

## MAN Series Needle Valves with MPI™ Style Connections

Pressures to 15,000 psi (1034 bar)

Parker MAN series needle valves with MPI™ tube connections are designed for multi-turn control of liquid or gas media with regulation or shutoff options for pressures up to 15,000 psi. This Double Ferrule connection delivers fast, easy make-up and reliable bubble-tight performance in either liquid or gas service. Valves are built for MPI™ tube sizes from 1/4" to 1" and include five different body patterns providing many control options.

### Features:

- Valve flow capabilities closely match associated tubing bore sizes
- CW 316 Stainless Steel Material is Standard, 2507 Annealed Super Duplex as option
- Rising stem/barstock body design
- Non-rotating stem prevents stem/seat galling
- Metal-to-metal seating achieves bubble-tight shut-off, longer stem/seat life in abrasive flow, greater durability for repeated on/off cycles, unmatched temperature performance and excellent corrosion resistance
- Temperature range from -423°F (-252°C) to 1000°F (538°C)
- Standard PTFE packing provides dependable stem and body sealing from -423°F to 450°F, additional options include PTFE/Glass (25%) for temperatures to 600°F and Graphite Yarn for temperatures to 1000°F
- Choice of Vee (shutoff) or Regulating Flow Stem Tips
- Replaceable Seat Option available with Right Angle 2-way body style
- Optional N-Dura Stem and Seat Coating or Stellite material option for severe service available



MAN Series Needle Valve with MPI Connections

### Parker MPI™ Connection Benefits:

MPI™ Connections are designed for both liquids and gases. They can be used on MPI™ 1/8th Hard tubing, Autoclave Engineers Medium Pressure Tubing, or Thick Wall Instrumentation Tubing in both 316 SS and 2507 Super Duplex materials.

- **Suparcase® Technology** creates a Corrosion Resistant Ferrule set for a strong, mechanical hold
- **Double Ferrule** design is proven but not interchangeable with standard tube fittings
- **Longer Thread Engagement** improves resistance to pressure and load on ferrules
- **Molybdenum Disulfide Coated Gland Nut** prevents galling and makes assembly easier.



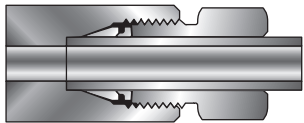
MAN Series Needle Valve Extreme Temperature shown with "-VT" (Vent) option

## MAN Series Medium Pressure Needle Valves

(Replaces MPN Series Valves)

Standard packing materials allow service temperatures from -100°F (-73°C) to 450°F (232°C), optional materials service from -423°F (-252°C) to 1000°F (538°C). Critical service design features include packing below the stem thread and the non-rotating stem design ensures longer life in rugged conditions. MPI™ valves are available in two materials, CW 316 SS and 2507 Super Duplex.

### MPI™ Medium Pressure Valve Connection Designation

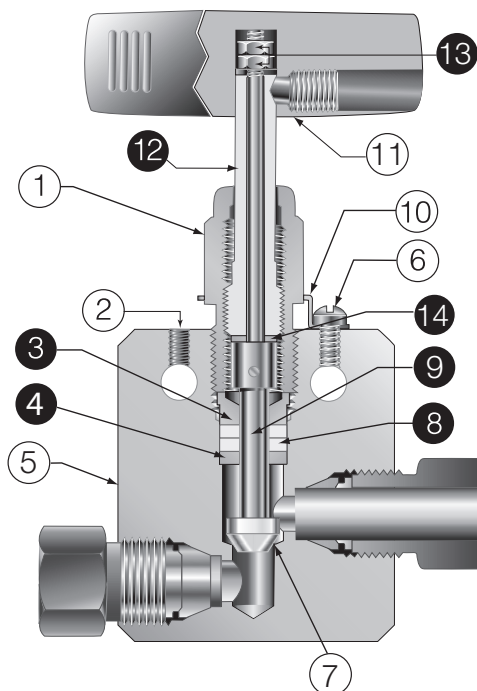
Valve Connection	Description	Drawing
<b>MP7</b>	Parker MPI™ (Medium Pressure Inverted) To 15,000 PSI	

Selections "F" NPT Valves and "MF" Medium Pressure C&T Valves from previous MPI™ catalog are now supplied from the Parker Autoclave Engineers product catalogs: "P" Series and "20SM" Series Needle Valve brochures.

### Material of Construction

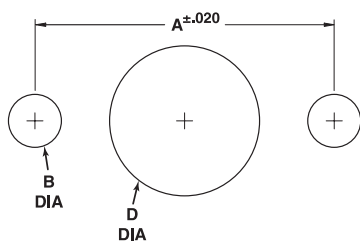
Item#	Description	Material
1	Low Friction Packing Gland	Ampco 45
2	Panel Mount Option	316 SS
3	Packing Washer	Ampco 45
4	Bottom Washer	316 SS
5	Valve Body	316 SS
6	Pan Head Screw 10-24 x 1/4"	18-8 SS
7	Metal to Metal Seating	316 SS
8	Adjustable Packing	PTFE
9	One Piece Stem	316 SS
10	Locking Device	302 SS
11	Powder Coated Handle	316 SS
12	Stem Sleeve	304 SS
13	Hex Nuts	300 Series SS
14	Thrust Washer	17-4PH
●	Replaceable Seat (version only)	17-4PH

# Typical spare parts found in Repair Kit



Inlet is typically under the seat (from left side in drawing above) however valve can be used bi-directionally. Inlet is shown to keep pressure trapped under seat in closed position (preferred).

### Panel Hole Sizes



Needle Valve Panel Mount

	Inches			
Valve Size	A	B	Screw Size	D
4 & 6	1.25	.22	10 - 24	.75
8 & 9	1.375	.22	10 - 24	1.00
12	1.75	.22	10 - 24	1.12
16	2.50	.22	10 - 24	1.62