

### Mini Needle Valves

**Features:**

- available in a variety of materials and handle options
- FKM O-ring seal and PTFE back-up ring below the threads protects from corrosion and galling
- stem threads are rolled for strength and ease of operation
- metal-to-metal hard seat design is 100% helium leak tested to 1 x 10<sup>-4</sup> ml/s at 200 PSI
- 1/8" and 1/4" are orifice size: 0.172", flow coefficient: 0.42
- 1/2": orifice size are 0.187", flow coefficient: 0.44, hex body
- all stems are 316 stainless steel

#### Male to Female



NPT Size	Handle Style	PSI at 200°F (94°C)	Brass Part #	Handle Style	PSI at 200°F (94°C)	Zinc Nickel Plated Steel Part #	316 Stainless Steel Part #
1/8" - 27	knurled knob	<b>6000</b>	<b>MFB101</b>	T design	<b>10000</b>	<b>MFC101</b>	<b>MFS101</b>
1/4" - 18	knurled knob	<b>6000</b>	<b>MFB102</b>	T design	<b>10000</b>	<b>MFC102</b>	<b>MFS102</b>
1/2" - 14	---	---	---	T design	<b>10000</b>	<b>MFC404</b>	<b>MFS404</b>

#### Female to Female



NPT Size	Handle Style	PSI at 200°F (94°C)	Brass Part #	Handle Style	PSI at 200°F (94°C)	Zinc Nickel Plated Steel Part #	316 Stainless Steel Part #
1/8" - 27	knurled knob	<b>6000</b>	<b>FFB101</b>	T design	<b>10000</b>	<b>FFC101</b>	<b>FFS101</b>
1/4" - 18	knurled knob	<b>6000</b>	<b>FFB102</b>	T design	<b>10000</b>	<b>FFC102</b>	<b>FFS102</b>
1/2" - 14	---	---	---	T design	<b>10000</b>	<b>FFC404</b>	<b>FFS404</b>

### Multiport Needle Valves

**Features:**

- reduces the number of gauge and other instrument connections to permanent piping installations, decreasing possible leak paths
- FKM O-ring seal and PTFE back-up ring below the threads protects from corrosion and galling
- stem threads are rolled for strength and ease of operation
- metal-to-metal hard seat design is 100% helium leak tested to 1 x 10<sup>-4</sup> ml/s at 200 PSI
- 1/2" female NPT port
- orifice size is 0.187", flow coefficient: 0.44
- all stems are 316 stainless steel

#### Hard Seat Male to Female



NPT Size	Handle Style	PSI at 200°F (94°C)	Zinc Nickel Plated Steel Part #	316 Stainless Steel Part #
1/2" - 14	T design	<b>10000</b>	<b>MFC204</b>	<b>MFS204</b>
3/4" - 14	T design	<b>10000</b>	<b>MFC20604</b>	<b>MFS20604</b>

#### Soft Seat Male to Female



NPT Size	Handle Style	PSI at 200°F (94°C)	Zinc Nickel Plated Steel Part #	316 Stainless Steel Part #
1/2" - 14	T design	<b>6000</b>	<b>MFC304</b>	<b>MFS304</b>
3/4" - 14	T design	<b>6000</b>	<b>MFC30604</b>	<b>MFS30604</b>