26.0	34.92	NV103-FF12N
Male to Female NPT	1/4"	4.3	0.37	60.0	31.0	29.0	79.0	54.0	19.8	25.40	NV103-MF4N
	3/8"	4.3	0.37	62.0	32.0	30.0	80.0	54.0	19.8	28.57	NV103-MF6N
	1/2"	6.3	0.73	70.0	37.5	32.5	84.0	58.0	26.0	31.75	NV103-MF8N
	3/4"	9.5	1.80	75.0	40.0	35.0	87.0	63.0	26.0	34.92	NV103-MF12N
Female to Female BSP	1/4"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	19.8	25.40	NV103-FF4RG
	3/8"	4.3	0.37	60.0	30.0	30.0	80.0	54.0	19.8	28.57	NV103-FF6RG
	1/2"	6.3	0.73	65.0	32.5	32.5	84.0	58.0	26.0	31.75	NV103-FF8RG
	3/4"	9.5	1.80	70.0	35.0	35.0	87.0	63.0	26.0	34.92	NV103-FF12RG
Socket Weld to Socket Weld	1/4"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	19.8	25.40	NV103-SW4
	3/8"	4.3	0.37	58.0	29.0	29.0	79.0	54.0	19.8	25.40	NV103-SW6
	1/2"	6.3	0.73	65.0	32.5	32.5	80.0	54.0	26.0	28.57	NV103-SW8
	3/4"	6.3	0.73	70.0	35.0	35.0	84.0	58.0	26.0	31.75	NV103-SW12

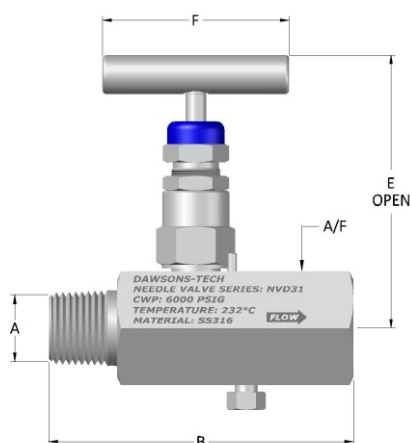
Dimensions are for reference only and subject to change.

DAWSONS-TECH most cost effective Bleeder Screw Guage Valve Series : NVD31 is having compact and rugged Bar Stock Hex Body equipped with a Bleed Screw design and construction. This Valve is most suitable for a variety of applications including Instrumentation, Hydraulic and Pneumatic systems.

Material of Construction:



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Dust Cap	PVC
5	Packing Adjustment Screw	SS316
6	Lock Nut	SS316
7	Bonnet	SS316
8	Washer	SS316
9	Packing	PTFE/Graphite
10	Safety Pin	SS316
11	Valve Body	SS316
12	Drain Plug	SS316



STANDARD CONFIGURATION DIMENSIONS

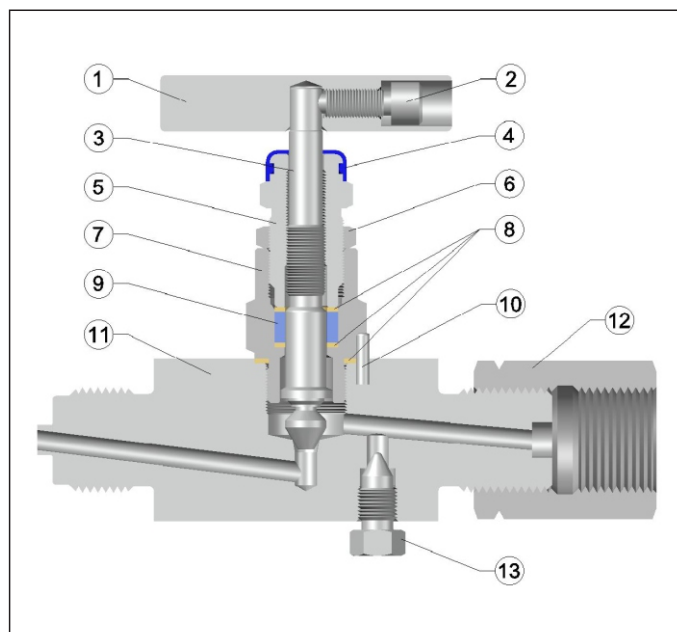
End Connection		Flow Data		Dimensions in mm				Dawsons-Tech Part No.
Type	Size - A	Orifice (mm)	Cv	B	E	F	A/F	
Female to Female NPT	1/4"	4.3	0.37	66.0	80.0	54.0	28.57	NVD31-FF4N
	3/8"	4.3	0.37	66.0	80.0	54.0	28.57	NVD31-FF6N
	1/2"	4.3	0.37	69.0	84.0	58.0	31.75	NVD31-FF8N
Male to Female NPT	1/4"	4.3	0.37	73.0	80.0	54.0	28.57	NVD31-MF4N
	3/8"	4.3	0.37	73.0	80.0	54.0	28.57	NVD31-MF6N
	1/2"	4.3	0.37	85.0	84.0	58.0	31.75	NVD31-MF8N
Female to Female BSP	1/4"	4.3	0.37	69.0	80.0	54.0	28.57	NVD31-FF4RG
	3/8"	4.3	0.37	69.0	80.0	54.0	28.57	NVD31-FF6RG
	1/2"	4.3	0.37	88.0	84.0	58.0	31.75	NVD31-FF8RG
Male to Female BSP	1/4"	4.3	0.37	69.0	80.0	54.0	28.57	NVD31-MF4G
	3/8"	4.3	0.37	69.0	80.0	54.0	28.57	NVD31-MF6G
	1/2"	4.3	0.37	88.0	84.0	58.0	31.75	NVD31-MF8G

Dimensions are for reference only and subject to change.

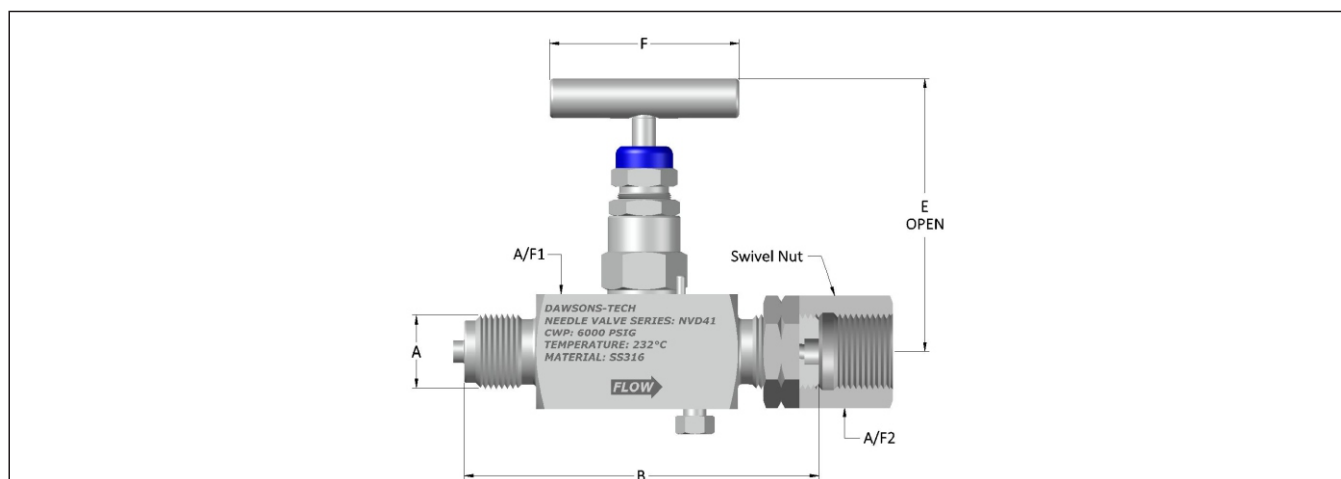
(With Swivel Nut)

DAWSONS-TECH most cost effective Bleeder Screw Guage Valve Series : NVD41 is having compact and rugged Bar Stock Square Body equipped with a Bleed Screw and Swivel Nut design and construction for a variety of applications including Instrumentation, Hydraulic and Pneumatic applications.

Material of Construction:



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Dust Cap	PVC
5	Packing Adjustment Screw	SS316
6	Lock Nut	SS316
7	Bonnet	SS316
8	Washer	SS316
9	Packing	PTFE
10	Safety Pin	SS316
11	Valve Body	SS316
12	Swivel Nut	SS316
13	Drain Plug	SS316



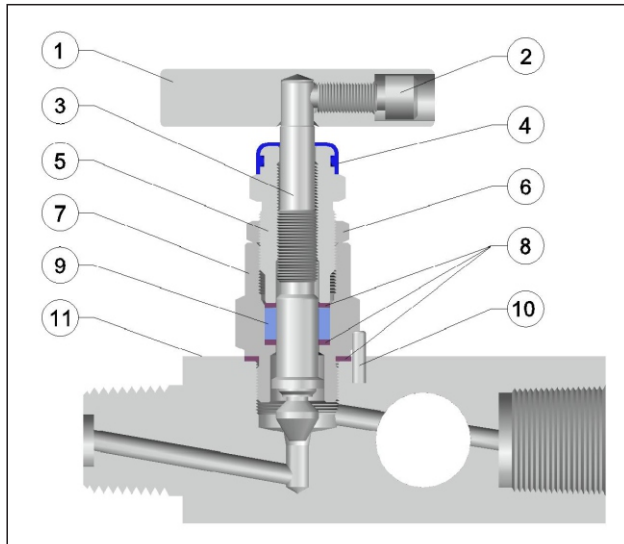
STANDARD CONFIGURATION DIMENSIONS

End Connection Size - A	Flow Data		Dimensions in mm					Dawsons-Tech Part No.
	Orifice (mm)	Cv	B	E	F	A/F1	A/F2	
1/4" BSP (Male x Swivel Nut)	3.2	0.25	80.0	79.0	54.0	25.40	19.0	NVD41-MF4G
1/2" BSP (Male x Swivel Nut)	4.3	0.37	100.0	84.0	58.0	31.75	27.0	NVD41-MF8G
M20 x 1.5 (Male x Swivel Nut)	4.3	0.37	100.0	84.0	58.0	31.75	27.0	NVD41-MF20M
1/2" BSP x M22 x 1.5 (Male x Swivel Nut)	4.3	0.37	100.0	84.0	58.0	31.75	27.0	NVD41-M8G-22M

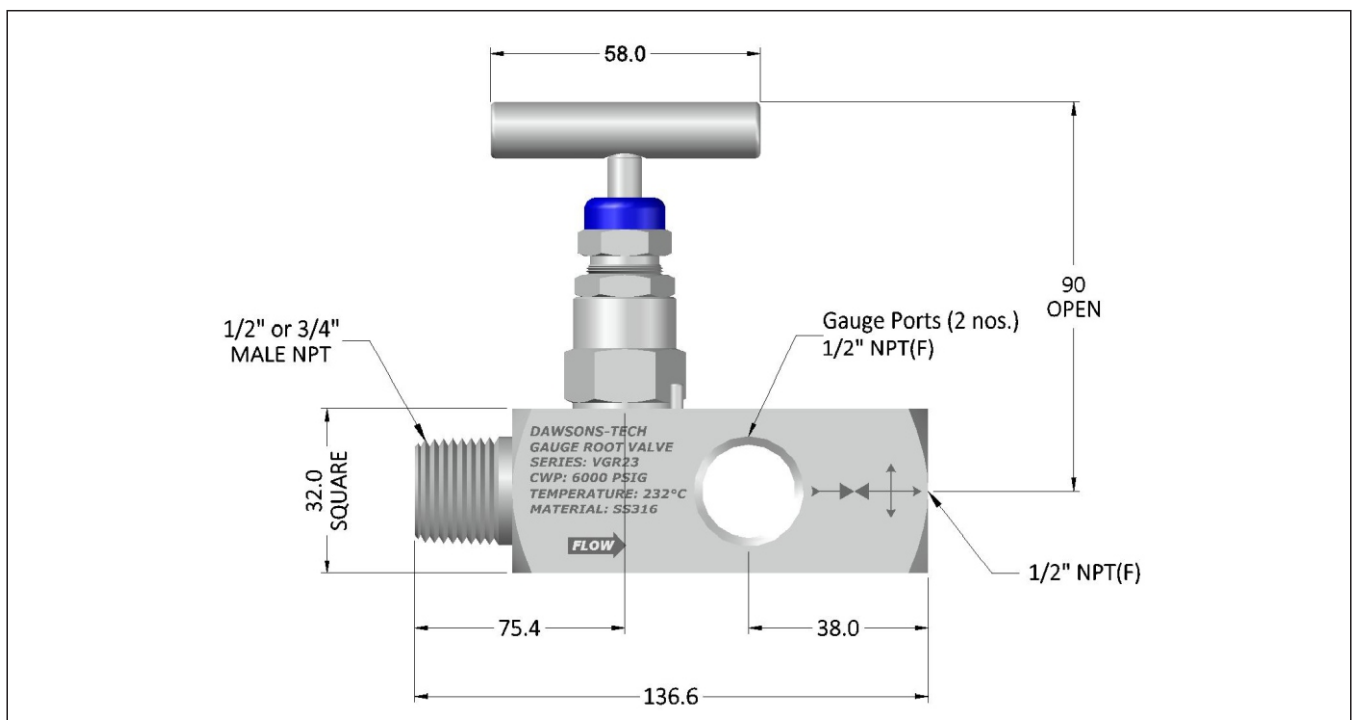
Dimensions are for reference only and subject to change.

DAWSONS-TECH most cost effective Gauge / Root Valve Series : VGR23 is having compact and rugged Bar Stock Square Body design and construction. This Valve can accommodate a variety of Gauge positions and handle orientations. They are suitable for Block & Bleed assemblies when a Purge Valve, Sampling line or test pressure source is required.

Material of Construction:



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Dust Cap	PVC
5	Packing Adjustment Screw	SS316
6	Lock Nut	SS316
7	Bonnet	SS316
8	Washer	SS316
9	Packing	PTFE/Graphite
10	Safety Pin	SS316
11	Valve Body	SS316



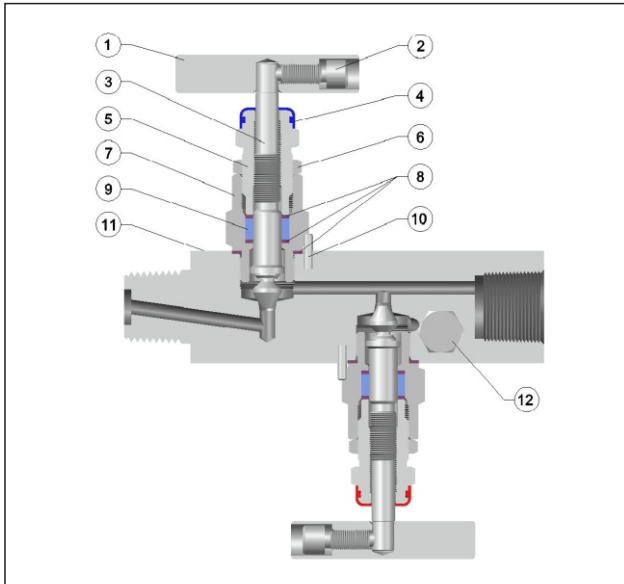
STANDARD CONFIGURATION DIMENSIONS

End Connection		Dawsons-Tech Part No.
Inlet	Outlet	
1/2" NPT (Male)	1/2" NPT (Female)	VGR23-MF8N/SSTNR
3/4" NPT (Male)	1/2" NPT (Female)	VGR23-M12N-F8N/SSTNR

Dimensions are for reference only and subject to change.

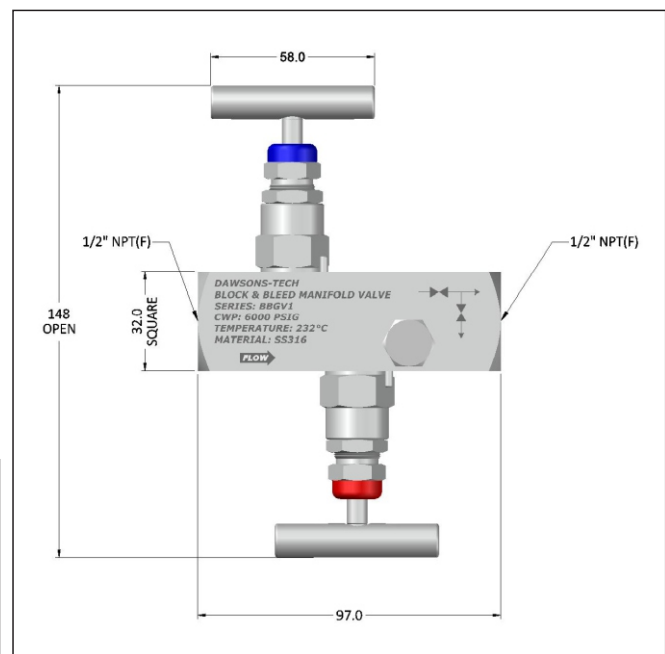
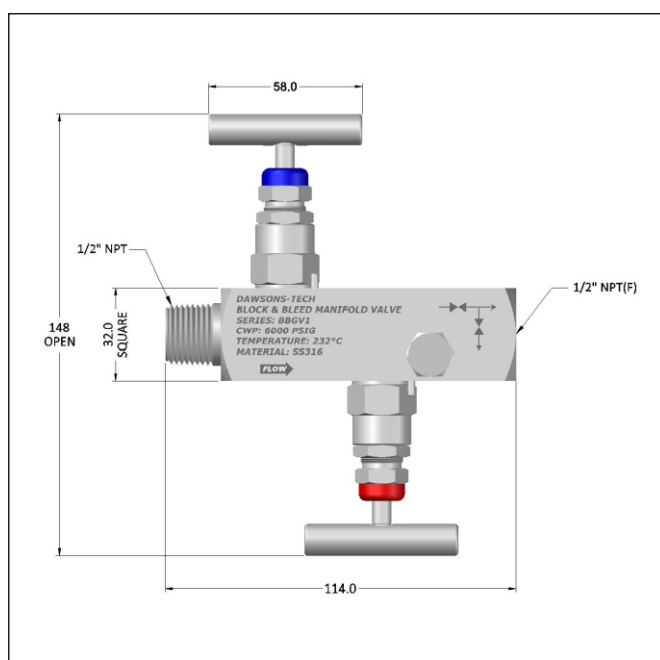
DAWSONS-TECH most cost effective Block & Bleed Gauge Valve Series : BBGV1 is having Bar Stock Square Body design and construction with two Valves for a safe and economical method for mounting Pressure Gauges, Pressure Transmitters, Pressure Switches, etc. These two Valves Manifold combines an Isolation Valve with a vent Valve in one compact unit.

Material of Construction:



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Dust Cap	PVC
5	Packing Adjustment Screw	SS316
6	Lock Nut	SS316
7	Bonnet	SS316
8	Washer	SS316
9	Packing	PTFE/Graphite
10	Safety Pin	SS316
11	Valve Body	SS316
12	Drain Plug	SS316

Block & Bleed Gauge Valve Series : BBGV1 (Female to Female) Part No. BBGV1-FF8N/SSTNR



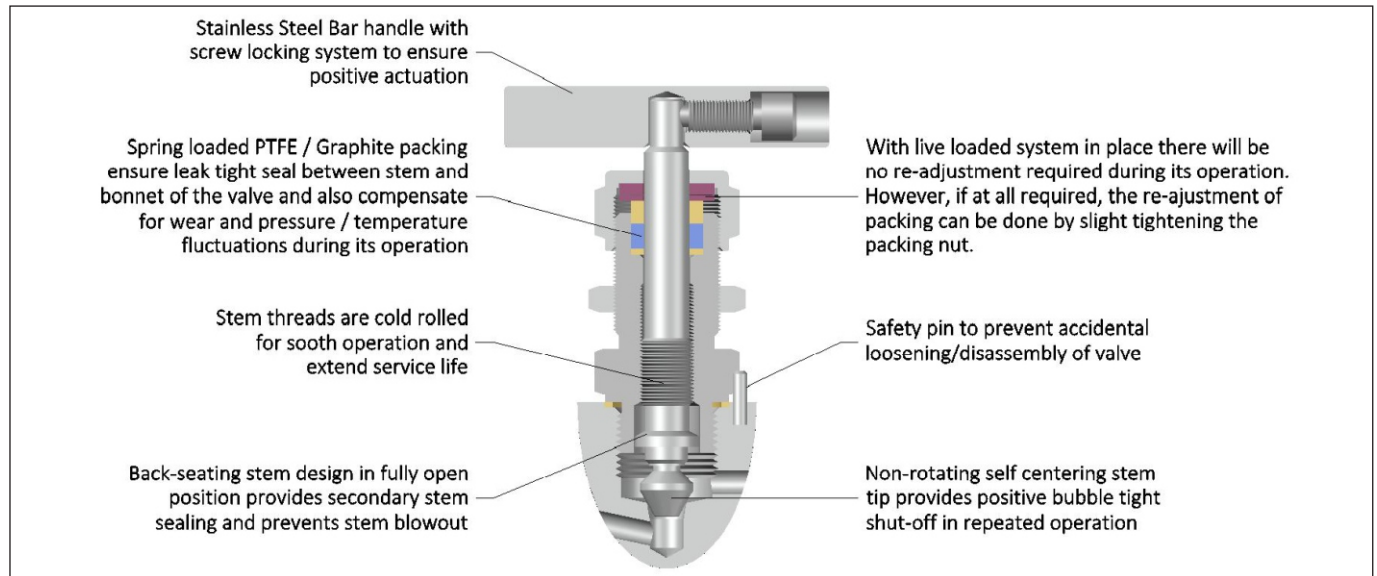
Block & Bleed Gauge Valve Series : BBGV1 (Male to Female) Part No. BBGV1-MF8N/SSTNR



DAWSONS-TECH Needle Valve Series : NV107 design very carefully with live loaded PTFE/Graphite packing to provide repeated leak tight seal between Stem and Bonnet of the Valve and also compensate for wear and pressure / temperature fluctuations during its operations.

Features / Benefits :

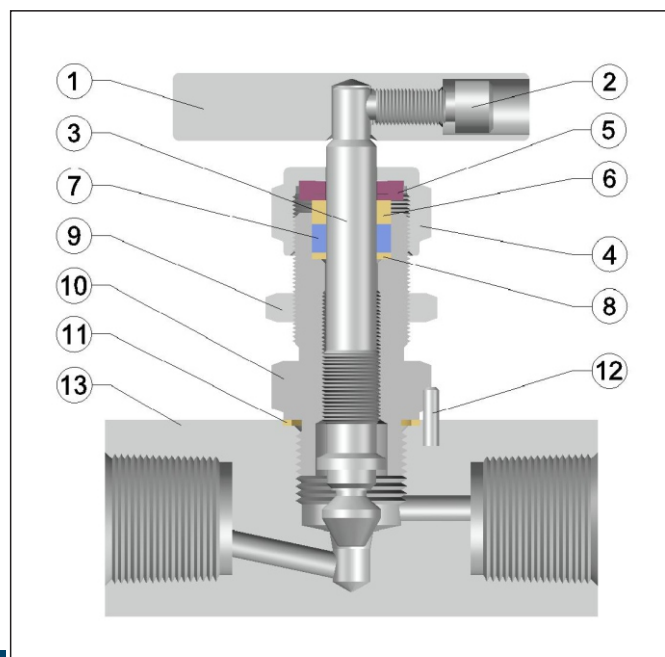
- Compact and Rugged Design.
- Bar stock body in straight & angle pattern.
- Low operating torque.
- Anti blow-out stem.
- Flow Coefficient (Cv) from 0.25 to 0.73.
- Every Valve is pressure tested.
- Orifice size : 4.3mm and 6.3mm.
- Available in Material SS316, all wetted parts in accordance with NACE MR01-75.
- Available with Male, Female NPT, BSP, BSPT Pipe Threads.
- Available with self centering non-rotations stem tip.



Technical Data : The temperature and pressure rating for a standard Valve with PTFE packing.

Temperature	Pressure	
	PSIG	Bar
-54°C to 38°C	6000	413
-54°C to 93°C	5160	351
-54°C to 148°C	4660	317
-54°C to 204°C	4280	291
-54°C to 232°C	4130	289

Material of Construction :



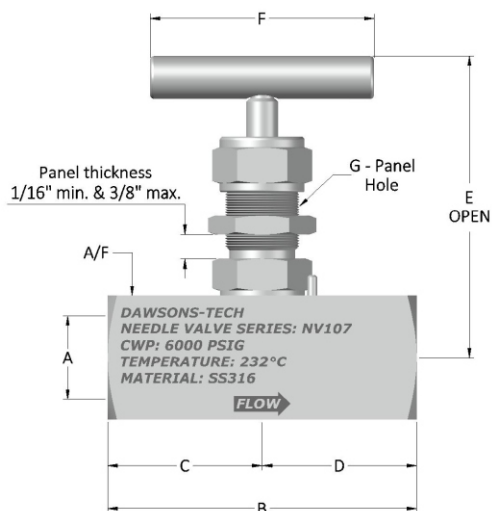
Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Packing Nut	SS316
5	Belleville Washer	Stainless Steel
6	Upper Gland	SS316
7	Packing	PTFE / Graphite
8	Lower Gland	SS316
9	Panel Nut	SS316
10	Bonnet	SS316
11	Washer	SS316
12	Safety Pin	SS316
13	Valve Body	SS316

Testing :

- Standard Test : Each Valve is pressure tested with Nitrogen at 2000 PSIG (138 Bar) for leakage at the seat and packing.
- Optional Hydrostatic Test : This test is performed with De-ionized water at 1.5 times the working pressure.

Certification :

The certificate to 3.1 acc. to EN10204 for Valves Body Material and pressure test will be provided on request.



STANDARD CONFIGURATION DIMENSIONS

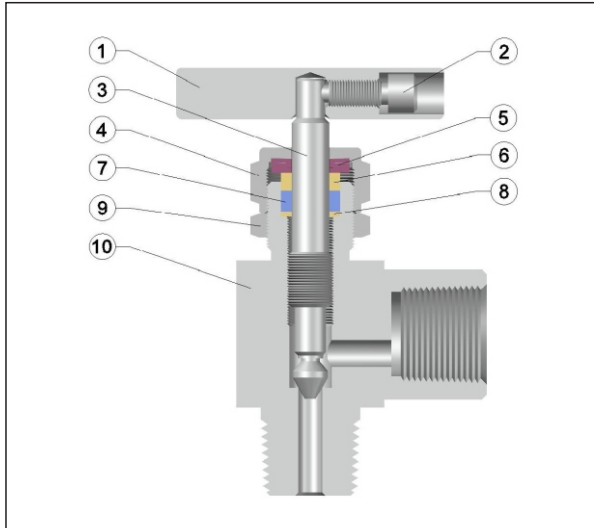
End Connection		Flow Data		Dimensions in mm							Dawsons-Tech Part No.
Type	Size - A	Orifice (mm)	Cv	B	C	D	E	F	G	A/F	
Tube OD to Tube OD (Fractional)	1/4"	4.3	0.37	72.8	36.4	36.4	75.0	54.0	19.6	25.40	NV107-TT4
	3/8"	4.3	0.37	72.8	36.4	36.4	75.0	54.0	19.6	25.40	NV107-TT6
	1/2"	6.3	0.73	80.0	40.0	40.0	79.0	58.0	19.6	28.57	NV107-TT8
Tube OD to Tube OD (Metric)	6mm	4.3	0.37	72.8	36.4	36.4	75.0	54.0	19.6	25.40	NV107-TT4M
	8mm	4.3	0.37	73.0	36.5	36.5	75.0	54.0	19.6	25.40	NV107-TT6M
	10mm	6.3	0.73	73.2	36.6	36.6	79.0	54.0	19.6	28.57	NV107-TT8M
	12mm	6.3	0.73	80.0	40.0	40.0	79.0	54.0	19.6	28.57	NV107-TT12M
Female to Female NPT	1/4"	4.3	0.37	58.0	29.0	29.0	75.0	54.0	19.6	25.40	NV107-FF4N
	3/8"	4.3	0.37	60.0	30.0	30.0	79.0	54.0	19.6	28.57	NV107-FF6N
	1/2"	6.3	0.73	65.0	32.5	32.5	80.5	58.0	19.6	31.75	NV107-FF8N
Male to Female NPT	1/4"	4.3	0.37	60.0	31.0	29.0	75.0	54.0	19.6	25.40	NV107-MF4N
	3/8"	4.3	0.37	62.0	32.0	30.0	75.0	54.0	19.6	28.57	NV107-MF6N
	1/2"	6.3	0.73	70.0	37.5	32.5	80.5	58.0	19.6	31.75	NV107-MF8N
Female to Female BSP	1/4"	4.3	0.37	58.0	29.0	29.0	75.0	54.0	19.6	25.40	NV107-FF4RG
	3/8"	4.3	0.37	60.0	30.0	30.0	79.0	54.0	19.6	28.57	NV107-FF6RG
	1/2"	6.3	0.73	65.0	32.5	32.5	80.5	58.0	19.6	31.75	NV107-FF8RG
Socket Weld to Socket Weld	1/4"	4.3	0.37	58.0	29.0	29.0	75.0	54.0	19.6	25.40	NV107-SW4
	3/8"	4.3	0.37	58.0	29.0	29.0	75.0	54.0	19.6	25.40	NV107-SW6
	1/2"	6.3	0.73	65.0	32.5	32.5	79.0	54.0	19.6	28.57	NV107-SW8
	3/4"	6.3	0.73	70.0	35.0	35.0	80.5	58.0	19.6	31.75	NV107-SW12

Dimensions are for reference only and subject to change.

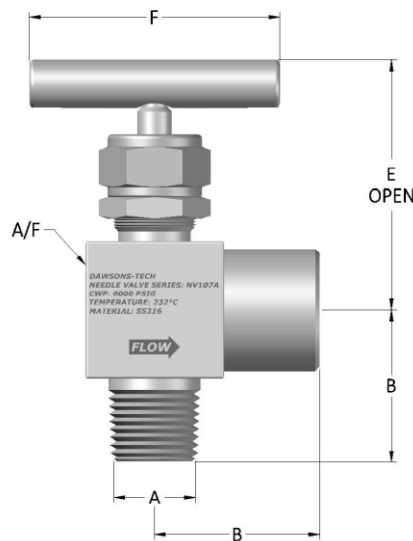
(With Live Load System)

DAWSONS-TECH Needle Valve Series : NV107A (Angle Pattern) design very carefully with live loaded PTFE/Graphite packing to provide repeated leak tight seal between stem and bonnet of the valve and also compensate for wear and pressure / temprature fluctuations during its operations.

Material of Construction :



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Packing Nut	SS316
5	Belleville Washer	Stainless Steel
6	Upper Gland	SS316
7	Packing	PTFE / Graphite
8	Lower Gland	SS316
9	Lock Nut	SS316
10	Valve Body	SS316



STANDARD CONFIGURATION DIMENSIONS

End Connection		Flow Data		Dimensions in mm				Dawsons-Tech Part No.
Type	Size - A	Orifice (mm)	Cv	B	E	F	A/F	
Tube OD to Tube OD	1/4"	4.3	0.37	29.5	46.0	54.0	25.40	NV107A-TT4
Female to Female NPT	1/4"	4.3	0.37	25.4	46.0	54.0	25.40	NV107A-FF4N
	1/2"	6.3	0.73	35.8	62.5	58.0	31.75	NV107A-FF8N
Male to Female NPT	1/4"	4.3	0.37	25.4	46.0	54.0	25.40	NV107A-MF4N
	3/8"	4.3	0.37	35.8	62.5	54.0	28.57	NV107A-MF6N
	1/2"	6.3	0.73	35.8	62.5	58.0	31.75	NV107A-MF8N
Male to Tube OD	1/4"	4.3	0.37	28.7	46.0	54.0	25.40	NV107A-FF4RG

Dimensions are for reference only and subject to change.

NEEDLE VALVES SERIES : NV109

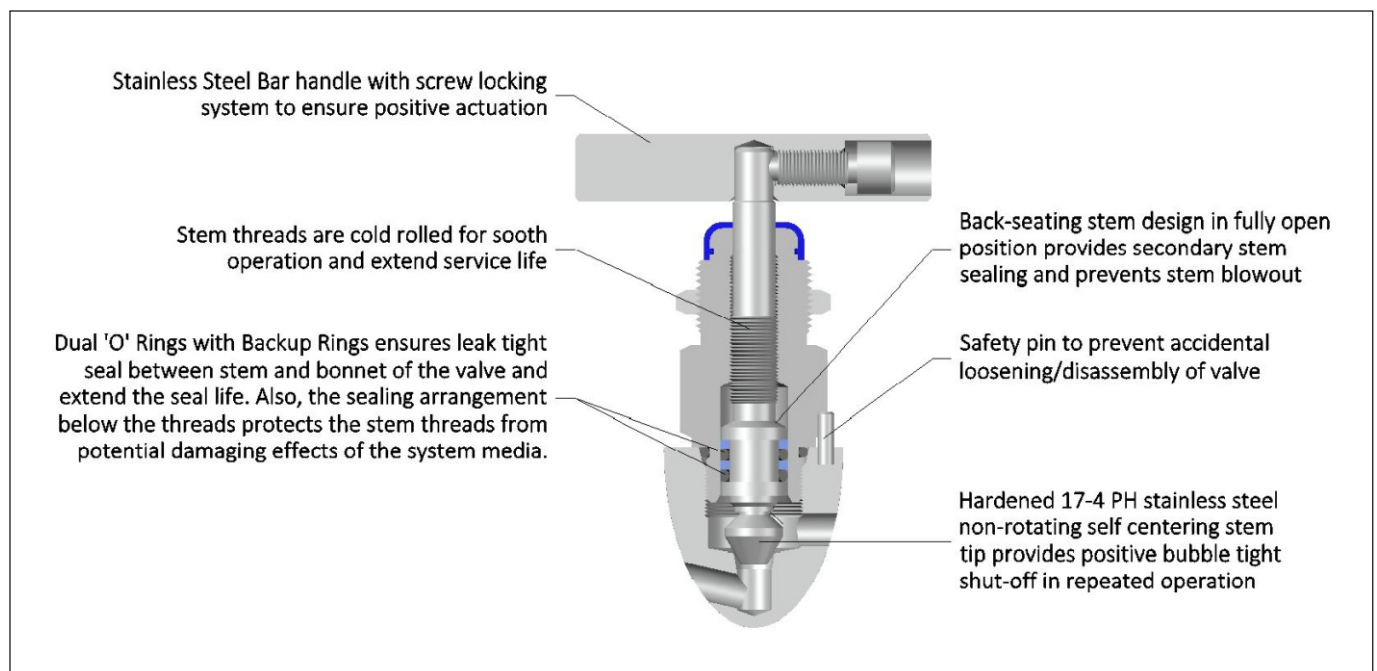
(For High Pressure 10,000 PSIG)



DAWSONS-TECH Needle Valve Series : NV109 design very carefully with dual 'O' Ring Sealing Arrangement between stem & bonnet of the Valve to provide reliable leak-tight performance under high pressure upto 10,000 PSIG (690 Bar) applications.

Features / Benefits :

- Compact and Rugged Design.
- Bar stock body in straight pattern.
- Panel mountable.
- Low operating torque.
- Anti blow-out stem.
- Flow Coefficient (Cv) from 0.37 to 0.73.
- Orifice size : 4.3mm and 6.3mm.
- Available in Material SS316 & Carbon Steel.
- Available with 1/4" to 1/2" Male / Female NPT, BSP, BSPT Pipe Threads and Metric / Inch Tube end connections.
- Every Valve is pressure tested.



Operating Parameters :

- Pressure Rating : UPTO 10,000 PSIG (690 Bar at CWP).
- Temperature Rating : UPTO 120° C

Applications :

- General Plant Services
- Hydraulic & Pneumatic
- Instrumentation Isolations
- Venting

Testing :

- Standard Test : Each Valve is pressure tested with Nitrogen at 2000 PSIG (138 Bar) for leakage at the seat and packing.
- Optional Hydrostatic Test : This test is performed with De-ionized water at 1.5 times the working pressure.

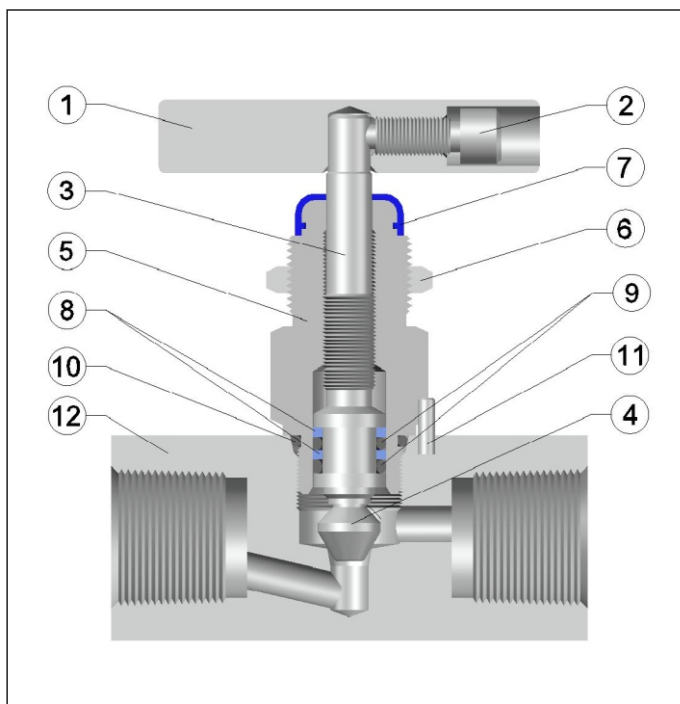
Certification :

The certificate to 3.1 acc. to EN10204 for Valves Body Material and pressure test will be provided on request.

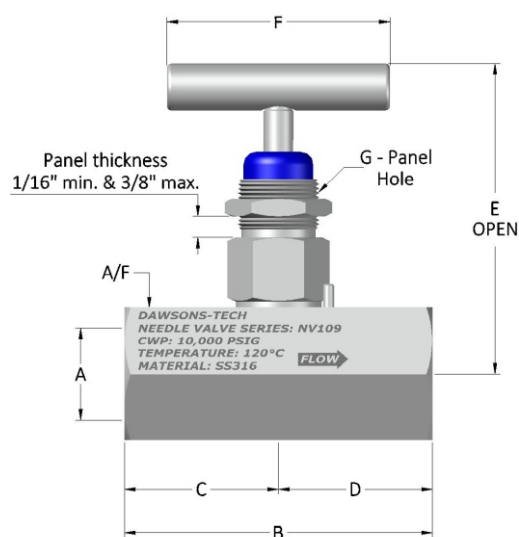
NEEDLE VALVES SERIES : NV109

(For High Pressure 10,000 PSIG)

Material of Construction:



Sr. No.	Part Description	Material
1	Handle	SS316
2	Screw	SS316
3	Valve Stem	SS316
4	Stem Tip	17-4 PH
5	Bonnet	SS316
6	Panel Nut	SS316
7	Dust Cap	PVC
8	Back-up Ring	PTFE
9	'O' Rings	Fluorocarbon
10	'O' Ring	Fluorocarbon
11	Safety Pin	SS316
12	Valve Body	SS316



STANDARD CONFIGURATION DIMENSIONS

End Connection		Flow Data		Dimensions in mm						Dawsons-Tech Part No.
Type	Size - A	Orifice (mm)	Cv	B	C	D	E	F	A/F	
Female to Female NPT	1/4"	4.3	0.37	58.0	29.0	29.0	63.5	54.0	28.57	NV109-FF4N
	3/8"	4.3	0.37	60.0	30.0	30.0	63.5	54.0	28.57	NV109-FF6N
	1/2"	6.3	0.73	68.0	32.5	32.5	65.0	58.0	31.75	NV109-FF8N
Male to Female NPT	1/4"	4.3	0.37	60.0	31.0	29.0	63.5	54.0	28.57	NV109-MF4N
	3/8"	4.3	0.37	62.0	32.0	30.0	63.5	54.0	28.57	NV109-MF6N
	1/2"	6.3	0.73	70.0	37.5	32.5	65.0	58.0	31.75	NV109-MF8N
Female to Female BSP	1/4"	4.3	0.37	58.0	29.0	29.0	63.5	54.0	28.57	NV109-FF4RG
	3/8"	4.3	0.37	60.0	30.0	30.0	63.5	54.0	28.57	NV109-FF6RG
	1/2"	6.3	0.73	68.0	32.5	32.5	65.0	58.0	31.75	NV109-FF8RG

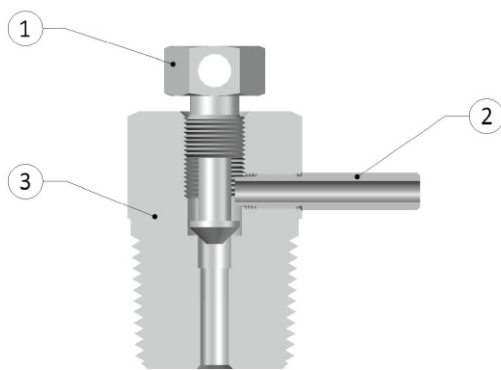
Dimensions are for reference only and subject to change.

DAWSONS-TECH most cost effective Bleed Valves Series : VBL03 is having compact and rugged Bar Stock Hex Body design and construction for a variety of applications including Instrumentation, Hydraulic and Pneumatic systems.

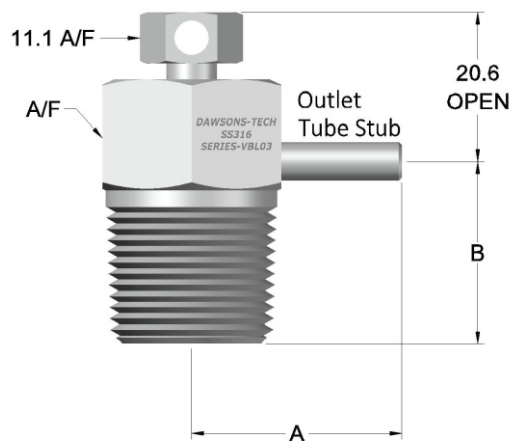
Features / Benefits :

- Compact and Convenient installation.
- Vent Tube prevents accidental removal of Stem.
- Vent Tube directs excess liquid / Gas from system line.
- Flow Coefficient (Cv) 0.25.
- Available with Male / Female NPT, BSPT Pipe Thread and Tube Fittings end connections.
- Available in material SS316.
- Every Valve is pressure tested.

Material of Construction:



Sr. No.	Part Description	Material
1	Stem	SS316
2	Vent Tube	SS316
3	Body	SS316



End Connection			Flow Data		Dimensions In mm			Dawsons-Tech Part No.
Type	Inlet	Outlet	Orifice (mm)	Cv	A	B	A/F	
Male (NPT)	1/8"	3/16" OD Tube Stub	3.20	0.25	23.9	19.1	15.87	VBL03-M2N
	1/4"	3/16" OD Tube Stub	3.20	0.25	23.9	19.1	15.87	VBL03-M4N
	3/8"	3/16" OD Tube Stub	3.20	0.25	26.3	22.3	22.22	VBL03-M6N
	1/2"	3/16" OD Tube Stub	3.20	0.25	26.3	22.3	22.22	VBL03-M8N
Male (BSPT)	1/8"	3/16" OD Tube Stub	3.20	0.25	23.9	19.1	15.87	VBL03-M2RT
	1/4"	3/16" OD Tube Stub	3.20	0.25	23.9	19.1	15.87	VBL03-M4RT
	3/8"	3/16" OD Tube Stub	3.20	0.25	26.3	22.3	22.22	VBL03-M6RT
	1/2"	3/16" OD Tube Stub	3.20	0.25	26.3	22.3	22.22	VBL03-M8RT

Dimensions are for reference only and subject to change.

ORDERING INFORMATION :

For Example : PART NO. NV101-FF8N-SSTNR (NEEDLE VALVES)

Valve Series	End Connection Type	End Connection Size	Pipe Thread Type	Material of Construction	Packing Material	Stem Type
NV101	FF	8	N	SS	T	NR
1	2	3	4	5	6	7

For Example : PART NO. NVD31-FF8N-SSTNR (BLEEDER SCREW GAUGE VALVES)

Valve Series	End Connection Type	End Connection Size	Pipe Thread Type	Material of Construction	Packing Material	Stem Type
NVD31	FF	8	N	SS	T	NR
1	2	3	4	5	6	7

For Example : PART NO. VGR23-FF8N-SSTNR (GAUGE / ROOT VALVES)

Valve Series	End Connection Type	End Connection Size	Pipe Thread Type	Material of Construction	Packing Material	Stem Type
VGR23	FF	8	N	SS	T	NR
1	2	3	4	5	6	7

For Example : PART NO. BBGV1-FF8N-SSTNR (BLOCK & BLEED GAUGE VALVES)

Valve Series	End Connection Type	End Connection Size	Pipe Thread Type	Material of Construction	Packing Material	Stem Type
BBGV1	FF	8	N	SS	T	NR
1	2	3	4	5	6	7

For Example : PART NO. VBL03-M8N-SS (BLEED VALVES)

Valve Series	End Connection Type	End Connection Size	Pipe Thread Type	Material of Construction
VBL03	M	8	N	SS
1	2	3	4	5

ORDERING INFORMATION :

1)	Valves Type	Series
	Needle Valves	NV101
		NV103
		NV107
		NV107A
		NV109
	Needle Valves with a Bleed Screw	NVD31
		NVD41
	Gauge / Root Valve	VGR23
	Block & Bleed Gauge Valve	BBGV1
	Bleed Valve	VL03

2)	End Connection Type	TT : Tube OD x Tube OD
		FF : Female x Female
		MM : Male x Male
		MF : Male x Female
		FM : Female x Male
		SW : Socket Weld

3)	End Connection Size Tube Fittings			
	Fractional Tube		Metric Tube	
	4	1/4"	6M	6MM
	6	3/8"	8M	8MM
	8	1/2"	10M	10MM
	12	3/4"	12M	12MM
	16	1"	22M	22MM
			25M	25MM
	Pipe End Connection Size		4	1/4"
			6	3/8"
8			1/2"	
12			3/4"	
16			1"	

4)	End Connection Thread Type	N : NPT (Male / Female)
		RT : BSPT (Male / Female)
		G : BSP (Male)
		RG : BSP (Female)

5)	Material	SS : SS316
		SSL : SS316L
		DX : Duplex
		CS : Carbon Steel

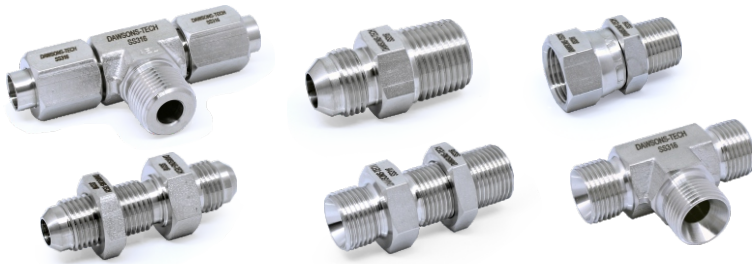
6)	Packing Material	T : PTFE
		G : Graphite
		V : Fluorocarbon

7)	Stem Type	NR : Non-Rotating
		VS : 'V' Stem
		SF : Soft Seat Stem
		RS : Regulating Stem

OUR PLEDGE

DAWSONS-TECH is self-committed for continuous development and upgradation of its products to meet the growing demands for Industries requirements of Flow Control Components by advanced technology induction and cutting-edge solution which is in-line with focused objective mission

"TO PROVIDE OUR CUSTOMERS WITH CONSISTENT RELIABLE QUALITY PRODUCTS AT RIGHT TIME & COMPETITIVE PRICE"



37° Flare Fittings / BSP 60° Cone Fittings



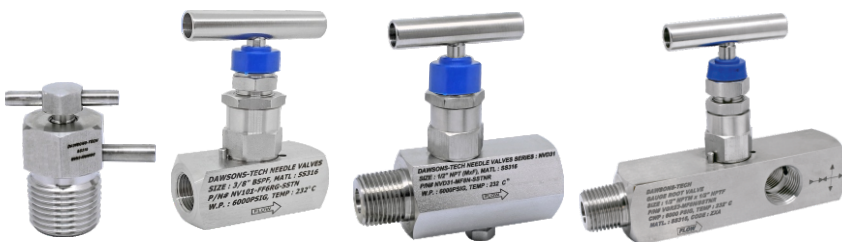
**Precision Threaded / Socket /
Butt Weld Pipe Fittings & Adapters**



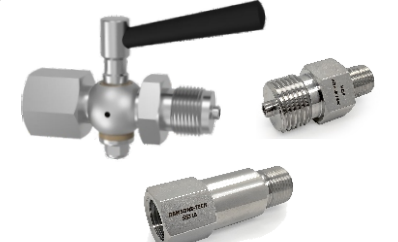
High Purity Fittings



**Wellhead Grease / Bleed Fittings
& Components**



Instrumentation Valves



Gauge Cock & Accessories



High Pressure Ball Valves



Check Valves



Quick Connect Couplings to ISO 16028 & ISO 7241-1 Series B



Customized Fittings and Valves

NOTES : _____



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