# ARMATURA ZE SZWEM

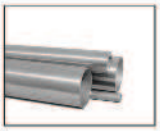
## Rury ze szwem ISO

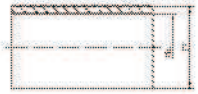
| DN | D [mm] | Grubość ścianek [mm] | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1.20 | 1.50 | 1.60 | 2.00 | 2.30 | 2.50 | 2.60 | 2.90 | 3.00 | 3.20 | 3.60 | 4.00 | 5.00 | 6.00 | 8.00 | 10.00 | 12.00 |
| | | Waga kg/m | | | | | | | | | | | | | | | | |
| 10 | 17.20 | 0.48 | 0.59 | 0.62 | | | | | | | | | | | | | | |
| 15 | 21.30 | 0.60 | 0.74 | 0.79 | 0.97 | 1.09 | | | | | | | | | | | | |
| 20 | 26.90 | 0.77 | 0.95 | 1.01 | 1.25 | 1.42 | 1.53 | 1.58 | | | | | | | | | | |
| 25 | 33.70 | 0.98 | 1.21 | 1.29 | 1.59 | 1.81 | 1.95 | 2.02 | 2.24 | 2.31 | 2.44 | | | | | | | |
| 32 | 42.40 | 1.24 | 1.54 | 1.63 | 2.02 | 2.31 | 2.50 | 2.59 | 2.87 | 2.96 | 3.14 | 3.50 | | | | | | |
| 40 | 48.30 | 1.42 | 1.76 | 1.87 | 2.32 | 2.65 | 2.87 | 2.98 | 3.30 | 3.40 | 3.61 | 4.03 | | | | | | |
| 50 | 60.30 | 1.78 | 2.21 | 2.35 | 2.92 | 3.34 | 3.62 | 3.76 | 4.17 | 4.30 | 4.58 | 5.11 | | | | | | |
| 65 | 76.10 | | 2.80 | 2.98 | 3.71 | 4.25 | 4.61 | 4.78 | 5.32 | 5.49 | 5.84 | 6.54 | 7.22 | 8.90 | | | | |
| 80 | 88.90 | | 3.28 | 3.50 | 4.35 | 4.99 | 5.41 | 5.62 | 6.24 | 6.45 | 6.87 | 7.69 | 8.50 | 10.50 | | | | |
| 100 | 114.30 | | 4.24 | 4.51 | 5.62 | 6.45 | 7.00 | 7.27 | 8.09 | 8.36 | 8.90 | 9.98 | 11.05 | 13.68 | 16.27 | | | |
| 125 | 139.70 | | 5.19 | 5.53 | 6.90 | 7.91 | 8.59 | 8.93 | 9.93 | 10.27 | 10.94 | 12.27 | 13.59 | | | | | |
| 150 | 168.30 | | 6.26 | 6.68 | 8.33 | 9.56 | 10.38 | 10.79 | 12.01 | 12.42 | 13.23 | 14.85 | 16.46 | 20.44 | | | | |
| 200 | 219.10 | | | | 10.87 | 12.49 | 13.56 | 14.09 | 15.70 | 16.23 | 17.30 | 19.42 | 21.54 | 26.80 | 32.01 | | | |
| 250 | 273.00 | | | | 13.57 | 15.59 | 16.93 | 17.60 | 19.61 | 20.28 | 21.62 | 24.28 | 26.94 | 33.55 | 40.11 | | | |
| 300 | 323.90 | | | | 16.12 | 18.52 | 20.12 | 20.92 | 23.31 | 24.10 | 25.70 | 28.87 | 32.04 | 39.92 | 47.76 | | | |
| 350 | 355.60 | | | | | | 22.10 | 22.98 | 25.61 | 26.49 | 28.24 | 31.73 | 35.21 | 43.89 | 52.52 | | | |
| 400 | 406.40 | | | | | | 25.28 | 26.29 | 29.30 | 30.30 | 32.31 | 36.31 | 40.30 | 50.25 | 60.15 | 79.80 | | |
| 450 | 457.20 | | | | | | | | 32.99 | 34.12 | 36.38 | 40.89 | 45.39 | 56.61 | 67.78 | | | |
| 500 | 508.00 | | | | | | | | 36.68 | 37.93 | 40.45 | 45.47 | 50.48 | 62.97 | 75.42 | 100.15 | 124.69 | |
| 600 | 609.60 | | | | | | | | 44.05 | 45.57 | 48.59 | 54.62 | 60.65 | 75.69 | 90.68 | 120.51 | 150.13 | |
| 700 | 711.20 | | | | | | | | | | | | 70.83 | 88.41 | 105.94 | 140.86 | 175.57 | |
| 800 | 812.80 | | | | | | | | | | | | 81.00 | 101.13 | 121.21 | 161.21 | 201.01 | |
| 900 | 914.40 | | | | | | | | | | | | 91.18 | 113.85 | 136.47 | 181.56 | 226.45 | |
| 1000 | 1016.00 | | | | | | | | | | | | 101.36 | 126.57 | 151.73 | 201.91 | 251.89 | 301.66 |
| 1100 | 1120.00 | | | | | | | | | | | | | 139.59 | 167.36 | 222.74 | 277.93 | 332.91 |
| 1200 | 1220.00 | | | | | | | | | | | | | 152.11 | 182.3 | 242.77 | 302.97 | 362.96 |

Dostępne w gatunakch: 304, 304L, 321, 316L, 316Ti

**Na zamówienie także rury w wykonaniu bez szwu w gatunkach: 304, 321, 316Ti.**

## Rury ze szwem METRYCZNE





| DN | Grubość ścianek [mm] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.2 | 1.5 | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 | 6.0 | 8.0 | 10.0 | 12.0 |
| | Waga kg/m | | | | | | | | | | |
| 15 | | 0.62 | | | | | | | | | |
| 20 | | 0.81 | | | | | | | | | |
| 25 | | 1.00 | 1.30 | 1.60 | | | | | | | |
| 32 | 1.02 | 1.26 | 1.65 | 2.03 | | | | | | | |
| 40 | 1.26 | 1.56 | 2.05 | 2.54 | | | | | | | |
| 50 | | 1.96 | | | | | | | | | |
| 65 | | 2.50 | 3.41 | | | | | | | | |
| 80 | | 3.06 | 4.11 | 5.16 | 6.23 | | | | | | |
| 100 | | 3.81 | 5.11 | 6.42 | 7.74 | | | | | | |
| 125 | | 4.75 | 6.36 | 7.98 | 9.61 | | | | | | |
| 150 | | 5.69 | 7.61 | 9.55 | 11.49 | 15.42 | | | | | |
| 200 | | 7.57 | 10.12 | 12.68 | 15.25 | 20.43 | 25.66 | | | | |
| 225 | | 8.51 | 11.37 | 14.24 | 17.13 | | | | | | |
| 250 | | 9.45 | 12.62 | 15.81 | 19.00 | 25.44 | 31.92 | | | | |
| 300 | | 11.32 | 15.12 | 18.94 | 22.76 | 30.45 | 38.18 | 45.97 | | | |
| 350 | | 13.20 | 17.63 | 22.07 | 26.52 | 35.45 | 44.44 | 53.48 | | | |
| 400 | | 15.08 | 20.13 | 25.19 | 30.27 | 40.46 | 50.70 | 60.99 | | | |
| 450 | | | | | 34.03 | 45.47 | 56.96 | 68.51 | | | |
| 500 | | | | | 37.78 | 50.48 | 63.22 | 76.02 | 101.76 | 127.70 | |
| 600 | | | | | 45.29 | 60.49 | 75.74 | 91.04 | 121.79 | 152.73 | |
| 700 | | | | | | 70.51 | 88.26 | 106.06 | 141.82 | 177.77 | |
| 800 | | | | | | 80.52 | 100.78 | 121.09 | 161.85 | 202.81 | |
| 900 | | | | | | 90.54 | 113.30 | 136.11 | 181.88 | 227.85 | |
| 1000 | | | | | | 100.55 | 125.82 | 151.13 | 201.91 | 252.89 | 304.07 |
| 1100 | | | | | | | 138.84 | 166.16 | 221.94 | 277.93 | 334.11 |
| 1200 | | | | | | | 150.86 | 181.18 | 241.97 | 302.97 | 364.16 |

Dostępne w gatunakch: 304, 304L, 321, 316L, 316Ti

**Na zamówienie także rury w wykonaniu bez szwu w gatunkach: 304, 321, 316Ti.**

## Rury ze szwem ANSI B 16.9

| Wymiar | D [mm] | SCH 5 S | | SCH 10 S | | SCH 40 S | |
|---|---|---|---|---|---|---|---|
| | | Ścianka [mm] | kg/m | Ścianka [mm] | kg/m | Ścianka [mm] | kg/m |
| 1/2 " | 21.34 | 1.65 | 0.80 | 2.11 | 1.00 | 2.77 | 1.27 |
| 3/4 " | 26.67 | 1.65 | 1.03 | 2.11 | 1.28 | 2.87 | 1.68 |
| 1 " | 33.40 | 1.65 | 1.31 | 2.77 | 2.12 | 3.38 | 2.54 |
| 1 1/4 " | 42.16 | 1.65 | 1.67 | 2.77 | 2.73 | 3.56 | 3.44 |
| 1 1/2 " | 48.26 | 1.65 | 1.93 | 2.77 | 3.16 | 3.68 | 4.11 |
| 2 " | 60.33 | 1.65 | 2.42 | 2.77 | 3.99 | 3.91 | 5.52 |
| 3 " | 88.90 | 2.11 | 4.59 | 3.05 | 6.56 | 5.49 | 11.47 |
| 4 " | 114.30 | 2.11 | 5.93 | 3.05 | 8.50 | 6.02 | 16.32 |
| 6 " | 168.28 | 2.77 | 11.48 | 3.40 | 14.04 | | |
| 8 " | 219.08 | 2.77 | 15.00 | 3.76 | 20.27 | | |
| 10 " | 273.05 | 3.40 | 22.96 | 4.19 | 28.21 | | |
| 12 " | 323.60 | 3.96 | 31.72 | 4.57 | 36.53 | | |
| 14 " | 355.60 | 3.96 | 34.87 | 4.78 | 41.99 | | |
| 16 " | 406.40 | 4.19 | 42.20 | 4.78 | 48.07 | | |
| 18 " | 457.20 | 4.19 | 47.53 | 4.78 | 54.15 | | |
| 20 " | 508.00 | 4.78 | 60.23 | 5.54 | 69.70 | | |

Dostępne w gatunakch: 304L, 316L

**Na zamówienie także rury w wykonaniu bez szwu w gatunkach: 304, 304L, 316, 316L.**



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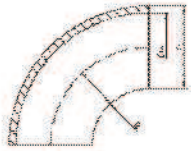
### Kolana ze szwem ISO R=1.5D wg DIN 2605

| DN | D [mm] | R | Grubość ścianek [mm] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2.0 | 2.3 | 2.5 | 2.6 | 2.9 | 3.0 | 3.2 | 3.6 | 4.0 | 5.0 | 6.0 | 8.0 |
| | | | Waga kg/szt. | | | | | | | | | | | |
| 10 | 17.2 | 26 | 0.03 | | | | | | | | | | | |
| 15 | 21.3 | 27 | 0.04 | | | | | | | | | | | |
| 20 | 26.9 | 29 | 0.06 | | | | | | | | | | | |
| 25 | 33.7 | 38 | 0.09 | 0.11 | 0.12 | 0.12 | 0.13 | 0.14 | 0.15 | | | | | |
| 32 | 42.4 | 48 | 0.15 | 0.17 | 0.19 | 0.20 | 0.22 | 0.22 | 0.24 | 0.26 | | | | |
| 40 | 48.3 | 57 | 0.21 | 0.24 | 0.26 | 0.27 | 0.30 | 0.30 | 0.32 | 0.36 | | | | |
| 50 | 60.3 | 76 | 0.35 | 0.40 | 0.43 | 0.45 | 0.50 | 0.51 | 0.55 | 0.61 | | | | |
| 65 | 76.1 | 95 | 0.55 | 0.63 | 0.69 | 0.71 | 0.79 | 0.82 | 0.87 | | | | | |
| 80 | 88.9 | 115 | 0.79 | 0.90 | 0.98 | 1.01 | 1.13 | 1.17 | 1.24 | 1.39 | 1.54 | 1.90 | | |
| 100 | 114.3 | 153 | 1.35 | 1.55 | 1.68 | 1.75 | 1.94 | 2.01 | 2.14 | 2.40 | 2.65 | 3.29 | 3.91 | |
| 125 | 139.7 | 191 | 2.07 | 2.37 | 2.58 | 2.68 | 2.98 | 3.08 | 3.28 | 3.68 | 4.08 | | | |
| 150 | 168.3 | 229 | 3.00 | 3.44 | 3.73 | 3.88 | 4.32 | 4.47 | 4.76 | 5.34 | 5.92 | 7.35 | 8.77 | 11.55 |
| 200 | 219.1 | 305 | 5.21 | 5.98 | 6.50 | 6.75 | 7.52 | 7.78 | | | 10.32 | 12.84 | 15.34 | 20.26 |
| 250 | 273.0 | 381 | | | 10.13 | | | 12.14 | | | 16.12 | 20.08 | 24.01 | 31.77 |
| 300 | 323.9 | 457 | | | 14.44 | | | 17.30 | | | 23.00 | 28.66 | 34.28 | 45.42 |
| 350 | 355.6 | 533 | | | 18.54 | | | 22.22 | | | 29.54 | 36.82 | 44.05 | 58.40 |
| 400 | 406.4 | 610 | | | 24.23 | | | 29.03 | | | 38.62 | 48.15 | 57.64 | 76.47 |
| 450 | 457.2 | 686 | | | 30.67 | | | 36.76 | | | 48.91 | 61.00 | 73.04 | 96.96 |
| 500 | 508.0 | 762 | | | 37.87 | | | 45.40 | | | 60.42 | 75.37 | 90.27 | 119.88 |
| 600 | 609.6 | 914 | | | 54.56 | | | 65.42 | | | 87.08 | 108.67 | 130.19 | 173.01 |
| 700 | 711.2 | 1070 | | | 74.56 | | | 8941 | | | 119.05 | 148.60 | 178.06 | 236.74 |
| 800 | 812.8 | 1220 | | | 97.20 | | | 116.57 | | | 155.23 | 193.80 | 232.28 | 308.93 |
| 900 | 914.4 | 1392 | | | 119.90 | | | 144.00 | | | 192.21 | 240.52 | 289.00 | 386.20 |
| 1000 | 1016.0 | 1525 | | | 151.97 | | | 182.28 | | | 242.79 | 303.19 | 363.47 | 483.67 |

Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti



### Kolana ze szwem METRYCZNE R=1.5D wg DIN 2605

| DW | R | Grubość ścianek [mm] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1.5 | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 | 6.0 | 8.0 | 10.0 |
| | | Waga kg/szt. | | | | | | | | |
| 15 | 27 | 0.03 | | | | | | | | |
| 20 | 29 | | 0.05 | | | | | | | |
| 25 | 38 | | 0.08 | | | | | | | |
| 32 | 48 | | 0.20 | | | | | | | |
| 40 | 57 | | 0.31 | | | | | | | |
| 50 | 76 | | 0.52 | | | | | | | |
| 65 | 95 | | 0.68 | | | | | | | |
| 80 | 115 | | 0.77 | | | | | | | |
| 100 | 153 | | 1.20 | 1.51 | 1.82 | | | | | |
| 125 | 191 | | 1.88 | 2.36 | 2.84 | | | | | |
| 150 | 229 | | 2.69 | 3.37 | 4.06 | 5.45 | | | | |
| 200 | 305 | | 4.77 | 5.97 | 7.19 | 9.63 | 12.09 | 14.58 | 19.63 | |
| 250 | 381 | | 7.43 | 9.31 | 11.19 | | | | | |
| 300 | 457 | | 10.69 | 13.38 | 16.09 | 21.52 | | | | |
| 350 | 533 | | 14.76 | 18.47 | 22.20 | 29.68 | 37.21 | 44.78 | 60.04 | 75.47 |
| 400 | 610 | | 19.29 | 24.14 | 29.01 | 38.77 | 48.58 | 58.44 | 78.31 | |
| 450 | 686 | | 24.39 | 30.52 | 36.67 | 49.00 | 61.38 | 73.82 | 98.86 | |
| 500 | 762 | | 30.09 | 37.65 | 45.22 | 60.42 | 75.67 | 90.99 | 121.80 | 152.85 |
| 600 | 914 | | 43.28 | 54.15 | 65.03 | 86.85 | 108.74 | 130.71 | 174.85 | 219.28 |
| 700 | 1070 | | 59.09 | 73.91 | 88.75 | 118.51 | 148.34 | 178.27 | 238.36 | 298.79 |
| 800 | 1220 | | 76.96 | 96.27 | 115.59 | 154.31 | 193.13 | 232.05 | 310.16 | 388.66 |
| 900 | 1372 | | 95.79 | 119.80 | 143.84 | 192.00 | 240.26 | 288.63 | 385.69 | 483.17 |
| 1000 | 1525 | | 120.20 | 150.32 | 180.48 | 240.87 | 301.39 | 362.03 | 483.67 | 605.79 |

Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti

### Kolana ze szwem METRYCZNE R=D+100 wg DIN 2605

| DW | R | Grubość ścianek [mm] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 | 6.0 | 8.0 | 10.0 |
| | | Waga kg/szt. | | | | | | | |
| 25 | 125 | 0.27 | | | | | | | |
| 40 | 140 | 0.46 | | | | | | | |
| 50 | 150 | 0.61 | | | | | | | |
| 65 | 165 | 0.88 | | | | | | | |
| 80.0 | 180 | 1.16 | | | | | | | |
| 100.0 | 200 | 1.60 | 2.02 | 2.43 | | | | | |
| 125.0 | 225 | 2.25 | 2.82 | 3.40 | 4.57 | 5.75 | 6.96 | | |
| 150.0 | 250 | 2.99 | 3.75 | 4.51 | 6.06 | 7.62 | 9.20 | | |
| 200.0 | 300 | 4.77 | 5.97 | 7.19 | 9.63 | 12.09 | 14.58 | 19.63 | |
| 250.0 | 350 | 6.94 | 8.69 | 10.45 | 13.99 | 17.55 | 21.14 | 28.41 | |
| 300.0 | 400 | 9.50 | 11.90 | 14.30 | 19.13 | 23.99 | 28.88 | 38.76 | 48.77 |
| 350.0 | 450 | 12.46 | 15.60 | 18.74 | 25.06 | 31.42 | 37.80 | 50.69 | 63.72 |
| 400.0 | 500 | 15.81 | 19.79 | 23.78 | 31.78 | 39.82 | 47.90 | 64.19 | 80.63 |
| 450.0 | 550 | 19.56 | 24.47 | 29.40 | 39.28 | | | | |
| 500.0 | 600 | 23.69 | 29.65 | 35.61 | 47.57 | 59.59 | 71.64 | | |
| 600.0 | 700 | 33.15 | 41.47 | 49.80 | 66.52 | 83.28 | 100.10 | 133.91 | 167.94 |
| 700.0 | 800 | 44.18 | 55.26 | 66.36 | 88.60 | 110.91 | 133.28 | | |
| 800.0 | 900 | 56.78 | 71.02 | 85.27 | 113.84 | 142.47 | 171.18 | | |
| 900.0 | 1000 | 70.95 | 88.74 | 106.27 | 142.22 | 177.97 | 213.80 | 285.70 | 357.91 |
| 1000.0 | 1100 | 86.70 | 108.43 | 130.18 | 173.75 | 217.40 | 261.14 | 348.88 | 436.96 |

Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti

### Kolana ze szwem wg ANSI B 16.9

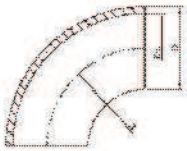
| Wymiar | D [mm] | R | SCH 5 S | | SCH 10 S | | SCH 40 S | |
|---|---|---|---|---|---|---|---|---|
| | | | Ścianka [mm] | kg/szt | Ścianka [mm] | kg/szt | Ścianka [mm] | kg/szt |
| 1/2" | 21.34 | 38 | 1.65 | 0.05 | 2.11 | 0.06 | 2.77 | 0.08 |
| 3/4" | 26.67 | 40 | 1.65 | 0.06 | 2.11 | 0.06 | 2.87 | 0.08 |
| 1" | 33.40 | 50 | 1.65 | 0.08 | 2.77 | 0.13 | 3.38 | 0.16 |
| 1 1/4" | 42.16 | 63 | 1.65 | 0.13 | 2.77 | 0.21 | 3.56 | 0.25 |
| 1 1/2" | 48.26 | 72 | 1.65 | 0.17 | 2.77 | 0.28 | 3.68 | 0.36 |
| 2" | 60.33 | 90 | 1.65 | 0.29 | 2.77 | 0.48 | 3.91 | 0.65 |
| 3" | 88.90 | 133 | 2.11 | 0.81 | 3.05 | 1.17 | 5.49 | 2.02 |
| 4" | 114.30 | 171 | 2.11 | 1.39 | 3.05 | 2.03 | 6.02 | 3.84 |
| 6" | 168.28 | 252 | 2.77 | 4.03 | 3.40 | 5.03 | 7.11 | 10.01 |
| 8" | 219.08 | 327 | 2.77 | 7.06 | 3.76 | 9.71 | 8.18 | 20.03 |
| 10" | 273.05 | 410 | 3.40 | 13.20 | 4.19 | 16.88 | 9.27 | 36.00 |
| 12" | 323.85 | 485 | 3.96 | 22.30 | 4.57 | 26.23 | 9.52 | 53.00 |
| 14" | 355.60 | 533 | 3.96 | 29.19 | 4.78 | 35.15 | | |
| 16" | 406.40 | 610 | 4.19 | 40.43 | 4.78 | 46.06 | | |
| 18" | 457.20 | 686 | 4.19 | 51.21 | 4.78 | 58.35 | | |
| 20" | 508.00 | 762 | 4.78 | 72.09 | 5.54 | 83.42 | | |
| 24" | 609.60 | 914 | 5.54 | 120.30 | 6.35 | 137.70 | | |

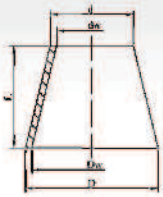
Dostępne w gatunkach: AISI 304L, AISI 316L

### Łuki gięte R=2.5D wg DIN 2605

| DN | D [mm] | R | Grubość ścianek [mm] | | | |
|---|---|---|---|---|---|---|
| | | | 1.6 | 2.0 | 2.6 | 3.0 |
| | | | Waga kg/szt. | | | |
| 10 | 17.2 | 43 | 0.04 | | | |
| 15 | 21.3 | 53 | | 0.06 | | |
| 20 | 26.9 | 67 | | 0.10 | | |
| 25 | 33.7 | 84 | | 0.18 | | |
| 32 | 42.4 | 106 | | 0.29 | | |
| 40 | 48.3 | 121 | | 0.40 | | |
| 50 | 60.3 | 151 | | 0.60 | | |
| 65 | 76.1 | 190 | | 1.00 | | |
| 80 | 88.9 | 222 | | 1.39 | | |
| 100 | 114.3 | 286 | | 2.30 | | |
| 125 | 139.7 | 349 | | | 4.30 | |
| 150 | 168.3 | 421 | | | 6.05 | |
| 200 | 219.1 | 548 | | | | 13.30 |

Inne grubości ścianek oraz wymiary nietypowe dostępne na zapytanie.





### Zwężki symetryczne ze szwem (stożkowe) METRYCZNE, L=3(D-d)

| DN | Dw | dw | L | Grubość ścianek [mm] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 | 6.0 | 8.0 |
| | | | | Waga kg/szt. | | | | | | |
| 25 | 25 | 15 | 30 | 0.03 | | | | | | |
| | | 20 | 15 | 0.02 | | | | | | |
| 32 | 32 | 20 | 36 | 0.05 | | | | | | |
| | | 25 | 21 | 0.03 | | | | | | |
| 40 | 40 | 20 | 60 | 0.10 | | | | | | |
| | | 25 | 45 | 0.08 | | | | | | |
| | | 32 | 24 | 0.05 | | | | | | |
| 50 | 50 | 25 | 75 | 0.15 | 0.19 | 0.23 | | | | |
| | | 32 | 54 | 0.12 | 0.15 | 0.18 | | | | |
| | | 40 | 30 | 0.07 | 0.09 | 0.11 | | | | |
| 65 | 65 | 32 | 99 | 0.25 | 0.32 | 0.39 | | | | |
| | | 40 | 75 | 0.21 | 0.26 | 0.32 | | | | |
| | | 50 | 45 | 0.14 | 0.17 | 0.21 | | | | |
| 80 | 80 | 40 | 120 | 0.38 | 0.48 | 0.58 | | | | |
| | | 50 | 90 | 0.31 | 0.39 | 0.47 | | | | |
| | | 65 | 45 | 0.17 | 0.21 | 0.26 | | | | |
| 100 | 100 | 50 | 150 | 0.56 | 0.74 | 0.89 | 1.20 | | | |
| | | 65 | 105 | 0.45 | 0.57 | 0.68 | 0.92 | | | |
| | | 80 | 60 | 0.28 | 0.35 | 0.42 | 0.57 | | | |
| 125 | 125 | 65 | 180 | 0.89 | 1.11 | 1.34 | 1.81 | | | |
| | | 80 | 135 | 0.72 | 0.90 | 1.08 | 1.46 | | | |
| | | 100 | 75 | 0.44 | 0.55 | 0.66 | 0.89 | | | |
| 150 | 150 | 80 | 210 | 1.25 | 1.57 | 1.89 | 2.54 | | | |
| | | 100 | 150 | 0.97 | 1.21 | 1.46 | 1.96 | | | |
| | | 125 | 75 | 0.53 | 0.67 | 0.80 | 1.08 | | | |
| 200 | 200 | 100 | 300 | 2.31 | 2.90 | 3.49 | 4.69 | 5.90 | | |
| | | 125 | 225 | 1.88 | 2.36 | 2.83 | 3.80 | 4.78 | | |
| | | 150 | 150 | 1.35 | 1.69 | 2.03 | 2.73 | 3.43 | | |
| 250 | 250 | 125 | 375 | 3.61 | 4.52 | 5.44 | 7.29 | 9.16 | 11.05 | |
| | | 150 | 300 | 3.08 | 3.85 | 4.64 | 6.21 | 7.80 | 9.41 | |
| | | 200 | 150 | 1.73 | 2.17 | 2.60 | 3.49 | 4.38 | 5.28 | |
| 300 | 300 | 150 | 450 | 5.19 | 6.50 | 7.81 | 10.46 | 13.13 | 15.83 | |
| | | 200 | 300 | 3.84 | 4.81 | 5.78 | 7.74 | 9.71 | 11.69 | |
| | | 250 | 150 | 2.11 | 2.64 | 3.18 | 4.25 | 5.33 | 6.42 | |
| 350 | 350 | 200 | 450 | 6.33 | 7.92 | 9.53 | 12.75 | 15.99 | 19.25 | |
| | | 250 | 300 | 4.60 | 5.76 | 6.92 | 9.26 | 11.61 | 13.98 | |
| | | 300 | 150 | 2.49 | 3.12 | 3.75 | 5.01 | 6.28 | 7.56 | |
| 400 | 400 | 250 | 450 | | 9.35 | 11.24 | 15.03 | 18.84 | 22.68 | |
| | | 300 | 300 | | 6.71 | 8.06 | 10.78 | 13.51 | 16.26 | |
| | | 350 | 150 | | 3.59 | 4.32 | 5.77 | 7.23 | 8.70 | |
| 450 | 450 | 300 | 450 | | | 12.95 | 17.31 | 21.70 | 26.11 | |
| | | 350 | 300 | | | 9.21 | 12.30 | 15.42 | 18.55 | |
| | | 400 | 150 | | | 4.89 | 6.53 | 8.18 | 9.84 | |
| 500 | 500 | 300 | 600 | | | 18.41 | 24.61 | 30.84 | 37.09 | |
| | | 350 | 450 | | | 14.67 | 19.60 | 24.55 | 29.53 | |
| | | 400 | 300 | | | 10.35 | 13.83 | 17.32 | 20.83 | |
| | | 450 | 150 | | | 5.46 | 7.29 | 9.14 | 10.99 | |
| 600 | 600 | 350 | 750 | | | 27.30 | 36.47 | 45.68 | 54.93 | 73.55 |
| | | 400 | 600 | | | 22.98 | 30.70 | 38.45 | 46.23 | 61.88 |
| | | 450 | 450 | | | 18.09 | 24.17 | 30.27 | 36.39 | 48.70 |
| | | 500 | 300 | | | 12.63 | 16.87 | 21.13 | 25.40 | 33.99 |

Dostępne w gatunku: AISI 304L, AISI 321, AISI 316L, AISI 316Ti
Na zamówienie także zwężki asymetryczne wg DIN 2616
oraz wymiary powyżej DN 600.

**Do wykonania zwężki symetryczne i asymetryczne wg dowolnej długości i kombinacji wymiarów (np. ISO+MET)**

### Zwężki symetryczne ze szwem (stożkowe) ISO, L=3(D-d)

| DN | D | d | L | Grubość ścianek [mm] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 | 6.0 | 8.0 |
| | | | | Waga kg/szt. | | | | | | |
| 15 | 21.3 | 17.2 | 12 | 0.01 | | | | | | |
| 20 | 26.9 | 17.2 | 29 | 0.03 | | | | | | |
| | | 21.3 | 17 | 0.02 | | | | | | |
| 25 | 33.7 | 21.3 | 37 | 0.05 | | | | | | |
| | | 26.9 | 20 | 0.03 | | | | | | |
| 32 | 42.4 | 26.9 | 46 | 0.08 | | | | | | |
| | | 33.7 | 26 | 0.05 | | | | | | |
| 40 | 48.3 | 26.9 | 63 | 0.11 | | | | | | |
| | | 33.7 | 43 | 0.09 | | | | | | |
| | | 42.4 | 17 | 0.04 | | | | | | |
| 50 | 60.3 | 26.9 | 99 | 0.21 | 0.26 | | | | | |
| | | 33.7 | 79 | 0.18 | 0.22 | | | | | |
| | | 42.4 | 53 | 0.13 | 0.16 | | | | | |
| | | 48.3 | 36 | 0.10 | 0.12 | 0.14 | | | | |
| 65 | 76.1 | 33.7 | 126 | 0.34 | 0.42 | 0.50 | | | | |
| | | 42.4 | 100 | 0.29 | 0.36 | 0.43 | | | | |
| | | 48.3 | 82 | 0.25 | 0.31 | 0.37 | | | | |
| | | 60.3 | 47 | 0.16 | 0.20 | 0.23 | | | | |
| 80 | 88.9 | 42.4 | 138 | 0.45 | 0.55 | 0.66 | | | | |
| | | 48.3 | 120 | 0.41 | 0.50 | 0.60 | | | | |
| | | 60.3 | 85 | 0.31 | 0.39 | 0.46 | | | | |
| | | 76.1 | 38 | 0.16 | 0.19 | 0.23 | | | | |
| 100 | 114.3 | 48.3 | 195 | 0.78 | 0.97 | 1.16 | 1.53 | | | |
| | | 60.3 | 160 | 0.69 | 0.86 | 1.03 | 1.35 | | | |
| | | 76.1 | 113 | 0.53 | 0.66 | 0.79 | 1.05 | | | |
| | | 88.9 | 75 | 0.38 | 0.47 | 0.56 | 0.74 | | | |
| 125 | 139.7 | 60.3 | 235 | 1.17 | 1.45 | 1.74 | 2.29 | | | |
| | | 76.1 | 188 | 1.01 | 1.26 | 1.50 | 1.98 | | | |
| | | 88.9 | 151 | 0.86 | 1.07 | 1.28 | 1.69 | | | |
| | | 114.3 | 75 | 0.48 | 0.59 | 0.71 | 0.94 | | | |
| 150 | 168.3 | 76.1 | 273 | 1.67 | 2.07 | 2.48 | 3.27 | | | |
| | | 88.9 | 235 | 1.51 | 1.88 | 2.25 | 2.97 | | | |
| | | 114.3 | 160 | 1.13 | 1.41 | 1.68 | 2.23 | | | |
| | | 139.7 | 85 | 0.66 | 0.82 | 0.98 | 1.29 | | | |
| 200 | 219.1 | 88.9 | 385 | 2.97 | 3.70 | 4.43 | 5.86 | 7.28 | | |
| | | 114.3 | 310 | 2.59 | 3.23 | 3.86 | 5.12 | 6.36 | | |
| | | 139.7 | 235 | 2.12 | 2.64 | 3.16 | 4.18 | 5.20 | | |
| | | 168.3 | 150 | 1.46 | 1.82 | 2.18 | 2.89 | 3.59 | | |
| 250 | 273.0 | 114.3 | 470 | 4.57 | 5.70 | 6.82 | 9.05 | 11.25 | 13.43 | |
| | | 139.7 | 395 | 4.10 | 5.11 | 6.12 | 8.11 | 10.09 | 12.05 | |
| | | 168.3 | 310 | 3.44 | 4.29 | 5.14 | 6.82 | 8.48 | 10.13 | |
| | | 219.1 | 160 | 1.98 | 2.47 | 2.96 | 3.93 | 4.89 | 5.85 | |
| 300 | 323.9 | 139.7 | 545 | 6.36 | 7.93 | 9.49 | 12.60 | 15.68 | 18.74 | |
| | | 168.3 | 461 | 5.71 | 7.13 | 8.53 | 11.33 | 14.10 | 16.85 | |
| | | 219.1 | 310 | 4.24 | 5.29 | 6.34 | 8.42 | 10.48 | 12.53 | |
| | | 273.0 | 151 | 2.27 | 2.84 | 3.40 | 4.51 | 5.62 | 6.72 | |
| 350 | 355.6 | 168.3 | 554 | 7.31 | 9.12 | 10.92 | 14.51 | 18.06 | 21.59 | |
| | | 219.1 | 404 | 5.85 | 7.30 | 8.75 | 11.62 | 14.47 | 17.31 | |
| | | 273.0 | 244 | 3.87 | 4.83 | 5.78 | 7.69 | 9.58 | 11.45 | |
| | | 323.9 | 94 | 1.61 | 2.01 | 2.41 | 3.20 | 3.99 | 4.78 | |
| 400 | 406.4 | 219.1 | 554 | | 10.91 | 13.07 | 17.36 | 21.63 | 25.88 | 34.27 |
| | | 273.0 | 395 | | 8.45 | 10.13 | 13.46 | 16.78 | 20.07 | 26.60 |
| | | 323.9 | 244 | | 5.61 | 6.73 | 8.95 | 11.15 | 13.34 | 17.69 |
| | | 355.6 | 150 | | 3.60 | 4.32 | 5.74 | 7.16 | 8.57 | 11.36 |
| 450 | 457.2 | 273.0 | 545 | | | 15.03 | 19.98 | 24.90 | 29.80 | 39.51 |
| | | 323.9 | 395 | | | 11.66 | 15.50 | 19.33 | 23.13 | 30.68 |
| | | 355.6 | 301 | | | 9.25 | 12.30 | 15.33 | 18.35 | 24.35 |
| | | 406.4 | 150 | | | 4.90 | 6.51 | 8.12 | 9.73 | 12.91 |
| 500 | 508.0 | 323.9 | 545 | | | 17.14 | 22.79 | 28.42 | 34.02 | 45.14 |
| | | 355.6 | 451 | | | 14.73 | 19.59 | 24.43 | 29.24 | 38.08 |
| | | 406.4 | 301 | | | 10.41 | 13.85 | 17.27 | 20.68 | 27.45 |
| | | 457.2 | 150 | | | 5.48 | 7.29 | 9.09 | 10.89 | 14.45 |
| 600 | 608.6 | 355.6 | 752 | | | 27.46 | 36.54 | 45.58 | 54.58 | 72.46 |
| | | 406.4 | 601 | | | 23.11 | 30.75 | 38.36 | 45.94 | 61.01 |
| | | 457.2 | 451 | | | 18.21 | 24.24 | 30.24 | 36.22 | 48.11 |
| | | 508.0 | 301 | | | 12.74 | 16.95 | 21.15 | 25.34 | 33.66 |

Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti
Na zamówienie także zwężki asymetryczne wg DIN 2616
oraz wymiary powyżej DN 600.



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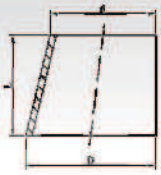
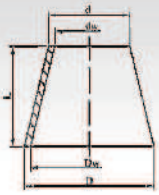
www.multiservice.com.pl





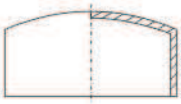
**Zwężki symetryczne i asymetryczne ze szwem wg ANSI B16.9**

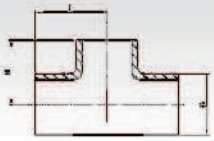
| DN | D [mm] | d [mm] | Grubość ścianek [mm] | | | | Długość L [mm] | Waga kg/szt. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Sch. 10s | | Sch. 40s | | | 10s | 40s |
| | | | T1 [mm] | T2 [mm] | T1 [mm] | T2 [mm] | | | |
| 3/4 x" 1/2 " | 26.67 | 21.34 | 2.11 | 2.11 | 2.87 | 2.77 | 38.1 | 0.04 | 0.06 |
| 1"x 1/2" | 33.40 | 21.34 | 2.77 | 2.11 | 3.38 | 2.77 | 50.8 | 0.09 | 0.11 |
| 1"x3/4" | 33.40 | 26.67 | 2.77 | 2.11 | 3.38 | 2.87 | 50.8 | 0.10 | 0.12 |
| 1 1/4"x 1/2" | 42.16 | 21.34 | 2.77 | 2.11 | 3.56 | 2.77 | 50.8 | 0.10 | 0.13 |
| 1 1/4"x3/4" | 42.16 | 21.34 | 2.77 | 2.11 | 3.56 | 2.87 | 50.8 | 0.11 | 0.14 |
| 1 1/4"x 1" | 42.16 | 33.40 | 2.77 | 2.77 | 3.56 | 3.38 | 50.8 | 0.12 | 0.16 |
| 1 1/2"x 1/2" | 48.26 | 21.34 | 2.77 | 2.11 | 3.68 | 2.77 | 63.5 | 0.14 | 0.18 |
| 1 1/2"x3/4" | 48.26 | 26.67 | 2.77 | 2.11 | 3.68 | 2.87 | 63.5 | 0.15 | 0.20 |
| 1 1/2"x 1" | 48.26 | 33.40 | 2.77 | 2.77 | 3.68 | 3.38 | 63.5 | 0.17 | 0.22 |
| 1 1/2"x1 1/4" | 48.26 | 42.16 | 2.77 | 2.77 | 3.68 | 3.56 | 63.5 | 0.18 | 0.24 |
| 2"x3/4" | 60.33 | 26.67 | 2.77 | 2.11 | 3.91 | 2.87 | 76.2 | 0.22 | 0.30 |
| 2"x 1" | 60.33 | 33.40 | 2.77 | 2.77 | 3.91 | 3.38 | 76.2 | 0.23 | 0.32 |
| 2"x1 1/4" | 60.33 | 42.16 | 2.77 | 2.77 | 3.91 | 3.56 | 76.2 | 0.25 | 0.35 |
| 2"x 1 1/2" | 60.33 | 48.26 | 3.05 | 2.77 | 3.91 | 3.68 | 76.2 | 0.27 | 0.37 |
| 2 1/2"x1" | 73.03 | 33.40 | 3.05 | 2.77 | 5.16 | 3.38 | 88.9 | 0.35 | 0.79 |
| 2 1/2"x 1 1/4" | 73.03 | 42.16 | 3.05 | 2.77 | 5.16 | 3.56 | 88.9 | 0.39 | 0.67 |
| 2 1/2"x 1 1/2" | 73.03 | 48.26 | 3.05 | 2.77 | 5.16 | 3.68 | 88.9 | 0.39 | 0.66 |
| 2 1/2"x 2" | 73.03 | 60.33 | 3.05 | 2.77 | 5.16 | 3.91 | 88.9 | 0.43 | 0.72 |
| 3"x 1" | 88.90 | 33.40 | 3.05 | 2.77 | 5.49 | 3.38 | 88.9 | 0.43 | 0.74 |
| 3"x 1 1/4" | 88.90 | 42.16 | 3.05 | 2.77 | 5.49 | 3.56 | 88.9 | 0.43 | 0.77 |
| 3"x 1 1/2" | 88.90 | 48.26 | 3.05 | 2.77 | 5.49 | 3.68 | 88.9 | 0.45 | 0.78 |
| 3"x 2" | 88.90 | 60.33 | 3.05 | 2.77 | 5.49 | 3.91 | 88.9 | 0.48 | 0.85 |
| 3"x 2 1/2" | 88.90 | 73.03 | 3.05 | 3.05 | 5.49 | 5.16 | 88.9 | 0.55 | 0.93 |
| 4"x 1 1/2" | 114.30 | 48.26 | 3.05 | 2.77 | 6.02 | 3.68 | 101.6 | 0.63 | 1.18 |
| 4"x2" | 114.30 | 60.33 | 3.05 | 2.77 | 6.02 | 3.91 | 101.6 | 0.67 | 1.27 |
| 4"x 2 1/2" | 114.30 | 73.03 | 3.05 | 3.05 | 6.02 | 5.16 | 101.6 | 0.71 | 1.37 |
| 4"x 3" | 114.30 | 88.90 | 3.05 | 3.05 | 6.02 | 5.49 | 101.6 | 0.76 | 1.45 |
| 5"x 3" | 141.30 | 88.90 | 3.40 | 3.05 | 6.55 | 5.49 | 127.0 | 1.22 | 1.54 |
| 5"x 4" | 141.30 | 114.30 | 3.40 | 3.05 | 6.55 | 6.02 | 127.0 | 1.33 | 2.27 |
| 6"x 2 1/2" | 168.28 | 73.03 | 3.40 | 3.05 | 7.11 | 5.16 | 152.4 | 1.35 | 2.74 |
| 6"x 3" | 168.28 | 88.90 | 3.40 | 3.05 | 7.11 | 5.49 | 152.4 | 1.50 | 3.04 |
| 6"x 4" | 168.28 | 114.30 | 3.40 | 3.05 | 7.11 | 6.02 | 152.4 | 1.64 | 3.30 |
| 6"x 5" | 168.28 | 141.30 | 3.40 | 3.40 | 7.11 | 6.55 | 152.4 | 1.78 | 3.57 |
| 8"x 4" | 219.08 | 114.30 | 3.73 | 3.05 | 8.18 | 6.02 | 152.4 | 2.43 | 5.10 |
| 8"x 5" | 219.08 | 141.30 | 3.73 | 3.40 | 8.18 | 6.55 | 152.4 | 2.70 | 5.40 |
| 8"x 6" | 219.08 | 168.28 | 3.73 | 3.40 | 8.18 | 7.11 | 152.4 | 2.22 | 5.71 |
| 10"x 5" | 273.05 | 141.30 | 4.19 | 3.40 | 9.27 | 6.55 | 177.8 | 3.30 | 8.21 |
| 10"x 6" | 273.05 | 168.28 | 4.19 | 3.40 | 9.27 | 8.18 | 177.8 | 4.14 | 8.32 |
| 10"x 8" | 273.05 | 219.08 | 4.19 | 3.76 | 9.27 | 8.18 | 177.8 | 4.49 | 9.58 |
| 12"x6" | 323.85 | 168.28 | 4.57 | 3.40 | 9.53 | 8.18 | 203.0 | 5.73 | 12.40 |
| 12"x8" | 323.85 | 219.08 | 4.57 | 3.76 | 9.53 | 8.18 | 203.0 | 6.50 | 14.60 |
| 12"x10" | 323.85 | 273.05 | 4.52 | 4.19 | 9.53 | 9.22 | 203.2 | 6.77 | 13.60 |

Dostępne w gatunku: AISI 304L, AISI 316L

**Dennica DIN 2017 oraz DIN 28011**

Zakres średnic: DN15-DN300 w ciągłej sprzedaży
Wykonanie: 304L, 321, 316L, 316Ti
Na zamówienie: Średnice powyżej DN300 oraz inne formy dennic
(płaskie, soczewkowe, kuliste, półkoliste, eliptyczne).
**Dostępne także wg norm: PN64/M 35411, PN75/M 35412, PN69/M 35413**





**Trójnik ze szwem ISO wg DIN 2615**

| DN | D | L | H | Waga |
|---|---|---|---|---|
| 15 | 21.3x2.0 | 25.0 | 10.0 | 0.04 |
| 20 | 26.9x2.0 | 29.0 | 15.0 | 0.05 |
| 25 | 33.7x2.0 | 38.0 | 19.0 | 0.09 |
| 32 | 42.4x2.0 | 48.0 | 23.0 | 0.16 |
| 40 | 48.3x2.0 | 57.0 | 26.0 | 0.24 |
| 50 | 60.3x2.0 | 64.0 | 33.0 | 0.32 |
| 65 | 76.1x2.0 | 76.0 | 41.0 | 0.49 |
| 80 | 88.9x2.0 | 86.0 | 48.0 | 0.68 |
| 100 | 114.3x2.0 | 105.0 | 61.0 | 1.06 |
| 125 | 139.7x2.0 | 124.0 | 76.0 | 1.64 |
| 150 | 168.3x2.0 | 143.0 | 92.0 | 1.92 |
| 200 | 219.1x2.0 | 178.0 | 118.0 | 3.49 |
| 250 | 273.0x2.0 | 216.0 | 216.0 | 7.85 |
| | 273.0x3.0 | 216.0 | 216.0 | 10.70 |
| 300 | 323.9x3.0 | 254.0 | 254.0 | 12.30 |
| 350 | 355.6x3.0 | 279.0 | 279.0 | 17.60 |
| 400 | 406.4x3.0 | 305.0 | 305.0 | 19.50 |
| 450 | 457.0x3.0 | 343.0 | 343.0 | 31.20 |
| 500 | 508.0x3.0 | 381.0 | 381.0 | 36.00 |
| 600 | 609.6x3.0 | 432.0 | 432.0 | 52.00 |

Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti

**Trójniki ze szwem METRYCZNE wg DIN 2615**

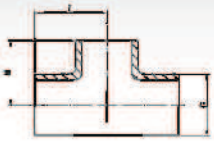
| DN | D | L | H | Waga |
|---|---|---|---|---|
| 15 | 18.0x1.5 | 25.0 | 10.0 | 0.03 |
| 20 | 23.0x1.5 | 28.0 | 13.0 | 0.06 |
| 25 | 28.0x1.5 | 32.0 | 15.0 | 0.10 |
| 32 | 35.0x1.5 | 48.0 | 21.0 | 0.12 |
| 40 | 43.0x1.5 | 51.0 | 24.0 | 0.15 |
| | 44.5x2.0 | 51.0 | 24.0 | 0.17 |
| 50 | 53.0x1.5 | 61.0 | 29.0 | 0.20 |
| | 54.0x2.0 | 61.0 | 29.0 | 0.30 |
| 65 | 70.0x2.0 | 65.0 | 38.0 | 0.51 |
| 80 | 84.0x2.0 | 80.0 | 45.0 | 0.71 |
| 100 | 104.0x2.0 | 100.0 | 55.0 | 0.96 |
| 125 | 129.0x2.0 | 123.0 | 69.0 | 1.41 |
| 150 | 154.0x2.0 | 143.0 | 84.0 | 1.83 |
| | 156.0x3.0 | 143.0 | 84.0 | 2.90 |
| 200 | 204.0x2.0 | 178.0 | 178.0 | 3.20 |
| | 206.0x3.0 | 178.0 | 178.0 | 4.90 |
| 250 | 254.0x2.0 | 216.0 | 216.0 | 7.16 |
| | 256.0x3.0 | 216.0 | 216.0 | 10.70 |
| 300 | 304.0x2.0 | 254.0 | 254.0 | 10.90 |
| | 306.0x3.0 | 254.0 | 254.0 | 12.10 |
| 350 | 354.0x2.0 | 279.0 | 279.0 | 15.70 |
| | 356.0x3.0 | 279.0 | 279.0 | 17.60 |

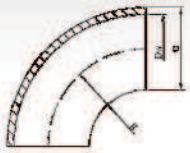
Dostepne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti

**Trójniki ze szwem równoramienne wg ANSI B 16.9**

| Wymiar | D [mm] | H [mm] | SCH 10 S | | SCH 40 S | |
|---|---|---|---|---|---|---|
| | | | ścianka [mm] | kg/szt | ścianka [mm] | kg/szt |
| 1/2" | 21.34 | 25.0 | 2.11 | 0.07 | 2.77 | 0.08 |
| 3/4" | 26.67 | 29.0 | 2.11 | 0.10 | 2.87 | 0.13 |
| 1" | 33.40 | 38.0 | 2.77 | 0.21 | 3.38 | 0.25 |
| 1 1/4" | 42.16 | 48.0 | 2.77 | 0.34 | 3.56 | 0.42 |
| 1 1/2" | 48.26 | 57.0 | 2.77 | 0.46 | 3.68 | 0.60 |
| 2" | 60.33 | 64.0 | 2.77 | 0.65 | 3.91 | 0.89 |
| 2 1/2" | 73.03 | 76.0 | 3.05 | 1.02 | 5.16 | 1.68 |
| 3" | 88.90 | 114.0 | 3.05 | 1.40 | 5.49 | 2.45 |
| 4" | 114.30 | 152.0 | 3.05 | 2.19 | 6.02 | 4.21 |
| 6" | 168.28 | 229.0 | 3.40 | 4.84 | 7.11 | 9.89 |
| 8" | 219.08 | 305.0 | 3.76 | 8.60 | 8.18 | 18.33 |
| 10" | 273.05 | 381.0 | 4.19 | 14.40 | 9.27 | 31.31 |
| 12" | 323.85 | 457.0 | 4.57 | 21.90 | 9.53 | 45.00 |
| 14" | 355.60 | 533.0 | 4.78 | 27.67 | | |
| 16" | 406.40 | 610.0 | 4.78 | 34.20 | | |
| 18" | 457.20 | 686.0 | 4.78 | 43.31 | | |
| 20" | 508.00 | 762.0 | 5.54 | 61.94 | | |
| 24" | 609.60 | 914.0 | 6.35 | 95.08 | | |

Dostepne w gatunkach: AISI 304L, AISI 316L





### Trójniki bez szwu ISO wg DIN 2615

| DN | D [mm] | H [mm] | Grubość ścianek [mm] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2.3 | 2.6 | 2.9 | 3.0 | 3.2 | 3.6 | 4.0 | 4.5 | 5.0 | 5.6 | 6.3 |
| | | | Waga kg/szt. | | | | | | | | | | |
| 10 | 17.2 | 20.0 | 0.05 | | | | | | | | | | |
| 15 | 21.3 | 25.0 | | 0.09 | 0.11 | | | | | | | | |
| 20 | 26.9 | 29.0 | | | | 0.15 | | | | | | | |
| 25 | 33.7 | 38.0 | | | | | 0.30 | | | | | | |
| 32 | 42.4 | 48.0 | | | | 0.45 | 0.50 | 0.55 | | | | | |
| 40 | 48.3 | 57.0 | | | | 0.55 | | 0.70 | | | | | |
| 50 | 60.3 | 64.0 | | | | | | 1.00 | | | 1.30 | | |
| 65 | 76.1 | 76.0 | | | | | | 1.60 | | 1.90 | 2.10 | | |
| 80 | 88.9 | 87.0 | | | | | | | 2.05 | | | 2.90 | |
| 100 | 114.3 | 103.0 | | | | | | | 2.90 | | 3.65 | | |
| 125 | 139.7 | 229.0 | | | | | | | | 5.40 | | | |
| 150 | 168.3 | 305.0 | | | | | | | | 7.25 | | | |
| 200 | 219.1 | 381.0 | | | | | | | | | | | 20.70 |

Dostępne w gatunkach: AISI 321

### Kolana bez szwu ISO wg DIN 2605

| DN | D [mm] | R | Grubość ścianek [mm] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2.3 | 2.6 | 2.9 | 3.0 | 3.2 | 3.6 | 4.0 | 4.5 | 5.0 | 6.3 |
| | | | Waga kg/szt. | | | | | | | | | |
| 10 | 17.2 | 26 | 0.05 | | | | | | | | | |
| 15 | 21.3 | 27 | | 0.08 | 0.09 | | | | | | | |
| 20 | 26.9 | 29 | | | | 0.12 | | | | | | |
| 25 | 33.7 | 38 | | | | | 0.15 | | | | | |
| 32 | 42.4 | 48 | | | | | 0.25 | | | | | |
| 40 | 48.3 | 57 | | | | | | 0.30 | | | | |
| 50 | 60.3 | 76 | | | | | 0.55 | | 0.60 | | | |
| 65 | 76.1 | 95 | | | | | | 0.95 | | | 1.30 | |
| 80 | 88.9 | 115 | | | | | | | 1.65 | | | |
| 100 | 114.3 | 153 | | | | | | | 2.55 | | | |
| 125 | 139.7 | 191 | | | | | | | 3.90 | 4.25 | | |
| 150 | 168.3 | 229 | | | | 4.45 | | | | 6.70 | | |
| 200 | 219.1 | 305 | | | | | | | | | | 16.10 |

Dostępne w gatunkach: AISI 321

### Trójniki bez szwu DIN wg DIN 2615

| DW | H [mm] | Grubość ścianek [mm] | | | | | |
|---|---|---|---|---|---|---|---|
| | | 3.0 | 3.6 | 4.0 | 4.5 | 5.0 | 5.6 |
| | | Waga kg/szt. | | | | | |
| 15 | 25.0 | 0.10 | | | | | |
| 20 | 29.0 | 0.15 | | | | | |
| 25 | 38.0 | 0.25 | | | | | |
| 32 | 48.0 | 0.40 | | | | | |
| 40 | 57.0 | 0.55 | | | | | |
| 50 | 64.0 | | | 0.95 | | | |
| 65 | 76.0 | | 1.60 | | | 2.10 | |
| 80 | 87.0 | | | 2.05 | | | 2.90 |
| 100 | 103.0 | 2.15 | | | | 4.05 | |
| 125 | 134.0 | | | | 5.15 | | |
| 150 | 165.0 | | | | 6.85 | | |

Dostępne w gatunkach: AISI 321

### Kolana bez szwu METRYCZNE wg DIN 2605

| DW | R | Grubość ścianek [mm] | | | | |
|---|---|---|---|---|---|---|
| | | 3.0 | 3.6 | 4.0 | 4.5 | 5.0 |
| | | Waga kg/szt. | | | | |
| 15 | 23 | 0.09 | | | | |
| 20 | 29 | 0.11 | | | | |
| 25 | 38 | 0.13 | | | | |
| 32 | 48 | 0.20 | | | | |
| 40 | 57 | 0.25 | | | | |
| 50 | 76 | | | 0.55 | | |
| 65 | 95 | | 0.95 | | | 1.30 |
| 80 | 115 | | | 1.65 | | |
| 100 | 153 | | | | | 2.65 |
| 125 | 191 | | | | 4.15 | |
| 150 | 229 | | | | 6.3 | |

Dostępne w gatunkach: AISI 321

### Trójniki bez szwu wg ANSI B 16.9

| Wymiar | D [mm] | H [mm] | SCH 40 S | |
|---|---|---|---|---|
| | | | Ścianka [mm] | kg/szt |
| 1/2" | 21.34 | 25.0 | 2.77 | 0.10 |
| 3/4" | 26.67 | 29.0 | 2.87 | 0.15 |
| 1" | 33.40 | 38.0 | 3.38 | 0.30 |
| 1 1/4" | 42.16 | 48.0 | 3.56 | 0.50 |
| 1 1/2" | 48.26 | 57.0 | 3.68 | 0.70 |
| 2" | 60.33 | 64.0 | 3.91 | 1.00 |
| 3" | 88.90 | 87.0 | 5.49 | 2.90 |
| 4" | 114.30 | 103.00 | 6.02 | 4.50 |

Dostępne w gatunkach: AISI 316L

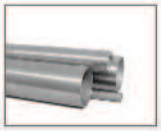
### Kolana bez szwu wg ANSI B 16.9

| Wymiar | D [mm] | R | SCH 10 S | | SCH 40 S | |
|---|---|---|---|---|---|---|
| | | | Ścianka [mm] | kg/szt | Ścianka [mm] | kg/szt |
| 1/2" | 21.34 | 38 | 2.11 | 0.06 | 2.77 | 0.08 |
| 3/4" | 26.67 | 40 | 2.11 | 0.06 | 2.87 | 0.08 |
| 1" | 33.40 | 50 | 2.77 | 0.13 | 3.38 | 0.16 |
| 1 1/4" | 42.16 | 63 | 2.77 | 0.21 | 3.56 | 0.25 |
| 1 1/2" | 48.26 | 72 | 2.77 | 0.28 | 3.68 | 0.36 |
| 2" | 60.33 | 90 | 2.77 | 0.48 | 3.91 | 0.65 |
| 3" | 88.90 | 133 | 3.05 | 1.17 | 5.49 | 2.02 |
| 4" | 114.30 | 171 | 3.05 | 2.03 | 6.02 | 3.84 |
| 6" | 168.28 | 252 | 3.40 | 5.03 | 7.11 | 10.01 |

Dostępne w gatunkach: AISI 304L, AISI 316L

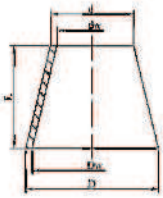
### Rury precyzyjne bez szwu wg DIN 2391

Zakres średnic: 6.0x1.0 - 38.0x3.0
Dostępne na zamówienie w gatunkach: AISI 304, AISI 321, AISI 316Ti



multiservice@multiservice.com.pl
www.multiservice.com.pl

**Zwężki bez szwu symetryczne ISO i DIN wg DIN 2616**



| DN | D | d | Grubość ścianek [mm] | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2.6/2.3 | 3.0/2.3 | 3.0/2.6 | 3.0 | 3.2 | 3.6 | 4.0/3.0 | 4.0/3.6 | 4.0 | 4.5/3.6 | 4.5/4.0 | 5.0 | 6.3/3.6 | 6.3/4.0 | 6.3/4.5 |
| | | | Waga kg/szt. | | | | | | | | | | | | | | |
| 15/10 | 21.3 | 17.2 | 0.04 | | | | | | | | | | | | | | |
| 20/10 | 26.9 | 17.2 | | 0.07 | | | | | | | | | | | | | |
| 20/15 | 25.0 | 20.0 | | | | 0.09 | | | | | | | | | | | |
| | 26.9 | 21.3 | | | 0.08 | | | | | | | | | | | | |
| 25/15 | 30.0 | 20.0 | | | | 0.13 | | | | | | | | | | | |
| | 33.7 | 21.3 | | | 0.10 | | | | | | | | | | | | |
| 25/20 | 30.0 | 25.0 | | | | 0.15 | | | | | | | | | | | |
| | 33.7 | 26.9 | | | | | 0.18 | | | | | | | | | | |
| 32/15 | 42.4 | 21.3 | | | 0.15 | | | | | | | | | | | | |
| 32/20 | 38.0 | 25.0 | | | | 0.15 | | | | | | | | | | | |
| | 42.4 | 26.9 | | | | 0.16 | 0.17 | | | | | | | | | | |
| 32/25 | 42.4 | 33.7 | | | | 0.19 | | | | | | | | | | | |
| 40/20 | 44.5 | 25.0 | | | | 0.20 | | | | | | | | | | | |
| | 48.3 | 26.9 | | | | 0.21 | | | | | | | | | | | |
| 40/25 | 48.3 | 33.7 | | | | 0.22 | | | | | | | | | | | |
| 40/32 | 44.5 | 38.0 | | | | 0.24 | | | | | | | | | | | |
| | 48.3 | 42.4 | | | | 0.25 | | | | | | | | | | | |
| 50/20 | 60.3 | 26.9 | | | | | | 0.35 | | | | | | | | | |
| 50/25 | 60.3 | 33.7 | | | | | | 0.40 | | | | | | | | | |
| 50/32 | 57.0 | 38.0 | | | | 0.29 | | | | | | | | | | | |
| | 60.3 | 42.4 | | | | | | 0.40 | | | | | | | | | |
| 50/40 | 57.0 | 44.5 | | | | 0.25 | | | | | | | | | | | |
| | 60.3 | 48.3 | | | | | | 0.35 | | | | | | | | | |
| 65/32 | 76.1 | 42.4 | | | | 0.50 | | | | | | | | 0.70 | | | |
| 65/40 | 76.1 | 44.5 | | | | | | | | | 0.60 | | | | | | |
| | 76.1 | 48.3 | | | | | | | 0.61 | | | | | 0.72 | | | |
| 65/50 | 76.1 | 57.0 | | | | | | | | | 0.62 | | | | | | |
| | 76.1 | 60.3 | | | | | | | | 0.60 | 0.63 | | | 0.65 | | | |
| 80/40 | 88.9 | 44.5 | | | | | | | | | 0.71 | | | | | | |
| | 88.9 | 48.3 | | | | | | | 0.70 | | | | | | | | |
| 80/50 | 88.9 | 57.0 | | | | | | | | | 0.76 | | | | | | |
| | 88.9 | 60.3 | | | | | | | | | 0.70 | | | | | | |
| 80/65 | 88.9 | 76.1 | | | | | | | | | 0.74 | | | | | | |
| 100/50 | 108.0 | 57.0 | | | | | | | | | 1.05 | | | | | | |
| | 114.3 | 57.0 | | | | | | | | | 0.97 | | | | | | |
| | 114.3 | 60.3 | | | | | | | | | 1.00 | 1.12 | | | | | |
| 100/65 | 108.0 | 76.1 | | | | | | | | | 1.03 | | | | | | |
| | 114.3 | 76.1 | | | | | | | | | 1.05 | | | 1.15 | | | |
| 100/80 | 108.0 | 88.9 | | | | | | | | | 1.04 | | | | | | |
| | 114.3 | 88.9 | | | | | | | | | 1.06 | | | | | | |
| 125/65 | 139.7 | 76.1 | | | | | | | | | 1.50 | | | | | | |
| 125/80 | 139.7 | 88.9 | | | | | | | | | 1.55 | | | | | | |
| 125/100 | 139.7 | 114.3 | | | | | | | | | 1.60 | | | | | | |
| 150/80 | 168.3 | 88.9 | | | | | | | | | | 2.90 | | | | | |
| 150/100 | 159.0 | 108.0 | | | | | | | | | | | 3.20 | | | | |
| | 168.3 | 114.3 | | | | | | | | | | | 3.30 | | | | |
| 150/125 | 159.0 | 133.0 | | | | | | | | | | | 1.70 | | | | |
| | 168.3 | 139.7 | | | | | | | | | | | 1.80 | | | | |
| 200/100 | 219.1 | 114.3 | | | | | | | | | | | | | 6.40 | | |
| 200/125 | 219.1 | 139.7 | | | | | | | | | | | | | | 6.50 | |
| 200/150 | 219.1 | 159.0 | | | | | | | | | | | | | | | 3.10 |
| | 219.1 | 168.3 | | | | | | | | | | | | | | | 3.20 |

Dostępne w gatunkach: AISI 321

**Zwężki bez szwu symetryczne wg ANSI B 16.9**

| DN | D | d | Grubość ścianek [mm] | | Długość L | Waga kg/szt |
|---|---|---|---|---|---|---|
| | | | Sch. 40s | | | 40s |
| | | | T1 | T2 | | |
| 3/4 x" 1/2 " | 26.67 | 21.34 | 2.87 | 2.77 | 38.1 | 0.06 |
| 1"x 1/2" | 33.40 | 21.34 | 3.38 | 2.77 | 50.8 | 0.11 |
| 1"x3/4" | 33.40 | 26.67 | 3.38 | 2.87 | 50.8 | 0.12 |
| 1 1/4"x 1/2" | 42.16 | 21.34 | 3.56 | 2.77 | 50.8 | 0.13 |
| 1 1/4"x3/4" | 42.16 | 21.34 | 3.56 | 2.87 | 50.8 | 0.14 |
| 1 1/4"x 1" | 42.16 | 33.40 | 3.56 | 3.38 | 50.8 | 0.16 |
| 1 1/2"x3/4" | 48.26 | 26.67 | 3.68 | 2.87 | 63.5 | 0.20 |
| 1 1/2"x 1" | 48.26 | 33.40 | 3.68 | 3.38 | 63.5 | 0.22 |
| 1 1/2"x1 1/4" | 48.26 | 42.16 | 3.68 | 3.56 | 63.5 | 0.24 |
| 2"x 1" | 60.33 | 33.40 | 3.91 | 3.38 | 76.2 | 0.32 |
| 2"x1 1/4" | 60.33 | 42.16 | 3.91 | 3.56 | 76.2 | 0.35 |
| 2"x 1 1/2" | 60.33 | 48.26 | 3.91 | 3.68 | 76.2 | 0.37 |
| 3"x 1 1/4" | 88.90 | 42.16 | 5.49 | 3.56 | 88.9 | 0.77 |
| 3"x 1 1/2" | 88.90 | 48.26 | 5.49 | 3.68 | 88.9 | 0.78 |
| 3"x 2" | 88.90 | 60.33 | 5.49 | 3.91 | 88.9 | 0.85 |
| 4"x2" | 114.30 | 60.33 | 6.02 | 3.91 | 101.6 | 1.27 |
| 4"x 3" | 114.30 | 88.90 | 6.02 | 5.49 | 101.6 | 1.45 |

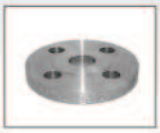
Dostępne w gatunkach: AISI 316L

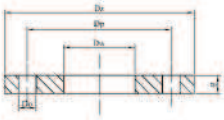
### Kołnierz płaski do przyspawania PN10 wg DIN 2576/PN-EN 1092-1

| DN | D [mm] | Kołnierz | | | | Śruby | | | Masa |
|---|---|---|---|---|---|---|---|---|---|
| | | Dz | Dw | Dp | g | liczba | gwint | Do | |
| 10 | 17.2 | 90.0 | 17.5 | 60 | 12.0 | 4 | M12 | 14 | 0.35 |
| 15 | 18.0 | 95.0 | 18.5 | 65 | 12.0 | 4 | M12 | 14 | 0.57 |
| | 20.0 | | 21.5 | | | | | | |
| | 21.3 | | 22.0 | | | | | | |
| 20 | 23.0 | 105 | 24.0 | 75 | 14.0 | 4 | M12 | 14 | 0.86 |
| | 25.0 | | 26.0 | | | | | | |
| | 26.9 | | 27.5 | | | | | | |
| 25 | 28.0 | 115 | 29.0 | 85 | 14.0 | 4 | M12 | 14 | 1.00 |
| | 30.0 | | 31.0 | | | | | | |
| | 33.7 | | 34.0 | | | | | | |
| 32 | 35.0 | 140 | 36.0 | 100 | 16.0 | 4 | M16 | 18 | 1.65 |
| | 38.0 | | 39.0 | | | | | | |
| | 42.4 | | 43.0 | | | | | | |
| 40 | 43.0 | 150 | 44.0 | 110 | 16.0 | 4 | M16 | 18 | 1.86 |
| | 44.5 | | 45.5 | | | | | | |
| | 48.3 | | 49.0 | | | | | | |
| 50 | 54.0 | 165 | 55.0 | 125 | 18.0 | 4 | M16 | 18 | 2.50 |
| | 57.0 | | 58.1 | | | | | | |
| | 60.3 | | 61.5 | | | | | | |
| 65 | 69.0 | 185 | 70.0 | 145 | 18.0 | 4 | M16 | 18 | 3.00 |
| | 76.1 | | 77.0 | | | | | | |
| 80 | 84.0 | 200 | 85.0 | 160 | 20.0 | 8 | M16 | 18 | 3.70 |
| | 88.9 | | 90.0 | | | | | | |
| 100 | 104.0 | 220 | 105.0 | 180 | 22.0 | 8 | M16 | 18 | 4.40 |
| | 108.0 | | 109.6 | | | | | | |
| | 114.3 | | 115.5 | | | | | | |
| 125 | 129.0 | 250 | 131.0 | 210 | 24.0 | 8 | M16 | 18 | 6.00 |
| | 133.0 | | 134.8 | | | | | | |
| | 139.7 | | 141.0 | | | | | | |
| 150 | 154.0 | 285 | 155.0 | 240 | 24.0 | 8 | M20 | 22 | 7.10 |
| | 159.0 | | 161.1 | | | | | | |
| | 168.3 | | 170.0 | | | | | | |
| 200 | 204.0 | 340 | 206.5 | 295 | 26.0 | 8 | M20 | 22 | 9.30 |
| | 219.1 | | 221.0 | | | | | | |
| 250 | 254.0 | 395 | 257.5 | 350 | 28.0 | 12 | M20 | 22 | 12.30 |
| | 267.0 | | 270.2 | | | | | | |
| | 273.0 | | 275.0 | | | | | | |
| 300 | 304.0 | 445 | 306.5 | 400 | 28.0 | 12 | M20 | 22 | 13.80 |
| | 318.0 | | 321.5 | | | | | | |
| | 323.9 | | 326.0 | | | | | | |
| 350 | 354.0 | 505 | 358.0 | 460 | 30.0 | 16 | M20 | 22 | 20.50 |
| | 355.6 | | 358.0 | | | | | | |
| | 368.0 | | 372.2 | | | | | | |
| 400 | 406.4 | 565 | 409.0 | 515 | 32.0 | 16 | M22 | 25 | 26.50 |
| | 419.0 | | 423.7 | | | | | | |
| 450 | 457.2 | 615 | 460.2 | 565 | 32.0 | 20 | M22 | 25 | 29.00 |
| 500 | 508.0 | 670 | 511.0 | 620 | 34.0 | 20 | M22 | 25 | 41.10 |
| 600 | 609.6 | 780 | 612.6 | 725 | 36.0 | 20 | M27 | 30 | 58.40 |

Dostępne w gatunkach: AISI 304, AISI 304L, AISI 321, AISI 316, AISI 316L, AISI 316Ti

**Na zamówienie także kołnierze wg rysunków.**



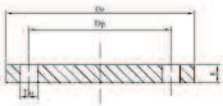


### Kołnierz płaski do przyspawania PN16 wg DIN 2576/PN-EN 1092-1

| DN | D [mm] | Kołnierz | | | | Śruby | | | Masa |
|---|---|---|---|---|---|---|---|---|---|
| | | Dz | Dw | Dp | g | liczba | gwint | Do | |
| 10 | 17.2 | 90.0 | 17.5 | 60 | 12.0 | 4 | M12 | 14 | 0.35 |
| 15 | 18.0 | 95.0 | 18.5 | 65 | 12.0 | 4 | M12 | 14 | 0.57 |
| | 20.0 | | 21.5 | | | | | | |
| | 21.3 | | 22.0 | | | | | | |
| 20 | 23.0 | 105 | 24.0 | 75 | 14.0 | 4 | M12 | 14 | 0.86 |
| | 25.0 | | 26.0 | | | | | | |
| | 26.9 | | 27.5 | | | | | | |
| 25 | 28.0 | 115 | 29.0 | 85 | 14.0 | 4 | M12 | 14 | 1.00 |
| | 30.0 | | 31.0 | | | | | | |
| | 33.7 | | 34.0 | | | | | | |
| 32 | 35.0 | 140 | 36.0 | 100 | 16.0 | 4 | M16 | 18 | 1.65 |
| | 38.0 | | 39.0 | | | | | | |
| | 42.4 | | 43.0 | | | | | | |
| 40 | 43.0 | 150 | 44.0 | 110 | 16.0 | 4 | M16 | 18 | 1.86 |
| | 44.5 | | 45.5 | | | | | | |
| | 48.3 | | 49.0 | | | | | | |
| 50 | 54.0 | 165 | 55.0 | 125 | 18.0 | 4 | M16 | 18 | 2.50 |
| | 57.0 | | 58.1 | | | | | | |
| | 60.3 | | 61.5 | | | | | | |
| 65 | 69.0 | 185 | 70.0 | 145 | 18.0 | 4 | M16 | 18 | 3.00 |
| | 76.1 | | 77.0 | | | | | | |
| 80 | 84.0 | 200 | 85.0 | 160 | 20.0 | 8 | M16 | 18 | 3.70 |
| | 88.9 | | 90.0 | | | | | | |
| 100 | 104.0 | 220 | 105.0 | 180 | 22.0 | 8 | M16 | 18 | 4.40 |
| | 108.0 | | 109.6 | | | | | | |
| | 114.3 | | 115.5 | | | | | | |
| 125 | 129.0 | 250 | 131.0 | 210 | 24.0 | 8 | M16 | 18 | 6.00 |
| | 133.0 | | 134.8 | | | | | | |
| | 139.7 | | 141.0 | | | | | | |
| 150 | 154.0 | 285 | 155.0 | 240 | 24.0 | 8 | M20 | 22 | 7.10 |
| | 159.0 | | 161.1 | | | | | | |
| | 168.3 | | 170.0 | | | | | | |
| 200 | 204.0 | 340 | 206.5 | 295 | 26.0 | 12 | M20 | 22 | 9.92 |
| | 219.1 | | 221.0 | | | | | | |
| 250 | 254.0 | 405 | 257.5 | 355 | 32.0 | 12 | M22 | 25 | 12.30 |
| | 267.0 | | 270.2 | | | | | | |
| | 273.0 | | 275.0 | | | | | | |
| 300 | 304.0 | 460 | 306.5 | 410 | 32.0 | 12 | M22 | 25 | 17.60 |
| | 318.0 | | 321.5 | | | | | | |
| | 323.9 | | 326.0 | | | | | | |
| 350 | 354.0 | 520 | 358.0 | 470 | 36.0 | 16 | M22 | 25 | 27.30 |
| | 355.6 | | 358.0 | | | | | | |
| | 368.0 | | 372.2 | | | | | | |
| 400 | 406.4 | 580 | 409.0 | 525 | 38.0 | 16 | M27 | 30 | 34.40 |
| | 419.0 | | 423.7 | | | | | | |
| 450 | 457.2 | 640 | 460.2 | 585 | 40.0 | 20 | M27 | 30 | 42.80 |
| 500 | 508.0 | 715 | 511.0 | 650 | 42.0 | 20 | M30 | 33 | 52.10 |
| 600 | 609.6 | 840 | 612.6 | 770 | 44.0 | 20 | M33 | 36 | 74.50 |

Dostępne w gatunkach: AISI 304, AISI 304L, AISI 321, AISI 316, AISI 316L, AISI 316Ti

**Na zamówienie także kołnierze wg rysunków.**



### Kołnierz zaślepiający PN10 wg DIN 2527

| DN | Kołnierz | | | Śruby | | | Masa |
|---|---|---|---|---|---|---|---|
| | Dz | Dp | g | liczba | gwint | Do | |
| Do DN 150 stosować PN 16 | | | | | | | |
| 200 | 340 | 295 | 22 | 8 | M20 | 22 | 16.50 |
| 250 | 395 | 350 | 22 | 12 | M20 | 22 | 24.00 |
| 300 | 445 | 400 | 22 | 12 | M20 | 22 | 30.90 |
| 350 | 505 | 460 | 22 | 16 | M20 | 22 | 40.60 |
| 400 | 565 | 515 | 25 | 16 | M22 | 25 | 49.60 |
| 450 | 615 | 565 | 25 | 20 | M22 | 25 | 55.80 |
| 500 | 670 | 620 | 25 | 20 | M22 | 25 | 75.00 |

Dostępne w gatunkach: AISI 304, AISI 304L, AISI 321, AISI 316, AISI 316L, AISI 316Ti

**Na zamówienie także kołnierze wg rysunków.**

### Kołnierz zaślepiający PN16 wg DIN 2527

| DN | Kołnierz | | | Śruby | | | Masa |
|---|---|---|---|---|---|---|---|
| | Dz | Dp | g | liczba | gwint | Do | |
| 10 | 90 | 60 | 14 | 4 | M12 | 14 | 0.63 |
| 15 | 95 | 65 | 14 | 4 | M12 | 14 | 0.72 |
| 20 | 105 | 75 | 16 | 4 | M12 | 14 | 1.01 |
| 25 | 115 | 85 | 16 | 4 | M12 | 14 | 1.25 |
| 32 | 140 | 100 | 16 | 4 | M16 | 18 | 1.82 |
| 40 | 150 | 110 | 16 | 4 | M16 | 18 | 2.06 |
| 50 | 165 | 125 | 18 | 4 | M16 | 18 | 2.88 |
| 65 | 185 | 145 | 18 | 4 | M16 | 18 | 3.70 |
| 80 | 200 | 160 | 20 | 8 | M16 | 18 | 4.55 |
| 100 | 220 | 180 | 20 | 8 | M16 | 18 | 5.51 |
| 125 | 250 | 210 | 22 | 8 | M16 | 18 | 8.83 |
| 150 | 285 | 240 | 22 | 8 | M20 | 22 | 10.40 |
| 200 | 340 | 295 | 24 | 12 | M20 | 22 | 16.10 |
| 250 | 405 | 355 | 26 | 12 | M22 | 25 | 24.90 |
| 300 | 460 | 410 | 28 | 12 | M22 | 25 | 35.10 |
| 350 | 520 | 470 | 30 | 16 | M22 | 25 | 47.80 |
| 400 | 580 | 525 | 32 | 16 | M27 | 30 | 63.50 |
| 450 | 640 | 585 | 32 | 20 | M27 | 30 | 71.50 |
| 500 | 715 | 650 | 34 | 20 | M30 | 33 | 102.00 |

Dostępne w gatunkach: AISI 304, AISI 304L, AISI 321, AISI 316, AISI 316L, AISI 316Ti

**Na zamówienie także kołnierze wg rysunków.**



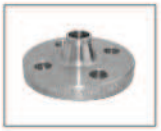
multiservice@multiservice.com.pl
www.multiservice.com.pl

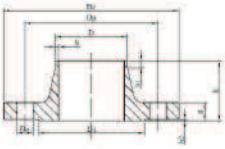
**Kołnierz aluminiowy luźny PN10 wg DIN 2642**

| DN | Średnica otworu | | Kołnierz | | | Śruby | | | Masa |
|---|---|---|---|---|---|---|---|---|---|
| | Typ A | Typ C | Dz | Dp | g | liczba | gwint | Do | |
| 10 | 19.0 | 19.0 | 90 | 60 | 12.0 | 4 | M12 | 14 | 0.17 |
| 15 | 24.0 | 24.0 | 95 | 65 | 12.0 | 4 | M12 | 14 | 0.18 |
| 20 | 30.0 | 30.0 | 105 | 75 | 12.0 | 4 | M12 | 14 | 0.23 |
| 25 | 34.0 | 36.0 | 115 | 85 | 12.0 | 4 | M12 | 14 | 0.26 |
| 32 | 40.0 | 46.0 | 140 | 100 | 16.0 | 4 | M12 | 18 | 0.52 |
| 40 | 48.0 | 54.0 | 150 | 110 | 16.0 | 4 | M16 | 18 | 0.60 |
| 50 | 58.0 | 65.0 | 165 | 125 | 16.0 | 4 | M16 | 18 | 0.72 |
| 65 | 73.0 | 81.0 | 185 | 145 | 16.0 | 4 | M16 | 18 | 0.85 |
| 80 | 90.0 | 94.0 | 200 | 160 | 18.0 | 8 | M16 | 18 | 1.10 |
| 100 | 110.0 | 119.0 | 220 | 180 | 18.0 | 8 | M16 | 18 | 1.15 |
| 125 | 135.0 | 144.0 | 250 | 210 | 18.0 | 8 | M16 | 18 | 1.50 |
| 150 | 160.0 | 173.0 | 285 | 240 | 18.0 | 8 | M20 | 22 | 1.90 |
| 200 | 212.0 | 225.0 | 340 | 295 | 20.0 | 8 | M20 | 22 | 2.70 |
| 250 | 262.0 | 279.0 | 395 | 350 | 22.0 | 12 | M20 | 22 | 3.70 |
| 300 | 312.0 | 329.0 | 445 | 400 | 22.0 | 12 | M20 | 22 | 4.30 |
| 350 | 362.0 | 362.0 | 505 | 460 | 22.0 | 16 | M20 | 22 | 5.80 |
| 400 | 413.0 | 413.0 | 565 | 515 | 25.0 | 16 | M24 | 25 | 6.90 |
| 450 | 466.0 | 468.0 | 615 | 565 | 25.0 | 20 | M24 | 25 | 7.80 |
| 500 | 517.0 | 517.0 | 670 | 620 | 28.0 | 20 | M24 | 25 | 9.60 |
| 600 | 620.0 | 620.0 | 780 | 725 | 30.0 | 20 | M27 | 30 | 14.00 |
| 700 | 721.0 | 721.0 | 895 | 840 | 32.0 | 24 | M27 | 30 | 22.00 |
| 800 | 824.0 | 824.0 | 1015 | 950 | 36.0 | 24 | M30 | 33 | 31.00 |

Typ A dotyczy wymiarów METRYCZNYCH
Typ C dotyczy wymiarów ISO
Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti
**Na zamówienie także kołnierze aluminiowe powlekane.**

**Kołnierz luźny wyciskany PN10 wg DIN 2642**
Wymiary jak dla kołnierza luźnego
Dostępne w gatunkach: AISI 304L, AISI 316L

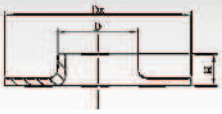




**Kołnierz szyjkowy PN16 wg DIN 2633**

| DN | D [mm] | Kołnierz | | | | | | | | Śruby | | | Masa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Dz | Dp | D1 | g | h | h1 | h2 | s | liczba | gwint | Do | |
| 10 | 17.2 | 90 | 60 | 40 | 14 | 35 | 6 | 2 | 1.8 | 4 | M12 | 14 | 0.58 |
| 15 | 21.3 | 95 | 65 | 45 | 14 | 35 | 6 | 2 | 2.0 | 4 | M12 | 14 | 0.69 |
| 20 | 26.9 | 105 | 75 | 58 | 16 | 38 | 6 | 2 | 2.3 | 4 | M12 | 14 | 0.95 |
| 25 | 33.7 | 115 | 85 | 68 | 16 | 38 | 6 | 2 | 2.6 | 4 | M12 | 14 | 1.14 |
| 32 | 42.4 | 140 | 100 | 78 | 16 | 40 | 6 | 2 | 2.6 | 4 | M16 | 18 | 1.70 |
| 40 | 48.3 | 150 | 110 | 88 | 16 | 42 | 7 | 3 | 2.6 | 4 | M16 | 18 | 1.86 |
| 50 | 60.3 | 165 | 125 | 102 | 18 | 45 | 8 | 3 | 2.9 | 4 | M16 | 18 | 2.53 |
| 65 | 76.1 | 185 | 145 | 122 | 18 | 45 | 10 | 3 | 2.9 | 4 | M16 | 18 | 3.06 |
| 80 | 88.9 | 200 | 160 | 138 | 20 | 50 | 10 | 3 | 3.2 | 8 | M16 | 18 | 3.70 |
| 100 | 114.3 | 220 | 180 | 158 | 20 | 52 | 12 | 3 | 3.6 | 8 | M16 | 18 | 4.62 |
| 125 | 139.7 | 250 | 210 | 188 | 22 | 55 | 12 | 3 | 4 | 8 | M16 | 18 | 6.30 |
| 150 | 168.3 | 285 | 240 | 212 | 22 | 55 | 12 | 3 | 4.5 | 8 | M20 | 23 | 7.75 |
| 200 | 219.1 | 340 | 295 | 268 | 24 | 62 | 16 | 3 | 5.9 | 12 | M20 | 23 | 11.00 |
| 250 | 273.0 | 405 | 355 | 320 | 26 | 70 | 16 | 3 | 6.3 | 12 | M24 | 27 | 15.60 |
| 300 | 323.9 | 460 | 410 | 378 | 28 | 78 | 16 | 4 | 7.1 | 12 | M24 | 27 | 22.00 |
| 350 | 355.6 | 520 | 470 | 438 | 30 | 82 | 16 | 4 | 8.0 | 16 | M24 | 27 | 31.20 |
| 400 | 406.4 | 580 | 525 | 490 | 32 | 85 | 16 | 4 | 8.0 | 16 | M27 | 30 | 39.30 |
| 500 | 508.0 | 715 | 650 | 610 | 34 | 90 | 16 | 4 | 8.0 | 20 | M30 | 33 | 61.00 |
| 600 | 609.6 | 840 | 770 | 725 | 36 | 95 | 18 | 5 | 8.8 | 20 | M33 | 36 | 75.40 |

Dostępne w gatunkach: AISI 304L, AISI 321, AISI 316L, AISI 316Ti

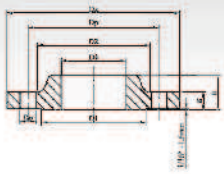


**Kołnierz wywijany wg DIN 2642**

| DN | D [mm] | Dz | H | Masa |
|---|---|---|---|---|
| 15 | 18.0x1.5 | 46.0 | * | 0.02 |
| | 21.3x2.0 | 46.0 | * | 0.02 |
| 20 | 26.9x2.0 | 58.0 | * | 0.03 |
| 25 | 28.0x1.5 | 68.0 | * | 0.03 |
| | 33.7x2.0 | 68.0 | * | 0.04 |
| | 33.7x3.0 | 68.0 | * | 0.08 |
| 32 | 38.0x2.0 | 78.0 | * | 0.05 |
| | 42.4x2.0 | 78.0 | * | 0.05 |
| | 42.4x3.0 | 78.0 | * | 0.10 |
| 40 | 44.5.0x2.0 | 88.0 | * | 0.08 |
| | 48.3x2.0 | 88.0 | * | 0.08 |
| | 48.3x3.0 | 88.0 | * | 0.12 |
| 50 | 54.0x2.0 | 102.0 | * | 0.10 |
| | 57.0x3.0 | 102.0 | * | 0.15 |
| | 60.3x2.0 | 102.0 | * | 0.10 |
| | 60.3x3.0 | 102.0 | * | 0.15 |
| 65 | 70.0x2.0 | 122.0 | * | 0.14 |
| | 76.1x2.0 | 122.0 | * | 0.14 |
| | 76.1x3.0 | 122.0 | * | 0.20 |
| 80 | 84.0x2.0 | 139.0 | * | 0.18 |
| | 88.9x2.0 | 139.0 | * | 0.18 |
| | 88.9x3.0 | 139.0 | * | 0.27 |
| 100 | 104.0x2.0 | 158.0 | * | 0.24 |
| | 108.0x2.0 | 158.0 | * | 0.24 |
| | 108.0x3.0 | 158.0 | * | 0.31 |
| | 108.0x4.0 | 158.0 | * | 0.47 |
| | 114.3x2.0 | 158.0 | * | 0.20 |
| | 114.3x3.0 | 158.0 | * | 0.31 |
| 125 | 129.0x2.0 | 188.0 | * | 0.30 |
| | 133.0x3.0 | 188.0 | * | 0.46 |
| | 133.0x4.0 | 188.0 | * | 0.63 |
| | 139.7x2.0 | 188.0 | * | 0.30 |
| | 139.7x3.0 | 188.0 | * | 0.46 |
| 150 | 154.0x2.0 | 212.0 | * | 0.35 |
| | 159.0x3.0 | 212.0 | * | 0.48 |
| | 159.0x4.0 | 212.0 | * | 1.75 |
| | 168.3x2.0 | 212.0 | * | 0.31 |
| | 168.3x3.0 | 212.0 | * | 0.48 |
| 200 | 204.0x2.0 | 270.0 | * | 0.50 |
| | 219.1x2.0 | 270.0 | * | 0.45 |
| | 219.1x3.0 | 270.0 | * | 0.66 |
| | 219.1x4.0 | 270.0 | * | 0.92 |
| 250 | 254.0x2.0 | 320.0 | * | 0.71 |
| | 273.0x2.0 | 320.0 | * | 0.55 |
| | 273.0x3.0 | 320.0 | * | 1.79 |
| | 273.0x4.0 | 320.0 | * | 1.06 |
| 300 | 304.0x2.0 | 370.0 | * | 0.78 |
| | 306.0x3.0 | 370.0 | * | 1.22 |
| | 323.9x3.0 | 370.0 | * | 0.97 |
| | 323.9x4.0 | 370.0 | * | 1.22 |
| 350 | 355.6x3.0 | 430.0 | * | 1.43 |
| | 355.6x4.0 | 430.0 | * | 1.68 |
| 400 | 406.4x3.0 | 482.0 | * | 1.74 |
| | 406.4x4.0 | 482.0 | * | 2.30 |
| 450 | 457.2x3.0 | 530.0 | * | 2.80 |
| | 457.2x4.0 | 530.0 | * | 3.00 |
| 500 | 508.0x4.0 | 585.0 | * | 3.15 |
| | 508.0x5.0 | 585.0 | * | 3.75 |
| 600 | 609.6x3.0 | 685.0 | * | 3.69 |
| | 609.6x4.0 | 685.0 | * | 4.25 |
| 700 | 711.0x4.0 | 800.0 | * | 5.97 |
| 800 | 812.8x4.0 | 900.0 | * | 8.27 |

* - według uznania producenta
Dostępne w gatunkach: AISI 304L, AISI 316L

### Kołnierz płaski wg ANSI B 16.5 150 Lbs

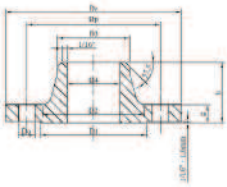


| Wymiar | Kołnierz | | | | | | | Śruby | | Masa |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dz | Dp | D1 | D2 | D4 | g | h | liczba | Do | |
| 1/2" | 88.9 | 60.5 | 35.1 | 30.2 | 22.4 | 11.2 | 15.7 | 4 | 15.7 | 0.4 |
| 3/4" | 98.6 | 69.9 | 42.9 | 38.1 | 27.7 | 12.7 | 15.7 | 4 | 15.7 | 0.6 |
| 1" | 108.0 | 79.2 | 50.8 | 49.3 | 34.5 | 14.2 | 17.5 | 4 | 15.7 | 0.8 |
| 1 1/4" | 117.3 | 88.9 | 63.5 | 58.7 | 43.2 | 15.7 | 20.6 | 4 | 15.7 | 1.0 |
| 1 1/2" | 127.0 | 98.6 | 73.2 | 65.0 | 49.5 | 17.5 | 22.4 | 4 | 15.7 | 1.4 |
| 2" | 152.4 | 120.7 | 91.9 | 77.7 | 62.0 | 19.1 | 25.4 | 4 | 19.1 | 2.1 |
| 2 1/2" | 177.8 | 139.7 | 104.6 | 90.4 | 74.7 | 22.4 | 28.4 | 4 | 19.1 | 3.3 |
| 3" | 190.5 | 152.4 | 127.0 | 108.0 | 90.7 | 23.9 | 30.2 | 4 | 19.1 | 3.9 |
| 3 1/2" | 215.9 | 177.8 | 139.7 | 122.2 | 103.4 | 23.9 | 31.8 | 8 | 19.1 | 4.9 |
| 4" | 228.6 | 190.5 | 157.2 | 134.9 | 116.1 | 23.9 | 33.3 | 8 | 19.1 | 5.4 |
| 5" | 254.0 | 215.9 | 185.7 | 163.6 | 143.8 | 23.9 | 36.6 | 8 | 22.4 | 6.1 |
| 6" | 279.4 | 241.3 | 215.9 | 192.0 | 170.7 | 25.4 | 39.6 | 8 | 22.4 | 7.5 |
| 8" | 342.9 | 298.5 | 269.7 | 246.1 | 221.5 | 28.4 | 44.5 | 8 | 22.4 | 12.1 |
| 10" | 406.6 | 362.0 | 323.8 | 304.8 | 276.4 | 30.2 | 49.3 | 12 | 25.4 | 16.5 |
| 12" | 482.6 | 431.8 | 381.0 | 365.3 | 327.2 | 31.8 | 55.6 | 12 | 25.4 | 27.0 |
| 14" | 533.4 | 476.3 | 412.8 | 400.1 | 359.2 | 35.1 | 57.2 | 12 | 28.4 | 35.0 |
| 16" | 596.9 | 539.8 | 469.9 | 457.2 | 410.5 | 36.6 | 63.5 | 16 | 28.4 | 45.0 |
| 18" | 635.0 | 577.9 | 533.4 | 505.0 | 461.8 | 39.6 | 68.3 | 16 | 31.8 | 49.0 |
| 20" | 698.5 | 635.0 | 584.2 | 558.8 | 513.1 | 42.9 | 73.2 | 20 | 31.8 | 62.0 |
| 22" | 749.3 | 692.1 | 641.2 | 609.6 | 564.4 | 46.0 | 79.4 | 20 | 35.1 | 85.0 |
| 24" | 812.8 | 749.3 | 692.2 | 663.4 | 616.0 | 47.8 | 82.6 | 20 | 35.1 | 87.0 |

Dostępne w gatunkach: AISI 304L, AISI 316L

**Na zamówienie kołnierze do 2500 Lbs**

### Kołnierz z szyjką wg ANSI B 16.5 150 Lbs



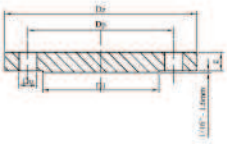
| Wymiar | Kołnierz | | | | | | | | Śruby | | Masa |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dz | Dp | D1 | D2 | D3 | D4 | g | h | liczba | Do | |
| 1/2" | 88.9 | 60.5 | 35.1 | 30.2 | 21.3 | * | 11.2 | 47.8 | 4 | 15.7 | 0.5 |
| 3/4" | 98.6 | 69.9 | 42.9 | 38.1 | 26.7 | * | 12.7 | 52.3 | 4 | 15.7 | 0.7 |
| 1" | 108.0 | 79.2 | 50.8 | 49.3 | 33.5 | * | 14.2 | 55.6 | 4 | 15.7 | 1.0 |
| 1 1/4" | 117.3 | 88.9 | 63.5 | 58.7 | 42.2 | * | 15.7 | 57.2 | 4 | 15.7 | 1.4 |
| 1 1/2" | 127.0 | 98.6 | 73.2 | 65.0 | 48.3 | * | 17.5 | 62.0 | 4 | 15.7 | 1.8 |
| 2" | 152.4 | 120.7 | 91.9 | 77.7 | 60.5 | * | 19.1 | 63.5 | 4 | 19.1 | 2.6 |
| 2 1/2" | 177.8 | 139.7 | 104.6 | 90.4 | 73.2 | * | 22.4 | 69.9 | 4 | 19.1 | 4.2 |
| 3" | 190.5 | 152.4 | 127.0 | 108.0 | 88.9 | * | 23.9 | 69.9 | 4 | 19.1 | 5.0 |
| 3 1/2" | 215.9 | 177.8 | 139.7 | 122.2 | 101.6 | * | 23.9 | 71.4 | 8 | 19.1 | 6.1 |
| 4" | 228.6 | 190.5 | 157.2 | 134.9 | 114.3 | * | 23.9 | 76.2 | 8 | 19.1 | 7.0 |
| 5" | 254.0 | 215.9 | 185.7 | 163.6 | 141.2 | * | 23.9 | 88.9 | 8 | 22.4 | 8.6 |
| 6" | 279.4 | 241.3 | 215.9 | 192.0 | 168.4 | * | 25.4 | 88.9 | 8 | 22.4 | 10.6 |
| 8" | 342.9 | 298.5 | 269.7 | 246.1 | 219.2 | * | 28.4 | 101.6 | 8 | 22.4 | 17.6 |
| 10" | 406.6 | 362.0 | 323.8 | 304.8 | 273.1 | * | 30.2 | 101.6 | 12 | 25.4 | 24.0 |
| 12" | 482.6 | 431.8 | 381.0 | 365.3 | 323.9 | * | 31.8 | 114.3 | 12 | 25.4 | 37.0 |
| 14" | 533.4 | 476.3 | 412.8 | 400.1 | 355.6 | * | 35.1 | 127.0 | 12 | 28.4 | 49.0 |
| 16" | 596.9 | 539.8 | 469.9 | 457.2 | 406.4 | * | 36.6 | 127.0 | 16 | 28.4 | 61.0 |
| 18" | 635.0 | 577.9 | 533.4 | 505.0 | 457.2 | * | 39.6 | 139.7 | 16 | 31.8 | 68.0 |
| 20" | 698.5 | 635.0 | 584.2 | 558.8 | 508.0 | * | 42.9 | 144.5 | 20 | 31.8 | 85.0 |
| 22" | 749.3 | 692.1 | 641.2 | 609.6 | 558.8 | * | 46.0 | 149.2 | 20 | 35.1 | 102.0 |
| 24" | 812.8 | 749.3 | 692.2 | 663.4 | 609.6 | * | 47.8 | 152.4 | 20 | 35.1 | 115.0 |

* - w zależności od Sch rury

Dostępne w gatunkach: AISI 304L, AISI 316L

**Na zamówienie kołnierze do 2500 Lbs**

### Kołnierz zaślepiający wg ANSI B 16.5 150 Lbs



| Wymiar | Kołnierz | | | | Śruby | | Masa |
|---|---|---|---|---|---|---|---|
| | Dz | Dp | D1 | g | liczba | Do | |
| 1/2" | 88.9 | 60.5 | 35.1 | 11.2 | 4 | 15.7 | 0.5 |
| 3/4" | 98.6 | 69.9 | 42.9 | 12.7 | 4 | 15.7 | 0.7 |
| 1" | 108.0 | 79.2 | 50.8 | 14.2 | 4 | 15.7 | 0.9 |
| 1 1/4" | 117.3 | 88.9 | 63.5 | 15.7 | 4 | 15.7 | 1.2 |
| 1 1/2" | 127.0 | 98.6 | 73.2 | 17.5 | 4 | 15.7 | 1.6 |
| 2" | 152.4 | 120.7 | 91.9 | 19.1 | 4 | 19.1 | 2.5 |
| 2 1/2" | 177.8 | 139.7 | 104.6 | 22.4 | 4 | 19.1 | 4.0 |
| 3" | 190.5 | 152.4 | 127.0 | 23.9 | 4 | 19.1 | 4.9 |
| 3 1/2" | 215.9 | 177.8 | 139.7 | 23.9 | 8 | 19.1 | 6.2 |
| 4" | 228.6 | 190.5 | 157.2 | 23.9 | 8 | 19.1 | 7.0 |
| 5" | 254.0 | 215.9 | 185.7 | 23.9 | 8 | 22.4 | 8.7 |
| 6" | 279.4 | 241.3 | 215.9 | 25.4 | 8 | 22.4 | 11.3 |
| 8" | 342.9 | 298.5 | 269.7 | 28.4 | 8 | 22.4 | 20.0 |
| 10" | 406.6 | 362.0 | 323.8 | 30.2 | 12 | 25.4 | 29.0 |
| 12" | 482.6 | 431.8 | 381.0 | 31.8 | 12 | 25.4 | 44.0 |
| 14" | 533.4 | 476.3 | 412.8 | 35.1 | 12 | 28.4 | 59.0 |
| 16" | 596.9 | 539.8 | 469.9 | 36.6 | 16 | 28.4 | 76.0 |
| 18" | 635.0 | 577.9 | 533.4 | 39.6 | 16 | 31.8 | 94.0 |
| 20" | 698.5 | 635.0 | 584.2 | 42.9 | 20 | 31.8 | 122.0 |
| 22" | 749.3 | 692.1 | 641.2 | 46.0 | 20 | 35.1 | 161.0 |
| 24" | 812.8 | 749.3 | 692.2 | 47.8 | 20 | 35.1 | 185.0 |

Dostępne w gatunkach: AISI 304L, AISI 316L

**Na zamówienie kołnierze do 2500 Lbs**



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**Uchwyty Rurowe (Obejmy) DIN 3576**

- bez trzpienia wymiary wg tabeli poniżej
- z trzpieniem gładkim /gwintowanym wymiary wg tabeli poniżej
- z nakrętką wymiary wg tabeli poniżej

| Rozmiar uchwytu (średnica rury) | Wymiary płaskownika (mm) | Śruba | Trzpień gładki | | Trzpień gwintowany | | Nakrętka | Waga obejm kg/szt | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Średnica (mm) | Długość (mm) | Gwint | Długość (mm) | | bez trzpienia z nakrętką | z trzpieniem |
| 10 | 15x2.0 | M5x12 | 6 | 60 | M6 | 60 | M6 | 0.02 | 0.03 |
| 12 | 15x2.0 | M5x12 | 6 | 60 | M6 | 60 | M6 | 0.02 | 0.03 |
| 12 | 20x2.0 | M6x16 | 8 | 60 | M8 | 60 | M8 | 0.02 | 0.03 |
| 13,5 ; 14 | 15x2.0 | M5x12 | 6 | 60 | M6 | 60 | M6 | 0.02 | 0.03 |
| 13,5 ; 14 | 20x2.0 | M6x16 | 8 | 60 | M8 | 60 | M8 | 0.02 | 0.03 |
| 17,2 | 15x2.0 | M5x12 | 6 | 60 | M6 | 60 | M6 | 0.02 | 0.03 |
| 17,2 | 20x2.0 | M6x16 | 8 | 60 | M8 | 60 | M8 | 0.02 | 0.03 |
| 18 | 20x2.0 | M6x16 | 8 | 60 | M8 | 60 | M8 | 0.03 | 0.04 |
| 20 | 20x2.0 | M6x16 | 8 | 60 | M8 | 60 | M8 | 0.03 | 0.04 |
| 21,3 ; 22 | 20x2.0 | M6x16 | 8 | 60 | M8 | 60 | M8 | 0.04 | 0.05 |
| 25 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.04 | 0.05 |
| 26,9 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.05 | 0.06 |
| 28 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.05 | 0.06 |
| 32 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.05 | 0.06 |
| 33,7 ; 34 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.05 | 0.06 |
| 38 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.05 | 0.06 |
| 40 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.06 | 0.07 |
| 42,4 | 20x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.06 | 0.07 |
| 48,3 | 25x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.09 | 0.10 |
| 50 ; 51 ; 52 | 25x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.10 | 0.11 |
| 60,3 | 25x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.10 | 0.11 |
| 63,5 | 25x2.0 | M6x16 | 10 | 60 | M10 | 60 | M10 | 0.11 | 0.12 |
| 70 | 25x2.0 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.12 | 0.14 |
| 76,1 | 25x2.0 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.13 | 0.15 |
| 85 | 25x2.0 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.14 | 0.16 |
| 88,9 | 25x2.0 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.15 | 0.17 |
| 101,6 | 30x2.5 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.20 | 0.22 |
| 104 | 30x2.5 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.22 | 0.24 |
| 108 | 30x2.5 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.23 | 0.25 |
| 110 | 30x2.5 | M8x20 | 12 | 60 | M12 | 60 | M12 | 0.25 | 0.27 |
| 114,3 | 30x2.5 | M10x25 | 12 | 60 | M12 | 60 | M12 | 0.27 | 0.29 |
| 129 | 30x2.5 | M10x25 | 14 | 60 | M16 | 60 | M16 | 0.30 | 0.33 |
| 139,7 ; 140 | 30x2.5 | M10x25 | 14 | 60 | M16 | 60 | M16 | 0.35 | 0.38 |
| 154 | 30x3.0 | M10x25 | 14 | 60 | M16 | 60 | M16 | 0.39 | 0.42 |
| 159 ; 160 | 30x3.0 | M10x25 | 14 | 60 | M16 | 60 | M16 | 0.42 | 0.45 |
| 168,3 | 30x3.0 | M10x25 | 14 | 60 | M16 | 60 | M16 | 0.48 | 0.51 |
| 200 | 30x4.0 | M10x25 | 14 | 60 | M16 | 60 | M16 | 0.63 | 0.66 |
| 202 | 30x4.0 | M10x25 | 18 | 60 | M16 | 60 | M16 | 0.65 | 0.68 |
| 204 | 30x4.0 | M10x25 | 18 | 60 | M16 | 60 | M16 | 0.67 | 0.70 |
| 219,1 | 30x4.0 | M10x25 | 18 | 60 | M16 | 60 | M16 | 0.80 | 0.83 |
| 225 | 40x4.0 | M12x35 | 18 | 60 | M16 | 60 | M16 | 1.25 | 1.28 |
| 254 | 50x5.0 | M16x35 | 20 | 80 | M20 | 80 | M20 | 2.06 | 2.12 |
| 256 | 50x5.0 | M16x35 | 20 | 80 | M20 | 80 | M20 | 2.08 | 2.16 |
| 273 | 50x5.0 | M16x35 | 22 | 80 | M24 | 80 | M24 | 2.27 | 2.51 |
| 280 | 50x5.0 | M16x35 | 22 | 80 | M24 | 80 | M24 | 2.33 | 2.57 |
| 304 | 50x5.0 | M16x35 | 22 | 80 | M24 | 80 | M24 | 2.52 | 2.76 |
| 306 | 50x5.0 | M16x35 | 22 | 80 | M24 | 80 | M24 | 2.56 | 2.80 |
| 315 | 50x5.0 | M16x35 | 22 | 80 | M24 | 80 | M24 | 2.61 | 2.85 |
| 318 | 50x5.0 | M16x35 | | | | | | 2.63 | |
| 323,9 | 50x5.0 | M16x35 | | | | | | 2.68 | |
| 355,6 | 50x5.0 | M16x35 | | | | | | 2.88 | |
| 406,4 | 50x6.0 | M16x40 | | | | | | 3.62 | |
| 508 | 50x6.0 | M16x40 | | | | | | 4.55 | |

Na zamówienie:
- obejmy wykonane z innych płaskowników,
- obejmy nietypowe wg rysunków oraz z wkładką gumową,
- obejmy z dowolną długością i średnicą trzpieni oraz nakrętkami innymi niż w/w.

### Mufa nr 01

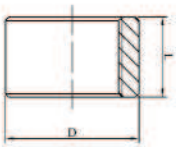
| Wymiar | L | D |
|---|---|---|
| 1/8" | 17 | 14.0 |
| 1/4" | 25 | 18.5 |
| 3/8" | 26 | 21.3 |
| 1/2" | 34 | 26.4 |
| 3/4" | 36 | 31.8 |
| 1" | 43 | 39.5 |
| 1 1/4" | 48 | 48.3 |
| 1 1/2" | 48 | 54.5 |
| 2" | 56 | 66.3 |
| 2 1/2" | 65 | 82.0 |
| 3" | 71 | 85.0 |
| 4" | 83 | 122.0 |

Dostępne w gatunkach: AISI 316

### Mufa krótka nr 25

| Wymiar | L | D |
|---|---|---|
| 1/8" | 10 | 14.5 |
| 1/4" | 10 | 17.5 |
| 3/8" | 12 | 21.5 |
| 1/2" | 15 | 27.0 |
| 3/4" | 17 | 33.5 |
| 1" | 20 | 40.0 |
| 1 1/4" | 20 | 50.0 |
| 1 1/2" | 21 | 57.0 |
| 2" | 27 | 70.0 |
| 2 1/2" | 30 | 86.0 |
| 3" | 33 | 100.0 |
| 4" | 40 | 126.0 |

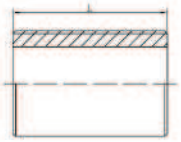
Dostępne w gatunkach: AISI 316



### Nypel nr 02

| Wymiar | L |
|---|---|
| 1/8" | 16 |
| 1/4" | 18 |
| 3/8" | 22 |
| 1/2" | 25 |
| 3/4" | 30 |
| 1" | 35 |
| 1 1/4" | 38 |
| 1 1/2" | 38 |
| 2" | 45 |
| 2 1/2" | 55 |
| 3" | 60 |
| 4" | 70 |

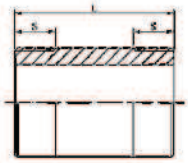
Dostępne w gatunkach: AISI 316



### Nypel rurowy podwójny nr 03

| Wymiar | L | S |
|---|---|---|
| 1/8" | 40 | 8 |
| 1/4" | 40 | 11 |
| 3/8" | 40 | 12 |
| 1/2" | 60 | 15 |
| 3/4" | 60 | 17 |
| 1" | 60 | 20 |
| 1 1/4" | 80 | 22 |
| 1 1/2" | 80 | 22 |
| 2" | 100 | 26 |
| 2 1/2" | 100 | 32 |
| 3" | 100 | 35 |
| 4" | 120 | 42 |

Dostępne w gatunkach: AISI 304, AISI 316
**Inne długości na zamówienie.**



### Nypel do przyspawania nr 04

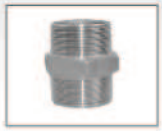
| Wymiar | L | S |
|---|---|---|
| 1/8" | 30 | 8 |
| 1/4" | 30 | 11 |
| 3/8" | 35 | 12 |
| 1/2" | 35 | 15 |
| 3/4" | 37 | 17 |
| 1" | 40 | 20 |
| 1 1/4" | 47 | 22 |
| 1 1/2" | 47 | 22 |
| 2" | 50 | 26 |
| 2 1/2" | 55 | 32 |
| 3" | 70 | 35 |
| 4" | 80 | 42 |

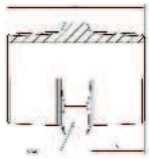
Dostępne w gatunkach: AISI 304, AISI 316
**Inne długości na zamówienie.**

### Nypel 6-kątny nr 11

| Wymiar | L | S | SW |
|---|---|---|---|
| 1/8" | 22 | 8 | 12 |
| 1/4" | 24 | 9 | 14 |
| 3/8" | 28 | 11 | 19 |
| 1/2" | 34 | 14 | 22 |
| 3/4" | 40 | 16 | 27 |
| 1" | 46 | 19 | 36 |
| 1 1/4" | 52 | 21 | 46 |
| 1 1/2" | 54 | 21 | 50 |
| 2" | 62 | 24 | 65 |
| 2 1/2" | 70 | 27 | 80 |
| 3" | 82 | 33 | 95 |

Dostępne w gatunkach: AISI 316

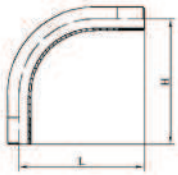




### Łuk z gwintem zewn. 90° nr 08

| Wymiar | L | H |
|---|---|---|
| 1/8" | 50 | 50 |
| 1/4" | 60 | 60 |
| 3/8" | 70 | 70 |
| 1/2" | 80 | 80 |
| 3/4" | 100 | 100 |
| 1" | 120 | 120 |
| 1 1/4" | 140 | 140 |
| 1 1/2" | 160 | 160 |
| 2" | 190 | 190 |
| 2 1/2" | 240 | 240 |
| 3" | 290 | 290 |

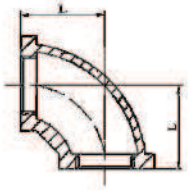
Dostępne w gatunkach: AISI 316



### Kolano 90° nr 07

| Wymiar | L |
|---|---|
| 1/4" | 21 |
| 3/8" | 25 |
| 1/2" | 28 |
| 3/4" | 33 |
| 1" | 38 |
| 1 1/4" | 45 |
| 1 1/2" | 50 |
| 2" | 58 |
| 2 1/2" | 70 |
| 3" | 80 |

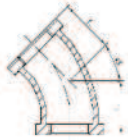
Dostępne w gatunkach: AISI 316



### Kolano 45° nr 46

| Wymiar | L |
|---|---|
| 1/4" | 19 |
| 3/8" | 20 |
| 1/2" | 23 |
| 3/4" | 25 |
| 1" | 29 |
| 1 1/4" | 33 |
| 1 1/2" | 37 |
| 2" | 43 |

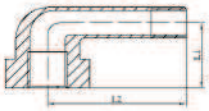
Dostępne w gatunkach: AISI 316



### Kolano nyplowe 90° nr 47

| Wymiar | L1 | L2 |
|---|---|---|
| 1/4" | 21 | 28 |
| 3/8" | 25.5 | 32 |
| 1/2" | 27.5 | 37 |
| 3/4" | 31 | 43 |
| 1" | 37.5 | 52 |
| 1 1/4" | 44 | 60 |
| 1 1/2" | 50 | 65 |
| 2" | 56 | 74 |

Dostępne w gatunkach: AISI 316





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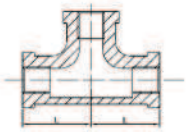
### Trójnik nr 06

| Wymiar | L |
|---|---|
| 1/4" | 21 |
| 3/8" | 25 |
| 1/2" | 28 |
| 3/4" | 33 |
| 1" | 38 |
| 1 1/4" | 45 |
| 1 1/2" | 50 |
| 2" | 58 |
| 2 1/2" | 70 |
| 3" | 80 |

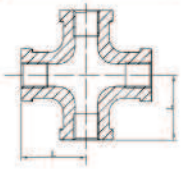
Dostępne w gatunkach: AISI 316



### Czwórnik nr 20

| Wymiar | L |
|---|---|
| 1/4" | 20 |
| 3/8" | 24 |
| 1/2" | 28 |
| 3/4" | 33 |
| 1" | 38 |
| 1 1/4" | 45 |
| 1 1/2" | 49 |
| 2" | 57 |

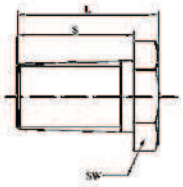
Dostępne w gatunkach: AISI 316



### Korek 6-kątny z gw. stożkowym nr 23

| Wymiar | L | S | SW |
|---|---|---|---|
| 1/8" | 13 | 8 | 12 |
| 1/4" | 15 | 10 | 14 |
| 3/8" | 17 | 11 | 19 |
| 1/2" | 20 | 14 | 22 |
| 3/4" | 24 | 16 | 30 |
| 1" | 27 | 18 | 36 |
| 1 1/4" | 31 | 21 | 46 |
| 1 1/2" | 33 | 21 | 50 |
| 2" | 38 | 26 | 65 |
| 2 1/2" | 39 | 27 | 79 |
| 3" | 51 | 36 | 95 |

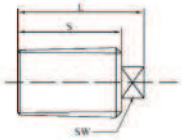
Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.




### Korek 4-kątny z gw. stożkowym nr 24

| Wymiar | L | S | SW |
|---|---|---|---|
| 1/8" | 12.5 | 8 | 7 |
| 1/4" | 16 | 10 | 9 |
| 3/8" | 19 | 11 | 10 |
| 1/2" | 23 | 14 | 11 |
| 3/4" | 27 | 11 | 17 |
| 1" | 32 | 20 | 19 |
| 1 1/4" | 35 | 21 | 22 |
| 1 1/2" | 36 | 22 | 22 |
| 2" | 43 | 27 | 27 |
| 2 1/2" | 50 | 30 | 32 |
| 3" | 57 | 37 | 36 |
| 4" | 67 | 47 | 41 |

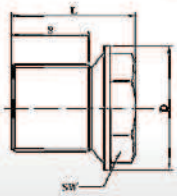
Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek czworokątu.




### Korek 6-kątny z gw. cylindrycznym nr 16

| Wymiar | D | L | S | SW |
|---|---|---|---|---|
| 1/8" | 14 | 17 | 11 | 11 |
| 1/4" | 18 | 21 | 14 | 14 |
| 3/8" | 22 | 21 | 17 | 17 |
| 1/2" | 26 | 26 | 19 | 19 |
| 3/4" | 32 | 30 | 24 | 24 |
| 1" | 39 | 32 | 27 | 27 |
| 1 1/4" | 49 | 33 | 30 | 30 |
| 1 1/2" | 55 | 33 | 30 | 30 |
| 2" | 68 | 40 | 36 | 36 |
| 2 1/2" | 85 | 44 | 41 | 41 |
| 3" | 95 | 48 | 46 | 46 |

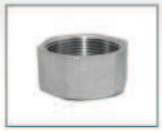
Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.

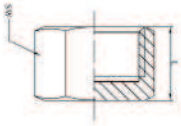



### Zaślepka 6-kątna nr 13

| Wymiar | L | SW |
|---|---|---|
| 1/8" | 13 | 14 |
| 1/4" | 15 | 17 |
| 3/8" | 17 | 22 |
| 1/2" | 20 | 27 |
| 3/4" | 24 | 32 |
| 1" | 27 | 41 |
| 1 1/4" | 32 | 50 |
| 1 1/2" | 32 | 55 |
| 2" | 34 | 70 |
| 2 1/2" | 36 | 85 |
| 3" | 38 | 105 |

Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.

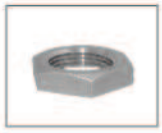





### Nakrętka sześciokątna nr 12

| Wymiar | L | SW |
|---|---|---|
| 1/8" | 6 | 19 |
| 1/4" | 6 | 22 |
| 3/8" | 7 | 27 |
| 1/2" | 8 | 32 |
| 3/4" | 9 | 36 |
| 1" | 10 | 46 |
| 1 1/4" | 11 | 55 |
| 1 1/2" | 12 | 60 |
| 2" | 13 | 75 |
| 2 1/2" | 16 | 95 |
| 3" | 19 | 105 |
| 4" | 22 | 135 |

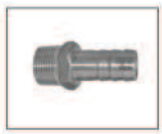
Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.



### Końcówka gwintowana na wąż nr 35

| Wymiar | D | SW | L |
|---|---|---|---|
| 1/4" | 4 | 14 | 35 |
| 1/4" | 6 | 14 | 40 |
| 1/4" | 9 | 14 | 40 |
| 3/8" | 6 | 19 | 42 |
| 3/8" | 9 | 19 | 42 |
| 3/8" | 13 | 19 | 45 |
| 1/2" | 6 | 22 | 45 |
| 1/2" | 9 | 22 | 45 |
| 1/2" | 13 | 22 | 50 |
| 3/4" | 9 | 27 | 50 |
| 3/4" | 13 | 27 | 52 |
| 3/4" | 16 | 27 | 55 |
| 1" | 16 | 36 | 60 |
| 1" | 19 | 36 | 65 |
| 1" | 25 | 36 | 70 |
| 1 1/4" | 19 | 46 | 70 |
| 1 1/4" | 25 | 46 | 75 |
| 1 1/4" | 30 | 46 | 80 |
| 1 1/2" | 25 | 50 | 80 |
| 1 1/2" | 30 | 50 | 85 |
| 1 1/2" | 38 | 50 | 90 |
| 2" | 51 | 60 | 105 |
| 2 1/2" | 63 | 80 | 110 |
| 3" | 76 | 95 | 120 |

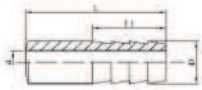
Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.

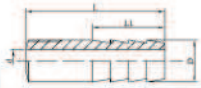


### Końcówka na wąż nr 42 - do przyspawania 42S, gwintowana 42G

| Wymiar | D | d | L | L1 |
|---|---|---|---|---|
| 1/8" | 10.4 | 6.4 | 70 | 31 |
| 1/4" | 13.5 | 8.9 | 70 | 31 |
| 3/8" | 17.2 | 12.6 | 70 | 31 |
| 1/2" | 21.3 | 16.1 | 70 | 31 |
| 3/4" | 26.9 | 21.7 | 70 | 31 |
| 1" | 33.7 | 27.3 | 70 | 31 |
| 1 1/4" | 42.4 | 36.0 | 70 | 31 |
| 1 1/2" | 48.3 | 41.9 | 100 | 31 |
| 2" | 60.3 | 53.1 | 100 | 31 |
| 2 1/2" | 76.1 | 68.7 | 120 | 38 |
| 3" | 88.9 | 80.5 | 120 | 38 |
| 4" | 114.3 | 105.6 | 150 | 44 |

Dostępne w gatunkach: AISI 304, AISI 316
**Inne długości na zamówienie.**

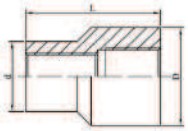




### Redukcja wewnętrzna (mufa redukcyjna) nr 18

| Wymiar | L | D | d |
|---|---|---|---|
| 1/4" x 1/8" | 25 | 18 | 15 |
| 3/8" x 1/4" | 30 | 22 | 18 |
| 1/2" x 1/4" | 34 | 30 | 20 |
| 1/2" x 3/8" | 34 | 30 | 25 |
| 3/4" x 3/8" | 36 | 35 | 25 |
| 3/4" x 1/2" | 36 | 35 | 30 |
| 1" x 3/8" | 44 | 40 | 25 |
| 1" x 1/2" | 44 | 40 | 30 |
| 1" x 3/4" | 44 | 40 | 35 |
| 1 1/4" x 1/2" | 50 | 50 | 30 |
| 1 1/4" x 3/4" | 50 | 50 | 35 |
| 1 1/4 "x1" | 50 | 50 | 40 |
| 1 1/2" x 3/4" | 52 | 55 | 35 |
| 1 1/2" x1" | 52 | 55 | 40 |
| 1 1/2" x1 1/4" | 52 | 55 | 50 |
| 2"x1" | 58 | 70 | 40 |
| 2" x1 1/4" | 58 | 70 | 50 |
| 2" x1 1/2 " | 58 | 70 | 60 |
| 2 1/2' 'x 1 1/4" | 65 | 85 | 50 |
| 2 1/2 "x1 1/2" | 65 | 85 | 60 |
| 2 1/2" x 2" | 65 | 85 | 70 |
| 3" x 2" | 70 | 100 | 70 |

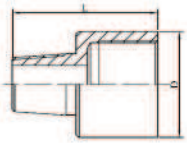
Dostępne w gatunkach: AISI 316




### Redukcja wewnętrzno – zewnętrzna nr 37

| Wymiar | L | D |
|---|---|---|
| 1/4" x 1/8" | 28 | 18 |
| 3/8" x 1/4" | 30 | 22 |
| 1/2" x 1/4" | 32 | 30 |
| 1/2" x 3/8" | 32 | 30 |
| 3/4" x 3/8" | 35 | 35 |
| 3/4" x 1/2" | 37 | 35 |
| 1" x 3/8" | 40 | 40 |
| 1" x 1/2" | 42 | 40 |
| 1" x 3/4" | 45 | 40 |
| 1 1/4" x 1/2" | 48 | 50 |
| 1 1/4" x 3/4" | 48 | 50 |
| 1 1/4" x 1" | 50 | 50 |
| 1 1/2' x 3/4" | 50 | 55 |
| 1 1/2" x 1" | 52 | 55 |
| 1 1/2" x 1 1/4" | 54 | 55 |
| 2" x 1" | 56 | 70 |
| 2" x 1 1/4" | 56 | 70 |
| 2" x 1 1/2" | 58 | 70 |
| 2 1/2" x 1 1/4" | 60 | 85 |
| 2 1/2" x 1 1/2" | 60 | 85 |
| 2 1/2" x 2" | 65 | 85 |
| 3" x 2" | 68 | 100 |

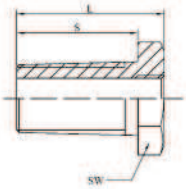
Dostępne w gatunkach: AISI 304, AISI 316
**Inne wymiary na zamówienie.**
**Możliwość kombinacji gwintów NPT/CALOWY**




### Redukcja zewnętrzno – wewnętrzna nr 17

| Wymiar | L | S | SW |
|---|---|---|---|
| 1/4" x 1/8" | 17 | 13 | 17 |
| 3/8" x 1/8" | 18 | 13 | 21 |
| 3/8" x 1/4" | 18 | 13 | 21 |
| 1/2" x 1/8" | 22 | 15 | 24 |
| 1/2" x 1/4" | 20 | 14 | 22 |
| 1/2" x 3/8" | 20 | 14 | 22 |
| 3/4" x 1/4" | 24 | 18 | 32 |
| 3/4" x 3/8" | 24 | 17 | 27 |
| 3/4" x 1/2" | 24 | 17 | 27 |
| 1" x 1/4" | 27 | 20 | 36 |
| 1" x 3/8" | 27 | 19 | 36 |
| 1" x 1/2" | 27 | 19 | 36 |
| 1" x 3/4" | 27 | 19 | 36 |
| 1 1/4' x 3/8" | 31 | 22 | 46 |
| 1 1/4" x 1/2" | 31 | 22 | 46 |
| 1 1/4' x 3/4" | 31 | 22 | 46 |
| 1 1/4" x 1" | 31 | 22 | 46 |
| 1 1/2" x 1/2" | 33 | 22 | 50 |
| 1 1/2" x 3/4" | 33 | 22 | 50 |
| 1 1/2" x 1" | 33 | 22 | 50 |
| 1 1/2" x 1 1/4" | 33 | 22 | 50 |
| 2" x 1" | 38 | 26 | 65 |
| 2" x1 1/4" | 38 | 26 | 65 |
| 2" x1 1/2" | 38 | 26 | 65 |
| 2 1/2" x 1 1/4" | 43 | 30 | 80 |
| 2 1/2" x 1 1/2" | 43 | 30 | 80 |
| 2 1/2" x 2" | 43 | 30 | 80 |
| 3" x1 1/2" | 48 | 35 | 90 |
| 3" x 2" | 48 | 35 | 90 |
| 3" x 2 1/2" | 48 | 35 | 90 |

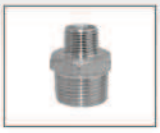
Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.

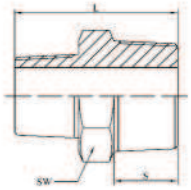



### Nypel redukcyjny nr 19

| Wymiar | L | S | SW |
|---|---|---|---|
| 1/4" x 1/8" | 25 | 10 | 14 |
| 3/8" x 1/8" | 29 | 11 | 19 |
| 3/8" x 1/4" | 30 | 11 | 19 |
| 1/2" x 1/8" | 33 | 14 | 22 |
| 1/2" x 1/4" | 33 | 14 | 22 |
| 1/2" x 3/8" | 33 | 14 | 22 |
| 3/4" x 1/4" | 36 | 16 | 27 |
| 3/4" x 3/8" | 37 | 16 | 27 |
| 3/4" x 1/2" | 40 | 16 | 27 |
| 1" x 1/4" | 39 | 18 | 36 |
| 1" x 3/8" | 40 | 18 | 36 |
| 1" x 1/2" | 43 | 18 | 36 |
| 1" x 3/4" | 45 | 18 | 36 |
| 1 1/4" x 1/2" | 47 | 21 | 46 |
| 1 1/4" x 3/4" | 48 | 21 | 46 |
| 1 1/4" x 1" | 50 | 21 | 46 |
| 1 1/2" x 1/2" | 50 | 21 | 50 |
| 1 1/2" x 3/4" | 52 | 21 | 50 |
| 1 1/2" x 1" | 54 | 21 | 50 |
| 1 1/2" x 1 1/4" | 55 | 21 | 50 |
| 2" x 1" | 58 | 26 | 65 |
| 2" x1 1/4" | 60 | 26 | 65 |
| 2" x 1 1/2" | 60 | 26 | 65 |
| 2 1/2" x 1 1/4" | 65 | 30 | 80 |
| 2 1/2" x 1 1/2" | 65 | 30 | 80 |
| 2 1/2" x 2" | 69 | 30 | 80 |
| 3" x 1 1/2" | 73 | 35 | 90 |
| 3" x 2" | 74 | 35 | 90 |
| 3" x 2 1/2" | 84 | 35 | 90 |

Dostępne w gatunkach: AISI 316
SW – Szerokość w poprzek sześciokątu.

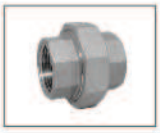


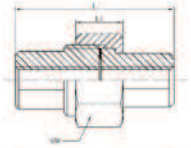


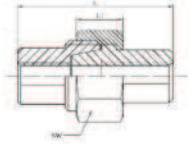

### Śrubunek z gwintem wewnętrznym nr 14/15

| Wymiar | L | L1 | SW |
|---|---|---|---|
| 1/4" | 43 | 15 | 27 |
| 3/8" | 48 | 16 | 32 |
| 1/2" | 55 | 18 | 41 |
| 3/4" | 65 | 20 | 50 |
| 1" | 66 | 22 | 55 |
| 1 1/4" | 73 | 24 | 70 |
| 1 1/2" | 77 | 25 | 75 |
| 2" | 87 | 27 | 90 |
| 2 1/2" | 93 | 30 | 110 |
| 3" | 105 | 31 | 130 |
| 4" | 113 | 34 | 155 |

Dostępne w gatunkach: AISI 316
Nr 14 – uszczelnienie płaskie
Nr 15 – uszczelnienie stożkowe
SW – Szerokość w poprzek sześciokątu.



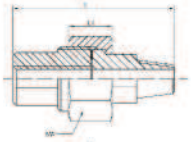


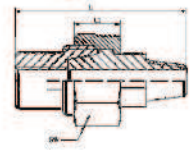


### Śrubunek z gwintem wew/zew nr 26/27

| Wymiar | L | L1 | SW |
|---|---|---|---|
| 1/4" | 50 | 15 | 27 |
| 3/8" | 55 | 16 | 32 |
| 1/2" | 63 | 18 | 41 |
| 3/4" | 71 | 20 | 50 |
| 1" | 78 | 22 | 55 |
| 1 1/4" | 94 | 24 | 70 |
| 1 1/2" | 102 | 25 | 75 |
| 2" | 107 | 27 | 90 |
| 2 1/2" | 110 | 30 | 110 |
| 3" | 122 | 31 | 130 |
| 4" | 135 | 34 | 155 |

Dostępne w gatunkach: AISI 316
Nr 26 – uszczelnienie płaskie
Nr 27 – uszczelnienie stożkowe
SW – Szerokość w poprzek sześciokątu.







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