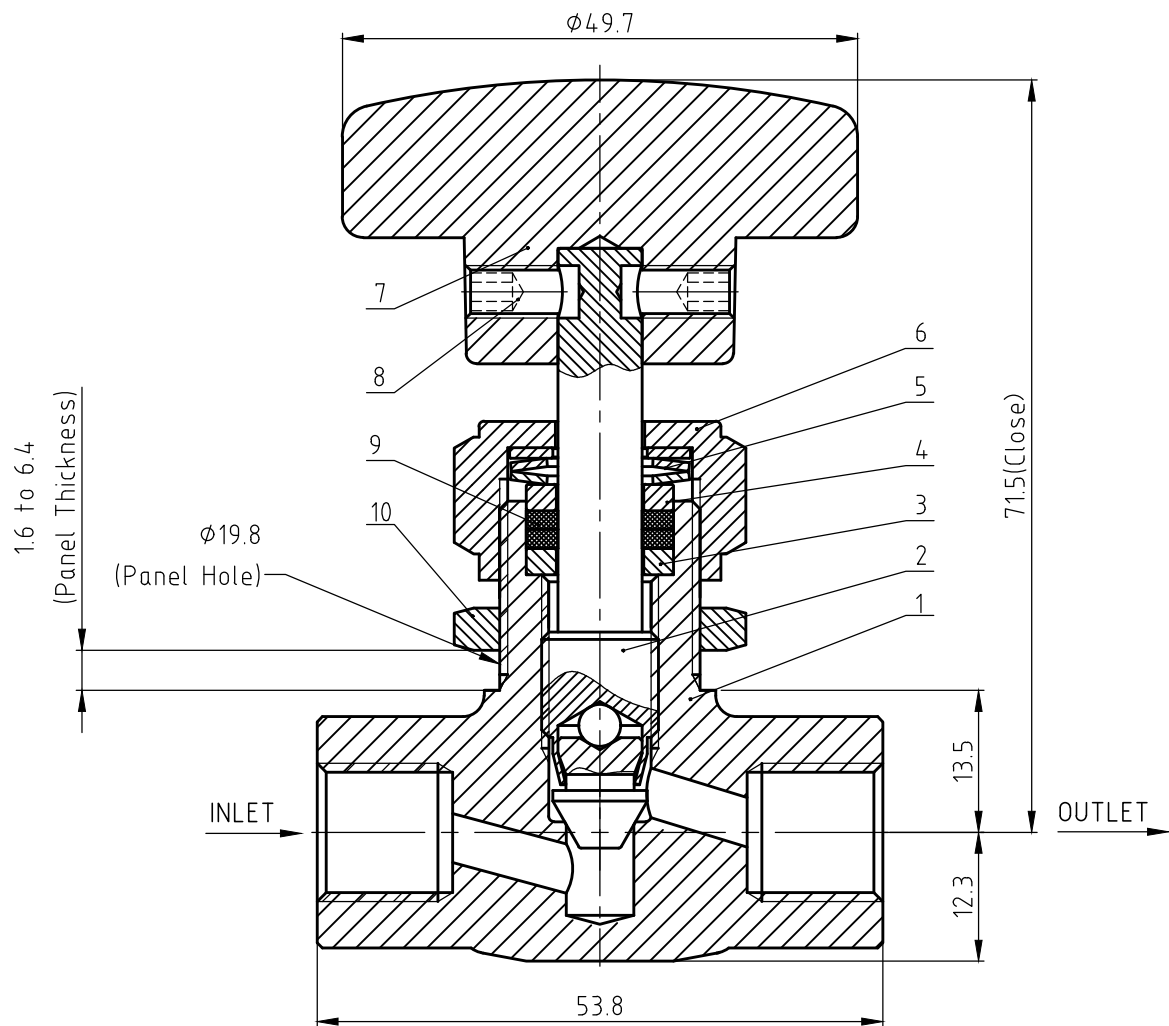




No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A276
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Panel Nut	316 S.S./ASTM B783

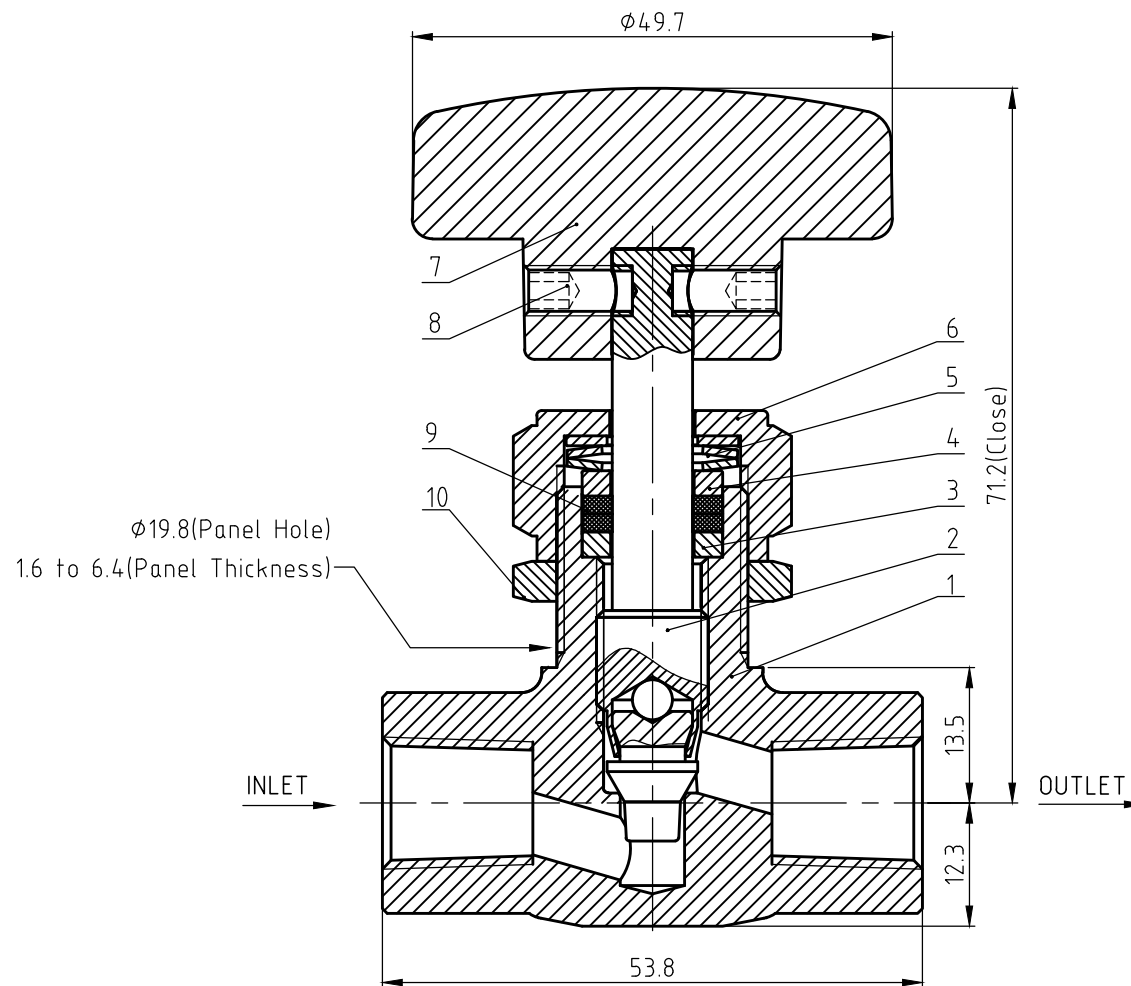
Technical Data:

Orifice Size	6mm
Inlet Size	G1/4 (F)
Outlet Size	G1/4 (F)
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Dec.23, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-FBP4-06-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

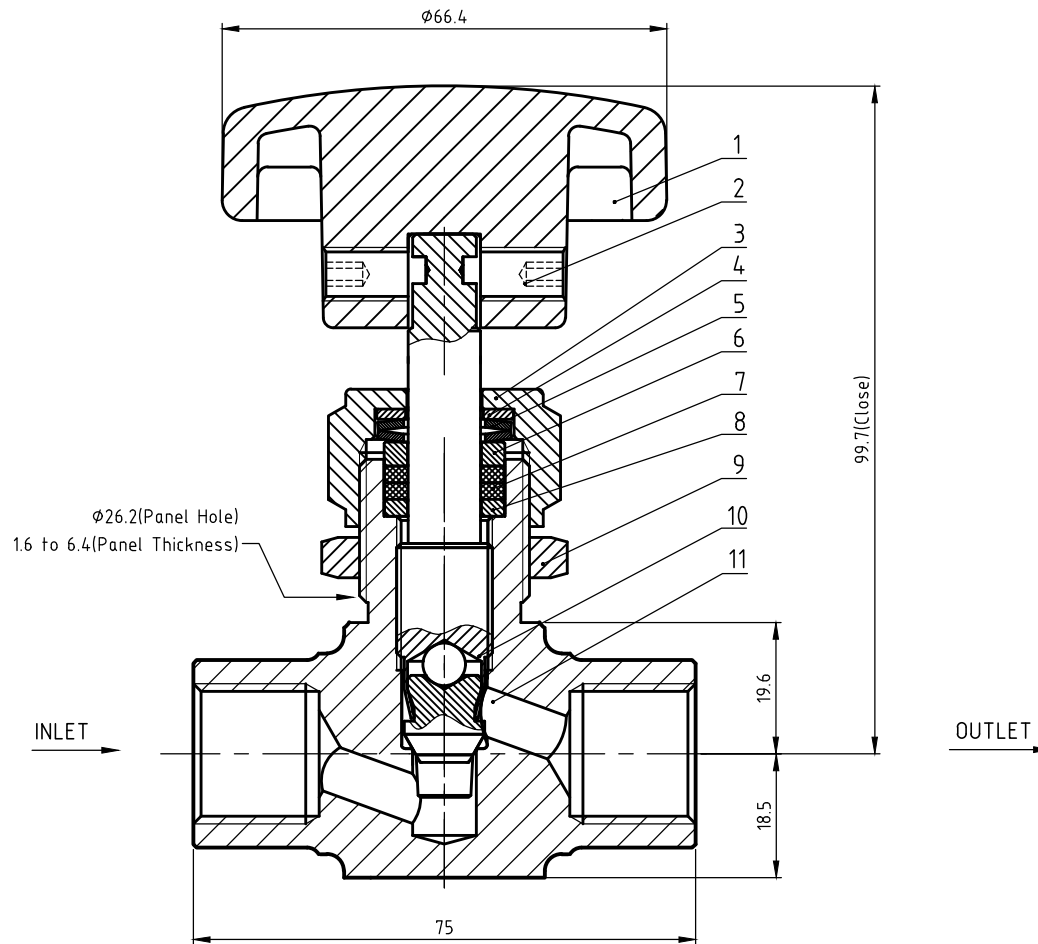
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 BSPT(F)
Outlet Size	1/4 BSPT(F)
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Nov.28, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-FBT4-06R-316		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	ADC12/JIS H5302
2	Screw	304 S.S.
3	Packing Nut	316 S.S./ASTM A479
4	Spring Seat	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Gland	316 S.S./ASTM A479
7	Packing	PTFE/ASTM D1710
8	Gland	316 S.S./ASTM A479
9	Panel Nut	630 S.S./ASTM B783
10	Stem	316 S.S./ASTM A479
11	Body	316 S.S./ASTM A182

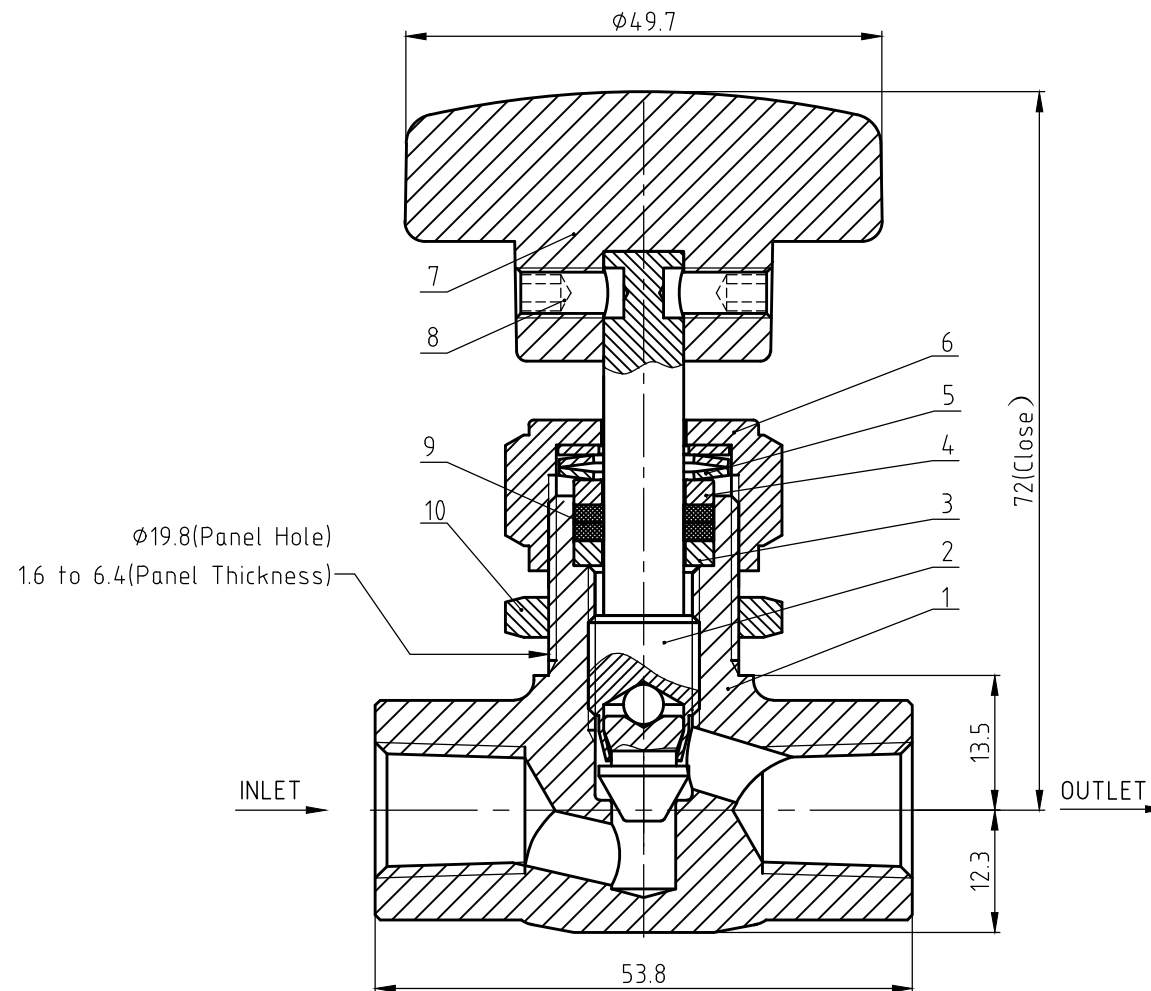
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 BSPT(F)
Outlet Size	1/2 BSPT(F)
Cv	1.8

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Nov.28, 2021				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-FBT8-11R-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized carbon steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

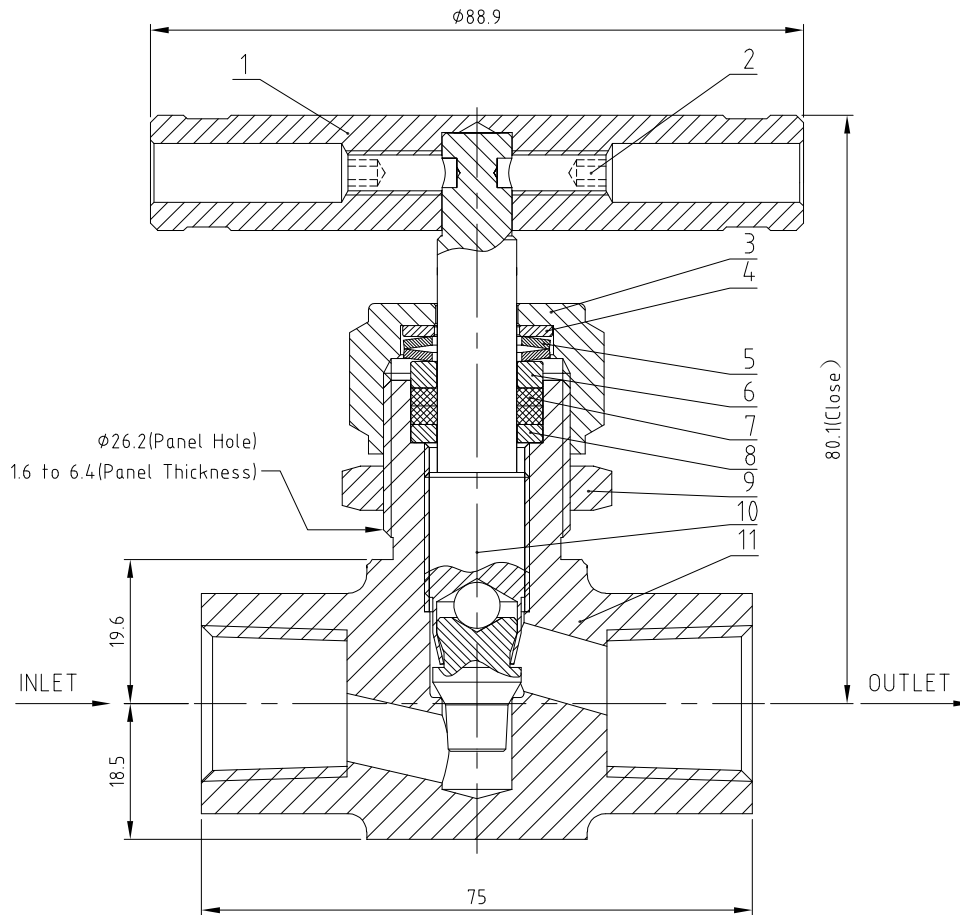
Technical Data:

Orifice Size	6.0mm
Inlet Size	1/4 NPT(F)
Outlet Size	1/4 NPT(F)
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Mar.21, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-FNPT4-06-316		
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	Packing Nut	316 S.S./ASTM A479
4	Spring Seat	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Gland	316 S.S./ASTM A479
7	Packing	PTFE/ASTM D1710
8	Gland	316 S.S./ASTM A479
9	Panel Nut	630 S.S./ASTM B783
10	Stem	316 S.S./ASTM A479
11	Body	316 S.S./ASTM A182

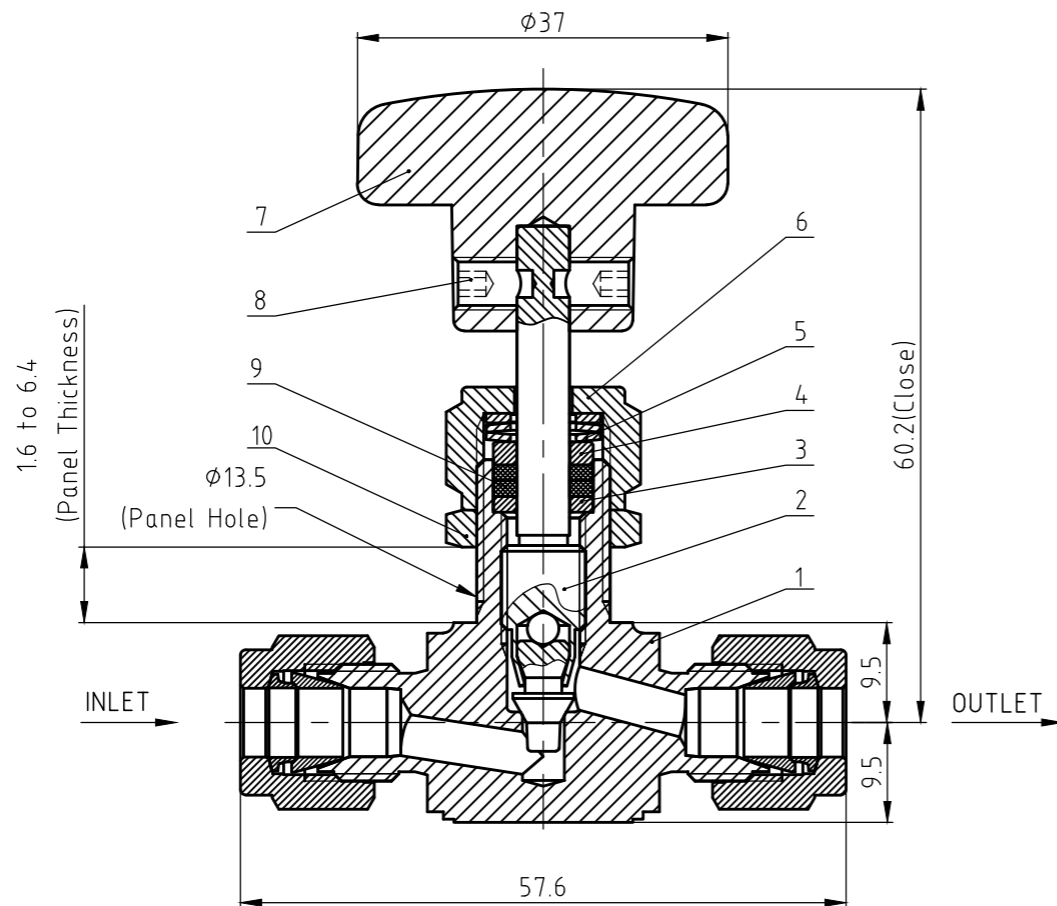
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT(F)
Outlet Size	1/2 NPT(F)
Cv	1.8

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Feb.22,2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-FNPT8-11R-HB-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

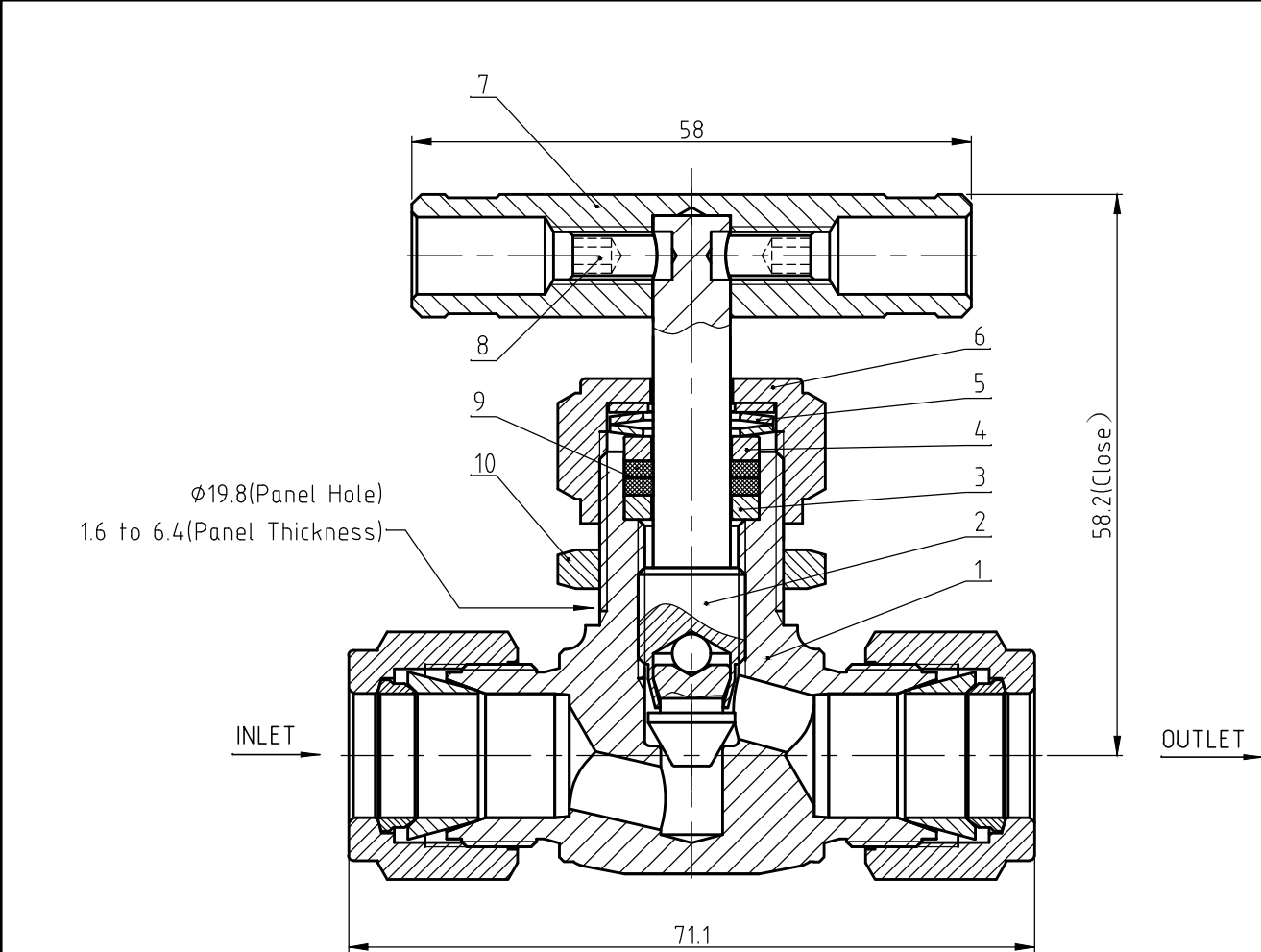
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 1/4''$
Outlet Size	O.D. $\phi 1/4''$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Jul.14, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-F4-04R-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Packing	PFA
10	Lock Nut	630 S.S./ASTM B783

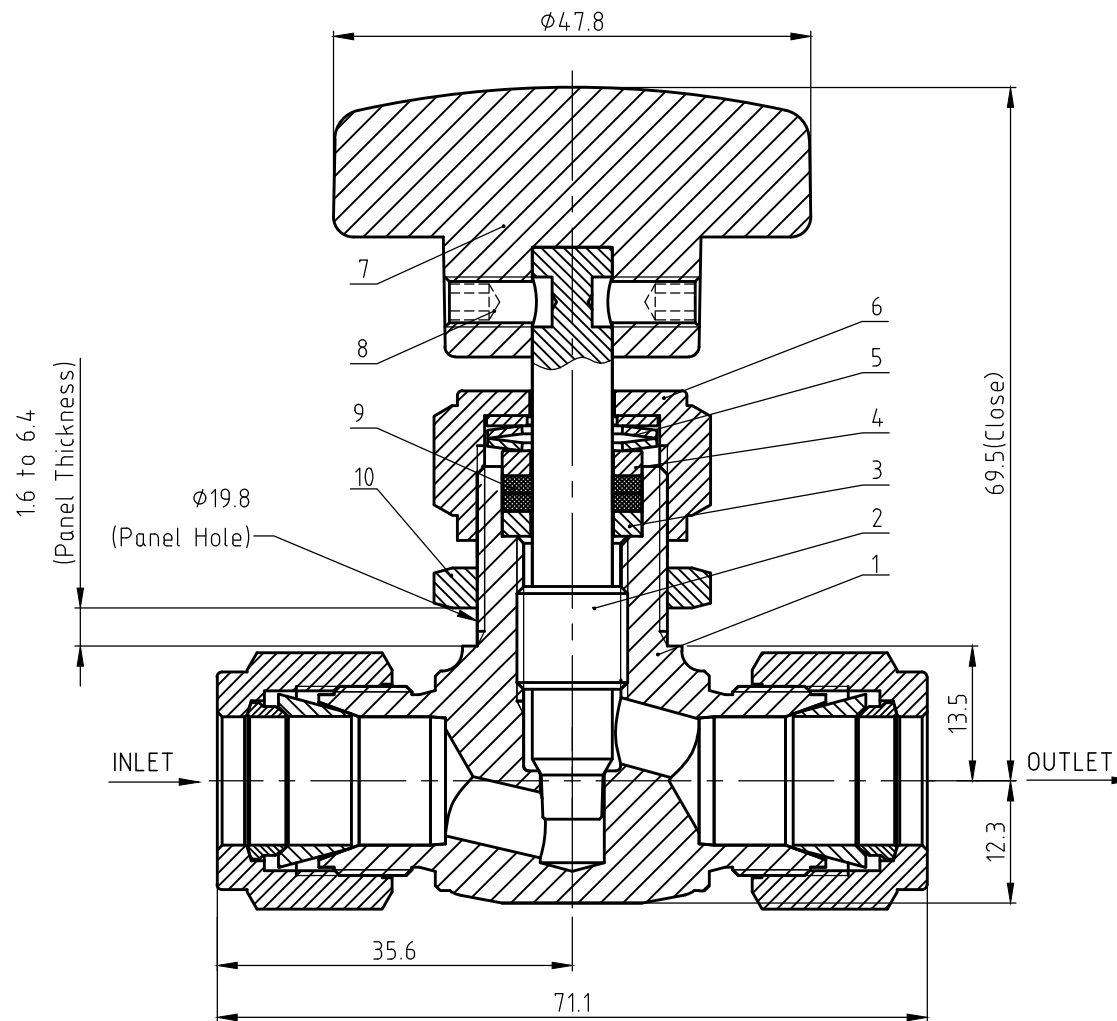
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. 1/2"
Outlet Size	O.D. 1/2"
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Aug.06, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-F8-06-HB-316-LT		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Disc Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

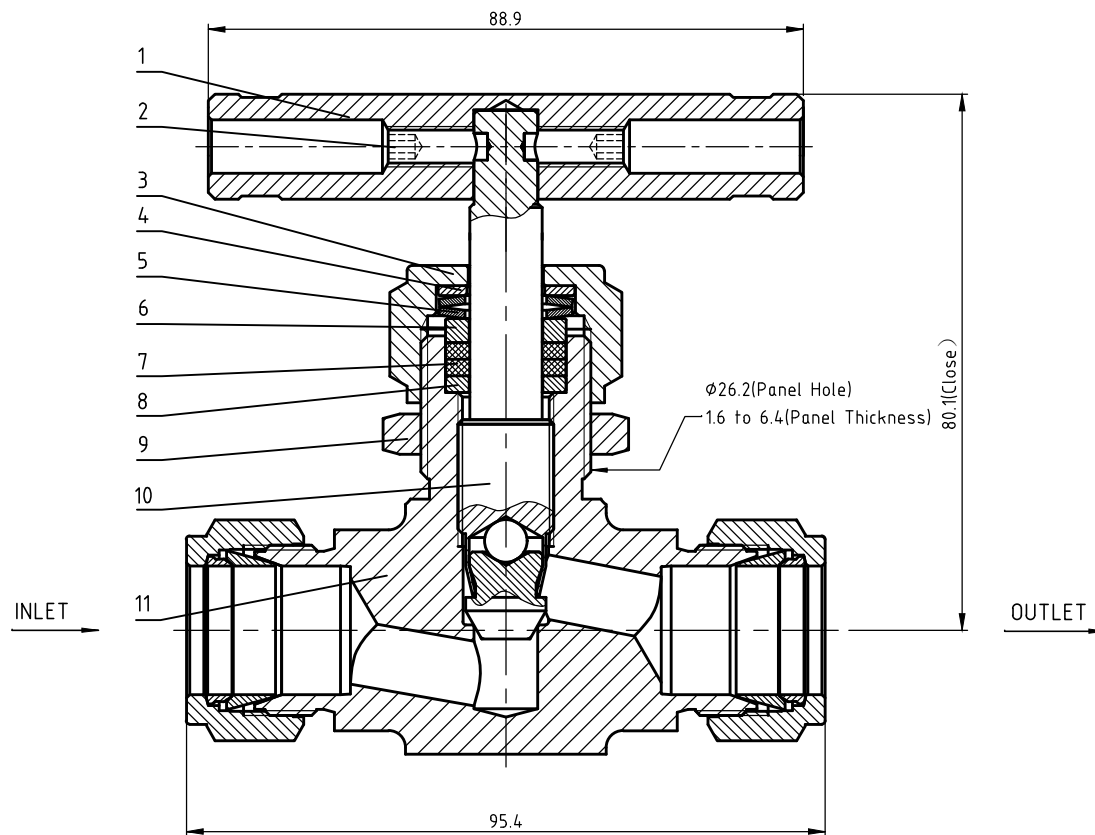
Technical Data:

Orifice Size	6.0
Inlet Size	O.D. $\phi 1/2''$
Outlet Size	O.D. $\phi 1/2''$
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295(295)		
300 (148)	3875(266)		
400 (204)	3560(245)		
450 (232)	3435(236)		

A	Apr.26, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-F8-06R-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	Packing Nut	316 S.S./ASTM A479
4	Spring Seat	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Gland	316 S.S./ASTM A479
7	Packing	PFA
8	Gland	316 S.S./ASTM A479
9	Panel Nut	630 S.S./ASTM B783
10	Stem	316 S.S./ASTM A479
11	Body	316 S.S./ASTM A182

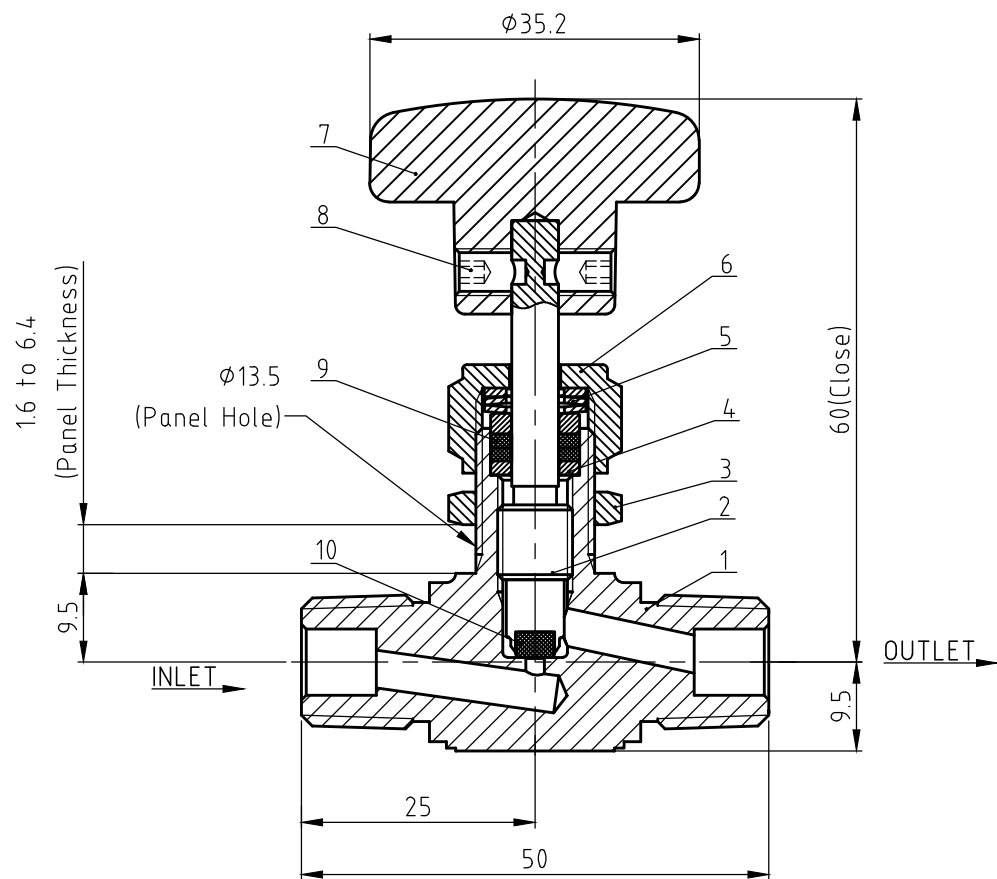
Technical Data:

Orifice Size	11mm
Inlet Size	O.D. $\phi 3/4"$
Outlet Size	O.D. $\phi 3/4"$
Cv	1.8

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Aug.06, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-F12-11-HB-316-LT		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		



Component		Material Grade
1	Body	316 S.S./ASTM A182
2	Stem	316 S.S./ASTM A479
3	Panel Nut	630 S.S./ASTM B783
4	Gland	316 S.S./ASTM A479
5	Packing Springs	631 S.S./ASTM A693
6	Lock Nut	316 S.S./ASTM A276
7	Handle	ADC12/JIS H5302
8	Screw	304 S.S.
9	Packing	PTFE/ASTM D1710
10	Stem Tip	PEEK

Technical Data:

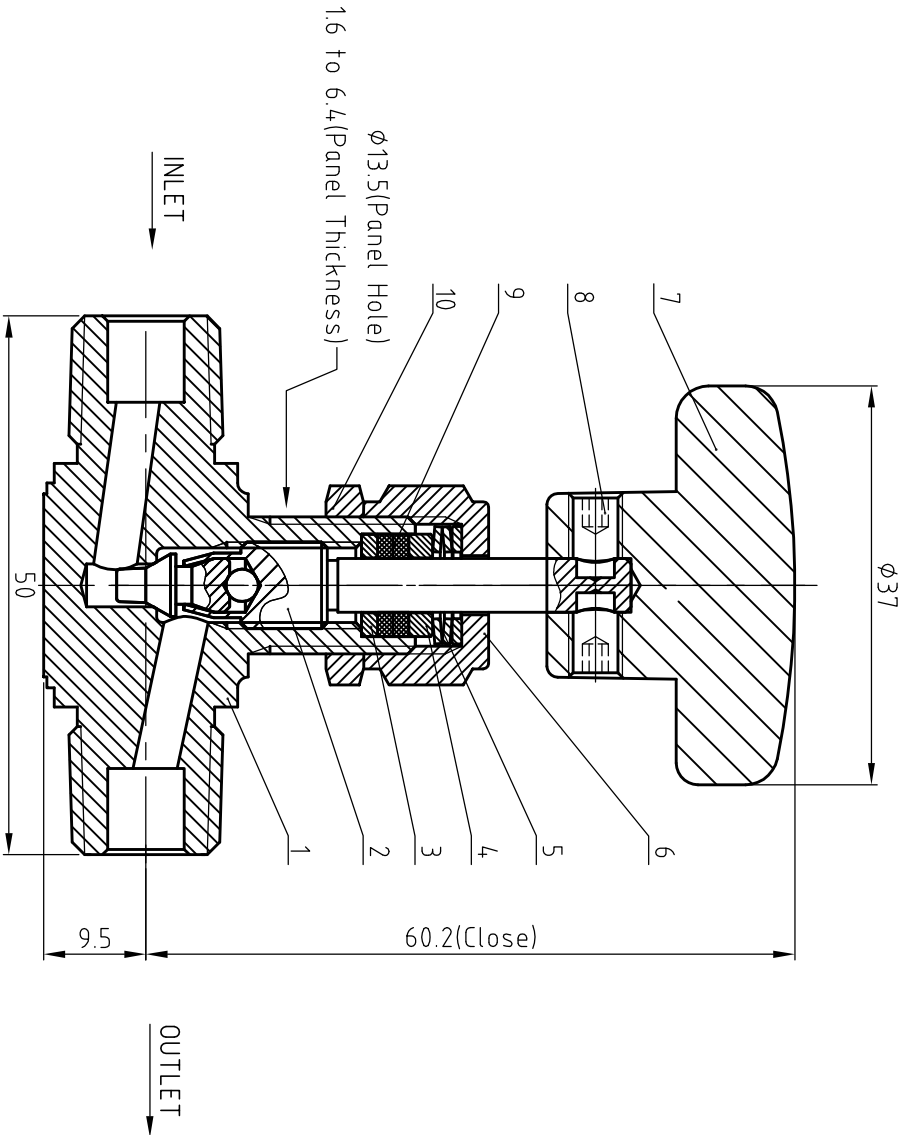
Inlet Size	1/4 NPT
Outlet Size	1/4 NPT
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000(344)		
200 (93)	4295(295)		
300 (148)	3875(266)		
400 (204)	3560(245)		
450 (232)	3435(236)		

A	Dec. 24,2019				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	NEEDLE VALVE		
		Model	NV4-NPT4-04P-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	UHMWPE
10	Lock Nut	630 S.S./ASTM B783



Technical Data:

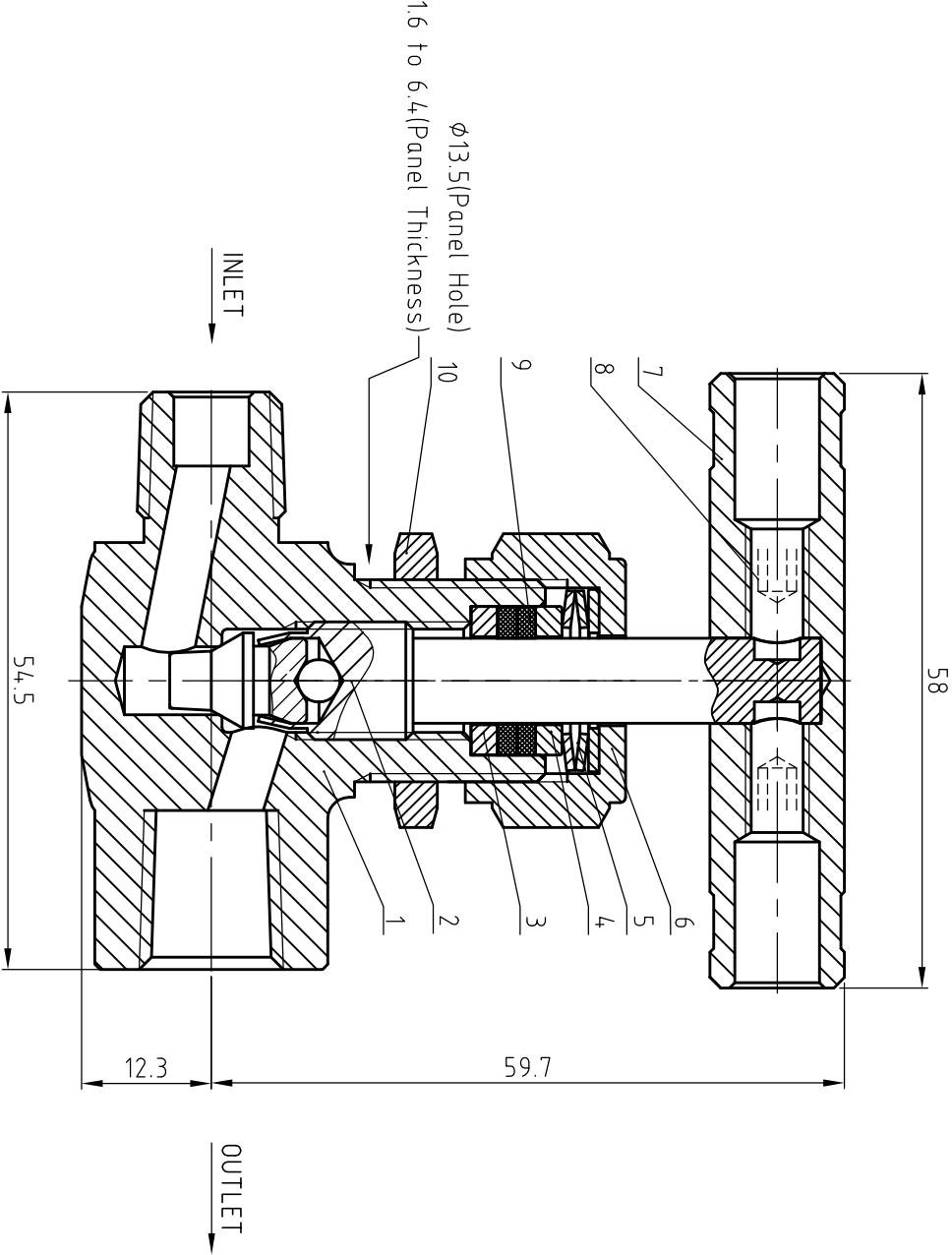
Pressure vs. Temperature Ratings:

Orifice Size	4.0mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT
Cv	0.35

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 176 (80)	2500 (172)		

A	Jul.26, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
Needle Valve					
Model NV4-NPT4-04R-316-LT					
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Packing	UHMWPE
10	Lock Nut	630 S.S./ASTM B783



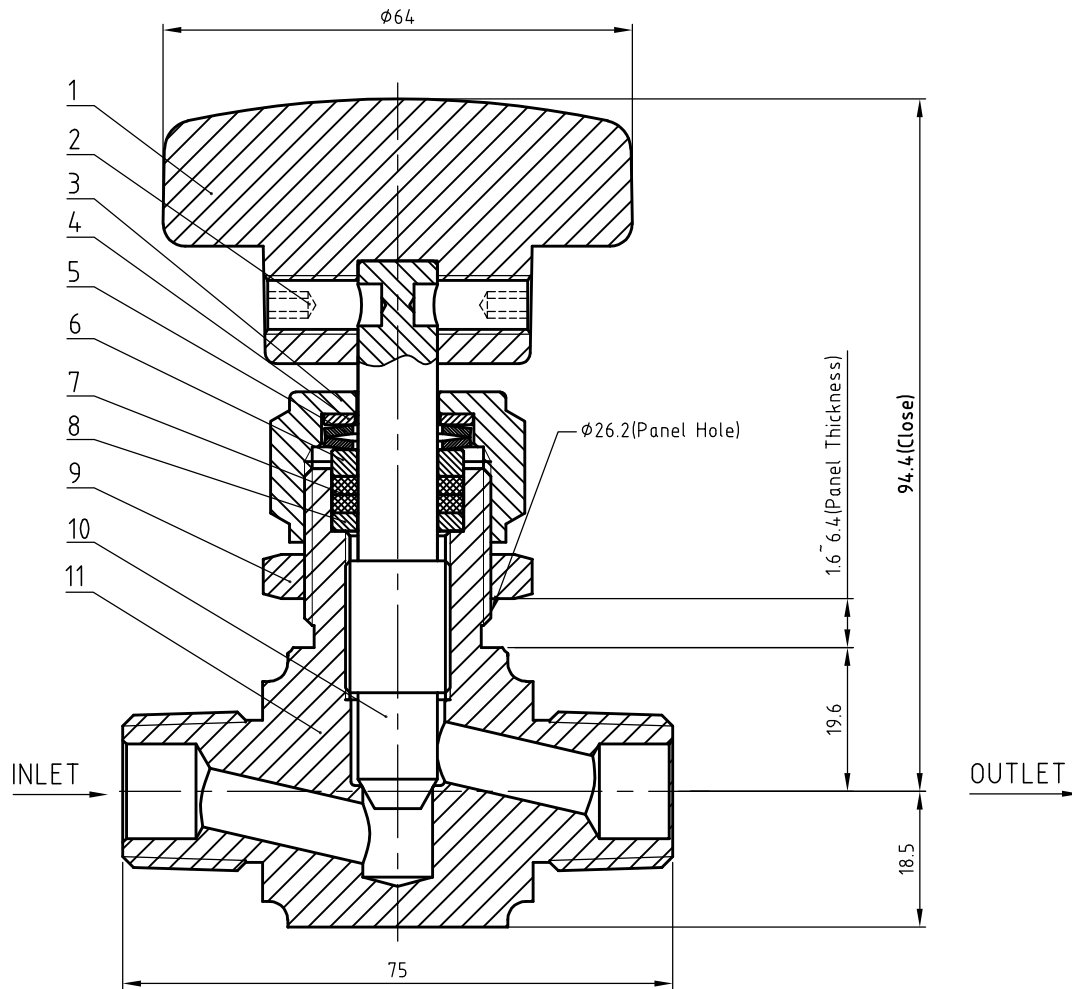
Technical Data:

Pressure vs. Temperature Ratings:

Orifice Size	4.0mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT(F)
Cv	0.35

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 176 (80)	2500 (172)		

A	Jul.26, 2023								YES
REV	Revision Date	Created	Checked	Approved	Approved	Status			
CIR-LOG		Title	Needle Valve						
	Model	NV4-NPT4-FNPT4-06R-HB-316-LT							
Format	A4	Unit	mm			View			
Scale	Not 1:1	Page	1 of 1						
CIR-LOG									
Symbol									



No.	Component	Material Grade
1	Handle	ADC12/JIS H5302
2	Screw	304 S.S.
3	Packing Nut	316 S.S./ASTM A479
4	Spring Seat	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Gland	316 S.S./ASTM A479
7	Packing	PTFE/ASTM D1710
8	Gland	316 S.S./ASTM A479
9	Panel Nut	630 S.S./ASTM B783
10	Stem	316 S.S./ASTM A479
11	Body	316 S.S./ASTM A182

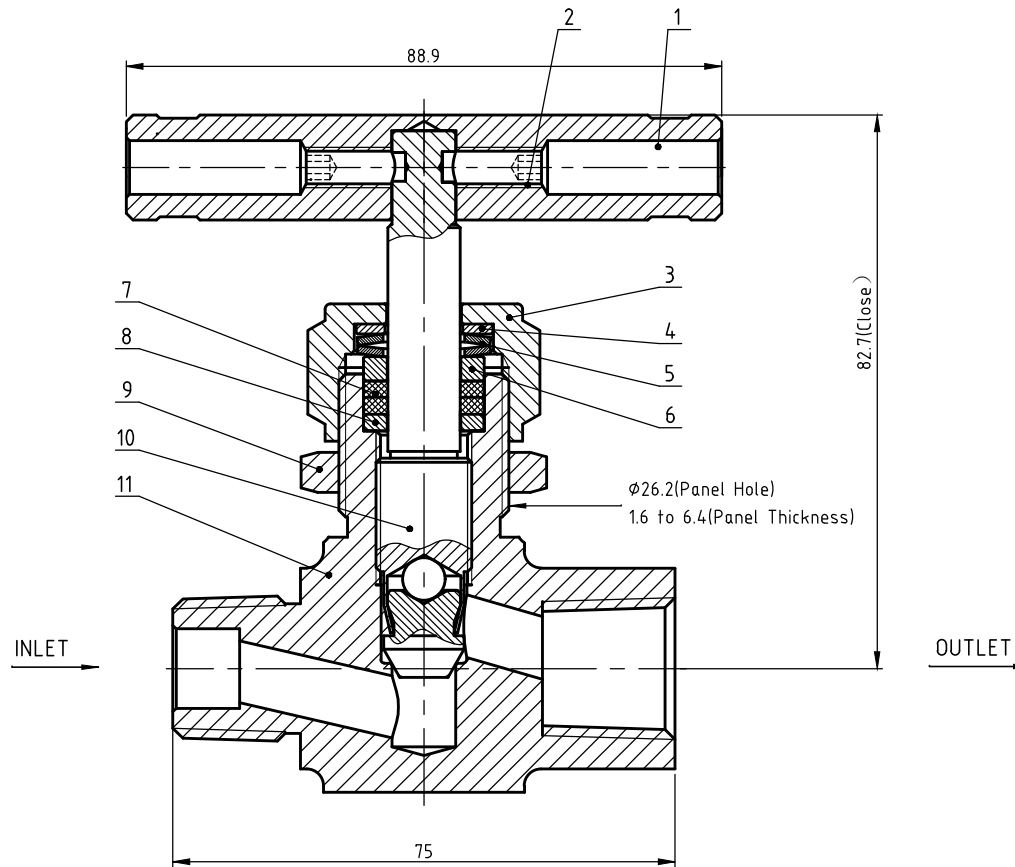
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT
Cv	1.8

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Nov.10, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR - LOK		Title	Needle Valve		
		Model	NV4-NPT8-11-316		
Format	A4	Unit	in/mm	View	
Scale	Not 1:1	Page	1 of 1		



No.	Component	Material Grade
1	Handle	6061/ASTM B211
2	Screw	Galvanized steel
3	Packing Nut	316 S.S./ASTM A479
4	Spring Seat	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Gland	316 S.S./ASTM A479
7	Packing	PEEK
8	Gland	316 S.S./ASTM A479
9	Panel Nut	630 S.S./ASTM B783
10	Stem	316 S.S./ASTM A479
11	Body	316 S.S./ASTM A182

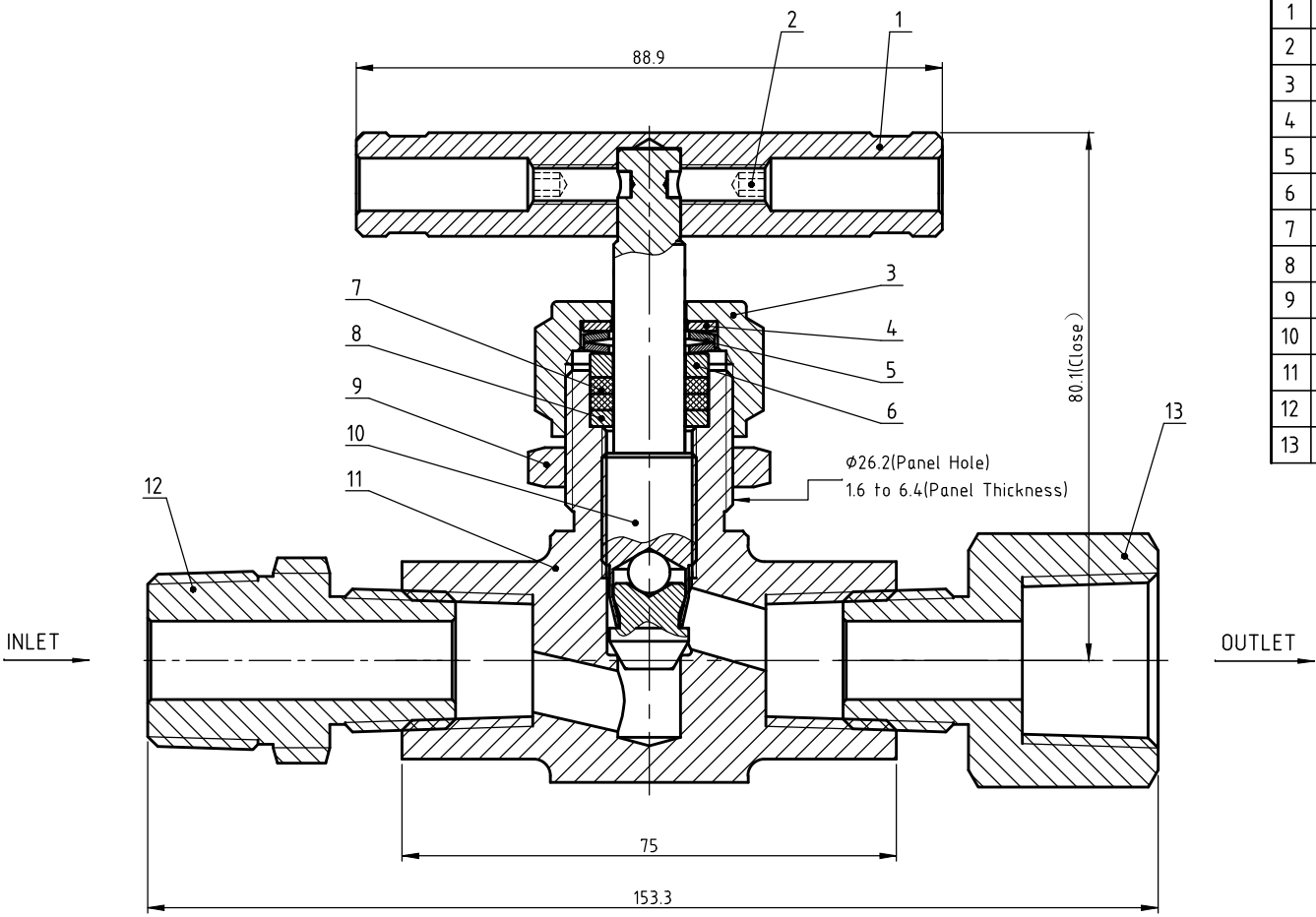
Technical Data:

Orifice Size	11mm
Inlet Size	1/2 NPT
Outlet Size	1/2 NPT(F)
Cv	1.8

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Feb.11, 2025				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-NPT8-FNPT8-11-P-HB-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	Packing Nut	316 S.S./ASTM A479
4	Spring Seat	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Gland	316 S.S./ASTM A479
7	Packing	PTFE/ASTM D1710
8	Gland	316 S.S./ASTM A479
9	Panel Nut	630 S.S./ASTM B783
10	Stem	316 S.S./ASTM A479
11	Body	316 S.S./ASTM A182
12	Connect	316 S.S./ASTM A479
13	Connect	316 S.S./ASTM A479

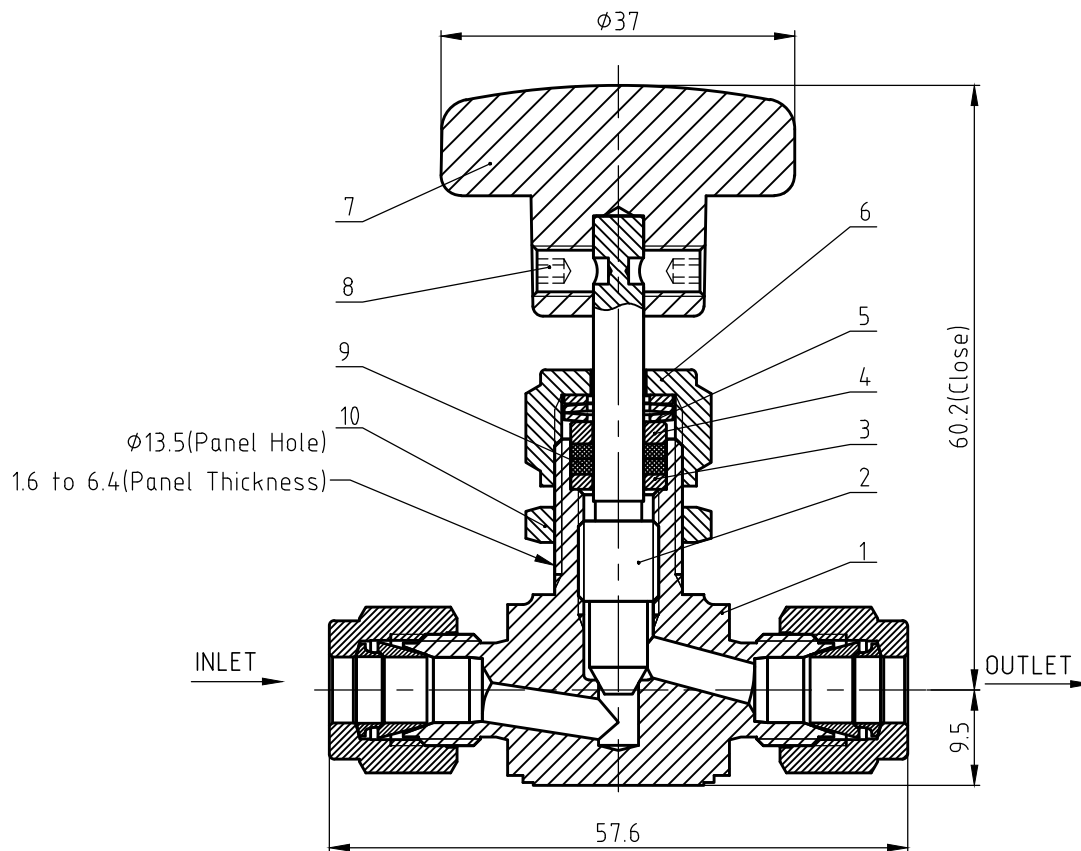
Technical Data:

Orifice Size	11mm
Inlet Size	3/4 NPT
Outlet Size	3/4 NPT(F)
Cv	1.8

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Nov.20, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-NPT12-FNPT12-11-HB-316-GLK01		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	304 S.S.
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

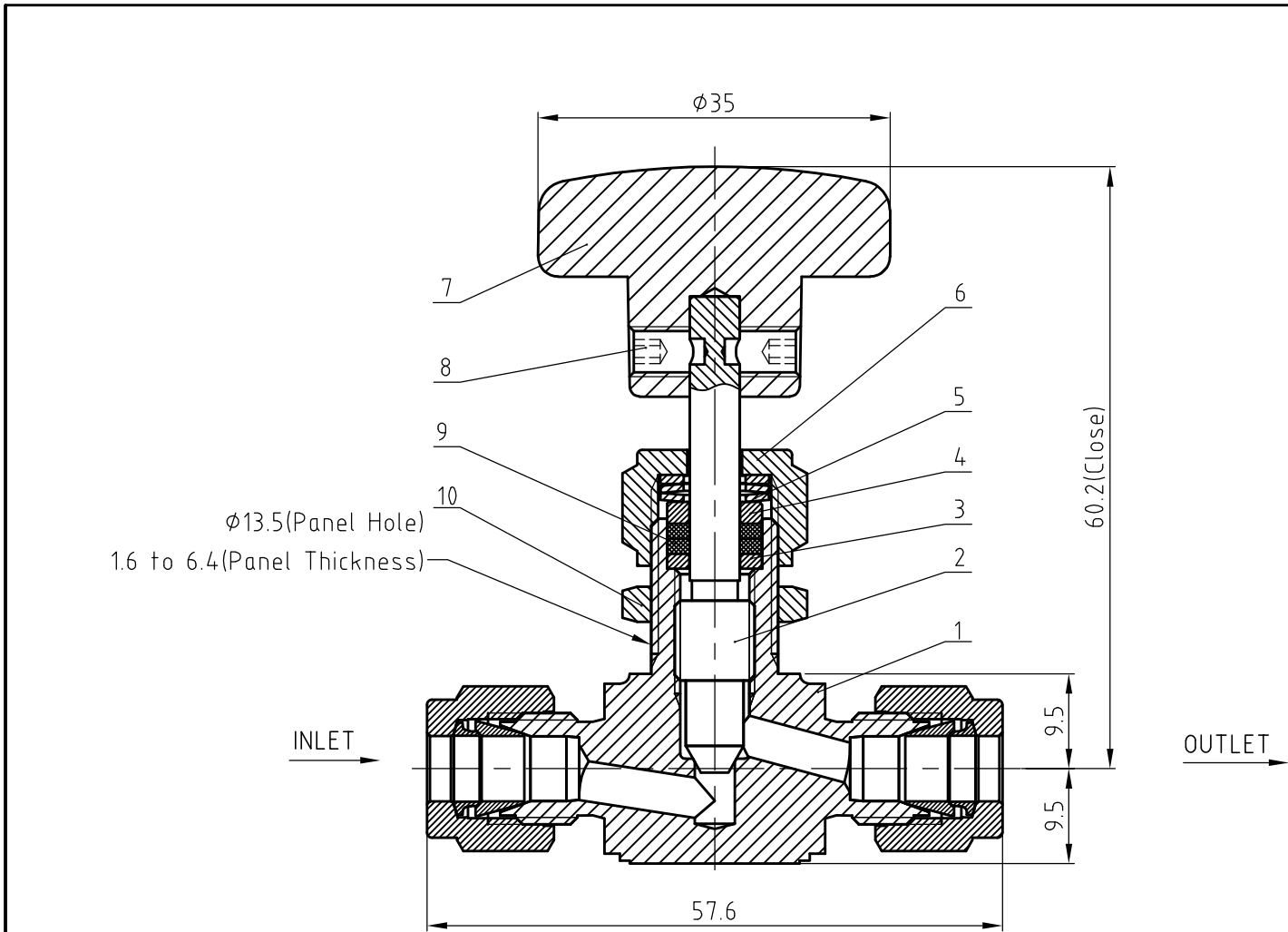
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 6$
Outlet Size	O.D. $\phi 6$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Sep.25, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-M6-04-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized carbon steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

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

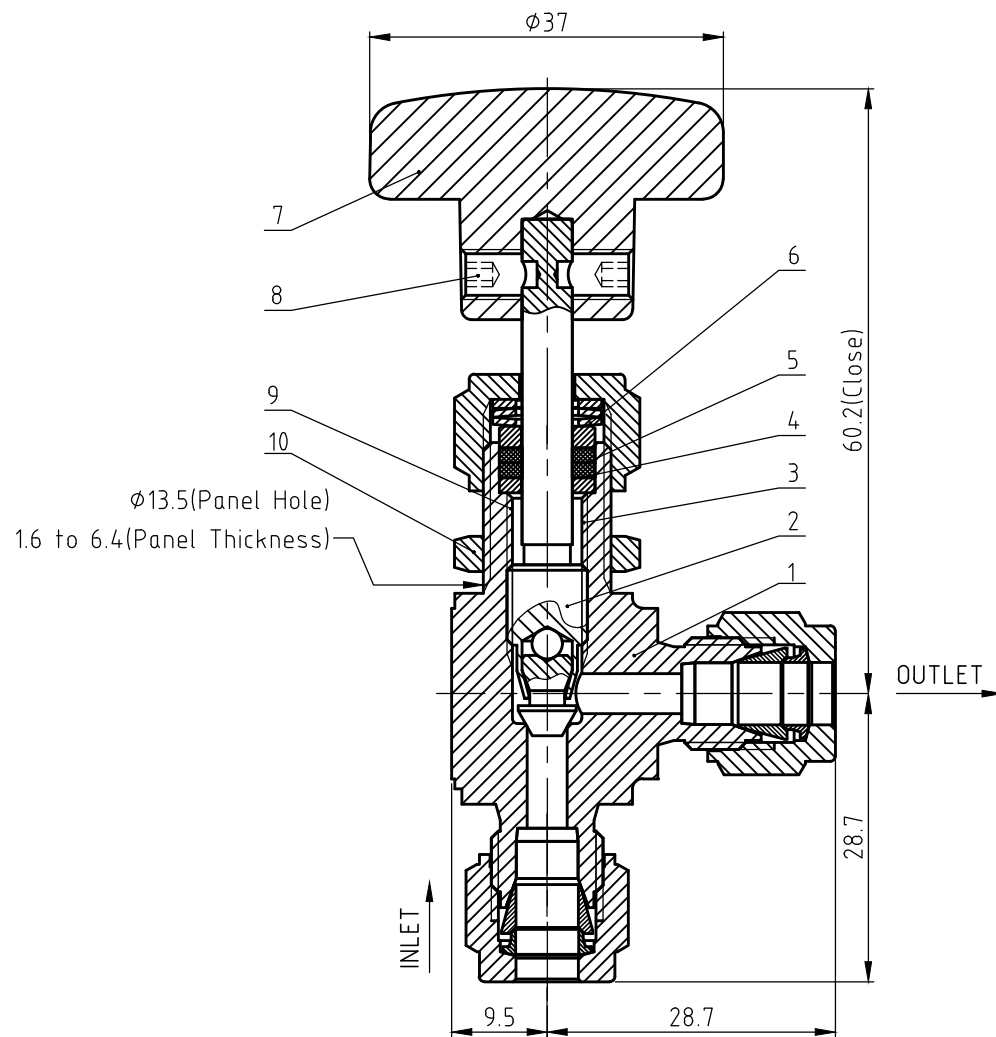
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. 6
Outlet Size	O.D. 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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Feb.22, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-M6-04-316-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	304 S.S.
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

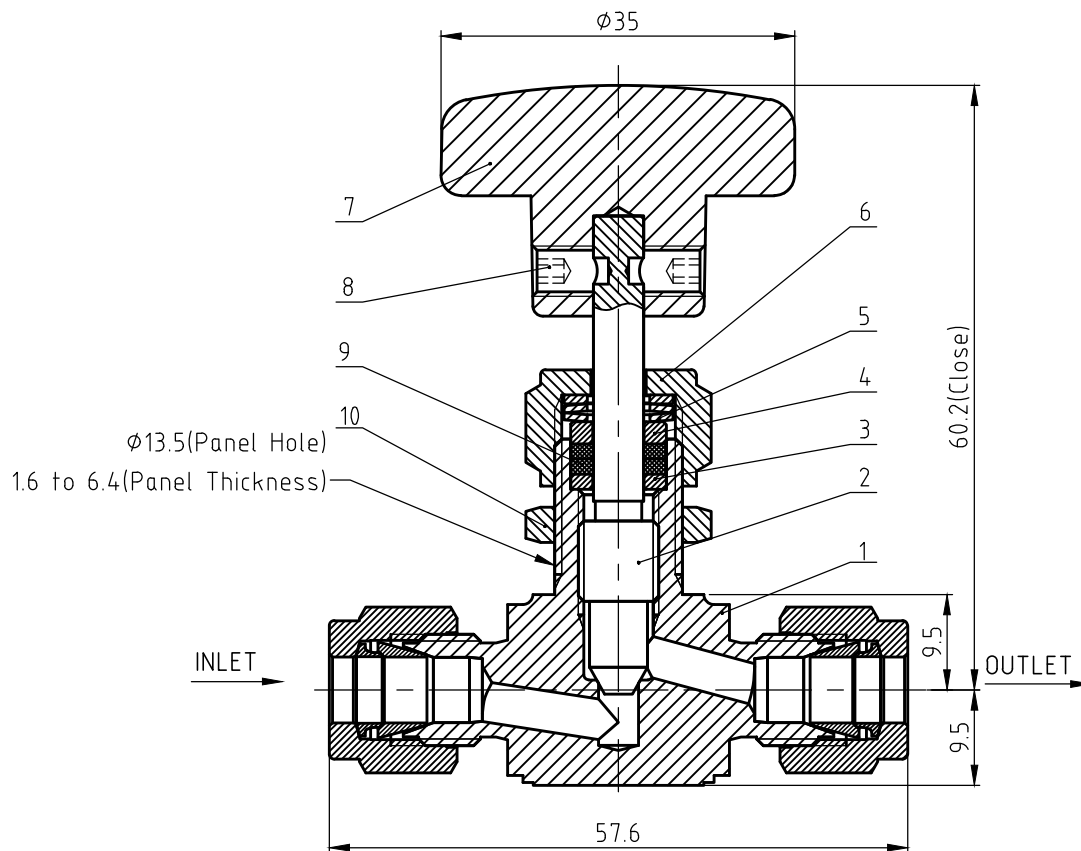
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 6$
Outlet Size	O.D. $\phi 6$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Sep.25, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-M6-04-A1-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

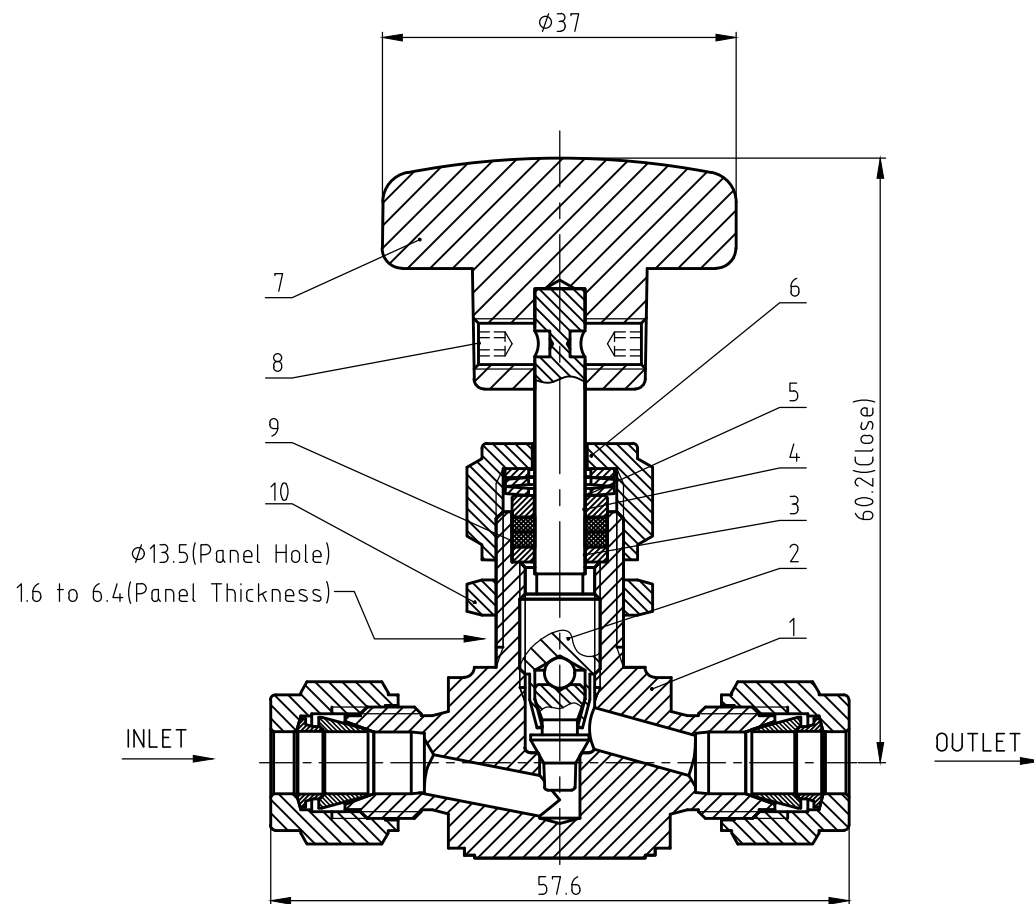
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 6$
Outlet Size	O.D. $\phi 6$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	May.13, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-M6-04-R1-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized carbon steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

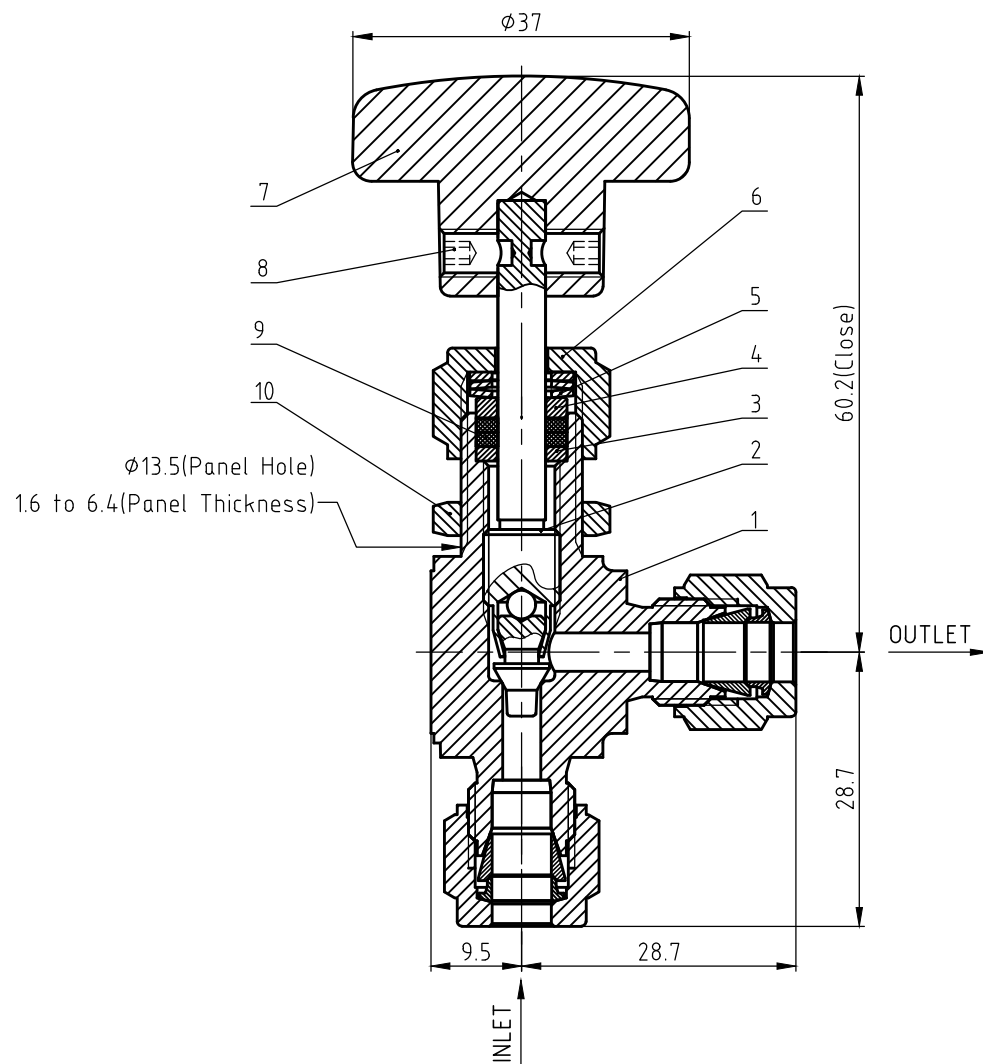
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 6$
Outlet Size	O.D. $\phi 6$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Sep.18, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-M6-04R-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

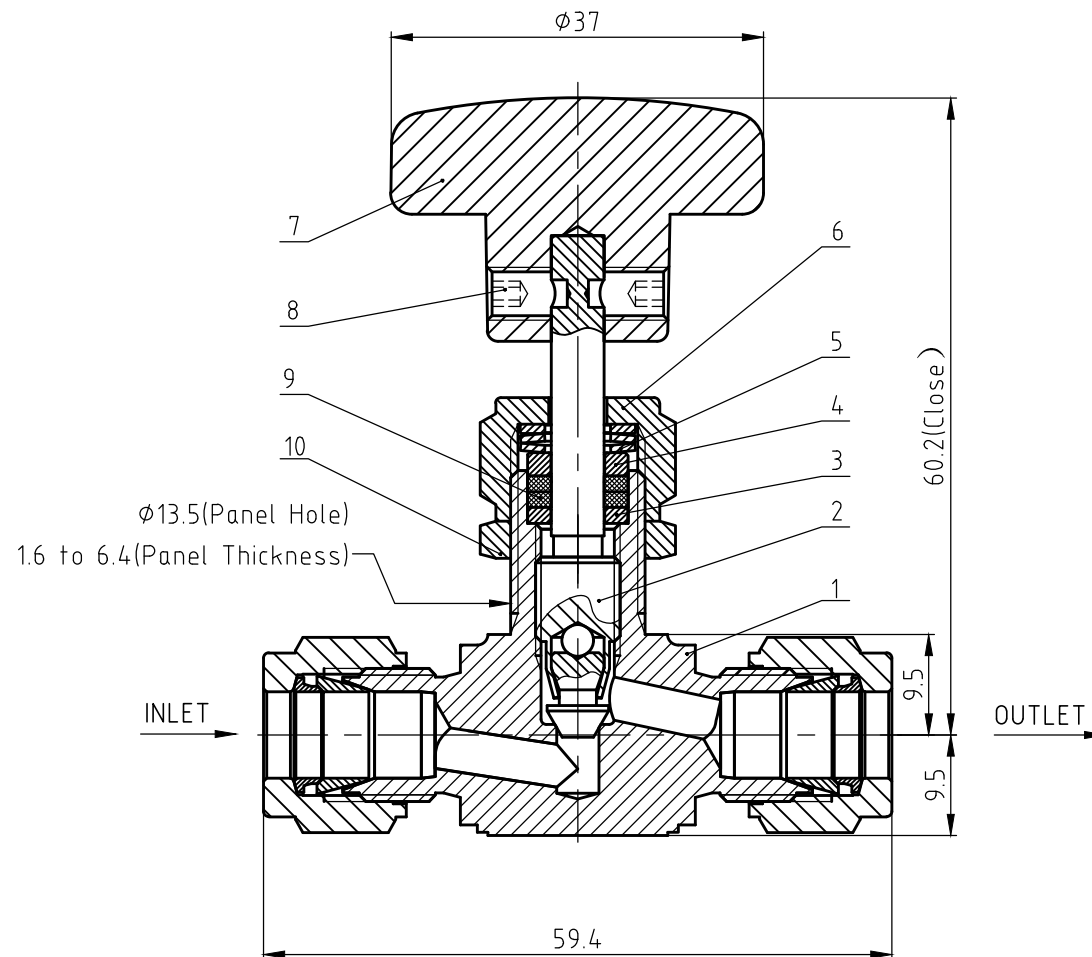
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 6$
Outlet Size	O.D. $\phi 6$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Jul.11, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-M6-04R-A1-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized carbon steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

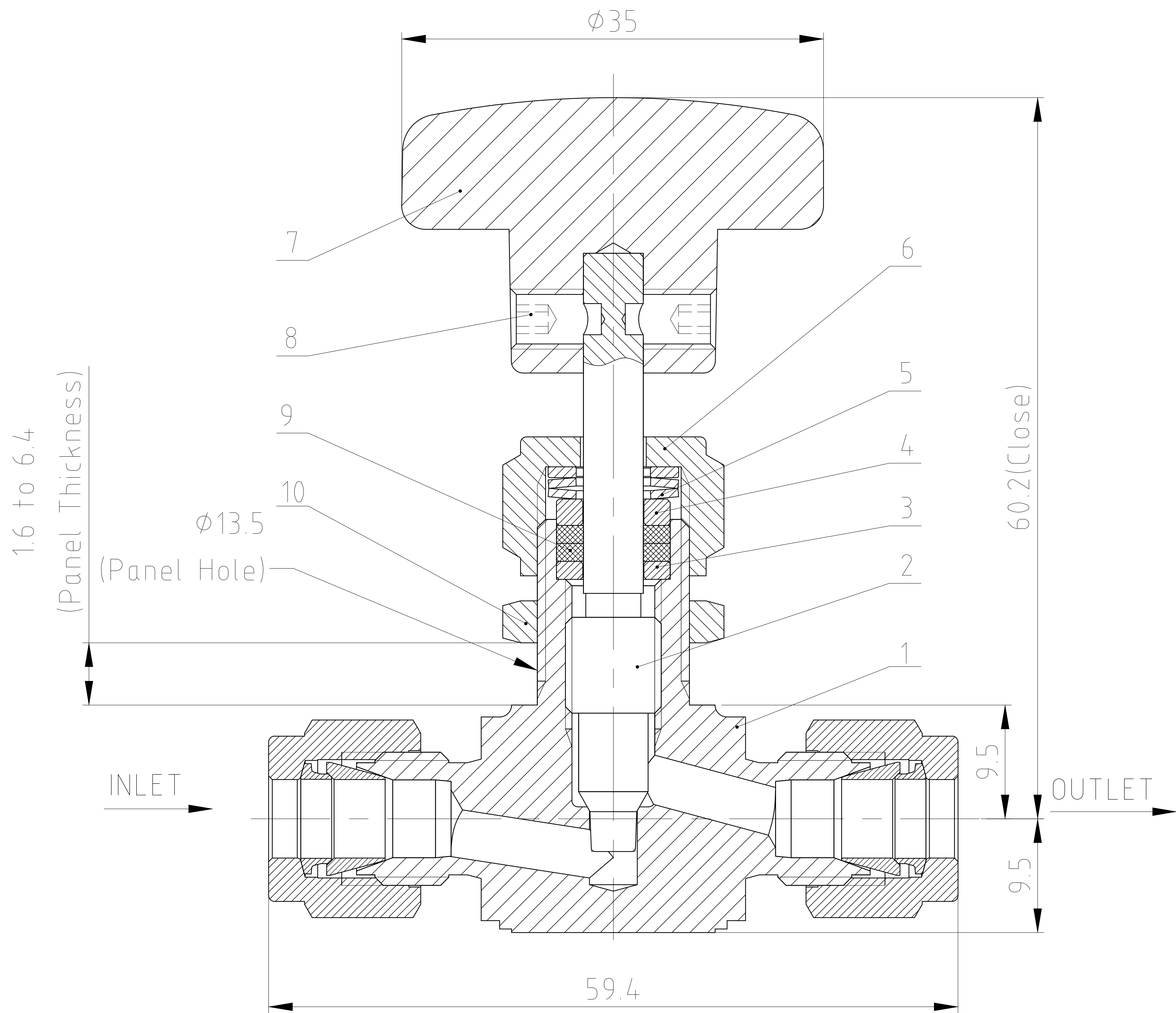
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 8$
Outlet Size	O.D. $\phi 8$
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	May.04, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-M8-04-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	304 S.S.
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

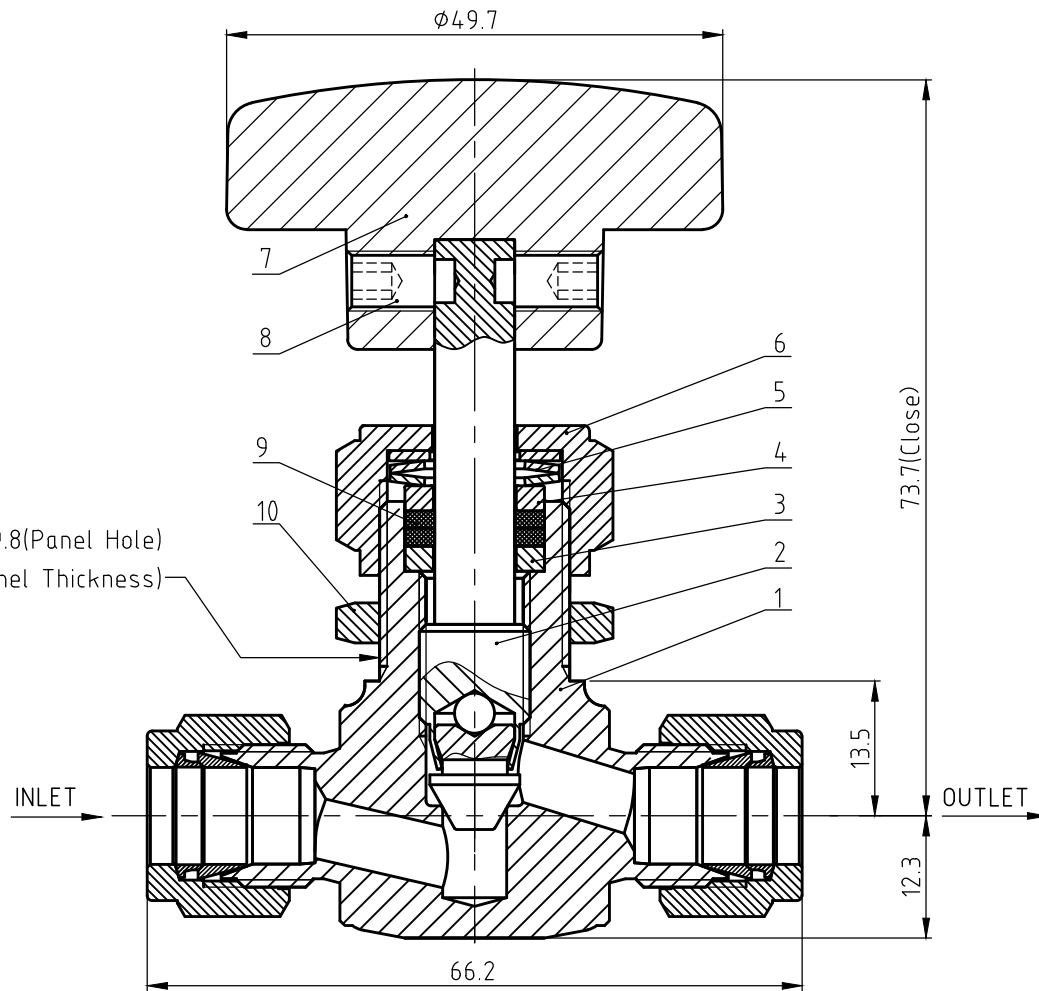
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. 8
Outlet Size	O.D. 8
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)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Aug.27, 2021				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-M8-04R-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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized carbon steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

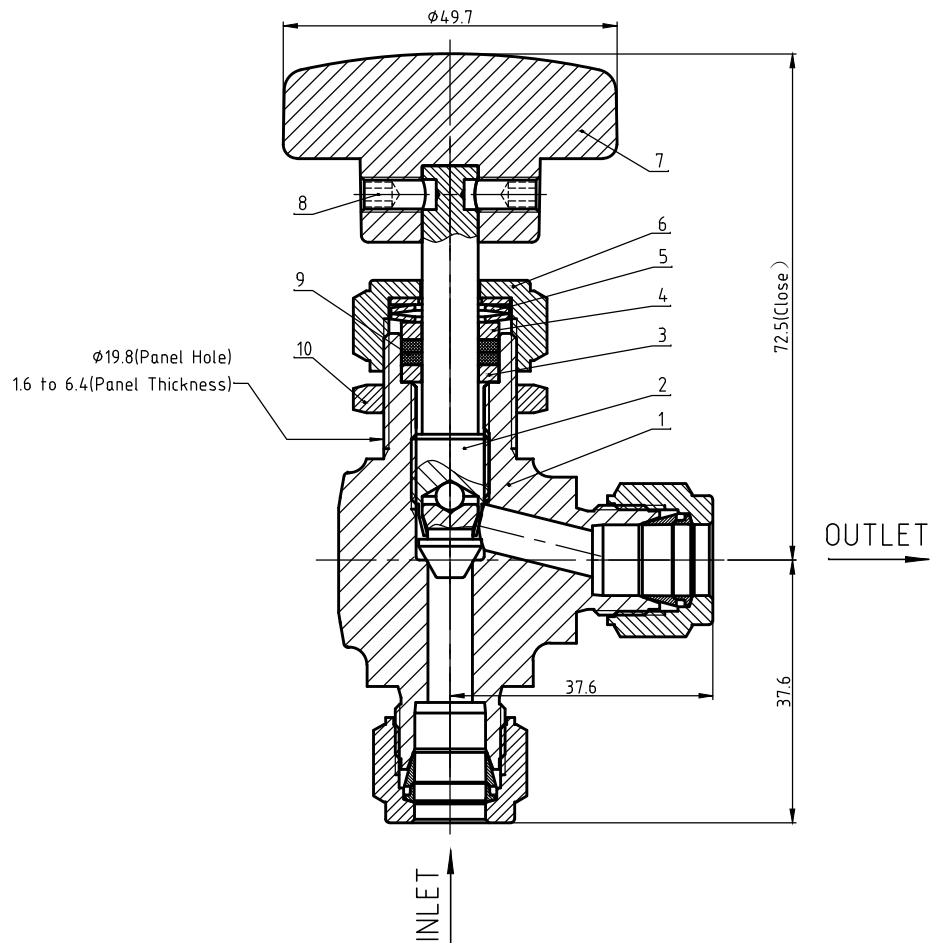
Technical Data:

Orifice Size	6.0mm
Inlet Size	O.D. ϕ 10
Outlet Size	O.D. ϕ 10
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Jul.07, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
		Title	Needle Valves		
		Model	NV4-M10-06-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316L S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783

Technical Data:

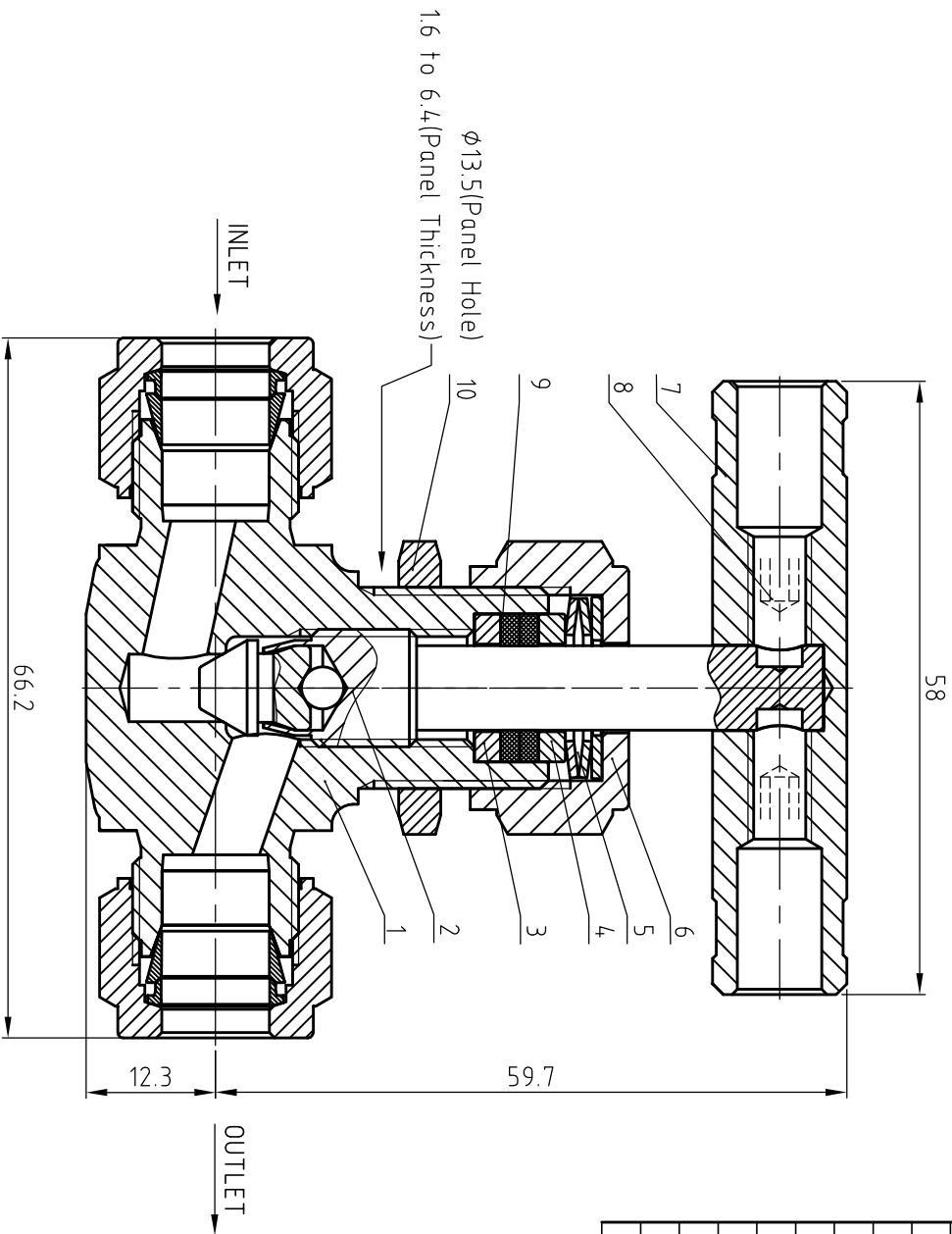
Orifice Size	6.0mm
Inlet Size	O.D. ϕ 10
Outlet Size	O.D. ϕ 10
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Jul.15.2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-M10-06-A1-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Packing	UHMWPE
10	Lock Nut	630 S.S./ASTM B783



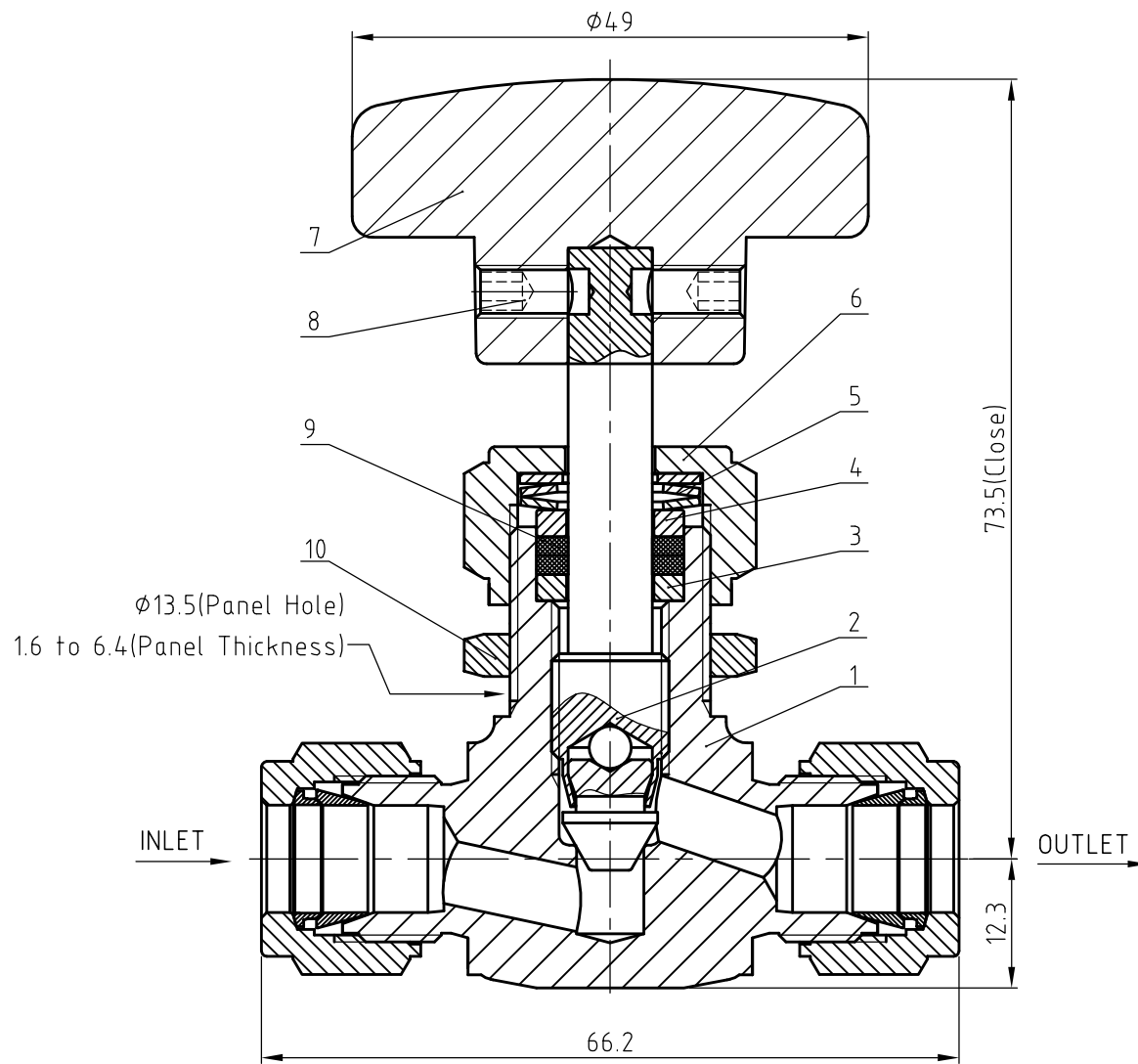
Technical Data:

Pressure vs. Temperature Ratings:

Orifice Size	4.0mm
Inlet Size	O.D. ϕ 10
Outlet Size	O.D. ϕ 10
Cv	0.35

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 176 (80)	2500 (172)		

A	Jul.26, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
Format	A4	Model	NV4-M10-06-HB-316-LT		
Scale	Not 1:1	Unit	mm	View	



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	UHMWPE
10	Lock Nut	630 S.S./ASTM B783

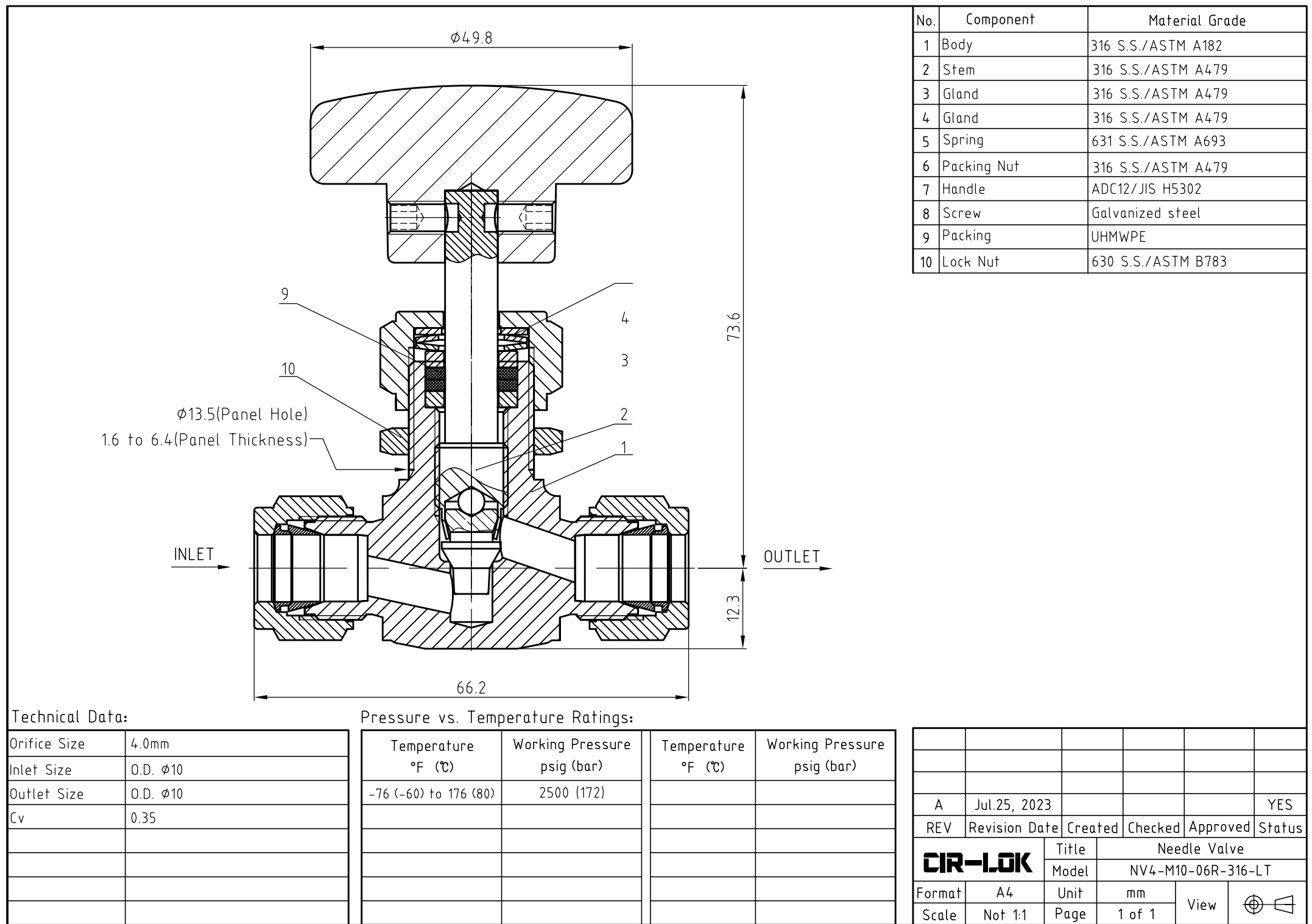
Technical Data:

Orifice Size	4.0mm
Inlet Size	O.D. $\phi 10$
Outlet Size	O.D. $\phi 10$
Cv	0.35

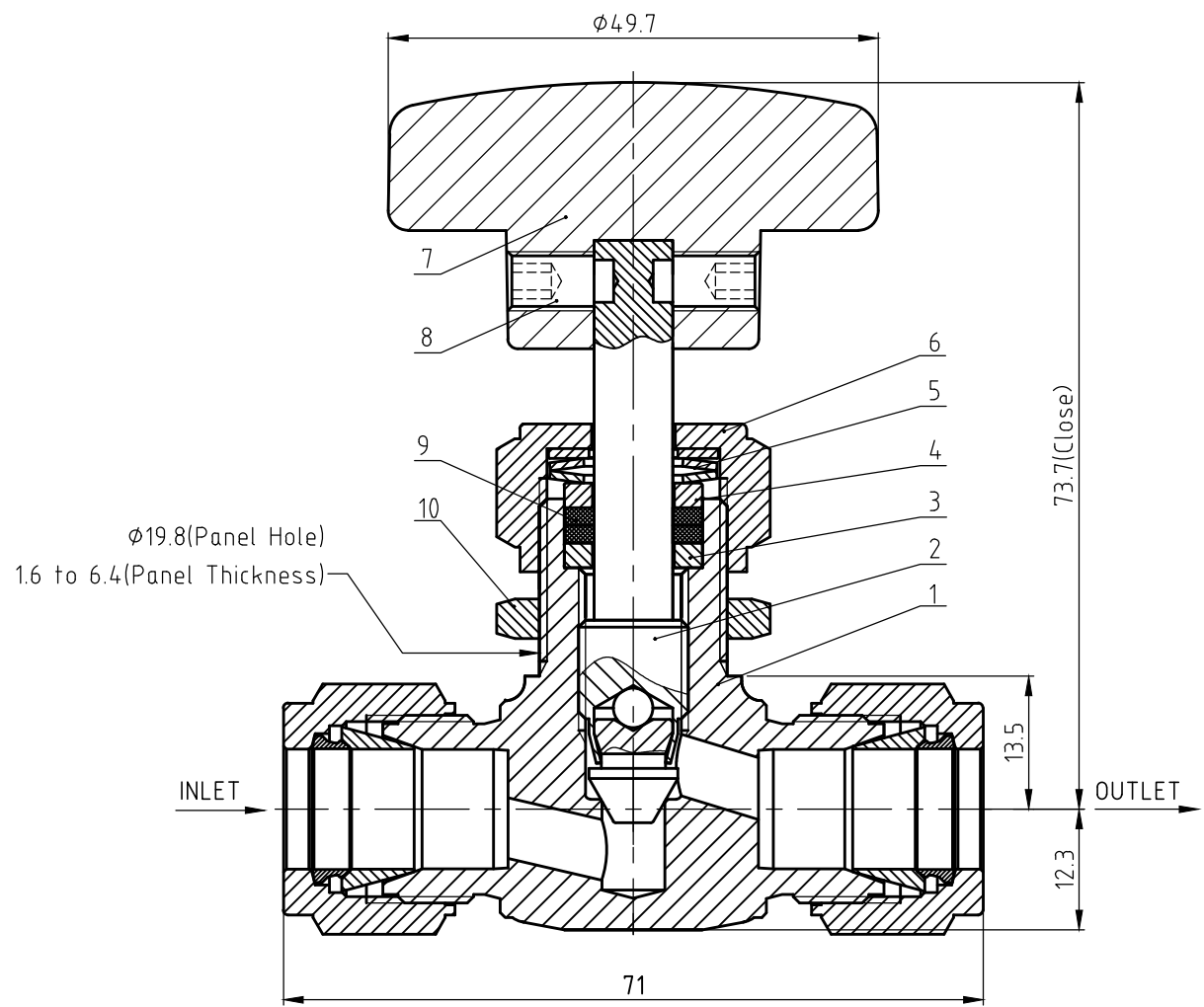
Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 176 (80)	2500 (172)		

A	Jul.26, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-M10-06-R1-316-LT		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783



Technical Data:

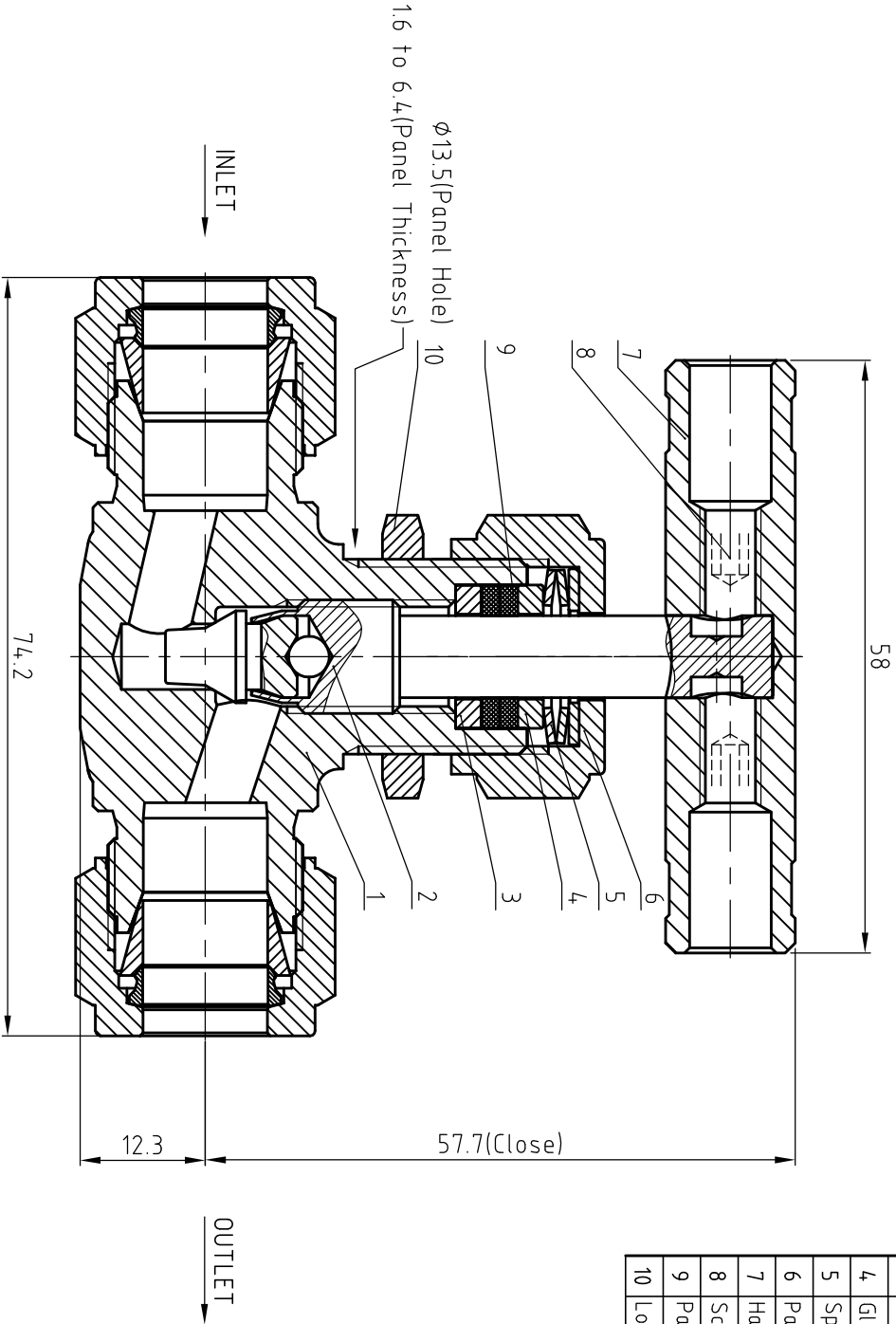
Orifice Size	6.0mm
Inlet Size	O.D. ϕ 12
Outlet Size	O.D. ϕ 12
Cv	0.7

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Apr.26, 2022				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valves		
		Model	NV4-M12-06-316		
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Packing	UHMWPE
10	Lock Nut	630 S.S./ASTM B783



Technical Data:

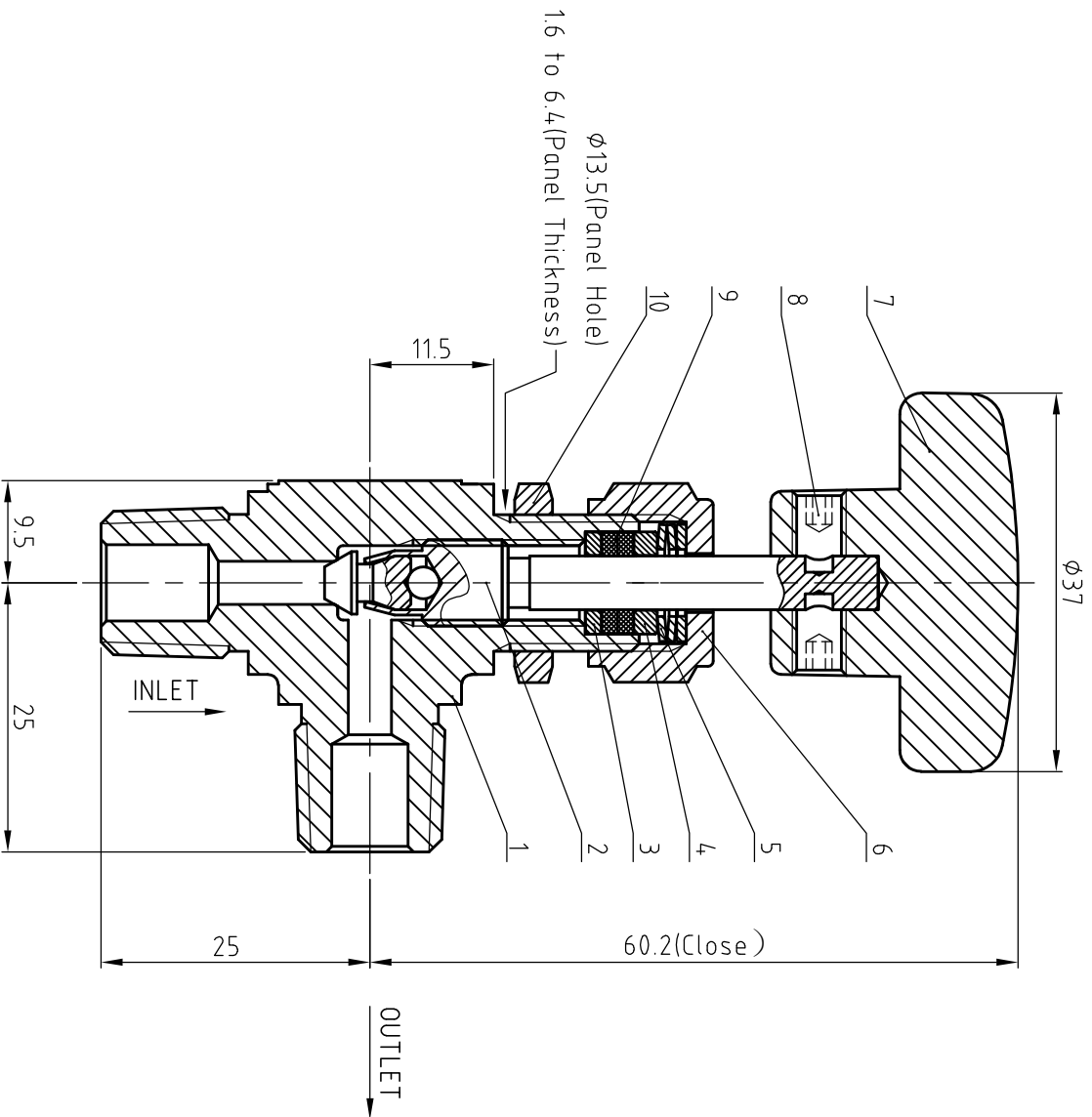
Pressure vs. Temperature Ratings:

Orifice Size	4.0mm
Inlet Size	O.D. ϕ 12
Outlet Size	O.D. ϕ 12
Cv	0.35

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-76 (-60) to 176 (80)	2500 (172)		

A	Jul.26, 2023				YES
REV	Revision Date	Created	Checked	Approved	Status
Title		Needle Valve			
Model		NV4-M12-06R-HB-316-LT			
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	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	ADC12/JIS H5302
8	Screw	Galvanized carbon steel
9	Packing	PTFE/ASTM D1710
10	Lock Nut	630 S.S./ASTM B783



Technical Data:

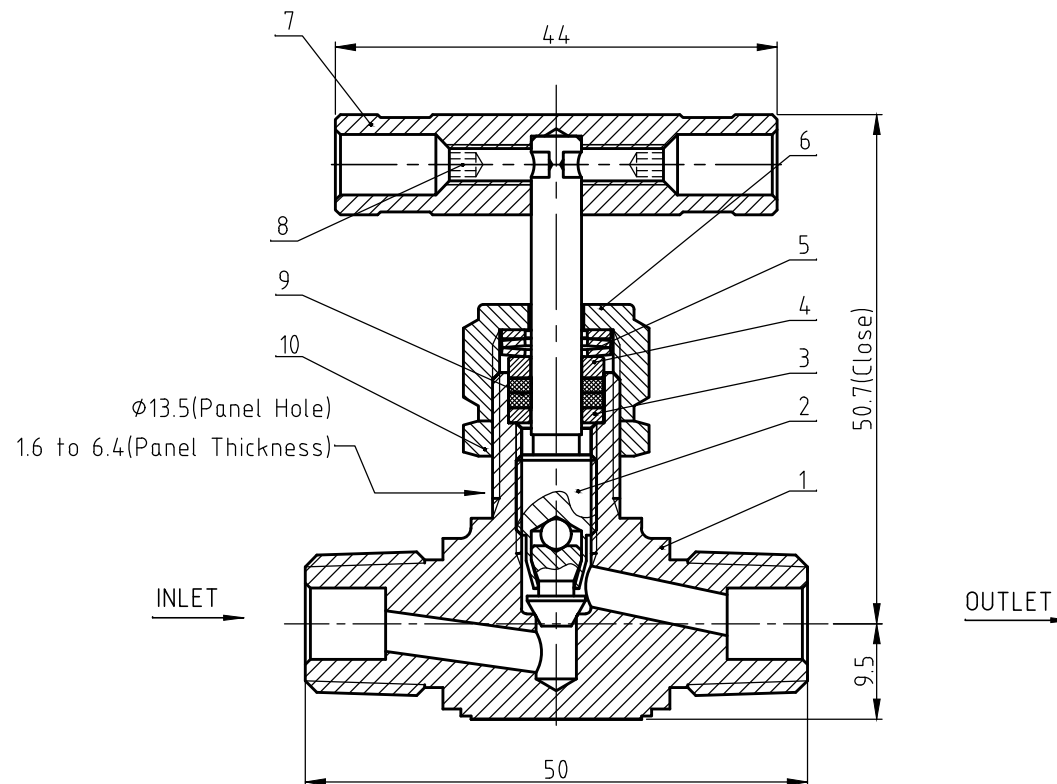
Orifice Size	4.0mm
Inlet Size	1/4 NPT
Outlet Size	1/4 NPT
Cv	0.35

Pressure vs. Temperature Ratings:

Temperature °F (°C)	Working Pressure psig (bar)	Temperature °F (°C)	Working Pressure psig (bar)
-65 (-53) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

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-LOK		Title	Needle Valve						
Format	A4	Model	NV4-NPT4-04-A1-316-NACE						
Scale	Not 1:1	Unit	mm		View				
		Page	1 of 1						



No.	Component	Material Grade
1	Body	316 S.S./ASTM A182
2	Stem	316 S.S./ASTM A479
3	Gland	316 S.S./ASTM A479
4	Gland	316 S.S./ASTM A479
5	Spring	631 S.S./ASTM A693
6	Packing Nut	316 S.S./ASTM A479
7	Handle	6061/ASTM B211
8	Screw	Galvanized steel
9	Packing	PFA
10	Lock Nut	630 S.S./ASTM B783

Technical Data:

Orifice Size	4.0mm
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)
-76 (-60) to 100 (37)	5000 (344)		
200 (93)	4295 (295)		
300 (148)	3875 (266)		
400 (204)	3560 (245)		
450 (232)	3435 (236)		

A	Aug.06, 2024				YES
REV	Revision Date	Created	Checked	Approved	Status
CIR-LOK		Title	Needle Valve		
		Model	NV4-NPT4-04-HB-316-LT		
Format	A4	Unit	mm	View	
Scale	Not 1:1	Page	1 of 1		