

## Series 100

Globe Pattern

Straight



GRM offers Series 100 globe style Needle Valves in Straight male x female and Straight female x female, These valves are available with a hard seat and 10,000 PSI pressure rating.

We also offer FKM O-rings with backup ring seals. Sizes of needle valves range from 1/4" NPT – 1" NPT.

- CRN Registration Number 0C17585.2 for 1/2" NPT and smaller
- Service to 10,000 PSI @ 100°F
- Single piece rotating stem plug
- Rolled stem and bonnet threads for greater strength and smoother operation
- Blowout proof stem provides positive back seal in full open position
- Stem packing below the threads prevents thread galling, lubricant washout and corrosion
- Vinyl bonnet hood protects from lubricant washout and ingress of contaminants
- One piece bonnet with metal-to-metal, body to bonnet seal below bonnet threads



### TESTING

- Needle valves are factory tested with nitrogen at 1,000 PSIG (69 bar)
- Seats have a maximum allowable leak rate of 0.18 std cm<sup>3</sup>/min
- Shell testing performed to a requirement of no detectable leakage with a liquid leak detector

NEEDLE VALVES

# NEEDLE VALVES

## Series 100

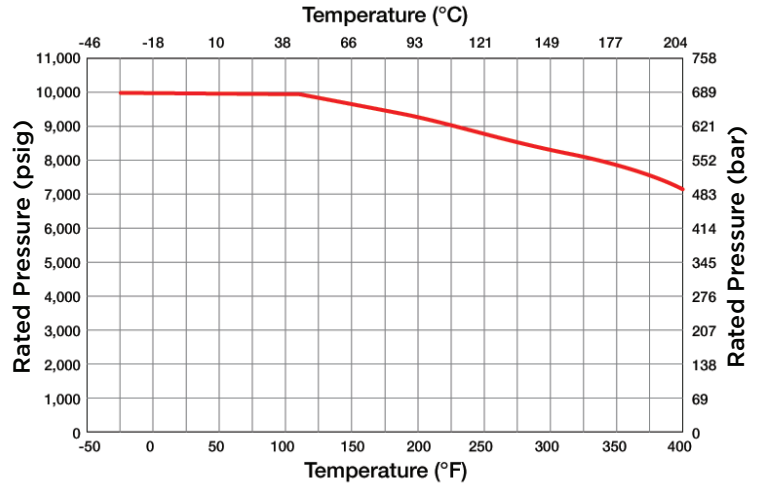
Globe Pattern - Straight



### SPECIFICATIONS

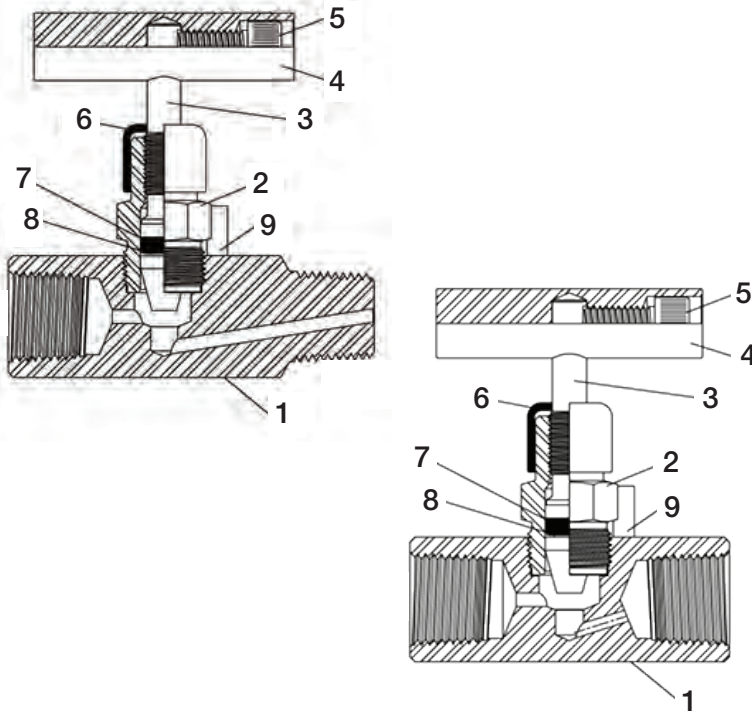
Material	Carbon Steel 316 Stainless Steel body
Pressure Rating	Hard seat - 10,000 PSI at 100°F
Connection Size	1/4", 1/2", 3/4" or 1" NPT Male x Female Female x Female
Handle	Tee

### RATED PRESSURE VS. TEMPERATURE



A108 & 316 SS

### MATERIAL OF CONSTRUCTION



#	DESCRIPTION	MATERIAL
1	Body	A108 CRS ASTM A479 316 SS
2	Bonnet	A108 CRS ASTM A479 316 SS
3	Stem	ASTM A479 316 SS
4	Handle	A108 CRS 304 SS
5	Handle Bolt	Steel Grade 5 18-8 Stainless
6	Bonnet Hood	Polyethylene
7	Back-up Ring	FKM
8	O Ring Seal	FKM
9	Bonnet Lock Pin	18-8 Stainless

# NEEDLE VALVES

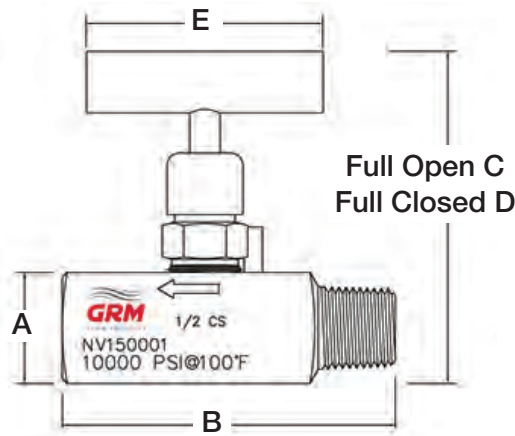
## Series 100

Globe Pattern - Straight



### ORDERING INFO AND DIMENSIONS

#### Male x Female



#### Dimensions

SIZE	MATERIAL	A	B	C	D	E
1"	CS/SS	1.750"	3.740"	4.000"	3.813"	2.400"
3/4"		1.500"	3.375"	3.750"	3.563"	
3/4" x 1/2"	CS	1.378"	3.375"	3.628"	3.441"	
	SS	1.500"		3.750"	3.563"	
1/2"	CS/SS	1.125"	3.375"	3.750"	3.188"	
3/8"						
1/4"						

SIZE	PART #		CRN #
	316 SS	A108	
1" NPT	NV190002	NV190001	-
3/4" NPT	NV175002	NV175001	
3/4" x 1/2" NPT	NV175302	NV175301	
1/2" NPT	NV150002	NV150001	0C17585.2
3/8" NPT	NV137002	NV137001	
1/4" NPT	NV125002	NV125001	

# NEEDLE VALVES

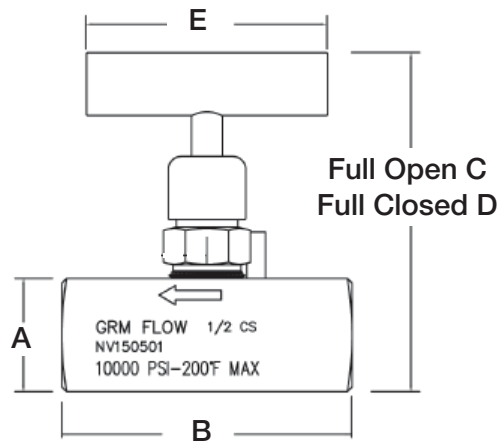
## Series 100

Globe Pattern - Straight



### ORDERING INFO AND DIMENSIONS

#### Female x Female



#### Dimensions

SIZE	A	B	C	D	E
3/4"	1.500"	2.875"	3.875"	3.563"	2.400"
1/2"	1.125"	2.875"	3.500"	3.125"	
3/8"	1.125"	2.875"	3.500"	2.125"	
1/4"	1.125"	2.875"	3.500"	2.125"	

SIZE	PART #		CRN #
	316 SS	A108	
3/4" NPT	NV175502	-	-
1/2" NPT	NV150502	NV150501	0C17585.2
3/8" NPT	NV137502	NV137501	
1/4" NPT	NV125502	NV125501	

## Series 200

Globe Pattern

Angled



GRM offers Series 200 globe style needle valves in angled (90°) male x female or female x female NPT connections. These valves are available with a hard seat and 10,000 PSI pressure rating.

We offer a complete line of FKM O-rings with backup ring seals. Sizes of needle valves range from 1/4" NPT – 1" NPT.

- CRN Registration Number 0C17585.2 for 1/2" NPT and smaller
- Service to 10,000 PSI @ 100°F
- Single piece rotating stem plug
- Rolled stem and bonnet threads for greater strength and smoother operation
- Blowout proof stem provides positive back seal in full open position
- Stem packing below the threads prevents thread galling, lubricant washout and corrosion
- Vinyl bonnet hood protects from lubricant washout and ingress of contaminants
- One piece bonnet with metal-to-metal, body to bonnet seal below bonnet threads



### TESTING

- Needle valve is factory tested with nitrogen at 1,000 PSIG (69 bar)
- Seats have a maximum allowable leak rate of 0.18 std cm<sup>3</sup>/min
- Shell testing is performed to a requirement of no detectable leakage with a liquid leak detector

NEEDLE VALVES

# NEEDLE VALVES

## Series 200

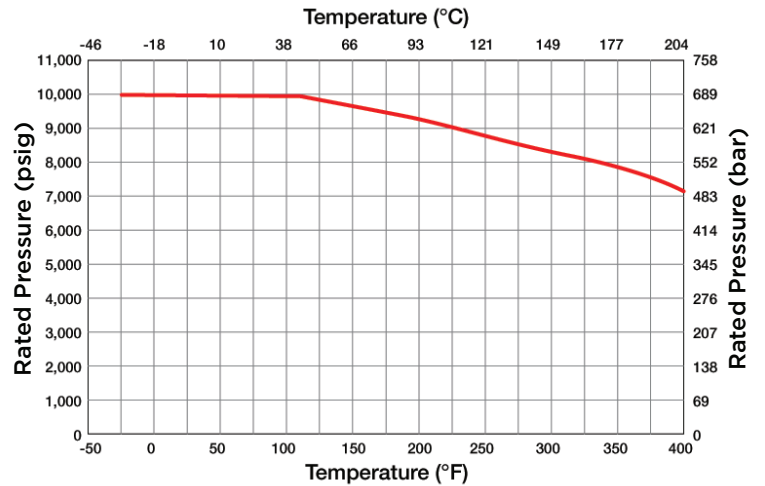
Globe Pattern - Angled



### SPECIFICATIONS

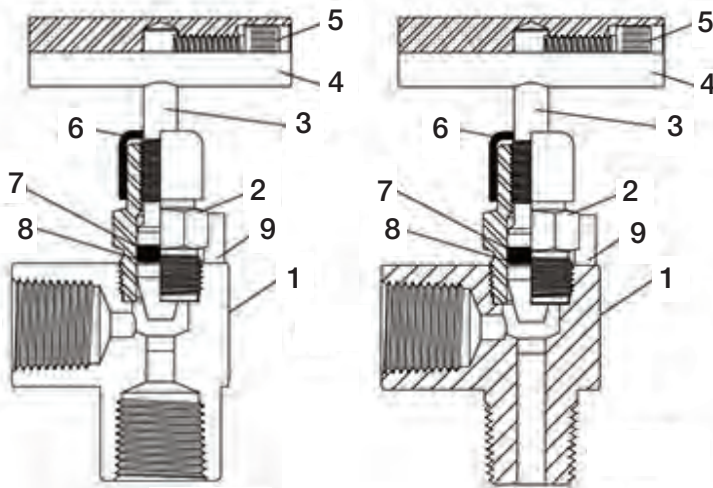
Material	Carbon Steel 316 Stainless Steel Body
Pressure Rating	Hard seat - 10,000 PSI at 100°F
Connection Size	1/2", 1/4" NPT Male x Female Female x Female
Handle	Tee

### RATED PRESSURE VS. TEMPERATURE



A108 & 316 SS

### MATERIAL OF CONSTRUCTION



#	DESCRIPTION	MATERIAL
1	Body	A105 CS ASTM A479 316 SS
2	Bonnet	A108 CRS ASTM A479 316 SS
3	Stem	ASTM A479 316 SS
4	Handle	A108 CRS 304 SS
5	Handle Bolt	Steel Grade 5 18-8 Stainless
6	Bonnet Hood	Polyethylene
7	Back-up Ring	FKM
8	O Ring Seal	FKM
9	Bonnet Lock Pin	18-8 Stainless

# NEEDLE VALVES

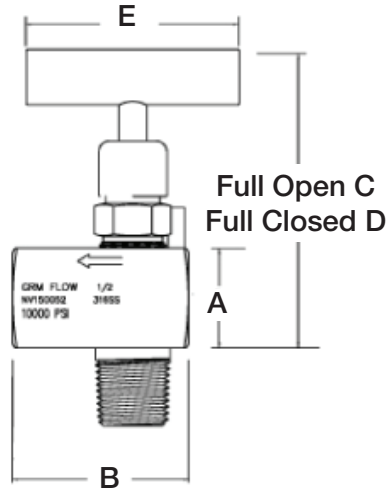
## Series 200

Globe Pattern - Angled



### ORDERING INFO AND DIMENSIONS

#### Male x Female



#### Dimensions

SIZE	A	B	C	D	E
1/2"	1.125"	2.000"	3.375"	3.188"	2.400"
1/4"					

SIZE	PART #		CRN #
	316 SS	A108	
1/2" NPT	NV150052	NV150051	0C17585.2
1/4" NPT	NV125052	NV125051	

# NEEDLE VALVES

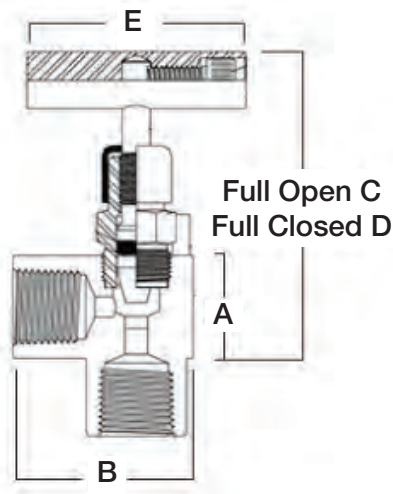
## Series 200

Globe Pattern - Angled



### ORDERING INFO AND DIMENSIONS

#### Female x Female



#### Dimensions

SIZE	A	B	C	D	E
1/2"	1.125"	2.000"	3.375"	3.188"	2.400"

SIZE	PART #		CRN #
	316 SS	A108	
1/2" NPT	NV150552	-	0C17585.2



## Additional Valves

Autoclave, Block &

Bleed, Mini,

Multi-Port



GRM offers Needle/Gauge Valves in a variety of connections and pressure ratings.

### AUTOCLAVE NEEDLE VALVE

- 9/16" Female x Female
- Working Pressure – 30,000 PSI @ 100° F



Autoclave Needle Valve

### BLOCK & BLEED GAUGE VALVE

- Hard seat
- Service to 10,000 PSI @ 100° F
- Male x Female
- Two piece non-rotating stem plug
- 316 Stainless Steel Body
- PTFE stem packing
- Blowout proof stem provides positive back seal in full open position



Block & Bleed Gauge Valve

### MINI NEEDLE VALVE

- Male x Female
- Service to 6,000 PSI
- Working temp: -20°F to 200°F



Mini Needle Valve

### MULTI-PORT GAUGE VALVE

- Hard seat
- Service to 10,000 PSI @ 100° F
- One 1/2" Male Port & Three 1/2" Female Ports
- Two piece non-rotating stem plug
- 316 Stainless Steel Body
- PTFE stem packing
- Blowout proof stem provides positive back seal In full open position



Multi-Port Gauge Valve

NEEDLE VALVES

# NEEDLE VALVES

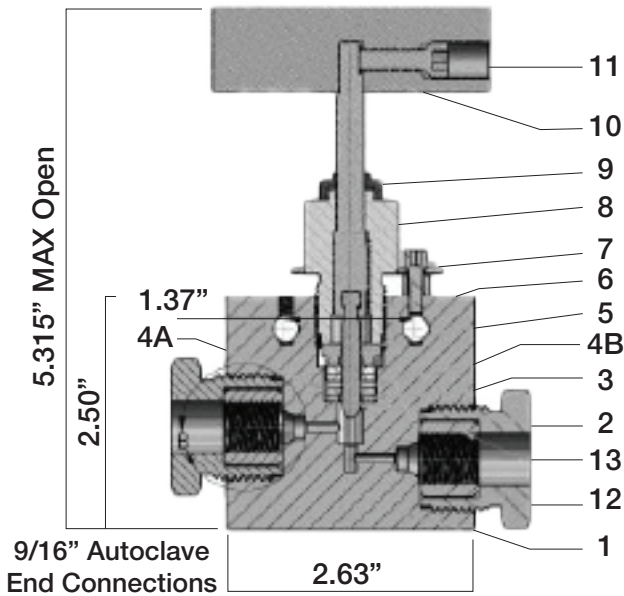
## Additional Valves

Autoclave, Block & Bleed, Mini, Multi-Port



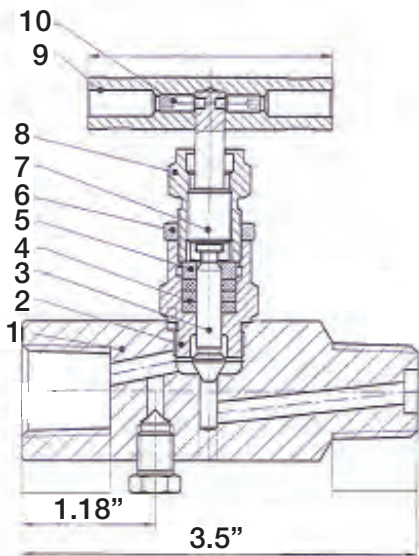
### MATERIAL OF CONSTRUCTION

#### Autoclave Needle Valve



#	DESCRIPTION	MATERIAL
1	Body	ASTM A276 Gr316
2	Lower Stem	17-4PH / SS 316
3	Lower Washer	ASTM A276 Gr316
4a	Packing	GFT / PEEK
4b	Packing	GFT / PEEK
5	Upper Washer	ASTM A276 Gr316
6	Bonnet	ALBr / AB-2
7	Locking Arrangement	SS
8	Upper Stem	ASTM A276 Gr316
9	Dust Cap	PVC
10	Handle	Powder Coated AL
11	Handle Screw	SS
12	Gland	ASTM A276 Gr316
13	Collar	ASTM A276 Gr316

#### Block & Bleed Gauge Valve



#	DESCRIPTION	MATERIAL
1	Body	316 SS
2	Bonnet	316 SS
3	Lower Stem	316 SS
4	Packing	PTFE
5	Gland	316 SS
6	Lock Nut	316 SS
7	Upper Stem	316 SS
8	Packing Bolt	316 SS
9	Handle	304 SS
10	Set Screw	18-8 SS

# NEEDLE VALVES

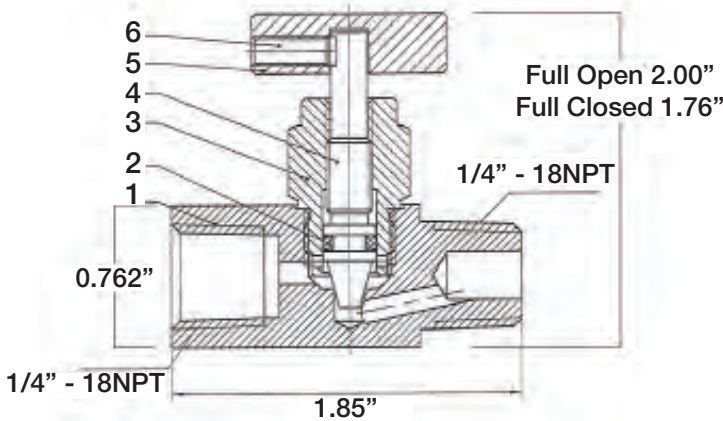
## Additional Valves

Autoclave, Block & Bleed, Mini, Multi-Port



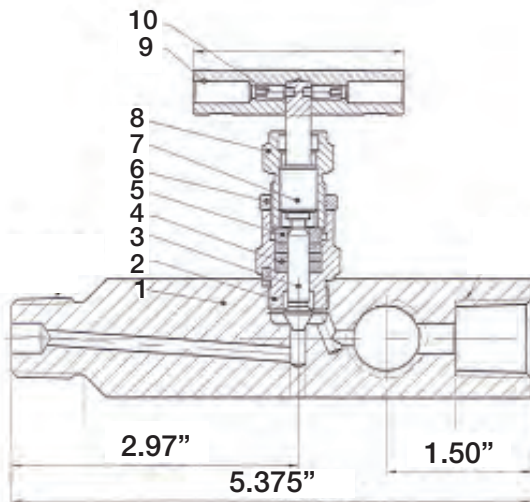
### MATERIAL OF CONSTRUCTION

#### Mini Needle Valve



#	DESCRIPTION	MATERIAL
1	Body	A105
2	O-Ring	Fluorine Rubber
3	Bonnet	A105
4	Stem	316
5	Handwheel	Aluminum
6	Set Screw	Stainless Steel

#### Multi-Port Needle Valve



#	DESCRIPTION	MATERIAL
1	Body	316 SS
2	Bonnet	316 SS
3	Lower Stem	316 SS
4	Packing	PTFE
5	Gland	316 SS
6	Lock Nut	316 SS
7	Upper Stem	316 SS
8	Packing Bolt	316 SS
9	Handle	304 SS
10	Set Screw	18-8 SS

**NEEDLE VALVES****Additional Valves***Autoclave, Block & Bleed, Mini, Multi-Port*ORDERING INFO**Autoclave Needle Valve**

SIZE	PART #
9/16"	NV391602

**Block & Bleed Gauge Valve**

SIZE	PART #
1/2"	NB150002

**Mini Needle Valve**

SIZE	PART #
1/4"	NV125001M

**Multi-Port Gauge Valve**

SIZE	PART #
1/2"	NM150002