



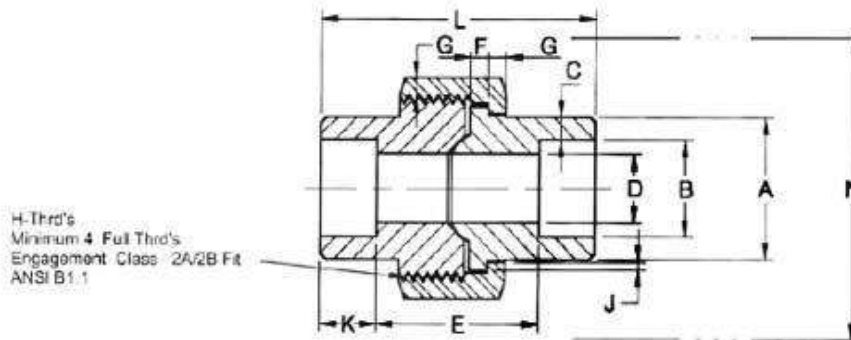
**RAJENDRA
PIPING &
FITTING**

MSS SP 83 UNION

**One Of India's Largest Manufacturer Of MSS-SP-83
Socket Weld And Threaded Union.**

MSS-SP-83 Socket Weld Union Dimensions

Socket Weld End MSS-SP-83-2006

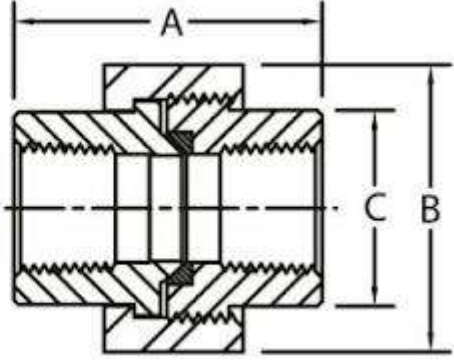


| Nom. Pipe Size | Pipe End (Min.) A | Socket Bore Dia. B | Socket Wall (Min.) C | Water Way Bore D | Laying Length E | Male Flange (Min.) F | Nut (Min.) G | Threads Per 25.4mm H | Bearing (Min.) J | Depth of Socket (Min.) K | Length Assem. Nom. L | Clear Assem. Nut N |
|----------------|-------------------|--------------------|----------------------|------------------|-----------------|----------------------|--------------|----------------------|------------------|--------------------------|----------------------|--------------------|
| 1/8" | 21.8 | 11.18 10.67 | 3.18 | 7.59 6.07 | 22.4 19.1 | 3.18 | 3.18 | 16 | 1.24 | 9.7 | 41.4 | 50.8 |
| 1/4" | 21.8 | 14.61 14.10 | 3.30 | 10.01 8.48 | 22.4 19.1 | 3.18 | 3.18 | 16 | 1.24 | 9.7 | 41.4 | 50.8 |
| 3/8" | 25.9 | 18.03 17.53 | 3.51 | 13.28 11.76 | 26.9 20.6 | 3.43 | 3.43 | 14 | 1.37 | 9.7 | 46.0 | 55.9 |
| 1/2" | 31.2 | 22.23 21.73 | 4.09 | 16.56 15.04 | 26.9 20.6 | 3.68 | 3.68 | 14 | 1.50 | 9.7 | 49.0 | 58.4 |
| 3/4" | 37.1 | 27.56 27.05 | 4.27 | 21.69 20.17 | 31.8 25.4 | 4.06 | 4.06 | 11 | 1.68 | 12.7 | 56.9 | 66.0 |
| 1" | 45.5 | 34.29 33.78 | 4.98 | 27.41 25.88 | 34.3 26.2 | 4.57 | 4.45 | 11 | 1.85 | 12.7 | 62.0 | 78.7 |
| 1-1/4" | 54.9 | 43.05 42.55 | 5.28 | 35.81 34.29 | 40.6 32.5 | 5.33 | 5.21 | 11 | 2.13 | 12.7 | 71.1 | 94.0 |
| 1-1/2" | 61.5 | 49.15 48.64 | 5.54 | 41.66 40.13 | 42.2 34.0 | 5.84 | 5.59 | 10 | 2.31 | 12.7 | 76.5 | 111.8 |
| 2" | 75.2 | 61.62 61.11 | 6.05 | 53.26 51.74 | 45.5 37.3 | 6.60 | 6.35 | 10 | 2.69 | 15.7 | 86.1 | 132.1 |
| 2-1/2" | 91.7 | 74.45 73.81 | 7.67 | 64.24 61.19 | 61.7 52.1 | 7.49 | 7.11 | 8 | 3.07 | 15.7 | 102.4 | 149.9 |
| 3" | 109.2 | 90.42 89.79 | 8.31 | 79.45 76.40 | 63.8 53.6 | 8.26 | 8.00 | 8 | 3.53 | 15.7 | 109.0 | 175.3 |

(1) Dimensions in Millimeters.

(2) Upper and lower values for each size are the respective maximum and minimum dimensions.

Check MSS-SP-83 Threaded Union Dimensions



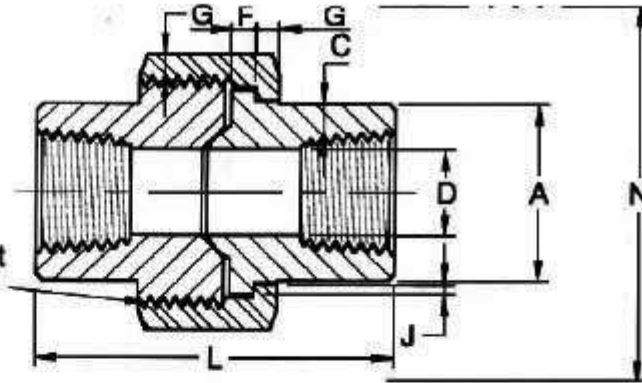
MSS-SP-83 THREADED UNION DIMENSIONS

| Nom. Pipe Size | Pipe End Min | Socket Bore Dia. | Socket Wall Min. | Water Way Bore | Laying Length | Male Flange Min. | Nut Min. | Threads Per 25.4 Max | Bearing Min. | Depth of Socket Min. | Length Assem. Nominal | Clear Assem. Nut |
|----------------|--------------|------------------|------------------|----------------|---------------|------------------|----------|----------------------|--------------|----------------------|-----------------------|------------------|
| | A | B | C | D | E | F | G | H | J | K | L | N |
| 1/8 | 21.8 | 10.92 | 3.17 | 6.83 | 22.4 | 3.17 | 3.17 | 16 | 1.24 | 9.6 | 41.1 | 49.0 |
| | | 10.67 | | 6.43 | 19.0 | | | | | | | |
| 1/4 | 21.8 | 14.22 | 3.30 | 9.85 | 22.4 | 3.17 | 3.17 | 19 | 1.24 | 9.6 | 41.4 | 49.0 |
| | | 13.97 | | 9.45 | 19.0 | | | | | | | |
| 3/8 | 25.9 | 17.78 | 3.48 | 13.92 | 26.9 | 3.43 | 3.43 | 14 | 1.37 | 9.6 | 46.0 | 55.0 |

| | | | | | | | | | | | | |
|-------|-------|----------------|------|----------------|--------------|------|------|----|------|------|-------|-------|
| | | 17.53 | | 13.51 | 20.6 | | | | | | | |
| ½ | 31.2 | 21.84 21.59 | 4.06 | 17.47 17.07 | 26.9 20.6 | 3.68 | 3.68 | 14 | 1.50 | 9.6 | 49.0 | 57.0 |
| ¾ | 37.1 | 27.18 26.92 | 4.27 | 21.79 21.39 | 31.8 25.4 | 4.06 | 4.06 | 11 | 1.68 | 12.7 | 56.9 | 67.0 |
| 1 | 45.5 | 34.04 33.78 | 4.95 | 28.14 27.74 | 34.3 26.2 | 4.57 | 4.44 | 11 | 1.85 | 12.7 | 62.0 | 79.0 |
| 1 1/4 | 54.9 | 42.67 42.42 | 5.28 | 35.76 35.36 | 40.6 32.5 | 5.33 | 5.21 | 11 | 2.13 | 12.7 | 71.1 | 94.0 |
| 1 1/2 | 61.5 | 48.77 48.51 | 5.54 | 41.61 41.20 | 42.2 34.0 | 5.84 | 5.59 | 10 | 2.31 | 12.7 | 75.5 | 111.0 |
| 2 | 75.2 | 61.47 61.21 | 6.05 | 52.53 52.12 | 45.3 37.3 | 6.60 | 6.35 | 10 | 2.69 | 15.8 | 86.1 | 132.0 |
| 2 1/2 | 91.7 | 74.17 73.66 | 7.65 | 64.72 64.31 | 61.7 52.1 | 7.49 | 7.11 | 8 | 3.07 | 15.8 | 102.4 | 148.0 |
| 3 | 109.2 | 90.17 89.66 | 8.31 | 77.67 77.27 | 63.8 53.6 | 8.25 | 8.00 | 8 | 3.53 | 15.8 | 109.0 | 175.0 |

MSS SP-83 Union Weight Chart

H-Thrd's
Minimum 4 Full Thrd's
Engagement Class 2A/2B Fit
ANSI B1.1



| Nom. Pipe Size | Pipe End | Wall | Water Way Bore | Male Flange | Nut | Threads Per 25.4mm | Bearing | Length Assem. Nom. | Clear Assem. Nut |
|----------------|----------|--------|----------------|-------------|--------|--------------------|---------|--------------------|------------------|
| | Min. A | Min. C | D | Min. F | Min. G | Max. H | Min. J | L | N |
| 1/8" | 14.7 | 2.41 | 8.43 6.43 | 3.18 | 3.18 | 16 | 1.24 | 41.4 | 50.8 |
| 1/4" | 19.0 | 3.02 | 11.13 9.45 | 3.18 | 3.18 | 16 | 1.24 | 41.4 | 50.8 |
| 3/8" | 22.9 | 3.20 | 14.27 13.51 | 3.43 | 3.43 | 14 | 1.37 | 46.0 | 55.9 |
| 1/2" | 27.7 | 3.73 | 17.86 17.07 | 3.68 | 3.68 | 14 | 1.50 | 49.0 | 58.4 |
| 3/4" | 33.5 | 3.91 | 23.01 21.39 | 4.06 | 4.06 | 11 | 1.68 | 56.9 | 66.0 |
| 1" | 41.4 | 4.55 | 28.98 27.74 | 4.57 | 4.45 | 11 | 1.85 | 62.0 | 78.7 |
| 1-1/4" | 50.5 | 4.85 | 37.69 35.36 | 5.33 | 5.21 | 11 | 2.13 | 71.1 | 94.0 |
| 1-1/2" | 57.2 | 5.08 | 43.54 41.20 | 5.84 | 5.59 | 10 | 2.31 | 76.5 | 111.8 |
| 2" | 70.1 | 5.54 | 55.58 52.12 | 6.60 | 6.35 | 10 | 2.69 | 86.1 | 132.1 |
| 2-1/2" | 85.3 | 7.01 | 66.27 64.31 | 7.49 | 7.11 | 8 | 3.07 | 102.4 | 149.9 |
| 3" | 102.4 | 7.62 | 88.25 77.27 | 8.26 | 8.00 | 8 | 3.53 | 109.0 | 175.3 |

(1) Dimensions in Millimeters.

(2) Upper and lower values for each size are the respective maximum and minimum dimensions.

MSS-SP-83 Union Threaded Pressure Rating

| MSS-SP-83 Union | | | | | |
|-----------------|-----------|-----------|--------------|----------------|----------------|
| Temperature | | Class 150 | Class 300 | | |
| | | | 1/4 - 1 inch | 1 1/4 - 2 inch | 2 1/2 - 3 inch |
| (oF) | (oC) | | | | |
| -20 to 150 | -29 to 66 | 300 | 2000 | 1500 | 1000 |
| 200 | 93 | 265 | 1785 | 1350 | 910 |
| 250 | 121 | 225 | 1575 | 1200 | 825 |
| 300 | 149 | 185 | 1360 | 1050 | 735 |
| 350 | 177 | 150 | 1150 | 900 | 650 |
| 400 | 204 | - | 935 | 750 | 560 |
| 450 | 232 | - | 725 | 600 | 475 |
| 500 | 260 | - | 510 | 450 | 385 |
| 550 | 288 | - | 300 | 300 | 300 |

