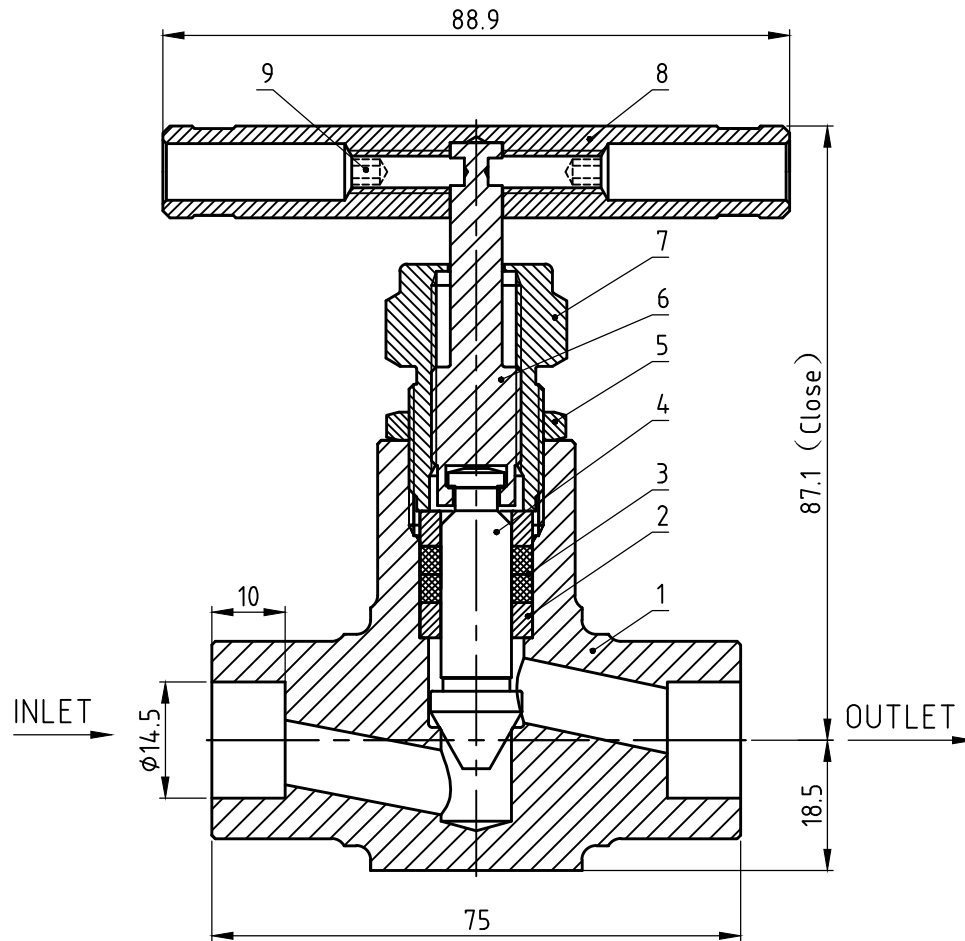




No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

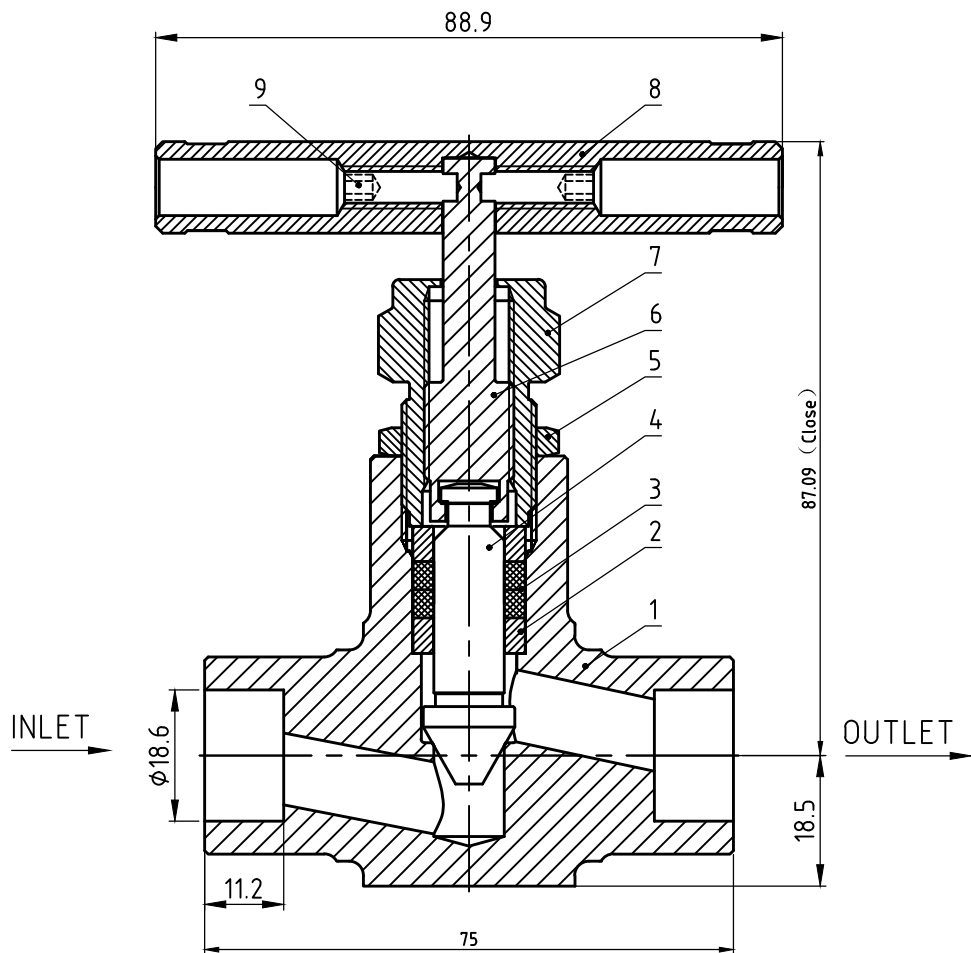
Technical Data:

Orifice Size	11mm
Inlet Size	14mm Tube Socket Weld
Outlet Size	14mm Tube Socket Weld
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Apr.06, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-MSW14-11-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

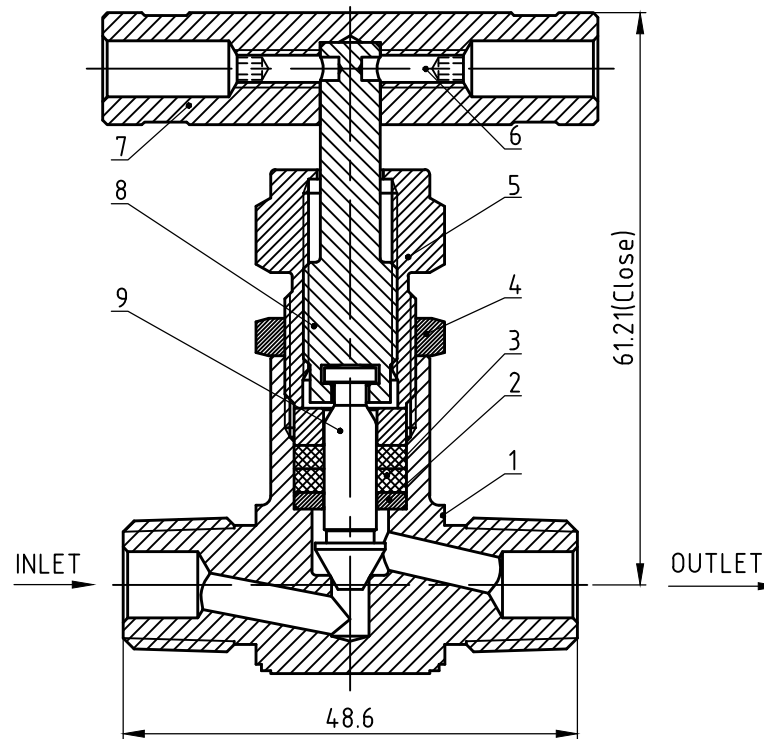
Technical Data:

Orifice Size	11mm
Inlet Size	18mm Tube Socket Weld
Outlet Size	18mm Tube Socket Weld
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Apr.06, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-MSW14-11-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	Galvanized steel
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A479
9	Lower Stem	316 S.S./ASTM A479

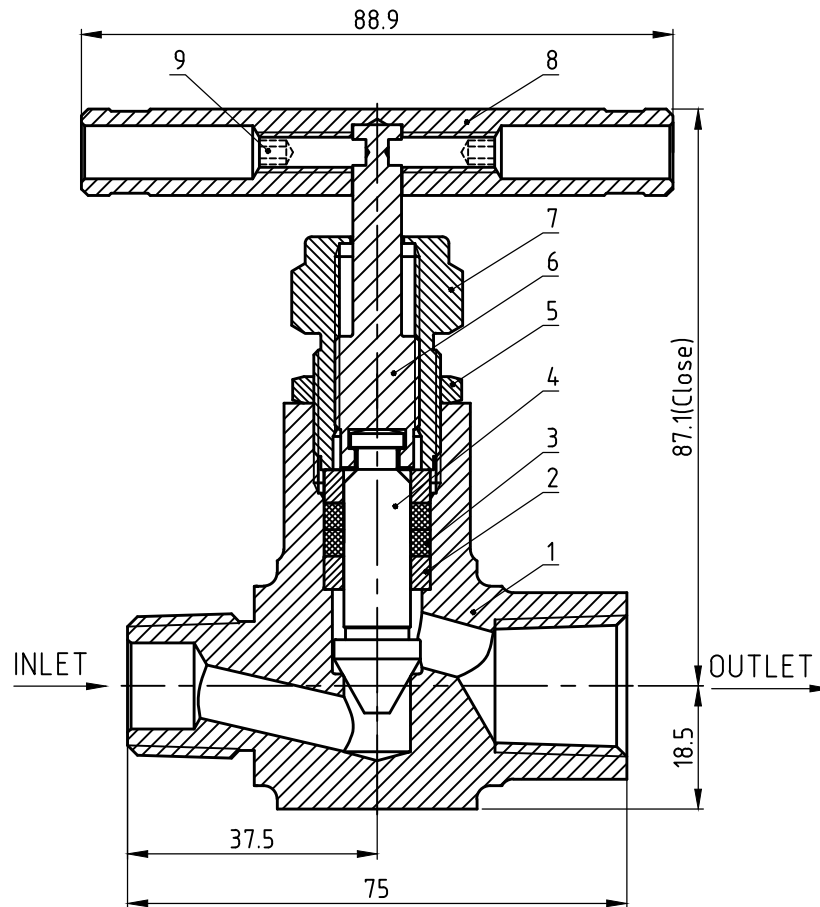
Technical Data:

Orifice Size	4mm
Inlet Size	1/4 NPT
Outlet Size	1/4 NPT
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (321)		
400 (204)	4280 (295)		
450 (232)	4130 (284)		

A	Oct.11, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-NPT4-04-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

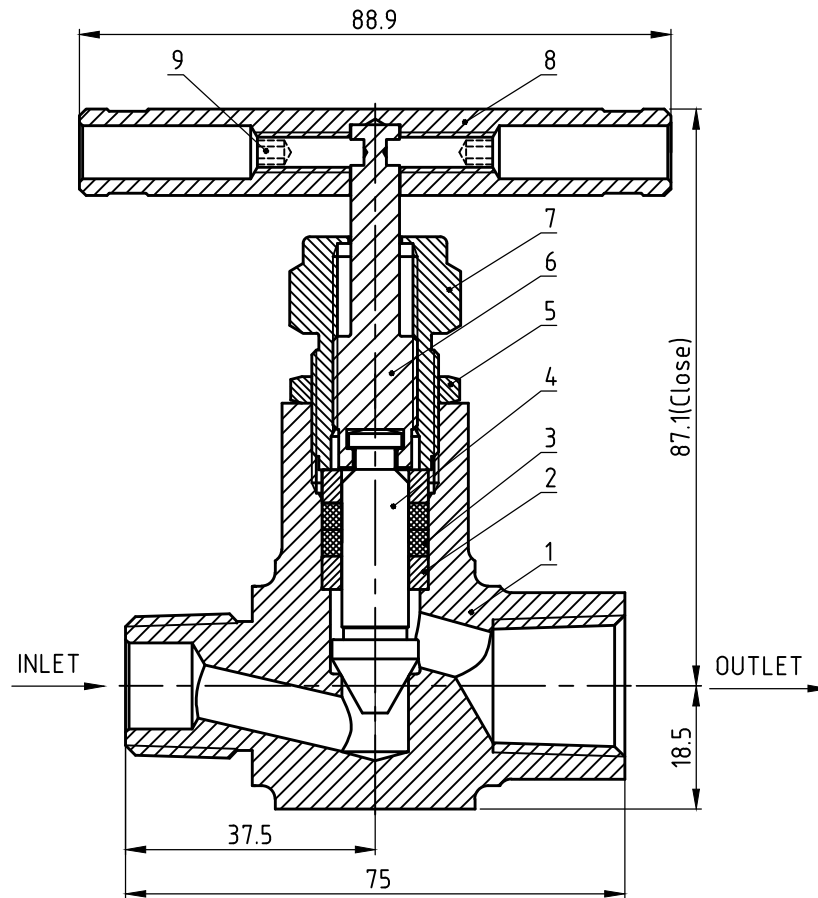
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT(F)
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	4130 (284)		

A	Apr.26, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-NPT8-FNPT8-11-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316L S.S./ASTM A182
2	Gland	316L S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316L S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

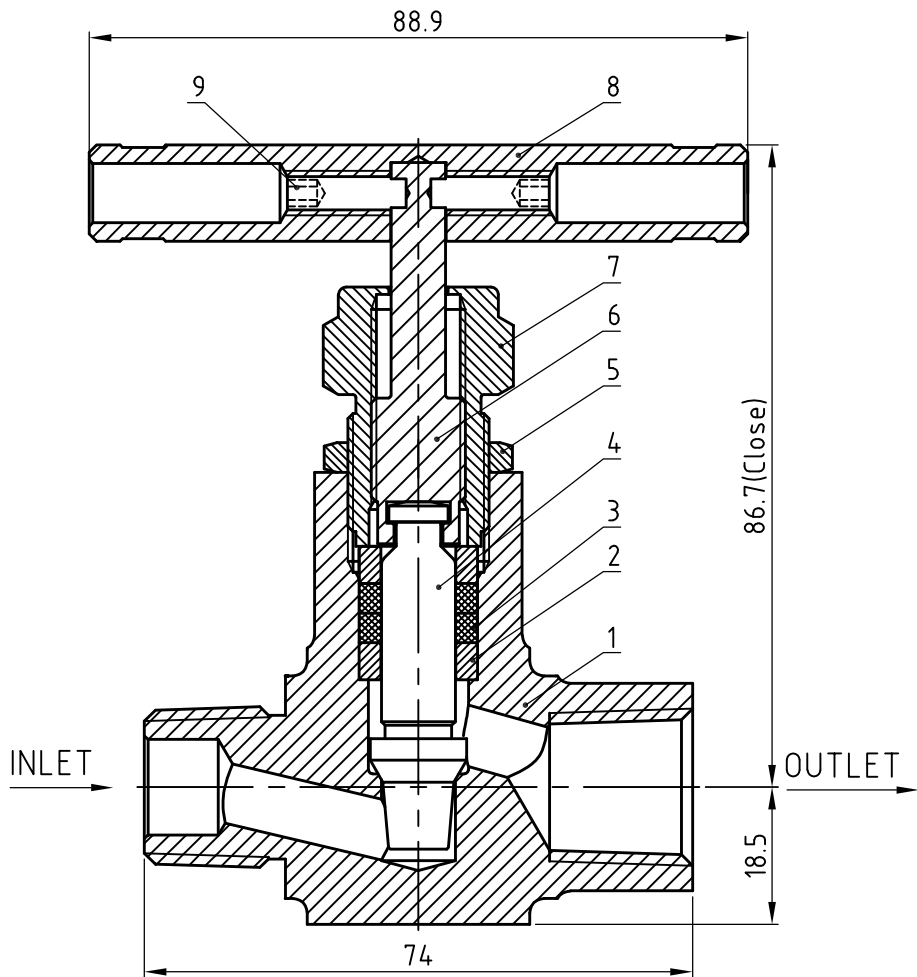
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT(F)
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Apr.26, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-NPT8-FNPT8-11-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

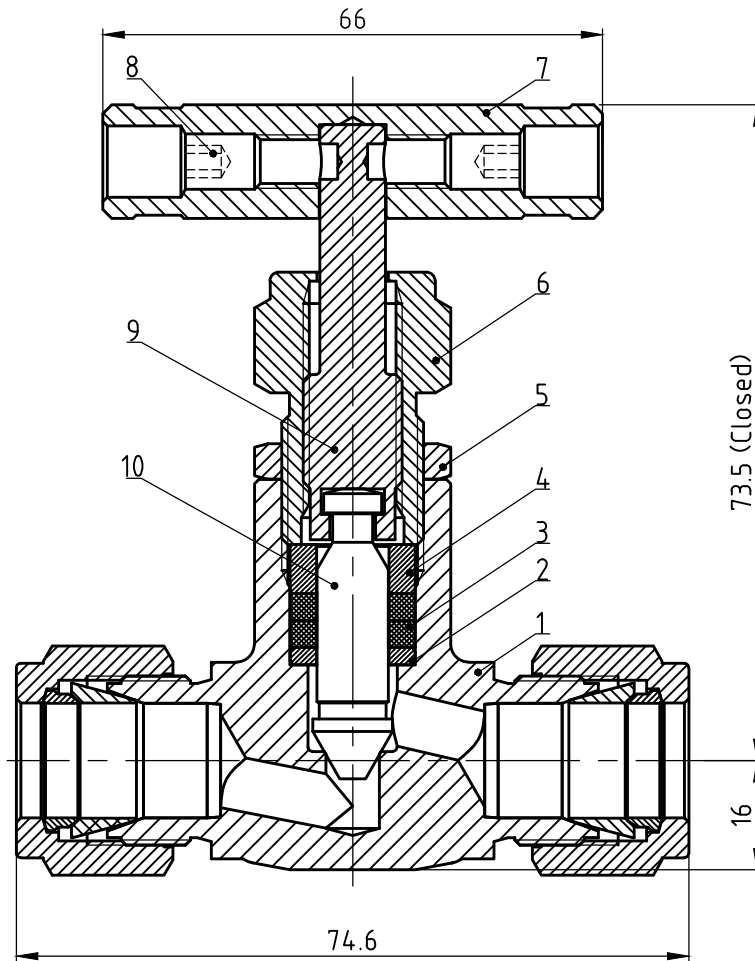
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT(F)
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Mar.01,2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-NPT8-FNPT8-11R-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Gland	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM A564
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	304 S.S.
9	Upper Stem	316 S.S./ASTM A276
10	Lower Stem	316 S.S./ASTM A479

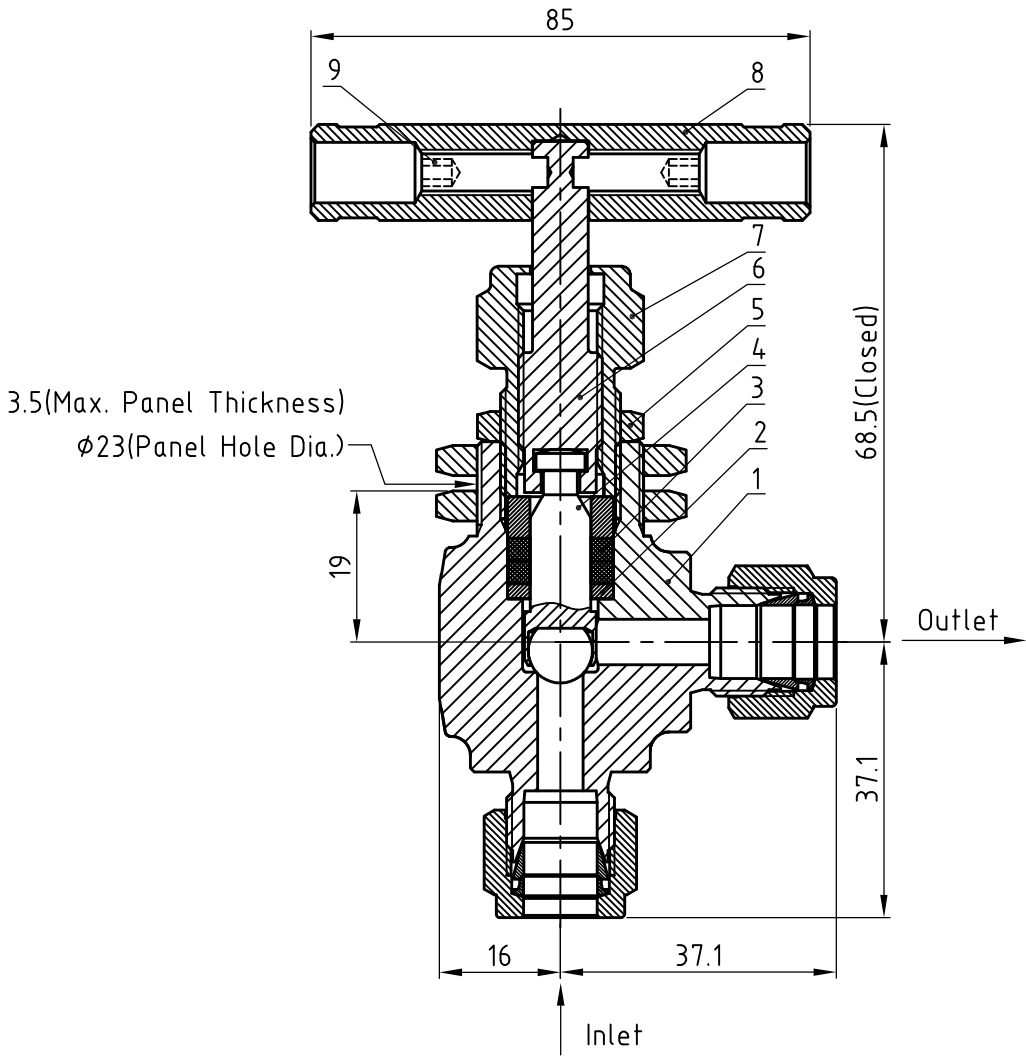
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. $\phi 3/8"$
Outlet Size	O.D. $\phi 3/8"$
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Sep.04, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CRI-LOK		Title	Needle Valve		
		Model	NV1-F6-06-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	304 S.S.

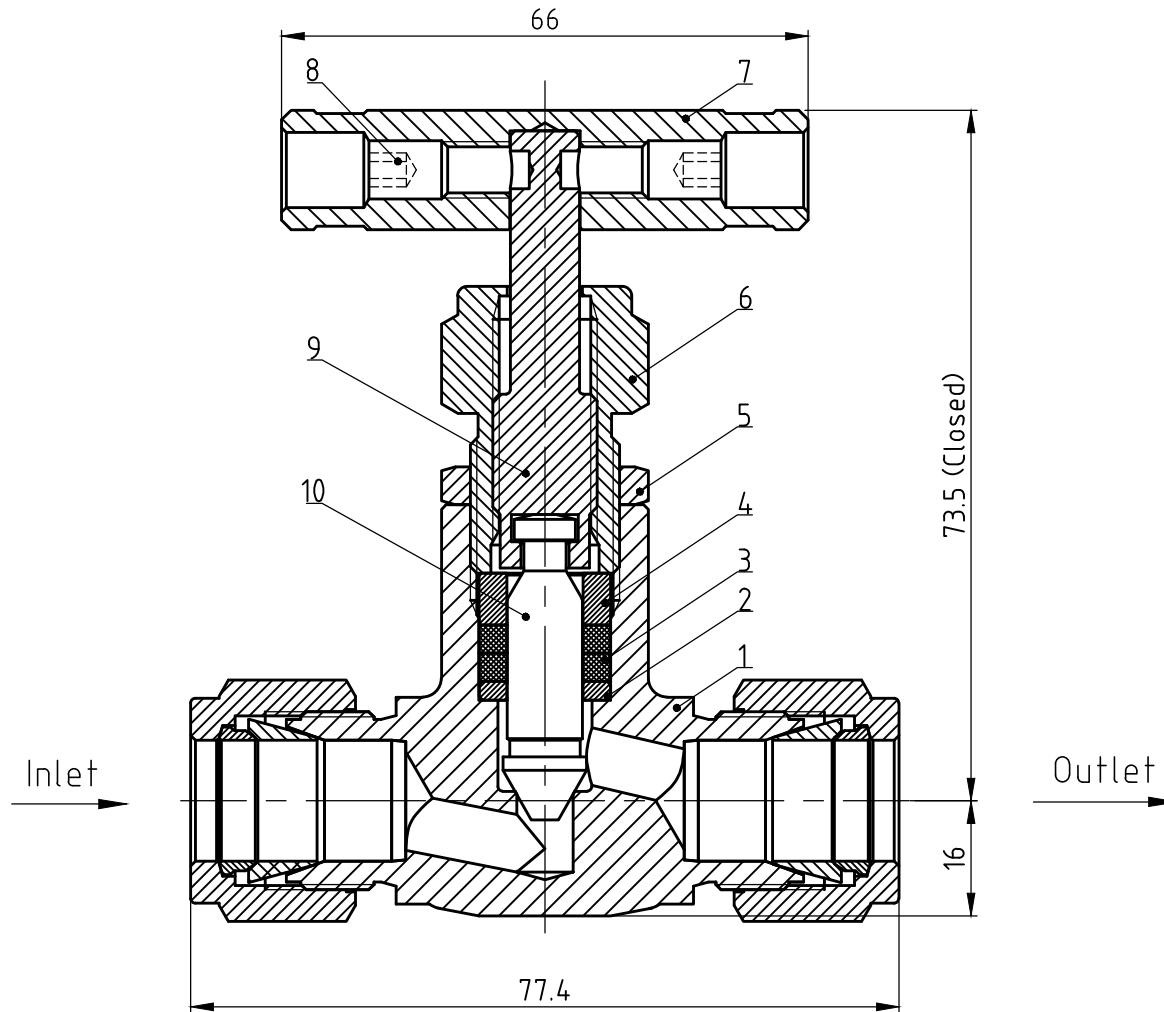
Technical Data:

Orifice Size	6mm
Inlet Size	O.D. $\phi 3/8"$
Outlet Size	O.D. $\phi 3/8"$
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	4130 (284)		

A	Apr.07, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV1-F6-06A-Y-S1A1-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Gland	316 S.S./ASTM A479
5	Lock Nut	S17400/ASTM A564
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	304 S.S.
9	Upper Stem	316 S.S./ASTM A276
10	Lower Stem	316 S.S./ASTM A479

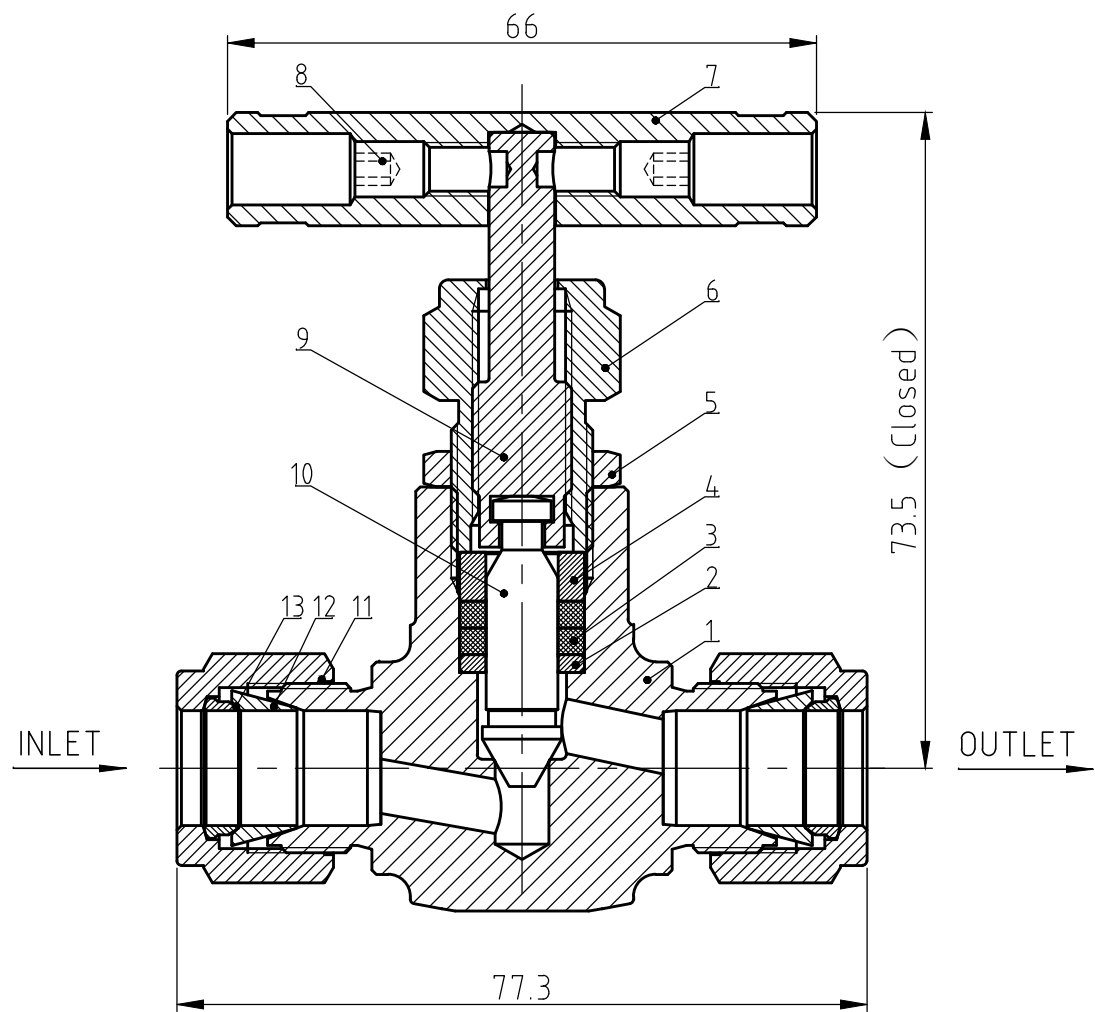
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. $\phi 1/2"$
Outlet Size	O.D. $\phi 1/2"$
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Apr.02, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CRI-LOK		Title	Needle Valve		
		Model	NV1-F8-06-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Gland	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM A564
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Upper Stem	316 S.S./ASTM A479
10	Lower Stem	316 S.S./ASTM A479
11	Ferrules Nut	316 S.S./ASTM A479
12	Front Ferrules	316 S.S./ASTM A479
13	Back Ferrules	316 S.S./ASTM A479

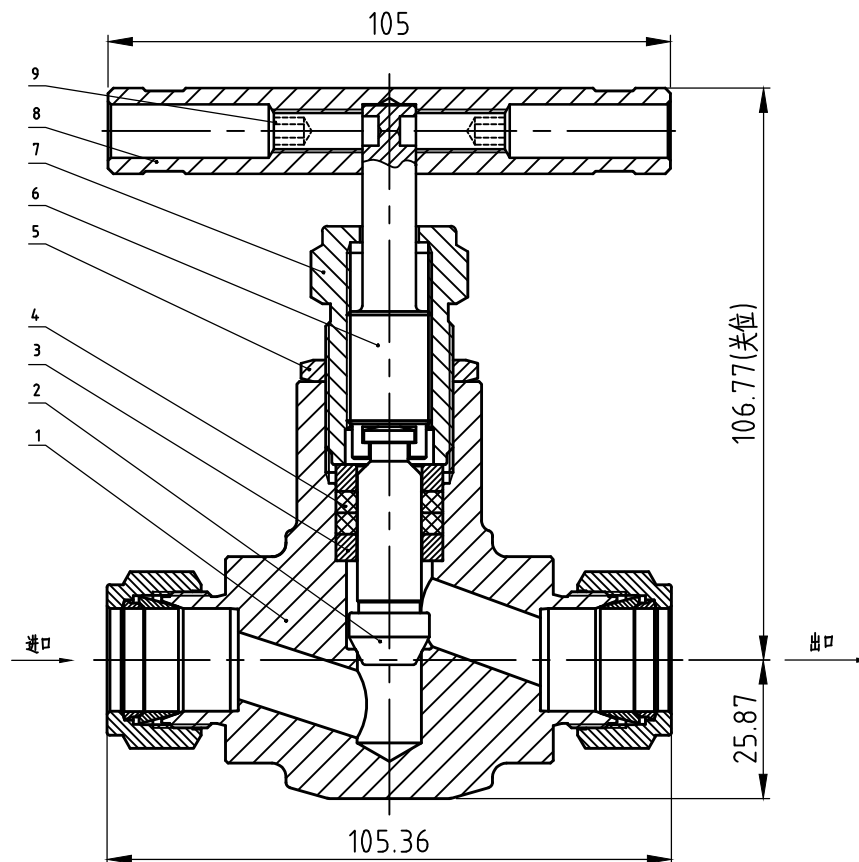
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. $\phi 1/2''$
Outlet Size	O.D. $\phi 1/2''$
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160(355)	800 (426)	3520 (243)
300 (148)	4660(322)	900 (482)	3460 (239)
400 (204)	4280(293)	1000 (537)	3030 (209)
500 (232)	3980(283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

B	Jan.5, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CRI-LOK		Title	Needle Valve		
		Model	NV1-F8-06-G-316		
Format	A4	Unit	in/mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Packing	PTFE/ASTM D1710
3	Gland	316 S.S./ASTM A479
4	Upper Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	304 S.S.
9	Lower Stem	316 S.S./ASTM A479

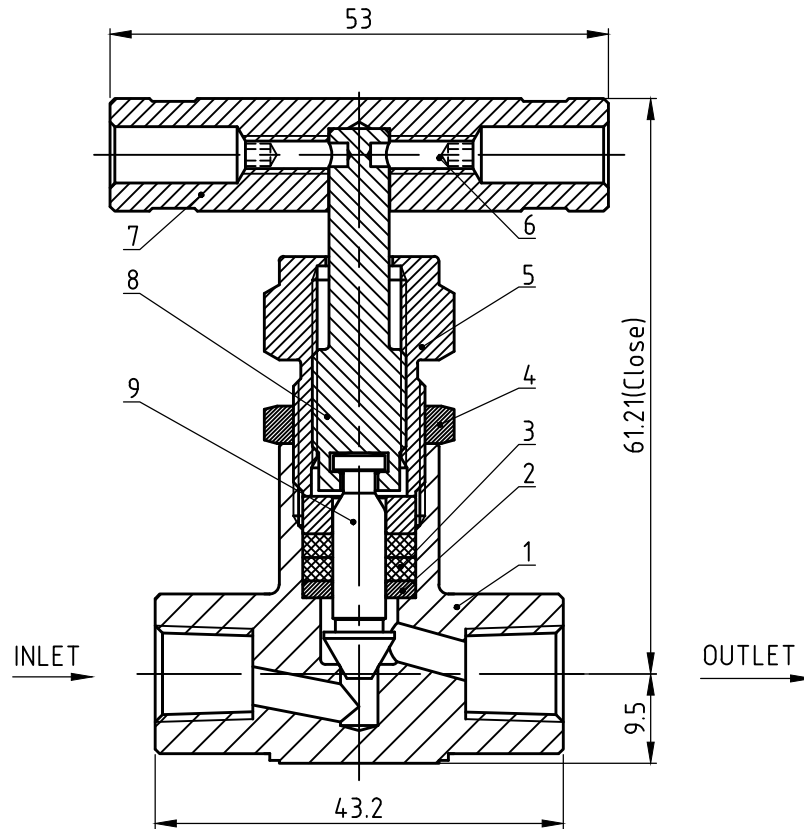
Technical Data:

Orifice Size	15mm
Inlet Size	O.D. $\phi 3/4"$
Outlet Size	O.D. $\phi 3/4"$
Cv	3.27

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (356)		
300 (148)	4660 (321)		
400 (204)	4280 (295)		
450 (232)	4130 (284)		

A	SEP.04, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-F12-15-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	304 S.S.
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A479
9	Lower Stem	316 S.S./ASTM A479

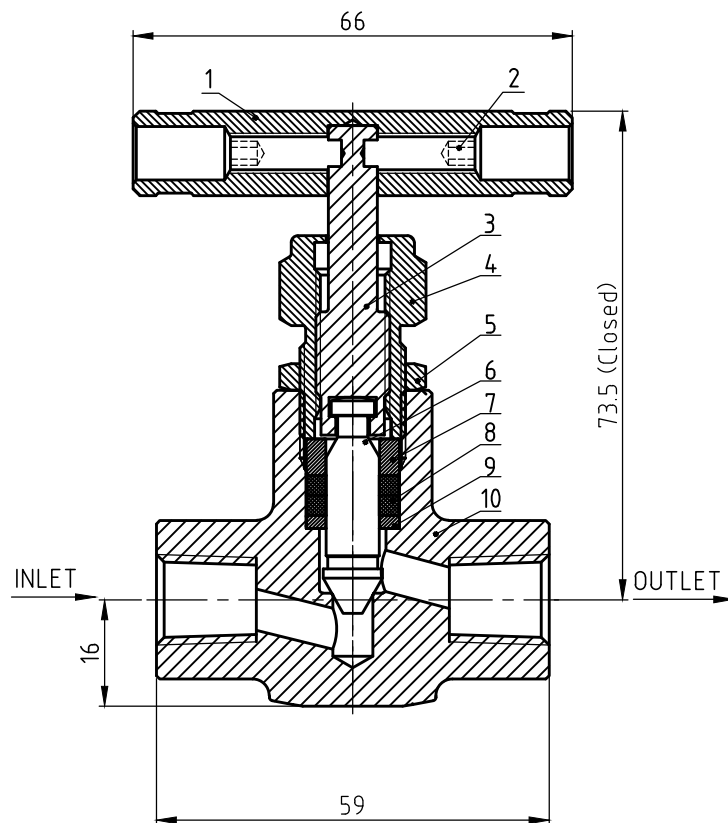
Technical Data:

Orifice Size	4mm
Inlet Size	1/8 NPT(F)
Outlet Size	1/8 NPT(F)
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Nov.20, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT2-04-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	6061/ASTM B211
2	Screw	Galvanized steel
3	Upper Stem	316 S.S./ASTM A479
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Lower Stem	316 S.S./ASTM A479
7	Gland	316 S.S./ASTM A479
8	Packing	PTFE/ASTM D1710
9	Gland	316 S.S./ASTM A479
10	Body	316 S.S./ASTM A182

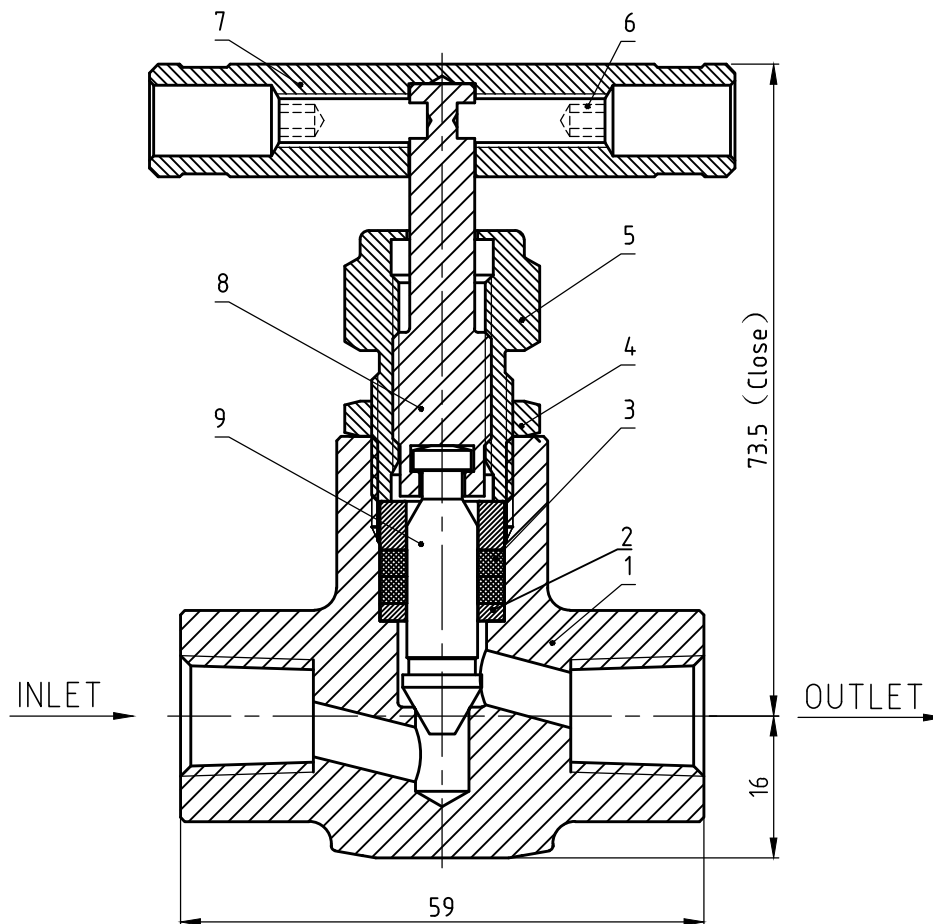
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (321)		
400 (204)	4280 (295)		
450 (232)	4130 (284)		

A	Nov.08, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV1-FNPT4-06-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	Galvanized steel
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A276
9	Lower Stem	316 S.S./ASTM A479

Note: Hydrogen sulfide environment for products.
Standard of material execution: NACE MR 0175

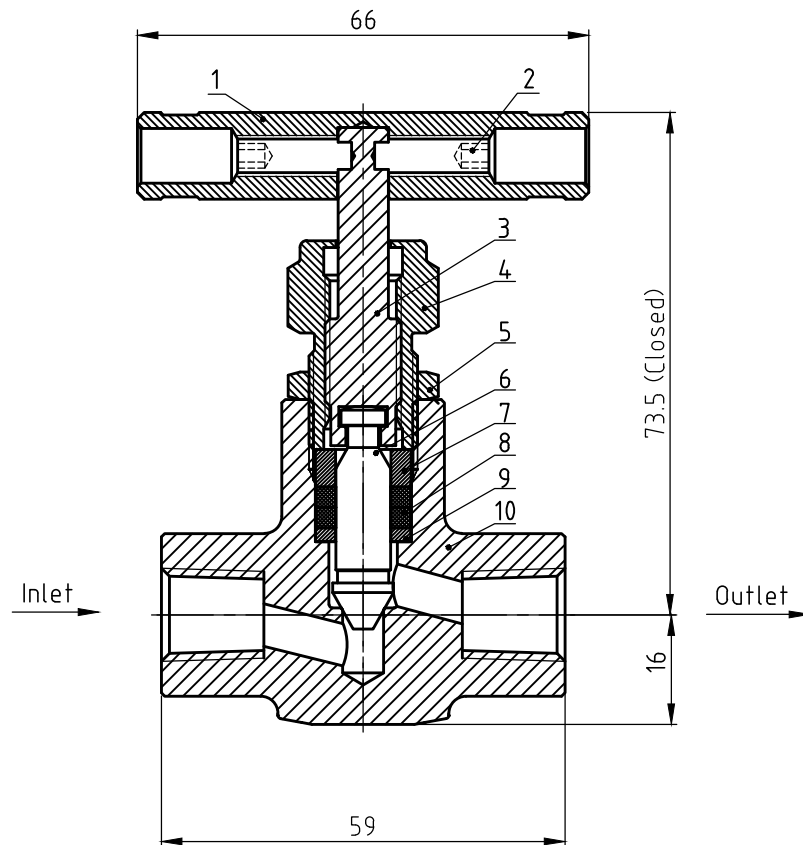
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	4130 (284)		

A	Mar.21, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT4-06-316-NACE		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	6061/ASTM B211
2	Screw	Galvanized steel
3	Upper Stem	316 S.S./ASTM A479
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Lower Stem	Monel 400/ASTM B164
7	Gland	316 S.S./ASTM A479
8	Packing	PTFE/ASTM D1710
9	Gland	Monel 400/ASTM B164
10	Body	Monel 400/ASTM B164

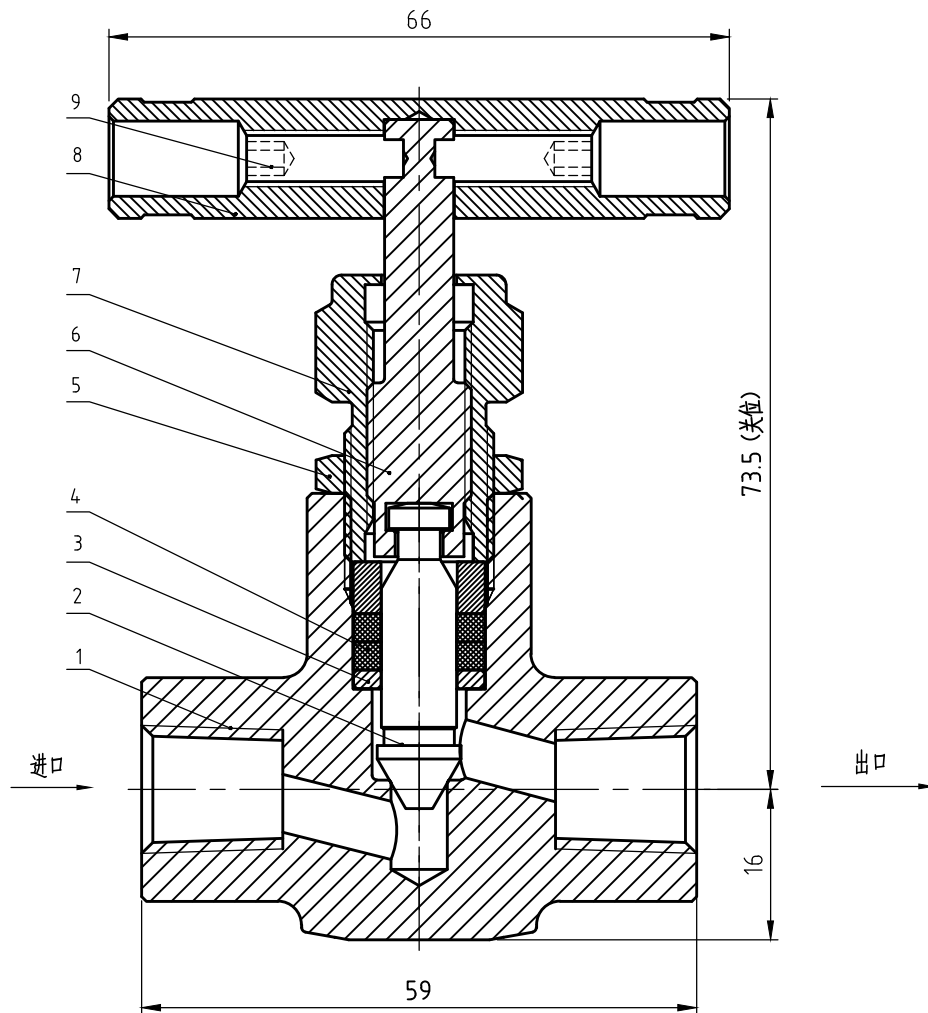
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Mar.07, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV1-FNPT4-06-A400		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	304 S.S.

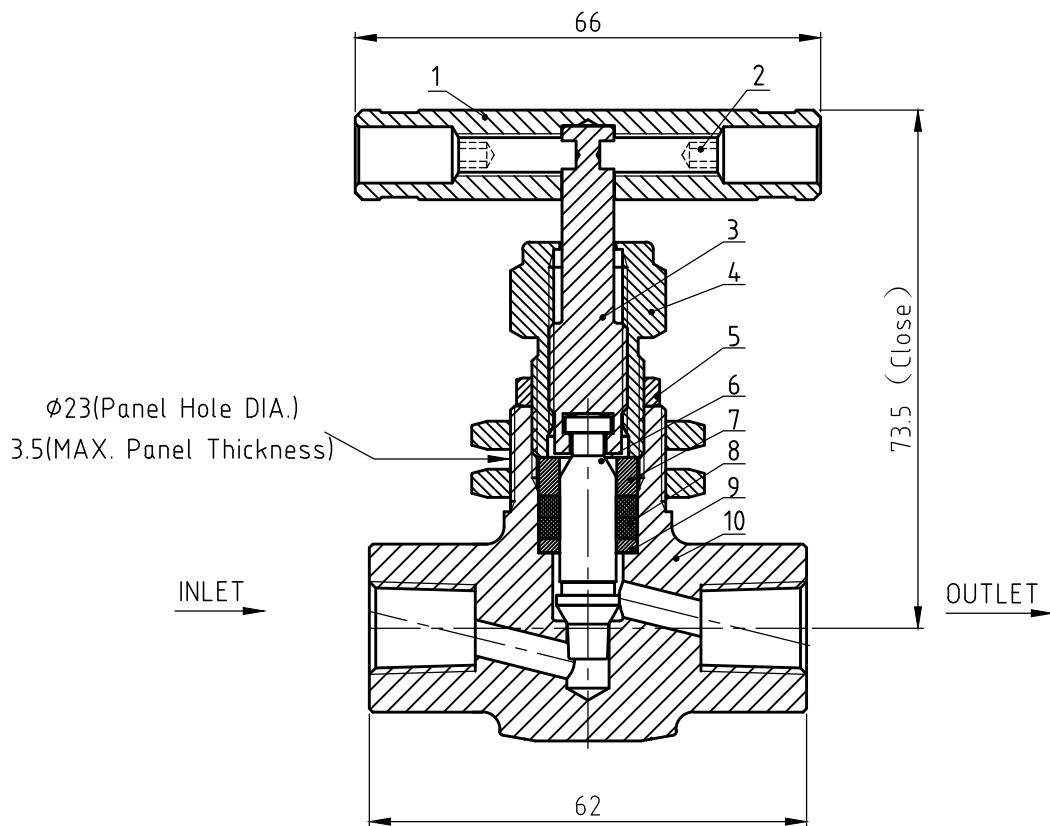
Technical Data:

Orifice Size	6mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160(355)	800 (426)	3520 (243)
300 (148)	4660(321)	900 (482)	3460 (239)
400 (204)	4280(295)	1000 (537)	3030 (209)
450 (232)	4130(284)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Nov.20, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT4-06-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	303 S.S
2	Screw	304 S.S.
3	Upper Stem	316 S.S./ASTM A479
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Lower Stem	316 S.S./ASTM A479
7	Gland	316 S.S./ASTM A479
8	Packing	PTFE/ASTM D1710
9	Gland	316 S.S./ASTM A479
10	Body	316 S.S./ASTM A182

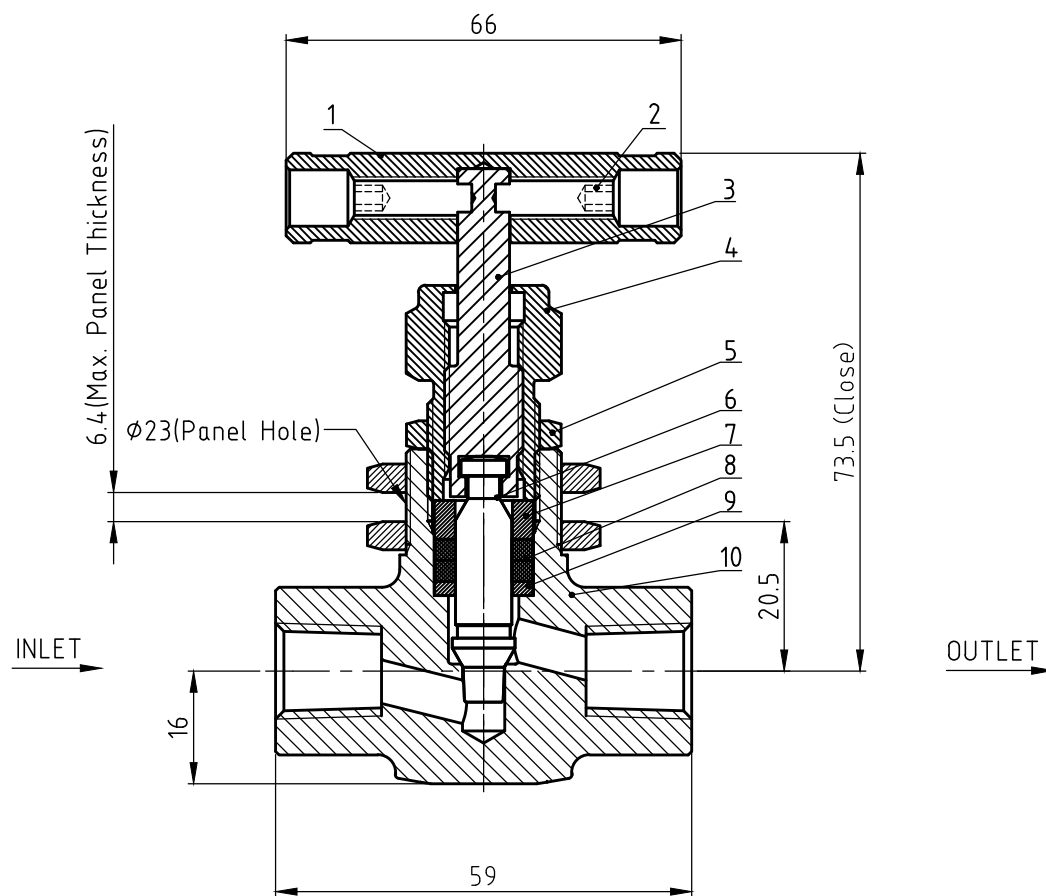
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160(355)		
300 (148)	4660(322)		
400 (204)	4280(293)		
450 (232)	3980(283)		

A	Mar.13, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV1-FNPT4-06R-Y-S1-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	303 S.S
2	Screw	304 S.S.
3	Upper Stem	316 S.S./ASTM A479
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Lower Stem	316 S.S./ASTM A479
7	Gland	316 S.S./ASTM A479
8	Packing	PTFE/ASTM D1710
9	Gland	316 S.S./ASTM A479
10	Body	316 S.S./ASTM A182

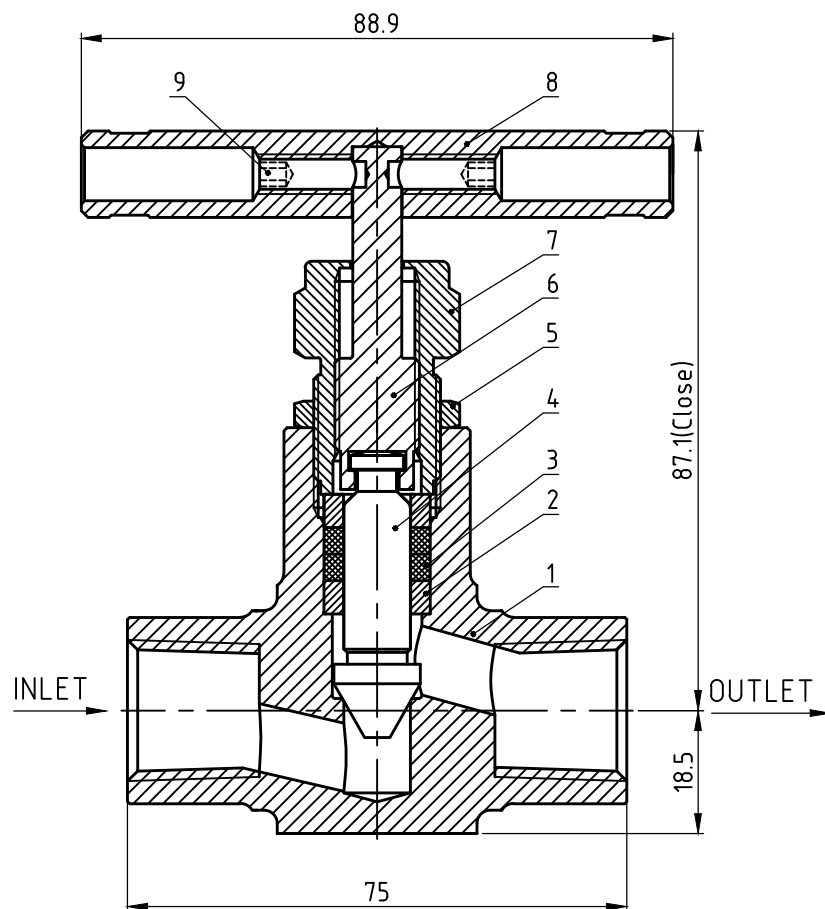
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Mar.14, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT6-06R-Y-S1-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

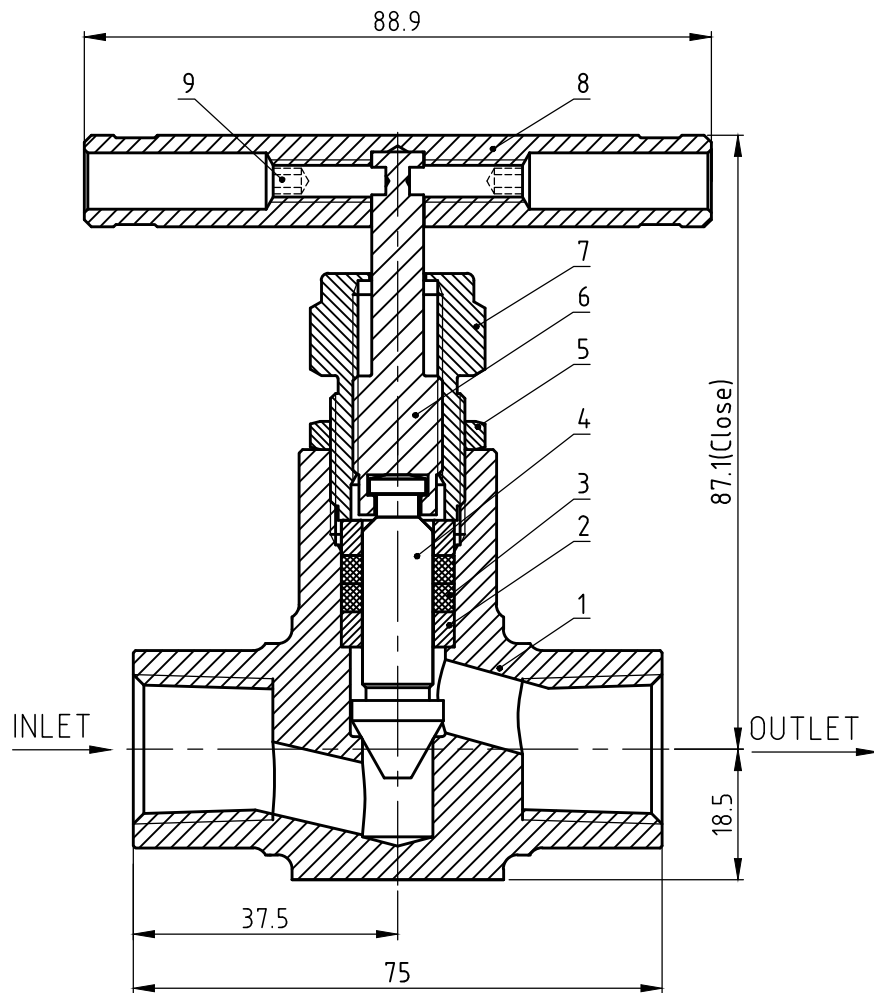
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT(F)
Outlet Size	1/2 NPT(F)
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	May.17, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT8-11-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	304 S.S.

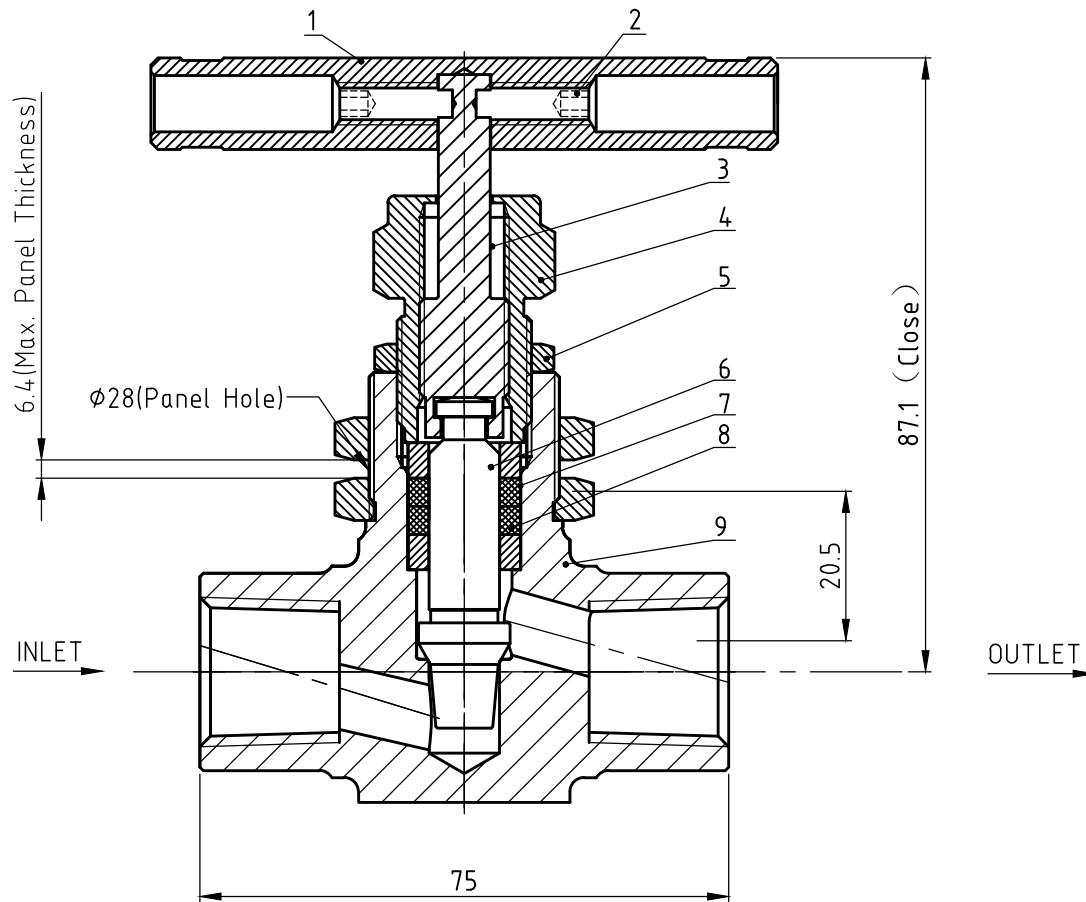
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT(F)
Outlet Size	1/2 NPT(F)
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160(355)	800 (426)	3520 (243)
300 (148)	4660(322)	900 (482)	3460 (239)
400 (204)	4280(293)	1000 (537)	3030 (209)
500 (232)	3980(283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Nov.20, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT8-11-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	303 S.S
2	Screw	304 S.S.
3	Upper Stem	316 S.S./ASTM A479
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Lower Stem	316 S.S./ASTM A479
7	Gland	316 S.S./ASTM A479
8	Packing	PTFE/ASTM D1710
9	Body	316 S.S./ASTM A182

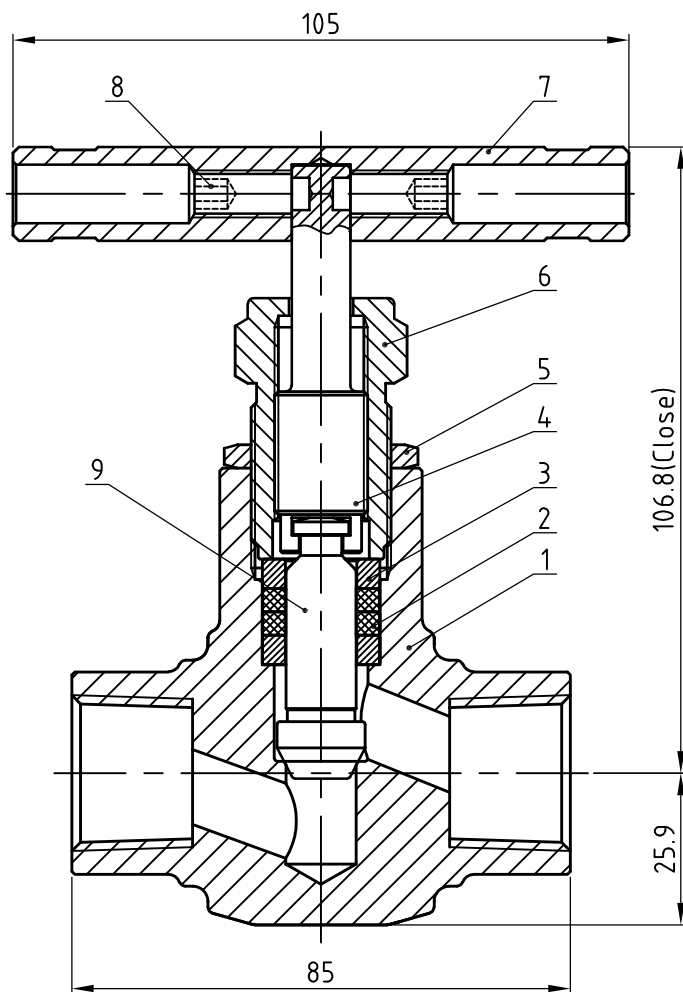
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT(F)
Outlet Size	1/2 NPT(F)
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Mar.13, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT8-11R-Y-S1-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Packing	PTFE/ASTM D1710
3	Gland	316 S.S./ASTM A479
4	Upper Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Lower Stem	316 S.S./ASTM A479

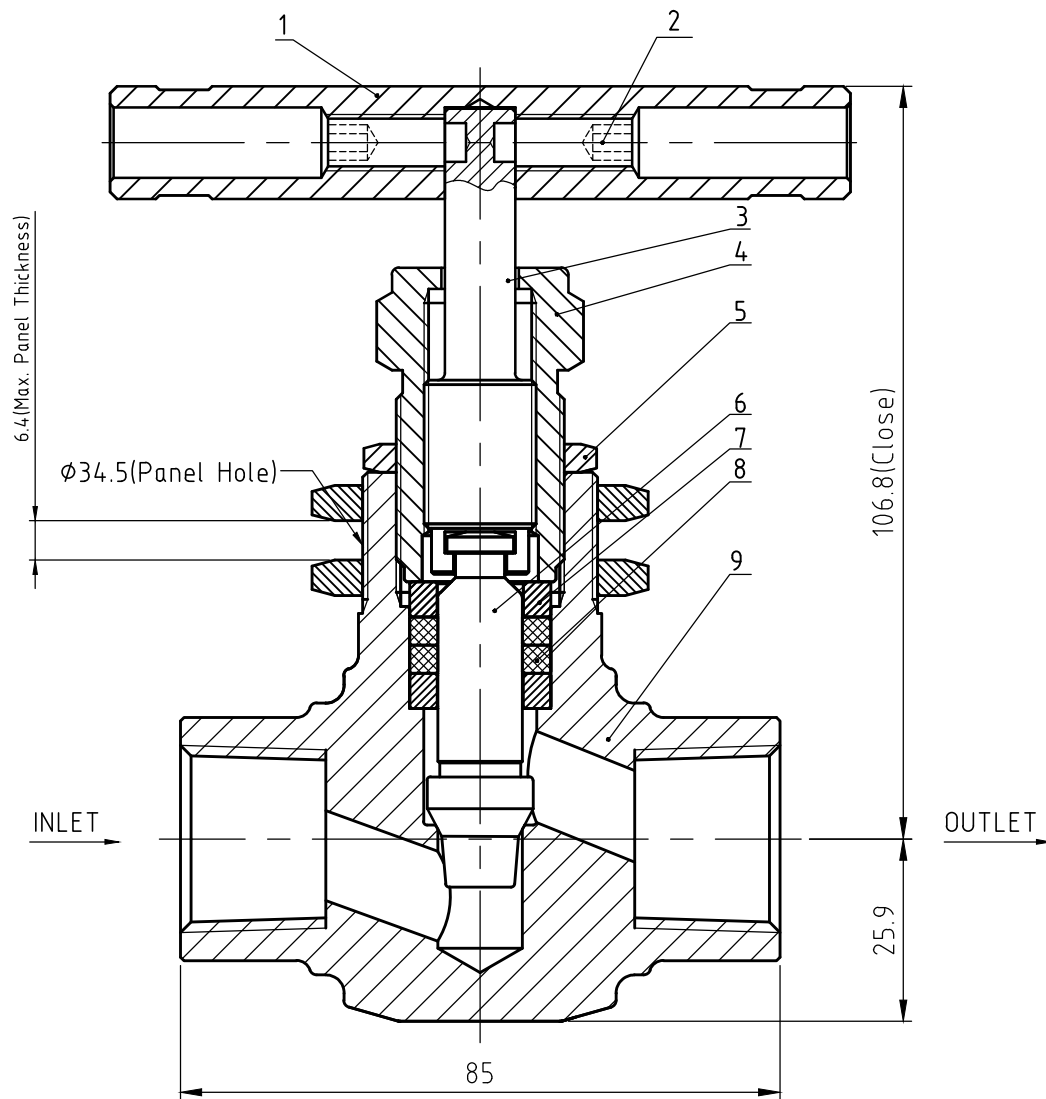
Technical Data:

Orifice Size	15mm
Inlet Size	3/4 NPT(F)
Outlet Size	3/4 NPT(F)
Cv	3.27

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (356)		
300 (148)	4660 (321)		
400 (204)	4280 (295)		
450 (232)	4130 (284)		

A	Dec.07, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT12-15-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	303 S.S
2	Screw	304 S.S.
3	Upper Stem	316 S.S./ASTM A479
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Lower Stem	316 S.S./ASTM A479
7	Gland	316 S.S./ASTM A479
8	Packing	PTFE/ASTM D1710
9	Body	316 S.S./ASTM A182

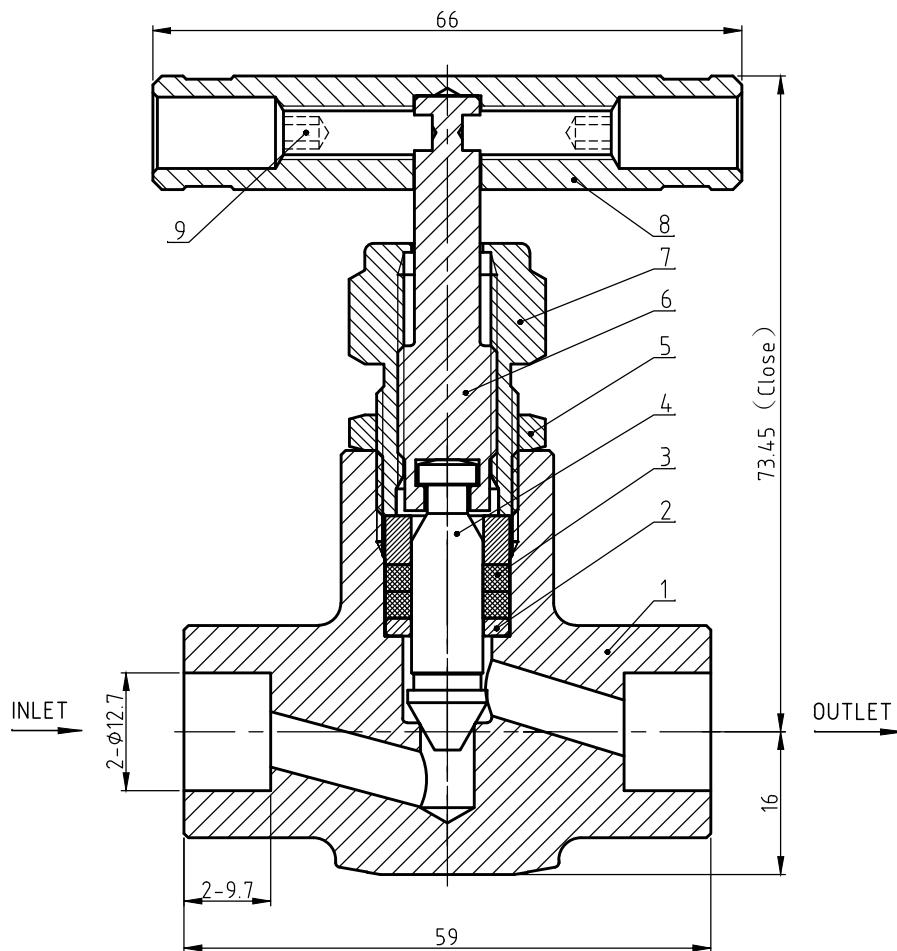
Technical Data:

Orifice Size	15mm
Inlet Size	3/4 NPT(F)
Outlet Size	3/4 NPT(F)
Cv	3.27

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	3980 (283)		

A	Mar.14, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FNPT12-11R-Y-S1-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	Galvanized steel

Technical Data:

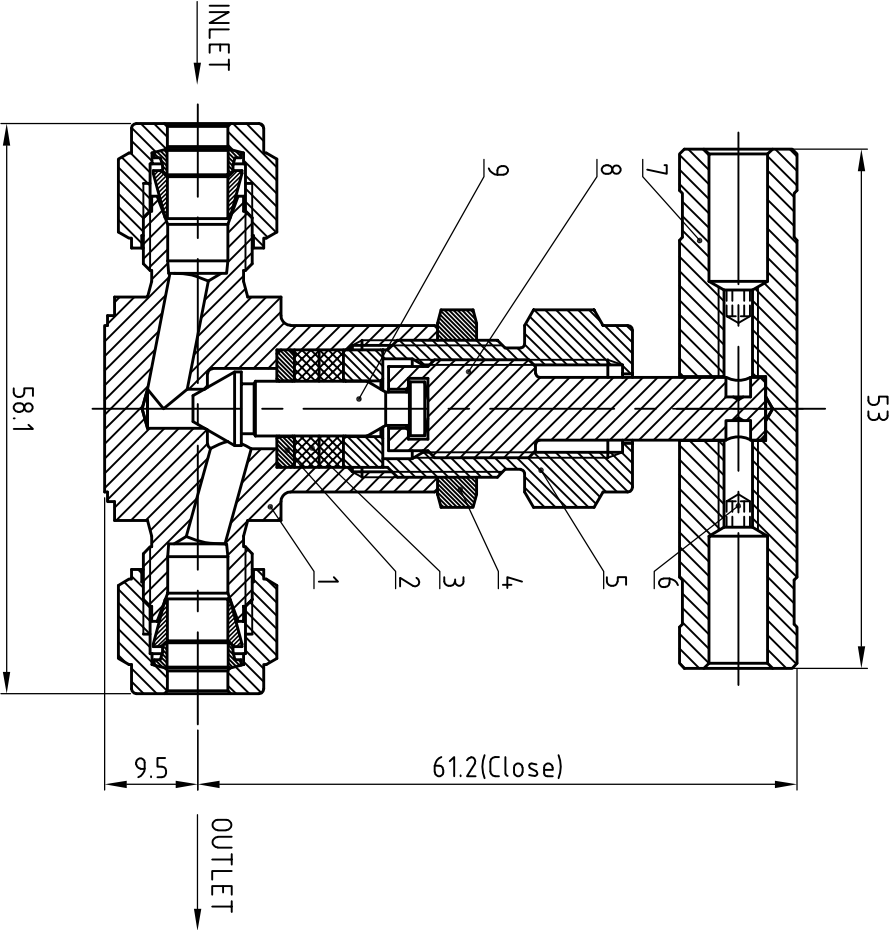
Orifice Size	6mm
Inlet Size	1/2" Tube Socket Weld
Outlet Size	1/2" Tube Socket Weld
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3880 (267)
200 (93)	5400 (372)	800 (426)	3760 (259)
300 (148)	4960 (342)	900 (482)	3680 (253)
400 (204)	4600 (317)	1000 (537)	3030 (208)
500 (260)	4300 (296)	1100 (593)	2545 (175)
600 (315)	4060 (280)	1200 (648)	1545 (107)

A	Jul.07, 2025				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-FSW8-06-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		

No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	PTFE/ASTM D1710
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	Galvanized steel
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A479
9	Lower Stem	316 S.S./ASTM A479



Technical Data:

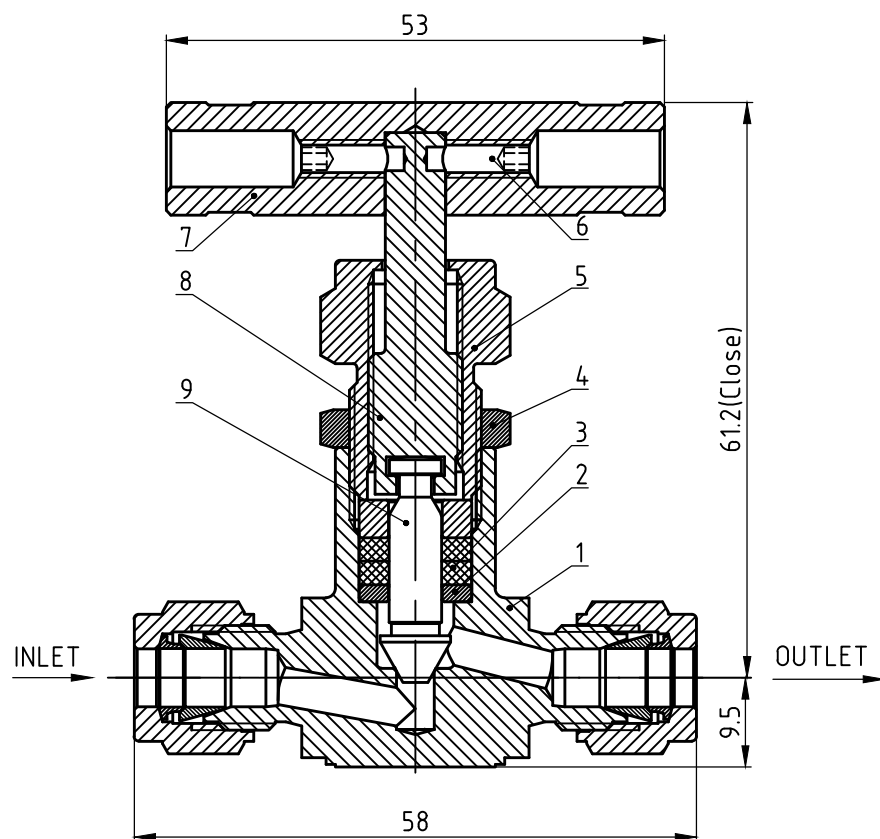
Orifice Size	4mm
Inlet Size	O.D. ϕ 6
Outlet Size	O.D. ϕ 6
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (321)		
400 (204)	4280 (295)		
450 (232)	4130 (284)		

Note: Hydrogen sulfide environment for products.
Standard of material execution: NACE MR 0175

A	Feb.08, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOOK		Title	Needle Valve		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	304 S.S.
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A479
9	Lower Stem	316 S.S./ASTM A479

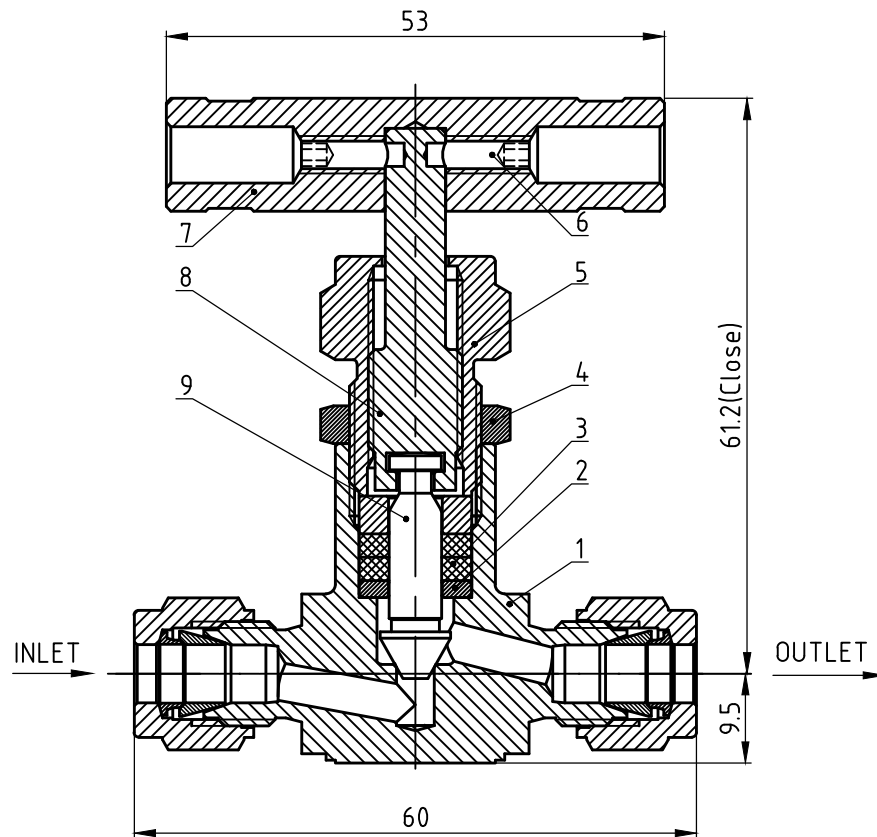
Technical Data:

Orifice Size	4mm
Inlet Size	O.D. Ø6
Outlet Size	O.D. Ø6
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Oct.13, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-M6-04-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	304 S.S.
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A479
9	Lower Stem	316 S.S./ASTM A479

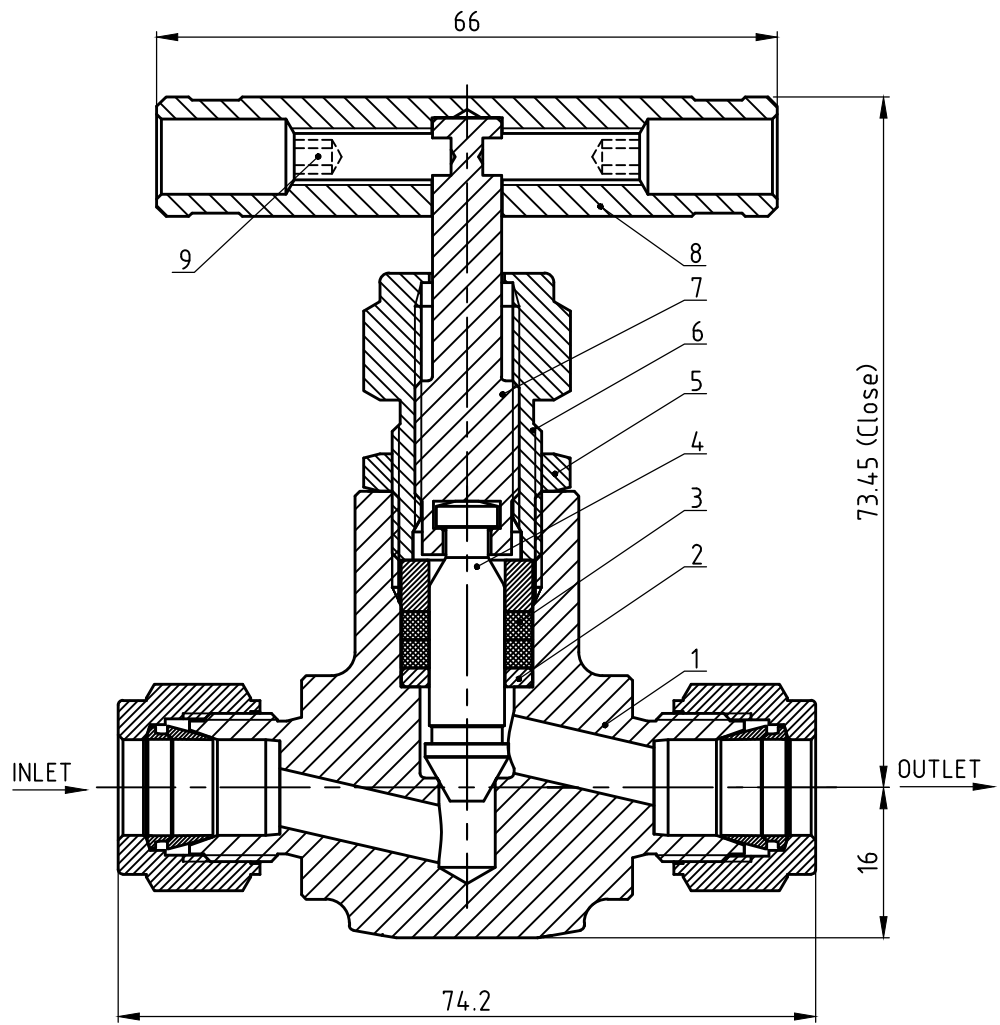
Technical Data:

Orifice Size	4mm
Inlet Size	O.D. Ø8
Outlet Size	O.D. Ø8
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Nov.20, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-M8-04-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	304 S.S.

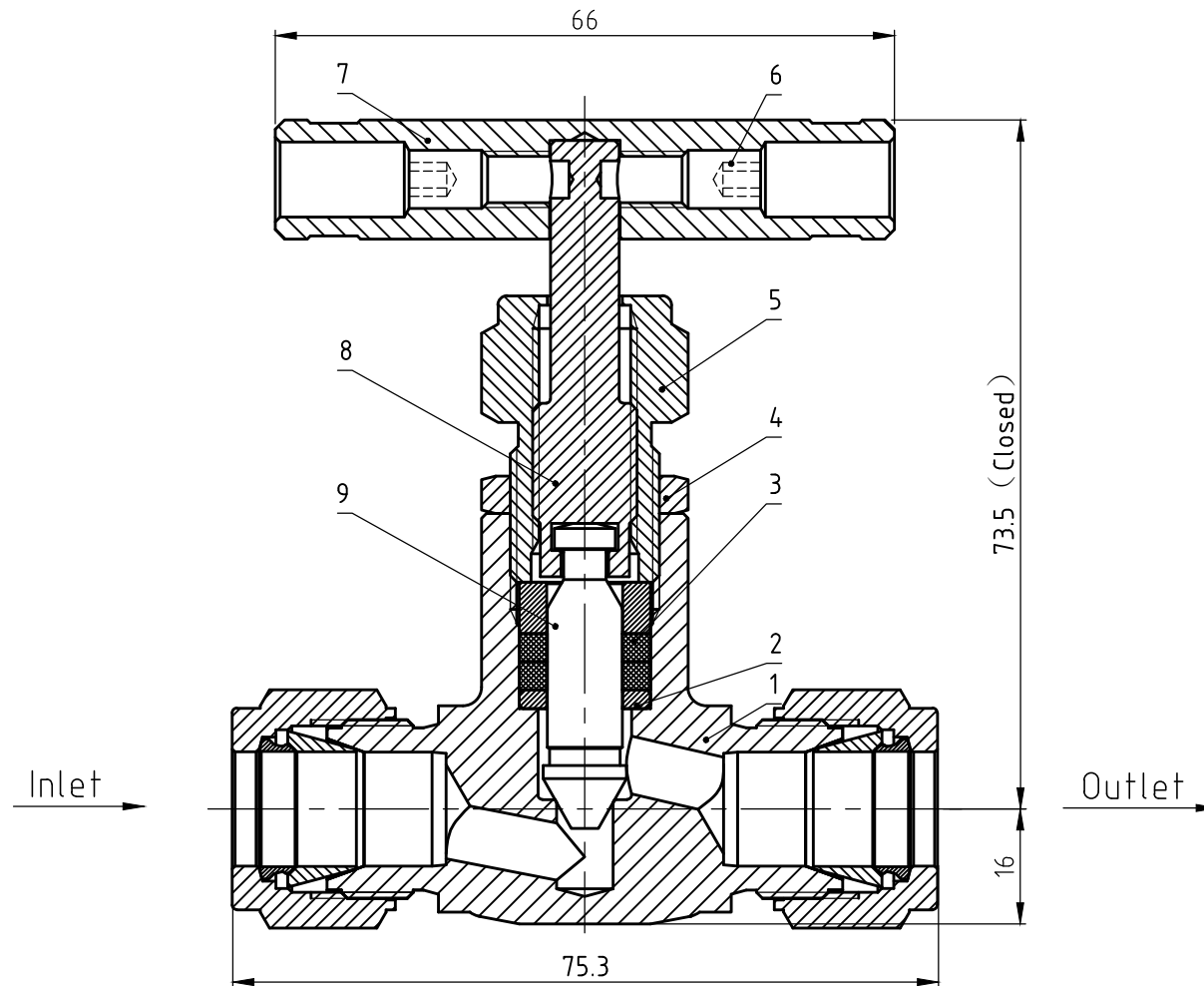
Technical Data:

Orifice Size	6mm
Inlet Size	O.D. ϕ 10
Outlet Size	O.D. ϕ 10
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160(355)	800 (426)	3520 (243)
300 (148)	4660(321)	900 (482)	3460 (239)
400 (204)	4280(295)	1000 (537)	3030 (209)
450 (232)	4130(284)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Nov.20, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-M10-06-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	Alloy C276/ASTM B564
2	Gland	Alloy C276/ASTM B574
3	Packing	PTFE/ASTM D1710
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	Galvanized steel
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A276
9	Lower Stem	Alloy C276/ASTM B574

Note: Hydrogen sulfide environment for products.
Standard of material execution: NACE MR 0175

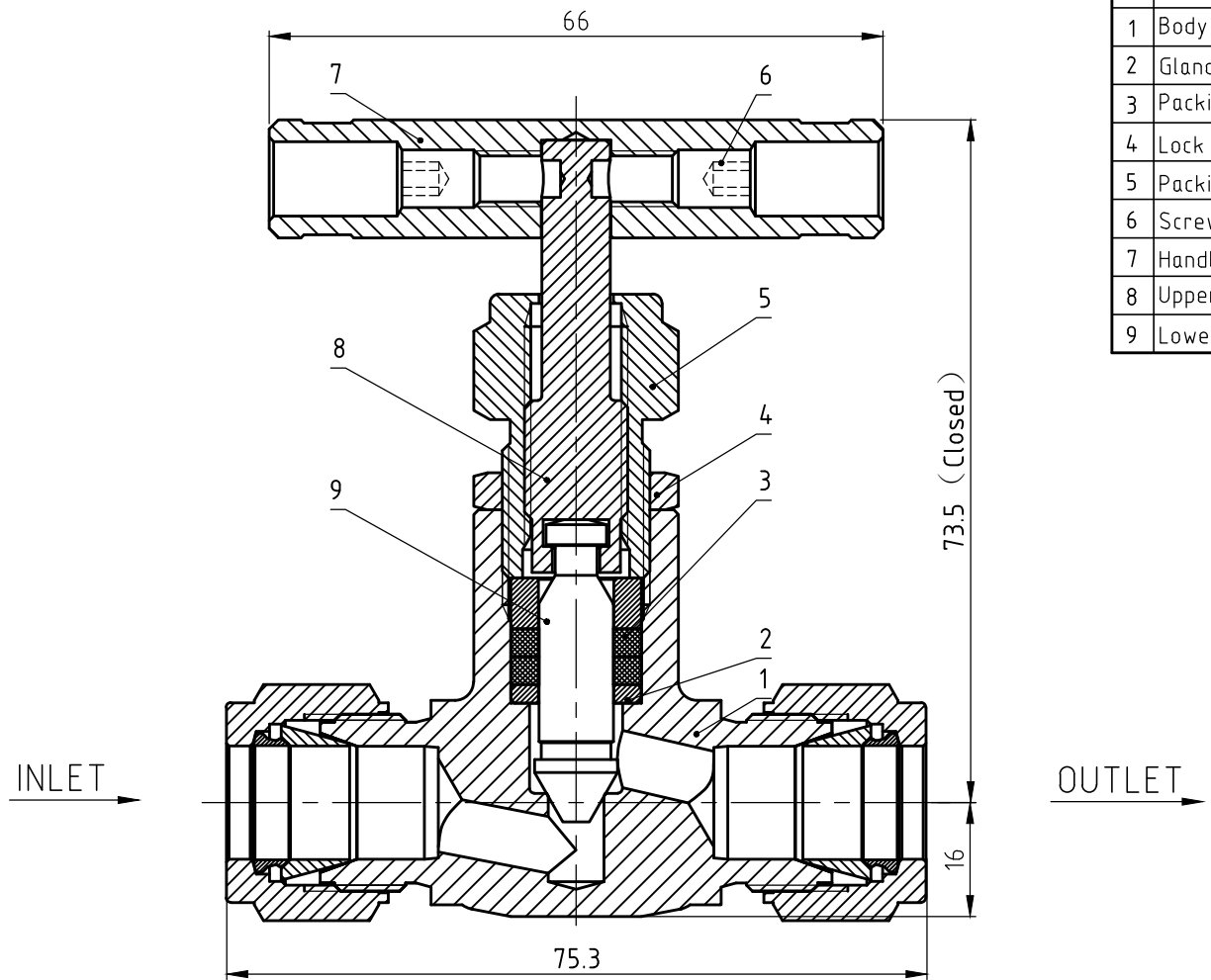
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. ϕ 12
Outlet Size	O.D. ϕ 12
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)		
200 (93)	5160 (355)		
300 (148)	4660 (322)		
400 (204)	4280 (293)		
450 (232)	4130 (284)		

A	Mar.18, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-I.LOK		Title	Needle Valve		
		Model	NV1-M12-06-A276-NACE		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lock Nut	630 S.S./ASTM B783
5	Packing Nut	316 S.S./ASTM A479
6	Screw	Galvanized steel
7	Handle	6061/ASTM B211
8	Upper Stem	316 S.S./ASTM A276
9	Lower Stem	316 S.S./ASTM A479

PTFE 填料温压

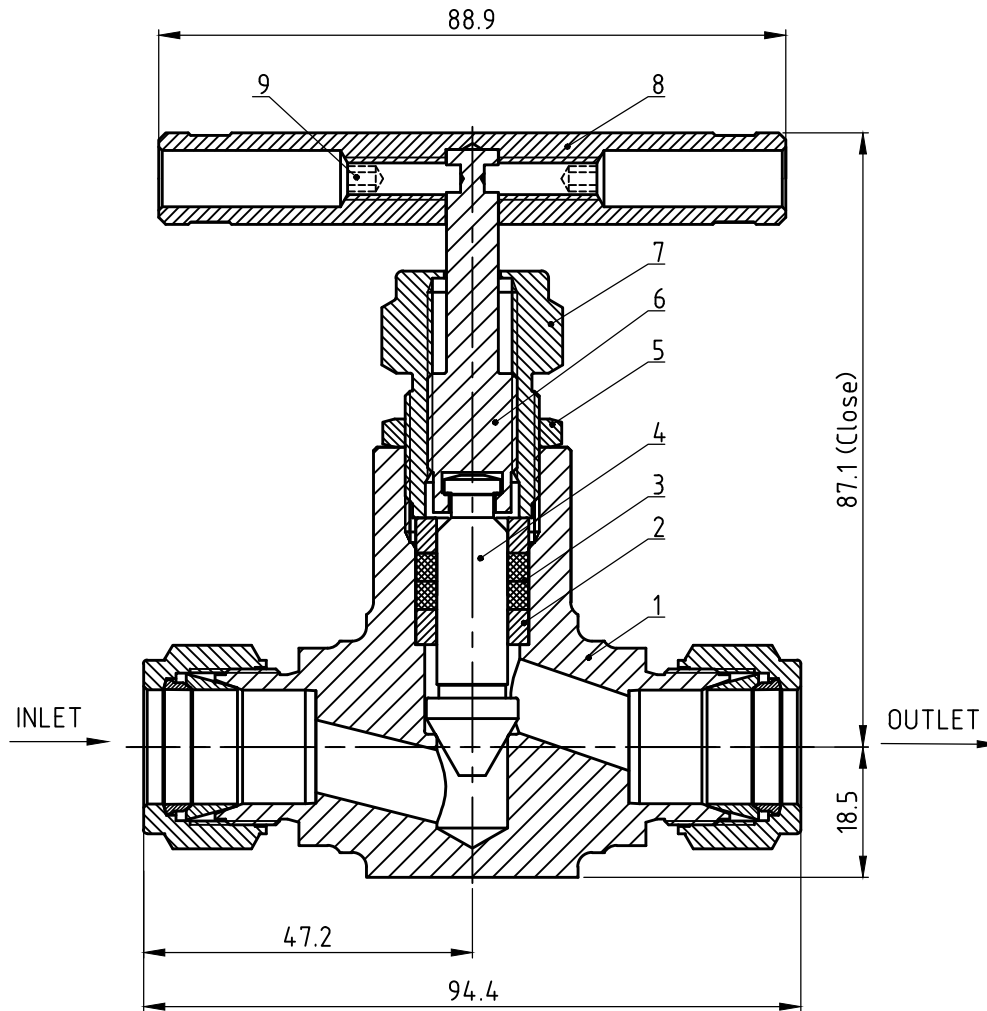
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. $\phi 12$
Outlet Size	O.D. $\phi 12$
Cv	0.85

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Oct.13, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-M12-06-G-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Lower Stem	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM B783
6	Upper Stem	316 S.S./ASTM A479
7	Packing Nut	316 S.S./ASTM A479
8	Handle	6061/ASTM B211
9	Screw	304 S.S.

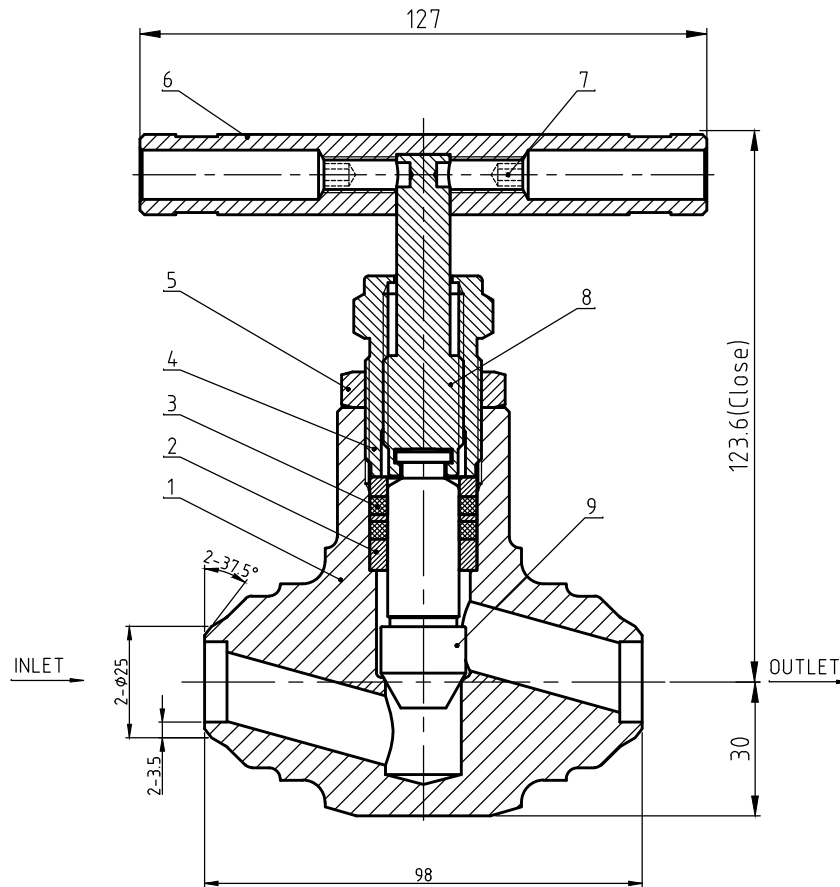
Technical Data:

Orifice Size	11mm
Inlet Size	O.D. ϕ 18
Outlet Size	O.D. ϕ 18
Cv	2.18

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
500 (260)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Oct.13, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV1-M18-11-G-316		
Format	A4	Unit	mm	View	
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No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Gland	316 S.S./ASTM A479
3	Packing	Graphite
4	Packing Nut	316 S.S./ASTM A479
5	Lock Nut	630 S.S./ASTM A564
6	Handle	6061/ASTM B211
7	Screw	304 S.S.
8	Upper Stem	316 S.S./ASTM A479
9	Lower Stem	316 S.S./ASTM A479

Technical Data:

Orifice Size	20mm
Inlet Size	25mm Tube Butt Weld
Outlet Size	25mm Tube Butt Weld
Cv	5.65

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	6000 (413)	700 (371)	3620 (250)
200 (93)	5160 (355)	800 (426)	3520 (243)
300 (148)	4660 (322)	900 (482)	3460 (239)
400 (204)	4280 (293)	1000 (537)	3030 (209)
450 (232)	3980 (283)	1100 (593)	2545 (175)
600 (315)	3760 (259)	1200 (648)	1545 (107)

A	Sep.11, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
		Title		Needle Valve	
		Model		NV1-MBW25-20-G-316	
Format	A4	Unit	mm	View	
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