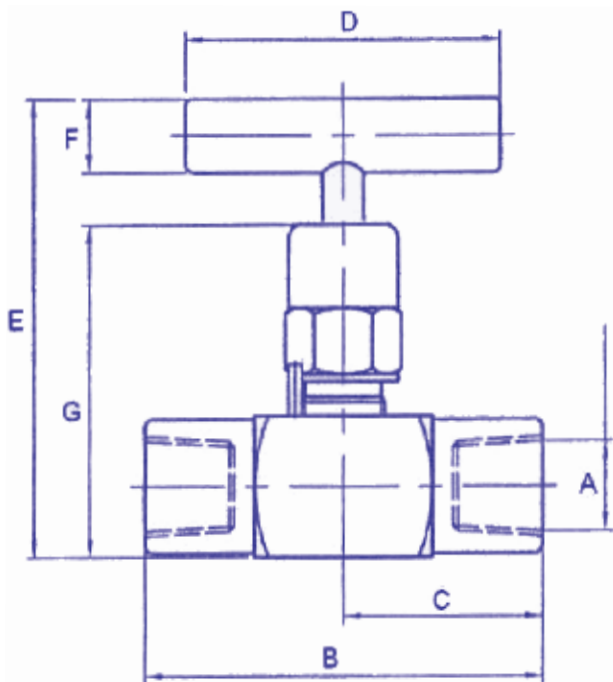
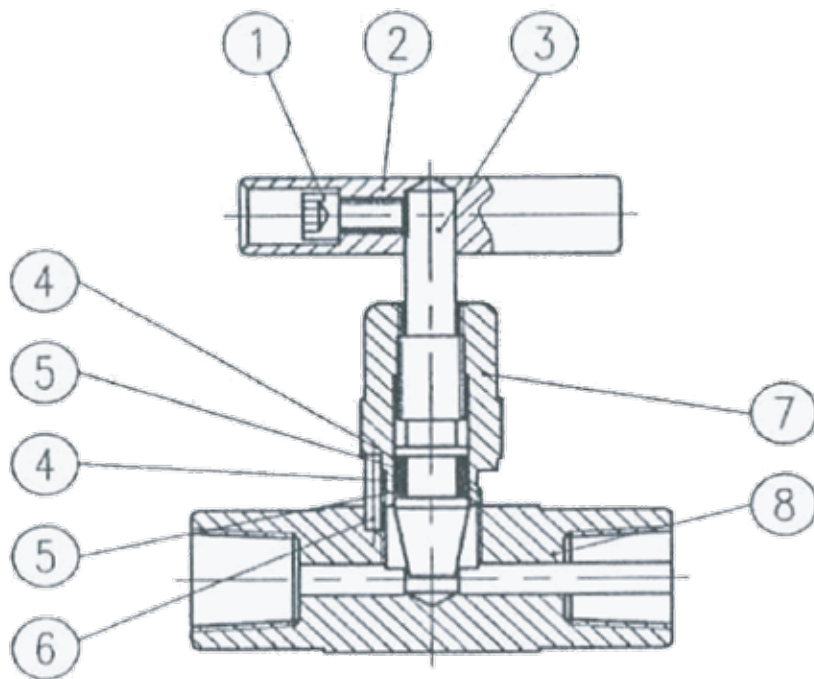




**CARBON STEEL F X F MINI  
NEEDLE VALVE  
SERIES: MCH**



**SPECIFICATIONS**

**RATED TO 6,000 PSI  
CARBON STEEL CONSTRUCTION  
VITON PACKING AND SEALS  
WORKING TEMPERATURE - 20 DEG F TO 100 DEG F  
THREADS CONFORM TO ASME B1.20.1  
NACE MR0175**

| ITEM | MATERIAL            |              |
|------|---------------------|--------------|
| 1    | Handle Fixing Screw | CARBON STEEL |
| 2    | Handle              | CARBON STEEL |
| 3    | Stem                | SS 316       |
| 4    | Back Up Ring        | Teflon       |
| 5    | O - Ring            | Viton        |
| 6    | Bonnet Lock Pin     | CARBON STEEL |
| 7    | Bonnet              | CARBON STEEL |
| 8    | Body                | CARBON STEEL |

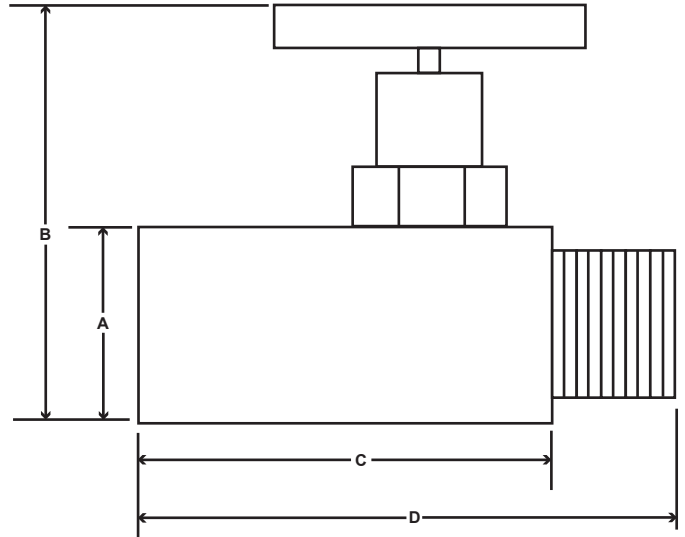
**DIMENSIONS**

| NPS  | PART #  | STYLE | WEIGHT | A      | B     | C     | D     | E     | F     | G     |
|------|---------|-------|--------|--------|-------|-------|-------|-------|-------|-------|
| 1/4" | MCH4F4F | F X F | 0.71   | PT 1/8 | 2.28" | 1.14" | 1.81" | 2.44" | 0.39" | 1.77" |

\* Due to the continuous development of our products, design or construction may change without prior notice



## CARBON STEEL M X F MINI NEEDLE VALVE SERIES: MCH



### SPECIFICATIONS

**RATED TO 6,000 PSI**  
**CARBON STEEL CONSTRUCTION**  
**VITON PACKING AND SEALS**  
**WORKING TEMPERATURE - 20 DEG F TO 100 DEG F**  
**THREADS CONFORM TO ASME B1.20.1**  
**NACE MR0175**

|   | ITEM                | MATERIAL     |
|---|---------------------|--------------|
| 1 | Handle Fixing Screw | CARBON STEEL |
| 2 | Handle              | CARBON STEEL |
| 3 | Stem                | SS 316       |
| 4 | Back Up Ring        | Teflon       |
| 5 | O - Ring            | Viton        |
| 6 | Bonnet Lock Pin     | CARBON STEEL |
| 7 | Bonnet              | CARBON STEEL |
| 8 | Body                | CARBON STEEL |

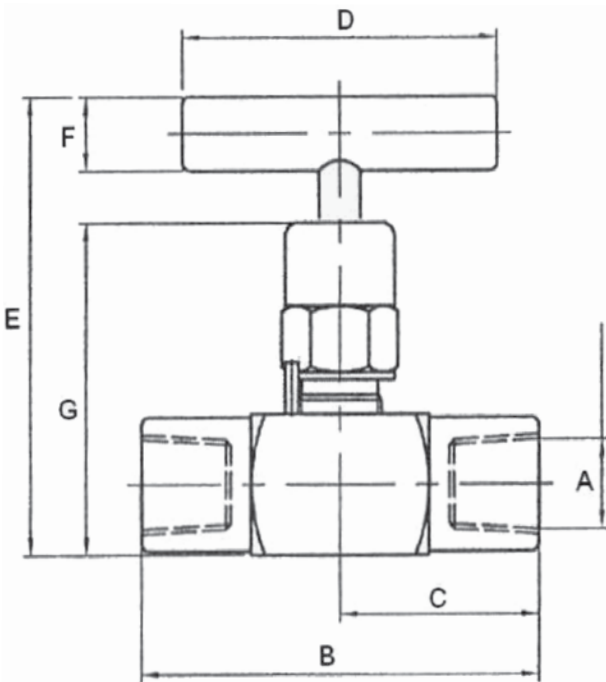
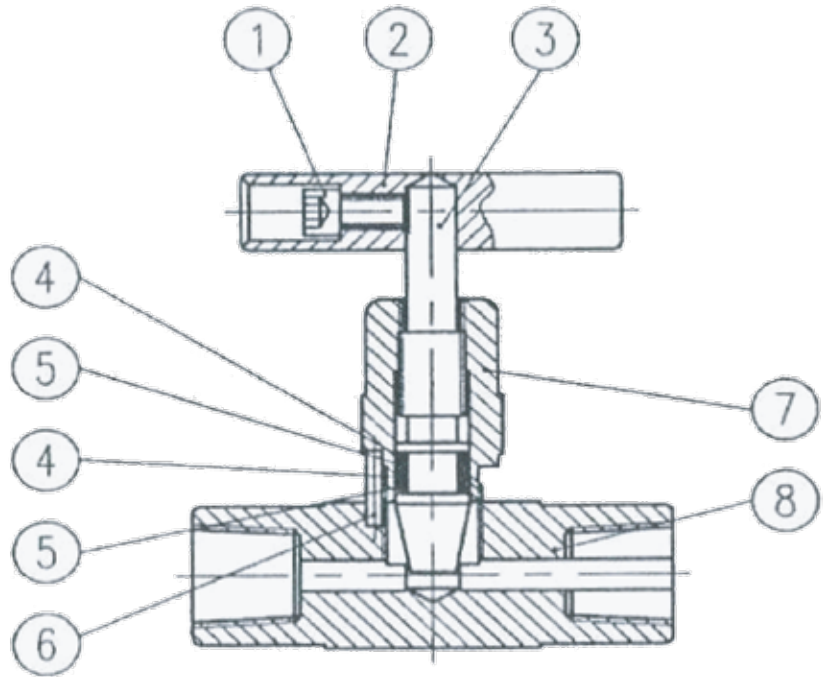
### DIMENSIONS

| NPS  | PART #  | STYLE | WEIGHT | PT   | A    | B     | C     | D     |
|------|---------|-------|--------|------|------|-------|-------|-------|
| 1/4" | MCH4M4F | M X F | 0.71   | 1/8" | .75" | 2.37" | 1.65" | 2.31" |

*\* Due to the continuous development of our products, design or construction may change without prior notice*



**STAINLESS STEEL F X F MINI  
NEEDLE VALVE  
SERIES: MSH**



**SPECIFICATIONS**

**RATED TO 6,000 PSI**  
**STAINLESS STEEL CONSTRUCTION**  
**VITON PACKING AND SEALS**  
**WORKING TEMPERATURE - 20 DEG F TO 100 DEG F**  
**THREADS CONFORM TO ASME B1.20.1**  
**NACE MR0175**

| ITEM | MATERIAL            |        |
|------|---------------------|--------|
| 1    | Handle Fixing Screw | SS 320 |
| 2    | Handle              | SS 303 |
| 3    | Stem                | SS 316 |
| 4    | Back Up Ring        | Teflon |
| 5    | O - Ring            | Viton  |
| 6    | Bonnet Lock Pin     | SS 303 |
| 7    | Bonnet              | SS 316 |
| 8    | Body                | SS 316 |

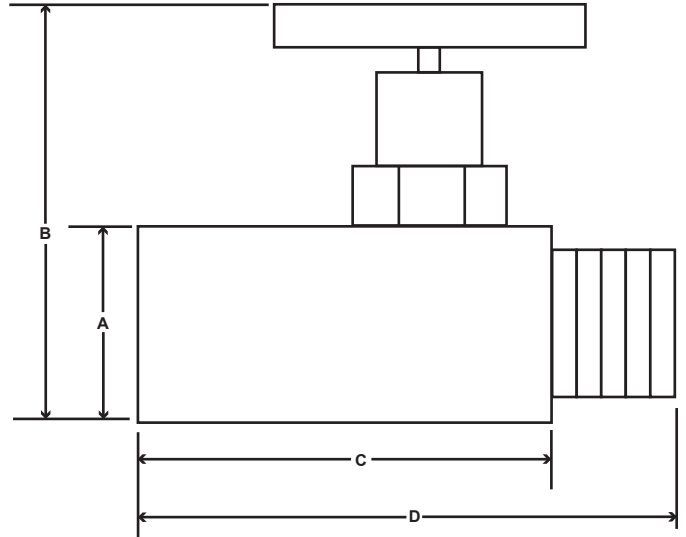
**DIMENSIONS**

| NPS  | PART # | STYLE | WEIGHT | A      | B     | C     | D     | E     | F     | G     |
|------|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|
| 1/4" |        | F X F | 0.71   | PT 1/8 | 2.28" | 1.14" | 1.81" | 2.44" | 0.39" | 1.77" |

*\* Due to the continuous development of our products, design or construction may change without prior notice*



## STAINLESS STEEL M X F MINI NEEDLE VALVE SERIES: MSH



### SPECIFICATIONS

RATED TO 6,000 PSI  
 STAINLESS STEEL CONSTRUCTION  
 VITON PACKING AND SEALS  
 WORKING TEMPERATURE -20 DEG F TO 100 DEG F  
 THREADS CONFORM TO ASME B1.20.1  
 AVAILABLE IN MxM, MxF AND FXF  
 NACE MR0175

| PART       | MATERIAL            |
|------------|---------------------|
| T-HANDLE   | 303 STAINLESS STEEL |
| STEM       | 304 STAINLESS STEEL |
| BONNET     | 316 STAINLESS STEEL |
| VALVE BODY | 316 STAINLESS STEEL |

### DIMENSIONS

| NPS  | PART #  | STYLE | WEIGHT | PT   | A    | B     | C     | D     |
|------|---------|-------|--------|------|------|-------|-------|-------|
| 1/4" | MSH4M4F | M X F | 0.71   | 1/8" | .75" | 2.37" | 1.65" | 2.31" |

\* Due to the continuous development of our products, design or construction may change without prior notice