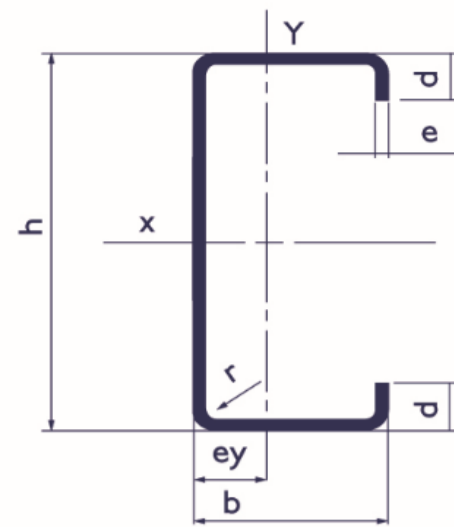


PERFIL C

MEDIDAS Y CARACTERÍSTICAS GEOMÉTRICAS

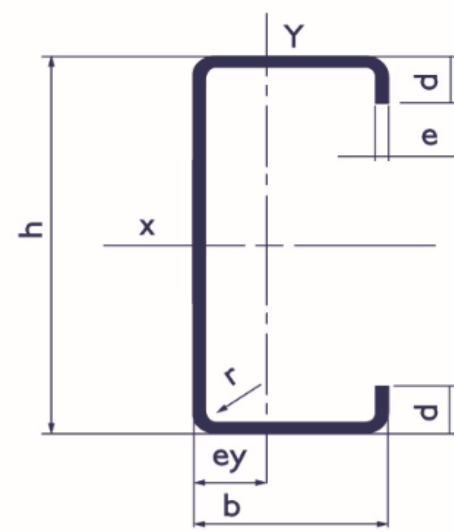


COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

| Designación del Perfil | Altura (alma) | Ala (rama) | Ala Rig. (rigidizador) | Espesor | Radio de Acuerdo | Área nominal de la sección | Masa Nominal | Distancias al Centro de Gravedad (1) | Momentos de Inercia (1) | | Módulos Resistente (1) | | Radios de Giro (1) | | | | |
|------------------------|---------------|------------|------------------------|---------|------------------|----------------------------|--------------|--------------------------------------|-------------------------|-------|------------------------|-----------------|--------------------|-----------------|-----------------|----|----|
| | h | b | d | | | | | | S | G | ey | Ix | Iy | Wx | Wy | ix | iy |
| | mm | mm | mm | | | | | | Cm ² | Kg/m | Cm | Cm ⁴ | Cm ⁴ | Cm ³ | Cm ³ | Cm | Cm |
| (#) 80x40x15 x 1.60 | 80 | 40 | 15 | 1.60 | 1.60 | 2.87 | 2.25 | 1.31 | 29.03 | 6.73 | 7.26 | 2.66 | 3.18 | 1.53 | | | |
| 80x40x15 x 1.80 | 80 | 40 | 15 | 1.80 | 1.80 | 3.20 | 2.51 | 1.46 | 32.20 | 7.43 | 8.05 | 2.93 | 3.16 | 1.52 | | | |
| (#) 80x40x15 x 2.00 | 80 | 40 | 15 | 2.00 | 2.00 | 3.54 | 2.78 | 1.26 | 35.25 | 8.07 | 8.81 | 3.18 | 3.16 | 1.51 | | | |
| (#) 80x50x15 x 1.60 | 80 | 50 | 15 | 1.60 | 1.60 | 3.19 | 2.51 | 1.73 | 33.95 | 11.46 | 8.49 | 3.69 | 3.26 | 1.89 | | | |
| (#) 80x50x15 x 2.00 | 80 | 50 | 15 | 2.00 | 2.00 | 3.94 | 3.09 | 1.69 | 41.33 | 13.82 | 10.33 | 4.44 | 3.24 | 1.87 | | | |
| (#) 80x50x20 x 1.60 | 80 | 50 | 20 | 1.60 | 1.60 | 3.35 | 2.63 | 1.88 | 34.76 | 12.85 | 8.69 | 4.34 | 3.22 | 1.96 | | | |
| (#) 80x50x20 x 2.00 | 80 | 50 | 20 | 2.00 | 2.00 | 4.14 | 3.25 | 1.84 | 42.35 | 15.54 | 10.59 | 5.24 | 3.20 | 1.94 | | | |
| 100x40x15 x 1.60 | 100 | 40 | 15 | 1.60 | 1.60 | 3.19 | 2.57 | 1.33 | 48.95 | 7.29 | 9.79 | 2.73 | 3.92 | 1.51 | | | |
| 100x40x15 x 2.00 | 100 | 40 | 15 | 2.00 | 2.00 | 3.94 | 3.15 | 1.32 | 59.62 | 8.74 | 11.92 | 3.27 | 3.89 | 1.49 | | | |
| 100x45x10 x 1.60 | 100 | 45 | 10 | 1.60 | 1.60 | 3.19 | 2.50 | 1.38 | 50.59 | 8.25 | 10.12 | 2.64 | 3.98 | 1.61 | | | |
| 100x45x10 x 2.00 | 100 | 45 | 10 | 2.00 | 2.00 | 3.94 | 3.08 | 1.37 | 61.64 | 9.89 | 12.33 | 3.16 | 3.96 | 1.59 | | | |
| 100x45x15 x 1.60 | 100 | 45 | 15 | 1.60 | 1.60 | 3.35 | 2.62 | 1.53 | 52.84 | 9.66 | 10.57 | 3.25 | 3.97 | 1.70 | | | |
| 100x45x15 x 2.00 | 100 | 45 | 15 | 2.00 | 2.00 | 4.14 | 3.24 | 1.52 | 64.46 | 11.63 | 12.89 | 3.91 | 3.95 | 1.68 | | | |
| (#) 100x50x15 x 1.60 | 100 | 50 | 15 | 1.60 | 1.60 | 3.51 | 2.76 | 1.57 | 56.70 | 12.41 | 11.34 | 3.79 | 4.02 | 1.88 | | | |
| 100x50x15 x 1.80 | 100 | 50 | 15 | 1.80 | 1.80 | 3.93 | 3.09 | 1.73 | 63.00 | 13.74 | 12.60 | 4.20 | 4.00 | 1.87 | | | |
| (#) 100x50x15 x 2.00 | 100 | 50 | 15 | 2.00 | 2.00 | 4.34 | 3.40 | 1.53 | 69.23 | 14.98 | 13.85 | 4.57 | 4.00 | 1.86 | | | |
| (#) 100x50x15 x 2.50 | 100 | 50 | 15 | 2.50 | 2.50 | 5.34 | 4.19 | 1.47 | 83.99 | 17.90 | 16.80 | 5.46 | 3.97 | 1.83 | | | |
| (#) 100x50x20 x 1.60 | 100 | 50 | 20 | 1.60 | 1.60 | 3.67 | 2.88 | 1.71 | 58.39 | 13.97 | 11.68 | 4.46 | 3.99 | 1.95 | | | |
| (#) 100x50x20 x 2.00 | 100 | 50 | 20 | 2.00 | 2.00 | 4.54 | 3.56 | 1.67 | 71.35 | 16.91 | 14.27 | 5.39 | 3.97 | 1.93 | | | |
| (#) 100x50x20 x 2.50 | 100 | 50 | 20 | 2.50 | 2.50 | 5.59 | 4.39 | 1.61 | 86.64 | 20.28 | 17.33 | 6.46 | 3.94 | 1.90 | | | |
| (#) 120x50x15 x 1.60 | 120 | 50 | 15 | 1.60 | 1.60 | 3.83 | 3.01 | 1.43 | 86.48 | 13.21 | 14.41 | 3.87 | 4.75 | 1.86 | | | |
| 120x50x15 x 1.80 | 120 | 50 | 15 | 1.80 | 1.80 | 4.30 | 3.38 | 1.39 | 94.83 | 16.27 | 15.81 | 4.51 | 4.69 | 1.94 | | | |
| (#) 120x50x15 x 2.00 | 120 | 50 | 15 | 2.00 | 2.00 | 4.74 | 3.72 | 1.39 | 105.80 | 15.95 | 17.63 | 4.67 | 4.73 | 1.83 | | | |
| 120x50x15 x 2.50 | 120 | 50 | 15 | 2.50 | 2.50 | 5.84 | 4.58 | 1.59 | 128.78 | 19.11 | 21.46 | 5.60 | 4.70 | 1.80 | | | |
| 120x50x15 x 3,20 | 120 | 50 | 15 | 3.20 | 3.20 | 7.33 | 5.75 | 1.24 | 147.57 | 22.88 | 24.59 | 6.09 | 4.49 | 1.77 | | | |
| (#) 120x50x20 x 1.60 | 120 | 50 | 20 | 1.60 | 1.60 | 3.99 | 3.13 | 1.56 | 89.37 | 14.91 | 14.89 | 4.55 | 4.73 | 1.93 | | | |
| (#) 120x50x20 x 2.00 | 120 | 50 | 20 | 2.00 | 2.00 | 4.94 | 3.88 | 1.52 | 109.42 | 18.05 | 18.24 | 5.51 | 4.71 | 1.91 | | | |
| (#) 120x50x20 x 2.50 | 120 | 50 | 20 | 2.50 | 2.50 | 6.09 | 4.78 | 1.47 | 133.22 | 21.66 | 22.20 | 6.60 | 4.68 | 1.89 | | | |
| (#) 120x50x20 x 3.20 | 120 | 50 | 20 | 3.20 | 3.20 | 7.65 | 6.00 | 1.40 | 164.23 | 26.15 | 27.37 | 7.96 | 4.63 | 1.85 | | | |
| 120x60x20 x 1,80 | 120 | 60 | 20 | 1.80 | 1.80 | 4.84 | 3.80 | 1.93 | 111.45 | 33.28 | 18.59 | 8.17 | 4.80 | 2.52 | | | |
| 120x60x20 x 2.00 | 120 | 60 | 20 | 2.00 | 2.00 | 5.34 | 4.19 | 1.91 | 121.86 | 36.08 | 20.31 | 8.83 | 4.78 | 2.60 | | | |
| 120x60x20 x 3,20 | 120 | 60 | 20 | 3.20 | 3.20 | 8.29 | 6.51 | 1.77 | 176.56 | 49.55 | 29.43 | 11.72 | 4.62 | 2.44 | | | |
| 140x50x15x 1.60 | 140 | 50 | 15 | 1.60 | 1.60 | 4.15 | 3.26 | 1.31 | 123.32 | 14.93 | 17.62 | 4.05 | 5.45 | 1.90 | | | |
| (#) 140x50x15x 2,00 | 140 | 50 | 15 | 2.00 | 2.00 | 5.14 | 4.03 | 1.27 | 151.85 | 16.76 | 21.69 | 4.75 | 5.44 | 1.81 | | | |
| 140x50x20 x 1.60 | 140 | 50 | 20 | 1.60 | 1.60 | 4.31 | 3.52 | 1.60 | 128.33 | 15.71 | 18.33 | 4.62 | 5.46 | 1.91 | | | |
| (#) 140x50x20 x 2.00 | 140 | 50 | 20 | 2.00 | 2.00 | 5.34 | 4.19 | 1.40 | 157.36 | 19.03 | 22.48 | 5.60 | 5.43 | 1.89 | | | |
| (#) 140x50x20 x 2.50 | 140 | 50 | 20 | 2.50 | 2.50 | 6.59 | 5.17 | 1.35 | 191.98 | 22.84 | 27.43 | 6.71 | 5.40 | 1.86 | | | |
| (#) 140x50x20 x 3.20 | 140 | 50 | 20 | 3.20 | 3.20 | 8.14 | 6.03 | 1.27 | 231.85 | 26.76 | 32.69 | 7.75 | 5.44 | 1.81 | | | |
| (#) 140x60x15 x 2.00 | 140 | 60 | 15 | 2.00 | 2.00 | 5.54 | 4.35 | 1.65 | 170.89 | 26.18 | 24.41 | 6.30 | 5.56 | 2.17 | | | |
| (#) 140x60x20 x 1.60 | 140 | 60 | 20 | 1.60 | 1.60 | 4.63 | 3.64 | 1.83 | 143.65 | 24.14 | 20.52 | 6.02 | 5.57 | 2.28 | | | |
| 140x60x20 x 1,80 | 140 | 60 | 20 | 1.80 | 1.80 | 5.20 | 4.09 | 1.80 | 159.64 | 33.28 | 22.81 | 7.92 | 5.54 | 2.53 | | | |
| (#) 140x60x20 x 2.00 | 140 | 60 | 20 | 2.00 | 2.00 | 5.74 | 4.50 | 1.79 | 176.41 | 29.35 | 25.20 | 7.32 | 5.55 | 2.26 | | | |
| (#) 140x60x20 x 2.50 | 140 | 60 | 20 | 2.50 | 2.50 | 7.09 | 5.56 | 1.74 | 215.62 | 35.41 | 30.80 | 8.82 | 5.52 | 2.23 | | | |
| (#) 140x60x20 x 3.20 | 140 | 60 | 20 | 3.20 | 3.20 | 8.93 | 7.01 | 1.66 | 267.31 | 43.08 | 38.19 | 10.72 | 5.47 | 2.20 | | | |
| 160x50x15 x 2,00 | 160 | 50 | 15 | 2.00 | 2.00 | 5.54 | 4.35 | 1.37 | 149.23 | 14.88 | 19.29 | 8.15 | 5.19 | 1.64 | | | |
| 160x50x20x 2,00 | 160 | 50 | 20 | 2.00 | 2.00 | 5.74 | 4.71 | 1.50 | 215.98 | 19.86 | 27.00 | 5.67 | 6.14 | 1.86 | | | |
| (#) 160x60x20 x 1.60 | 160 | 60 | 20 | 1.60 | 1.60 | 4.95 | 3.89 | 1.71 | 195.98 | 25.23 | 24.50 | 6.11 | 6.29 | 2.26 | | | |
| (#) 160x60x20 x 2.00 | 160 | 60 | 20 | 2.00 | 2.00 | 6.14 | 4.82 | 1.67 | 240.95 | 30.68 | 30.12 | 7.42 | 6.27 | 2.24 | | | |
| (#) 160x60x20 x 2.50 | 160 | 60 | 20 | 2.50 | 2.50 | 7.59 | 5.96 | 1.61 | 294.93 | 37.03 | 36.87 | 8.95 | 6.23 | 2.21 | | | |
| (#) 160x60x20 x 3.20 | 160 | 60 | 20 | 3.20 | 3.20 | 9.57 | 7.51 | 1.54 | 366.41 | 45.06 | 45.80 | 10.89 | 6.19 | 2.17 | | | |
| (#) 160x60x25 x 3.20 | 160 | 60 | 25 | 3.20 | 3.20 | 9.89 | 7.76 | 1.67 | 376.99 | 49.97 | 47.12 | 12.46 | 6.18 | 2.25 | | | |

PERFIL C

MEDIDAS Y CARACTERÍSTICAS GEOMÉTRICAS

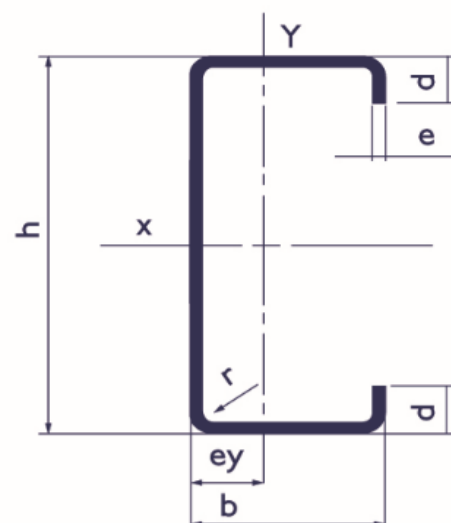


COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

| Designación del Perfil | Altura (alma) | Ala (rama) | Ala Rig. (rigidizador) | Espesor | Radio de Acuerdo | Area nominal de la sección | Masa Nominal | Distancias al Centro de Gravedad (1) | Momentos de Inercia (1) | | Módulos Resistente (1) | | Radios de Giro (1) | |
|------------------------|---------------|------------|------------------------|---------|------------------|----------------------------|--------------|--------------------------------------|-------------------------|-----------------|------------------------|-----------------|--------------------|----------------|
| | h | b | d | e | r | S | G | ey | I _x | I _y | W _x | W _y | i _x | i _y |
| | mm | mm | mm | mm | mm | Cm ² | Kg/m | Cm | Cm ⁴ | Cm ⁴ | Cm ³ | Cm ³ | Cm | Cm |
| 180x60x20 x 2.00 | 180 | 60 | 20 | 2.00 | 2.00 | 6.54 | 5.13 | 1.76 | 317.83 | 31.88 | 35.31 | 7.52 | 6.97 | 2.21 |
| 180x60x20 x 2.50 | 180 | 60 | 20 | 2.50 | 2.50 | 8.09 | 6.35 | 1.76 | 389.55 | 38.50 | 43.28 | 9.07 | 6.94 | 2.18 |
| 180x60x20 x 3.20 | 180 | 60 | 20 | 3.20 | 3.20 | 10.21 | 8.01 | 1.76 | 484.89 | 46.92 | 53.88 | 11.05 | 6.89 | 2.14 |
| (#) 180x70x20 x 2.00 | 180 | 70 | 20 | 2.00 | 2.00 | 6.94 | 5.45 | 1.93 | 349.45 | 46.13 | 38.83 | 9.47 | 7.10 | 2.58 |
| (#) 180x70x20 x 2.50 | 180 | 70 | 20 | 2.50 | 2.50 | 8.59 | 6.74 | 1.87 | 428.81 | 55.89 | 47.65 | 11.46 | 7.07 | 2.55 |
| (#) 180x70x20 x 3.20 | 180 | 70 | 20 | 3.20 | 3.20 | 10.85 | 8.51 | 1.80 | 534.65 | 68.42 | 59.41 | 14.02 | 7.02 | 2.51 |
| (#) 180x70x25 x 2.00 | 180 | 70 | 25 | 2.00 | 2.00 | 7.14 | 5.60 | 2.06 | 358.56 | 50.56 | 39.84 | 10.67 | 7.09 | 2.66 |
| (#) 180x70x25 x 2.50 | 180 | 70 | 25 | 2.50 | 2.50 | 8.84 | 6.94 | 2.01 | 440.20 | 61.37 | 48.91 | 12.95 | 7.06 | 2.64 |
| (#) 180x70x25 x 3.20 | 180 | 70 | 25 | 3.20 | 3.20 | 11.17 | 8.77 | 1.94 | 549.24 | 75.35 | 61.03 | 15.88 | 7.01 | 2.60 |
| 200x60x20 x 2.00 | 200 | 60 | 20 | 2.00 | 2.00 | 6.94 | 5.44 | 1.66 | 407.72 | 32.92 | 40.77 | 7.59 | 7.66 | 2.18 |
| 200x60x20 x 2.50 | 200 | 60 | 20 | 2.50 | 2.50 | 8.59 | 6.74 | 1.66 | 500.24 | 39.75 | 50.02 | 9.16 | 7.63 | 2.15 |
| 200x60x20 x 3.20 | 200 | 60 | 20 | 3.20 | 3.20 | 10.85 | 8.51 | 1.66 | 623.58 | 48.45 | 62.36 | 11.16 | 7.58 | 2.11 |
| (#) 200x70x25 x 2.00 | 200 | 70 | 25 | 2.00 | 2.00 | 7.54 | 5.92 | 1.95 | 458.87 | 52.33 | 45.89 | 10.78 | 7.80 | 2.63 |
| (#) 200x70x25 x 2.50 | 200 | 70 | 25 | 2.50 | 2.50 | 9.34 | 7.33 | 1.89 | 563.87 | 63.53 | 56.39 | 13.08 | 7.77 | 2.61 |
| (#) 200x70x25 x 3.20 | 200 | 70 | 25 | 3.20 | 3.20 | 11.81 | 9.27 | 1.82 | 704.48 | 78.01 | 70.45 | 16.06 | 7.72 | 2.57 |
| (#) 200x80x25 x 2.00 | 200 | 80 | 25 | 2.00 | 2.00 | 7.94 | 6.23 | 2.33 | 498.07 | 71.80 | 49.81 | 13.12 | 7.92 | 3.01 |
| (#) 200x80x25 x 2.50 | 200 | 80 | 25 | 2.50 | 2.50 | 9.84 | 7.72 | 2.27 | 612.63 | 87.41 | 61.26 | 15.96 | 7.89 | 2.98 |
| (#) 200x80x25 x 3.20 | 200 | 80 | 25 | 3.20 | 3.20 | 12.45 | 9.77 | 2.20 | 766.45 | 107.76 | 76.64 | 19.66 | 7.85 | 2.94 |
| 220x60x20 x 2.00 | 220 | 60 | 20 | 2.00 | 2.00 | 7.34 | 5.76 | 1.39 | 510.55 | 36.08 | 46.41 | 7.83 | 8.34 | 2.22 |
| 220x60x20 x 2.50 | 220 | 60 | 20 | 2.50 | 2.50 | 9.09 | 7.13 | 1.34 | 628.10 | 40.87 | 57.10 | 9.24 | 8.31 | 2.12 |
| 220x60x20 x 3.20 | 220 | 60 | 20 | 3.20 | 3.20 | 11.49 | 9.02 | 1.28 | 783.94 | 49.82 | 71.27 | 11.26 | 8.26 | 2.08 |
| 220x70x25 x 2.00 | 220 | 70 | 25 | 2.00 | 2.00 | 7.94 | 6.23 | 1.85 | 576.53 | 64.33 | 52.41 | 12.49 | 8.52 | 2.85 |
| 220x70x25 x 2.50 | 220 | 70 | 25 | 2.50 | 2.50 | 9.84 | 7.72 | 1.80 | 700.57 | 76.46 | 63.69 | 14.71 | 8.44 | 2.79 |
| 220x70x25 x 3.20 | 220 | 70 | 25 | 3.20 | 3.20 | 12.45 | 9.77 | 1.73 | 861.18 | 91.02 | 78.29 | 17.27 | 8.32 | 2.70 |
| (#) 220x80x25 x 2.00 | 220 | 80 | 25 | 2.00 | 2.00 | 8.34 | 6.54 | 2.21 | 621.77 | 74.04 | 56.52 | 13.24 | 8.64 | 2.98 |
| (#) 220x80x25 x 2.50 | 220 | 80 | 25 | 2.50 | 2.50 | 10.34 | 8.12 | 2.16 | 765.36 | 90.14 | 69.58 | 16.12 | 8.60 | 2.95 |
| (#) 220x80x25 x 3.20 | 220 | 80 | 25 | 3.20 | 3.20 | 13.09 | 10.27 | 2.08 | 958.53 | 111.14 | 87.14 | 19.86 | 8.56 | 2.91 |
| 220x90x25 x 2.00 | 220 | 90 | 25 | 2.00 | 2.00 | 8.74 | 6.86 | 2.58 | 676.33 | 130.42 | 61.48 | 20.31 | 8.80 | 3.86 |
| 220x90x25 x 2.50 | 220 | 90 | 25 | 2.50 | 2.50 | 10.84 | 8.51 | 2.52 | 824.75 | 156.35 | 74.98 | 24.14 | 8.72 | 3.80 |
| 220x90x25 x 3.20 | 220 | 90 | 25 | 3.20 | 3.20 | 13.73 | 10.78 | 2.44 | 1019.10 | 188.49 | 92.65 | 28.75 | 8.62 | 3.71 |
| (#) 240x80x20 x 2.00 | 240 | 80 | 20 | 2.00 | 2.00 | 8.54 | 6.70 | 1.97 | 743.13 | 69.66 | 61.93 | 11.95 | 9.33 | 2.86 |
| (#) 240x80x20 x 2.50 | 240 | 80 | 20 | 2.50 | 2.50 | 10.59 | 8.31 | 1.92 | 914.98 | 84.68 | 76.25 | 14.53 | 9.30 | 2.83 |
| (#) 240x80x20 x 3.20 | 240 | 80 | 20 | 3.20 | 3.20 | 13.41 | 10.52 | 1.85 | 1146.37 | 104.16 | 95.53 | 17.86 | 9.25 | 2.79 |
| 240x80x25 x 2.00 | 240 | 80 | 25 | 2.00 | 2.00 | 8.74 | 6.86 | 2.11 | 768.72 | 93.66 | 64.06 | 15.89 | 9.38 | 3.27 |
| 240x80x25 x 2.50 | 240 | 80 | 25 | 2.50 | 2.50 | 10.84 | 8.51 | 2.06 | 936.78 | 111.84 | 78.06 | 18.81 | 9.30 | 3.21 |
| 240x80x25 x 3.20 | 240 | 80 | 25 | 3.20 | 3.20 | 13.73 | 10.78 | 1.98 | 1156.34 | 134.07 | 96.36 | 22.28 | 9.18 | 3.12 |
| 240x90x25 x 2.00 | 240 | 90 | 25 | 2.00 | 2.00 | 9.14 | 7.17 | 2.46 | 819.49 | 130.42 | 69.02 | 19.96 | 9.52 | 3.78 |
| 240x90x25 x 2.50 | 240 | 90 | 25 | 2.50 | 2.50 | 11.34 | 8.90 | 2.41 | 1010.81 | 156.35 | 84.23 | 23.73 | 9.44 | 3.71 |
| 240x90x25 x 3.20 | 240 | 90 | 25 | 3.20 | 3.20 | 14.37 | 11.28 | 2.33 | 1250.55 | 188.49 | 104.21 | 28.28 | 9.33 | 3.62 |
| 240x90x30 x 2.50 | 240 | 90 | 30 | 2.50 | 2.50 | 11.59 | 9.10 | 2.55 | 1033.27 | 173.30 | 86.11 | 26.86 | 9.44 | 3.87 |
| 240x90x30 x 3.20 | 240 | 90 | 30 | 3.20 | 3.20 | 14.69 | 11.53 | 2.47 | 1279.30 | 209.82 | 106.61 | 32.15 | 9.33 | 3.78 |
| 240x100x25 x 2.00 | 240 | 100 | 25 | 2.00 | 2.00 | 9.54 | 7.49 | 2.84 | 887.68 | 175.42 | 73.97 | 24.48 | 9.65 | 4.29 |
| 240x100x25 x 2.50 | 240 | 100 | 25 | 2.50 | 2.50 | 11.84 | 9.29 | 2.78 | 1084.84 | 210.98 | 90.40 | 29.22 | 9.57 | 4.22 |
| 240x100x25 x 3.20 | 240 | 100 | 25 | 3.20 | 3.20 | 15.01 | 11.78 | 2.70 | 1344.75 | 255.55 | 112.06 | 35.00 | 9.47 | 4.13 |
| (#) 260x80x20 x 2.00 | 260 | 80 | 20 | 2.00 | 2.00 | 8.94 | 7.02 | 1.88 | 896.88 | 71.30 | 68.99 | 12.04 | 10.02 | 2.82 |
| (#) 260x80x20 x 2.50 | 260 | 80 | 20 | 2.50 | 2.50 | 11.09 | 8.70 | 1.83 | 1104.94 | 86.68 | 85.00 | 14.64 | 9.98 | 2.80 |
| (#) 260x80x20 x 3.20 | 260 | 80 | 20 | 3.20 | 3.20 | 14.05 | 11.03 | 1.76 | 1385.52 | 106.62 | 106.58 | 18.00 | 9.93 | 2.76 |
| 260x90x25 x 2.00 | 260 | 90 | 25 | 2.00 | 2.00 | 9.54 | 7.49 | 2.36 | 998.80 | 130.42 | 76.83 | 19.65 | 10.23 | 3.70 |
| 260x90x25 x 2.50 | 260 | 90 | 25 | 2.50 | 2.50 | 11.84 | 9.29 | 2.31 | 1219.98 | 156.35 | 93.84 | 23.37 | 10.15 | 3.63 |
| 260x90x25 x 3.20 | 260 | 90 | 25 | 3.20 | 3.20 | 15.01 | 11.78 | 2.24 | 1511.01 | 188.49 | 116.23 | 27.86 | 10.03 | 3.54 |
| 260x100x25 x 2.00 | 260 | 100 | 25 | 2.00 | 2.00 | 9.94 | 7.80 | 2.72 | 1068.70 | 175.42 | 82.21 | 24.10 | 10.37 | 4.20 |
| 260x100x25 x 2.50 | 260 | 100 | 25 | 2.50 | 2.50 | 12.34 | 9.69 | 2.67 | 1307.01 | 210.98 | 100.54 | 28.77 | 10.29 | 4.13 |
| 260x100x25 x 3.20 | 260 | 100 | 25 | 3.20 | 3.20 | 15.65 | 12.29 | 2.59 | 1621.80 | 255.55 | 124.75 | 34.48 | 10.18 | 4.04 |
| 260x100x30 x 2.50 | 260 | 100 | 30 | 2.50 | 2.50 | 12.59 | 9.88 | 2.81 | 1334.59 | 232.31 | 102.66 | 32.30 | 10.30 | 4.30 |
| 260x100x30 x 3.20 | 260 | 100 | 30 | 3.20 | 3.20 | 15.97 | 13.06 | 3.06 | 1667.16 | 216.97 | 128.24 | 31.26 | 10.22 | 3.69 |

PERFIL C

MEDIDAS Y CARACTERÍSTICAS GEOMÉTRICAS



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

| Designación del Perfil | Altura (alma) | Ala (rama) | Ala Rig. (rigidizador) | Espesor | Radio de Acuerdo | Area nominal de la sección | Masa Nominal | Distancias al Centro de Gravedad (1) | Momentos de Inercia (1) | | Módulos Resistente (1) | | Radios de Giro (1) | |
|------------------------|---------------|------------|------------------------|---------|------------------|----------------------------|--------------|--------------------------------------|-------------------------|-----------------|------------------------|-----------------|--------------------|----------------|
| | h | b | d | e | r | S | G | ey | I _x | I _y | W _x | W _y | i _x | i _y |
| | mm | mm | mm | mm | mm | Cm ² | Kg/m | Cm | Cm ⁴ | Cm ⁴ | Cm ³ | Cm ³ | Cm | Cm |
| 280x80x20 x 2.00 | 280 | 80 | 20 | 2.00 | 2.00 | 9.34 | 7.33 | 1.80 | 1078.84 | 83.05 | 7.06 | 13.40 | 10.75 | 2.98 |
| 280x80x20 x 2.50 | 280 | 80 | 20 | 2.50 | 2.50 | 11.59 | 9.10 | 1.76 | 1315.99 | 98.76 | 9.00 | 15.82 | 10.66 | 2.92 |
| 280x80x20 x 3.20 | 280 | 80 | 20 | 3.20 | 3.20 | 14.69 | 11.53 | 1.69 | 1626.71 | 117.66 | 116.19 | 18.64 | 10.52 | 2.83 |
| 280x90x25 x 2.00 | 280 | 90 | 25 | 2.00 | 2.00 | 9.94 | 7.80 | 2.27 | 1188.99 | 130.42 | 84.93 | 19.37 | 10.94 | 3.62 |
| 280x90x25 x 2.50 | 280 | 90 | 25 | 2.50 | 2.50 | 12.34 | 9.69 | 2.22 | 1453.31 | 156.35 | 103.81 | 23.05 | 10.85 | 3.56 |
| 280x90x25 x 3.20 | 280 | 90 | 25 | 3.20 | 3.20 | 15.65 | 12.29 | 2.14 | 1801.83 | 188.49 | 128.70 | 27.49 | 10.73 | 3.47 |
| 280x100x25 x 2.00 | 280 | 100 | 25 | 2.00 | 2.00 | 10.34 | 8.12 | 2.62 | 1270.14 | 175.42 | 90.72 | 23.76 | 11.08 | 4.12 |
| 280x100x25 x 2.50 | 280 | 100 | 25 | 2.50 | 2.50 | 12.84 | 10.08 | 2.56 | 1554.38 | 210.98 | 111.03 | 28.37 | 11.00 | 4.05 |
| 280x100x25 x 3.20 | 280 | 100 | 25 | 3.20 | 3.20 | 16.29 | 12.79 | 2.49 | 1930.54 | 255.55 | 137.90 | 34.02 | 10.89 | 3.96 |
| (#) 300x80x20 x 2.00 | 300 | 80 | 20 | 2.00 | 2.00 | 9.74 | 7.64 | 1.72 | 1258.80 | 74.18 | 83.92 | 12.20 | 11.37 | 2.76 |
| (#) 300x80x20 x 2.50 | 300 | 80 | 20 | 2.50 | 2.50 | 12.09 | 9.49 | 1.67 | 1552.38 | 90.18 | 103.49 | 14.82 | 11.33 | 2.73 |
| (#) 300x80x20 x 3.20 | 300 | 80 | 20 | 3.20 | 3.20 | 15.33 | 12.03 | 1.60 | 1949.38 | 110.92 | 129.96 | 18.23 | 11.28 | 2.69 |
| 300x80x30 x 3.20 | 300 | 80 | 30 | 3.20 | 3.20 | 15.97 | 13.06 | 2.15 | 2049.43 | 132.48 | 136.63 | 22.66 | 11.33 | 2.88 |
| 300x90x25 x 2.00 | 300 | 90 | 25 | 2.00 | 2.00 | 10.34 | 8.12 | 2.18 | 1399.60 | 130.42 | 93.31 | 19.12 | 11.63 | 3.55 |
| 300x90x25 x 2.50 | 300 | 90 | 25 | 2.50 | 2.50 | 12.84 | 10.08 | 2.13 | 1711.85 | 156.35 | 114.12 | 22.76 | 11.55 | 3.49 |
| 300x90x25 x 3.20 | 300 | 90 | 25 | 3.20 | 3.20 | 16.29 | 12.79 | 2.06 | 2124.35 | 188.49 | 141.62 | 27.16 | 11.42 | 3.40 |
| 300x90x30 x 2.50 | 300 | 90 | 30 | 2.50 | 2.50 | 13.09 | 10.60 | 2.49 | 1741.18 | 141.97 | 116.08 | 21.82 | 11.53 | 3.29 |
| 300x90x30 x 3.20 | 300 | 90 | 30 | 3.20 | 3.20 | 16.61 | 13.56 | 2.49 | 2190.38 | 175.95 | 146.03 | 27.04 | 11.48 | 3.26 |
| 300x100x25 x 2.00 | 300 | 100 | 25 | 2.00 | 2.00 | 10.74 | 8.43 | 2.52 | 1492.84 | 175.42 | 99.52 | 23.45 | 11.79 | 4.04 |
| 300x100x25 x 2.50 | 300 | 100 | 25 | 2.50 | 2.50 | 13.34 | 10.47 | 2.47 | 1828.02 | 210.98 | 121.87 | 28.01 | 11.71 | 3.98 |
| 300x100x25 x 3.20 | 300 | 100 | 25 | 3.20 | 3.20 | 16.93 | 13.29 | 2.39 | 2272.34 | 255.55 | 151.49 | 33.59 | 11.59 | 3.89 |
| 300x100x30 x 2.00 | 300 | 100 | 30 | 2.00 | 2.00 | 10.94 | 8.59 | 2.65 | 1524.36 | 192.67 | 101.62 | 26.22 | 11.80 | 4.20 |
| 300x100x30 x 3.20 | 300 | 100 | 30 | 3.20 | 3.20 | 17.25 | 13.54 | 2.53 | 2322.77 | 382.44 | 154.85 | 37.80 | 11.60 | 4.05 |
| (#) 320x80x20 x 2.00 | 320 | 80 | 20 | 2.00 | 2.00 | 10.14 | 7.96 | 1.65 | 1468.57 | 75.45 | 91.79 | 12.26 | 12.04 | 2.73 |
| (#) 320x80x20 x 2.50 | 320 | 80 | 20 | 2.50 | 2.50 | 12.59 | 9.88 | 1.60 | 1811.86 | 91.72 | 113.24 | 14.90 | 12.00 | 2.70 |
| (#) 320x80x20 x 3.20 | 320 | 80 | 20 | 3.20 | 3.20 | 15.97 | 12.53 | 1.53 | 2276.65 | 112.81 | 142.29 | 18.33 | 11.94 | 2.66 |
| 320x90x25 x 2.00 | 320 | 90 | 25 | 2.00 | 2.00 | 10.74 | 8.43 | 2.10 | 1631.47 | 130.42 | 101.97 | 18.89 | 12.32 | 3.48 |
| 320x90x25 x 2.50 | 320 | 90 | 25 | 2.50 | 2.50 | 13.34 | 10.47 | 2.05 | 1996.66 | 156.35 | 124.79 | 22.50 | 12.23 | 3.42 |
| 320x90x25 x 3.20 | 320 | 90 | 25 | 3.20 | 3.20 | 16.93 | 13.29 | 1.98 | 2479.93 | 188.49 | 155.00 | 26.86 | 12.10 | 3.34 |
| 320x100x25 x 2.00 | 320 | 100 | 25 | 2.00 | 2.00 | 11.14 | 8.74 | 2.43 | 1737.65 | 175.42 | 108.60 | 23.17 | 12.49 | 3.97 |
| 320x100x25 x 2.50 | 320 | 100 | 25 | 2.50 | 2.50 | 13.84 | 10.86 | 2.38 | 2128.97 | 210.98 | 133.06 | 27.68 | 12.40 | 3.90 |
| 320x100x25 x 3.20 | 320 | 100 | 25 | 3.20 | 3.20 | 17.57 | 13.79 | 2.31 | 2648.54 | 255.55 | 165.53 | 33.21 | 12.28 | 3.81 |
| 340x90x25 x 2.00 | 340 | 90 | 25 | 2.00 | 2.00 | 11.14 | 8.74 | 2.02 | 1885.44 | 130.42 | 110.91 | 18.69 | 13.01 | 3.42 |
| 340x90x25 x 2.50 | 340 | 90 | 25 | 2.50 | 2.50 | 13.84 | 10.86 | 1.98 | 2308.78 | 156.35 | 135.81 | 22.26 | 12.92 | 3.36 |
| 340x90x25 x 3.20 | 340 | 90 | 25 | 3.20 | 3.20 | 17.57 | 13.79 | 1.91 | 2869.90 | 188.49 | 168.82 | 26.58 | 12.78 | 3.28 |
| 340x100x25 x 2.00 | 340 | 100 | 25 | 2.00 | 2.00 | 11.54 | 9.06 | 2.34 | 2005.39 | 175.42 | 117.96 | 22.91 | 13.18 | 3.90 |
| 340x100x25 x 2.50 | 340 | 100 | 25 | 2.50 | 2.50 | 14.34 | 11.26 | 2.29 | 2458.28 | 210.98 | 144.60 | 27.38 | 13.09 | 3.84 |
| 340x100x25 x 3.20 | 340 | 100 | 25 | 3.20 | 3.20 | 18.21 | 14.29 | 2.22 | 3060.47 | 255.55 | 180.03 | 32.87 | 12.96 | 3.75 |
| 340x80x20 x 2.00 | 340 | 80 | 20 | 2.00 | 2.00 | 10.54 | 8.27 | 1.60 | 1719.79 | 83.05 | 101.16 | 12.97 | 12.77 | 2.81 |
| 340x80x20 x 2.50 | 340 | 80 | 20 | 2.50 | 2.50 | 13.09 | 10.28 | 1.55 | 2102.16 | 98.76 | 123.66 | 15.32 | 12.67 | 2.75 |
| 340x80x20 x 3.20 | 340 | 80 | 20 | 3.20 | 3.20 | 16.61 | 13.04 | 1.49 | 2606.22 | 117.66 | 153.31 | 18.08 | 12.53 | 2.66 |
| 340x90x25 x 2.00 | 340 | 90 | 25 | 2.00 | 2.00 | 11.14 | 8.74 | 2.02 | 1885.44 | 130.42 | 110.91 | 18.69 | 13.01 | 3.42 |
| 340x90x25 x 2.50 | 340 | 90 | 25 | 2.50 | 2.50 | 13.84 | 10.86 | 1.98 | 2308.78 | 156.35 | 135.81 | 22.26 | 12.92 | 3.36 |
| 340x90x25 x 3.20 | 340 | 90 | 25 | 3.20 | 3.20 | 17.57 | 13.79 | 1.91 | 2869.90 | 188.49 | 168.82 | 26.58 | 12.78 | 3.28 |
| 350x100x25 x 2.00 | 350 | 100 | 25 | 2.00 | 2.00 | 11.74 | 9.22 | 2.52 | 2148.13 | 175.42 | 122.75 | 22.79 | 13.53 | 3.87 |
| 350x100x25 x 2.50 | 350 | 100 | 25 | 2.50 | 2.50 | 14.59 | 11.45 | 2.47 | 2633.90 | 210.98 | 150.51 | 27.24 | 13.44 | 3.80 |
| 350x100x25 x 3.20 | 350 | 100 | 25 | 3.20 | 3.20 | 18.53 | 14.51 | 2.39 | 3287.00 | 220.70 | 187.83 | 29.00 | 13.32 | 3.45 |

Largo Máximo de Barra: 13 metros

Largo Mínimo de Barra: 4 o 6 metros (Consultar)

Troquelado: corte parcial a partir de 2.000 mm

Tolerancia en el largo -0 / +30 mm. Para largos especiales consultar por tolerancia restringida.

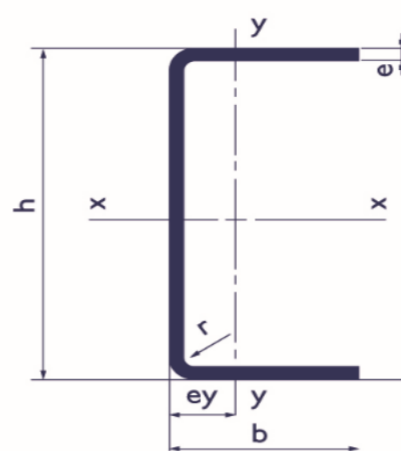
(1) Los valores indicados son a título informativo

(#) Perfiles normalizados según Norma IRAM IAS U 500-206 - 1 y 3 Calidades de Acero F24/F26

Medidas que no figuran en esta tabla consultar factibilidad de fabricación.

PERFIL U

MEDIDAS Y CARACTERÍSTICAS GEOMÉTRICAS



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

| Designación del Perfil | Altura (alma) | Ala (rama) | Espesor | Radio de Acuerdo | Area nominal de la Sección | Masa Nominal | Distancias al centro de gravedad (1) | Momentos de Inercia (1) | | Módulos Resistente (1) | | Radios de Giro (1) | |
|------------------------|---------------|------------|---------|------------------|----------------------------|--------------|--------------------------------------|-------------------------|-----------------|------------------------|-----------------|--------------------|----------------|
| | h | b | e | r | S | G | ey | I _x | I _y | W _x | W _y | i _x | i _y |
| | mm | mm | mm | mm | Cm ² | Kg/m | Cm | Cm ⁴ | Cm ⁴ | Cm ³ | Cm ³ | Cm | Cm |
| (#) 100x50 x 2.00 | 100 | 50 | 2.00 | 2.00 | 3.87 | 3.04 | 1.14 | 61.48 | 9.72 | 12.30 | 2.66 | 3.99 | 1.59 |
| (#) 120x50 x 1.60 | 120 | 50 | 1.60 | 1.60 | 3.44 | 2.70 | 1.05 | 76.14 | 8.33 | 12.69 | 2.20 | 4.71 | 1.56 |
| (#) 120x50 x 2.00 | 120 | 50 | 2.00 | 2.00 | 4.27 | 3.35 | 1.03 | 93.79 | 10.28 | 15.63 | 2.72 | 4.69 | 1.55 |
| (#) 120x50 x 2.50 | 120 | 50 | 2.50 | 2.50 | 5.29 | 4.16 | 1.00 | 115.09 | 12.63 | 19.18 | 3.37 | 4.66 | 1.54 |
| (#) 120x50 x 3.20 | 120 | 50 | 3.20 | 3.20 | 6.70 | 5.26 | 0.96 | 143.51 | 15.78 | 23.92 | 4.24 | 4.63 | 1.53 |
| (#) 140x50 x 2.00 | 140 | 50 | 2.00 | 2.00 | 4.67 | 3.66 | 0.93 | 134.63 | 10.74 | 19.23 | 2.78 | 5.37 | 1.52 |
| (#) 140x50 x 2.50 | 140 | 50 | 2.50 | 2.50 | 5.79 | 4.55 | 0.90 | 165.49 | 13.21 | 23.64 | 3.43 | 5.34 | 1.51 |
| (#) 140x50 x 3.20 | 140 | 50 | 3.20 | 3.20 | 7.34 | 5.76 | 0.86 | 206.87 | 16.52 | 29.55 | 4.33 | 5.31 | 1.50 |
| (#) 140x60 x 2.00 | 140 | 60 | 2.00 | 2.00 | 5.07 | 3.98 | 1.27 | 153.67 | 17.81 | 21.95 | 3.94 | 5.51 | 1.87 |
| (#) 140x60 x 2.50 | 140 | 60 | 2.50 | 2.50 | 6.29 | 4.94 | 1.25 | 189.12 | 21.95 | 27.02 | 4.88 | 5.48 | 1.87 |
| (#) 140x60 x 3.20 | 140 | 60 | 3.20 | 3.20 | 7.98 | 6.27 | 1.21 | 236.82 | 27.54 | 33.83 | 6.16 | 5.45 | 1.86 |
| (#) 140x70 x 3.20 | 140 | 70 | 3.20 | 3.20 | 8.62 | 6.77 | 1.58 | 266.76 | 42.24 | 38.11 | 8.28 | 5.56 | 2.21 |
| (#) 140x75 x 2.50 | 140 | 75 | 2.50 | 2.50 | 7.04 | 5.52 | 1.74 | 218.43 | 44.93 | 31.20 | 7.80 | 5.57 | 2.53 |
| (#) 160x50 x 2.00 | 160 | 50 | 2.00 | 2.00 | 5.07 | 3.98 | 0.85 | 184.80 | 11.13 | 23.10 | 2.82 | 6.04 | 1.48 |
| (#) 160x50 x 2.50 | 160 | 50 | 2.50 | 2.50 | 6.29 | 4.94 | 0.82 | 227.48 | 13.69 | 28.44 | 3.48 | 6.01 | 1.47 |
| (#) 160x50 x 3.20 | 160 | 50 | 3.20 | 3.20 | 7.98 | 6.27 | 0.78 | 284.92 | 17.13 | 35.61 | 4.39 | 5.97 | 1.46 |
| (#) 160x60 x 2.00 | 160 | 60 | 2.00 | 2.00 | 5.47 | 4.29 | 1.17 | 209.77 | 18.51 | 26.22 | 4.00 | 6.19 | 1.84 |
| (#) 160x60 x 2.50 | 160 | 60 | 2.50 | 2.50 | 6.79 | 5.33 | 1.15 | 258.49 | 22.83 | 32.31 | 4.96 | 6.17 | 1.83 |
| (#) 160x60 x 3.20 | 160 | 60 | 3.20 | 3.20 | 8.62 | 6.77 | 1.11 | 324.26 | 28.65 | 40.53 | 6.27 | 6.13 | 1.82 |
| (#) 160x70 x 3.20 | 160 | 70 | 3.20 | 3.20 | 9.26 | 7.27 | 1.46 | 363.60 | 44.04 | 45.45 | 8.43 | 6.27 | 2.18 |
| (#) 160x80 x 3.20 | 160 | 80 | 3.20 | 3.20 | 9.90 | 7.77 | 1.83 | 402.93 | 63.70 | 50.37 | 10.88 | 6.38 | 2.54 |
| (#) 180x60 x 2.00 | 180 | 60 | 2.00 | 2.00 | 5.87 | 4.61 | 1.09 | 276.80 | 19.12 | 30.76 | 4.06 | 6.87 | 1.80 |
| (#) 180x60 x 2.50 | 180 | 60 | 2.50 | 2.50 | 7.29 | 5.73 | 1.06 | 341.44 | 23.58 | 37.94 | 5.03 | 6.84 | 1.80 |
| (#) 180x60 x 3.20 | 180 | 60 | 3.20 | 3.20 | 9.26 | 7.27 | 1.02 | 428.95 | 29.61 | 47.66 | 6.35 | 6.80 | 1.79 |
| (#) 180x80 x 3.20 | 180 | 80 | 3.20 | 3.20 | 10.54 | 8.28 | 1.71 | 528.97 | 66.07 | 58.77 | 11.06 | 7.08 | 2.50 |
| (#) 200x60 x 2.00 | 200 | 60 | 2.00 | 2.00 | 6.27 | 4.92 | 1.01 | 355.57 | 19.65 | 35.56 | 4.10 | 7.53 | 1.77 |
| (#) 200x60 x 2.50 | 200 | 60 | 2.50 | 2.50 | 7.79 | 6.12 | 0.98 | 438.99 | 24.23 | 43.90 | 5.08 | 7.50 | 1.76 |
| (#) 200x60 x 3.20 | 200 | 60 | 3.20 | 3.20 | 9.90 | 7.77 | 0.94 | 552.16 | 30.44 | 55.22 | 6.43 | 7.47 | 1.75 |
| (#) 200x70 x 2.50 | 200 | 70 | 2.50 | 2.50 | 8.29 | 6.51 | 1.30 | 487.75 | 37.31 | 48.77 | 6.85 | 7.67 | 2.12 |
| (#) 200x70 x 3.20 | 200 | 70 | 3.20 | 3.20 | 10.54 | 8.28 | 1.26 | 614.13 | 46.98 | 61.41 | 8.67 | 7.63 | 2.11 |
| (#) 200x80 x 3.20 | 200 | 80 | 3.20 | 3.20 | 11.18 | 8.78 | 1.60 | 676.10 | 68.17 | 67.61 | 11.21 | 7.78 | 2.47 |
| (#) 220x50 x 3.20 | 220 | 50 | 3.20 | 3.20 | 9.90 | 7.77 | 0.60 | 619.98 | 18.50 | 56.36 | 4.53 | 7.91 | 1.37 |
| (#) 220x80 x 3.20 | 220 | 80 | 3.20 | 3.20 | 11.82 | 9.28 | 1.50 | 845.59 | 70.05 | 76.87 | 11.34 | 8.46 | 2.43 |
| (#) 240x80 x 2.00 | 240 | 80 | 2.00 | 2.00 | 7.87 | 6.18 | 1.49 | 664.81 | 45.93 | 55.40 | 7.28 | 9.19 | 2.42 |
| (#) 240x80 x 2.50 | 240 | 80 | 2.50 | 2.50 | 9.79 | 7.69 | 1.46 | 822.86 | 56.84 | 68.57 | 9.03 | 9.17 | 2.41 |
| (#) 240x80 x 3.20 | 240 | 80 | 3.20 | 3.20 | 12.46 | 9.78 | 1.42 | 1038.72 | 71.73 | 86.56 | 11.46 | 9.13 | 2.40 |
| (#) 260x80 x 2.50 | 260 | 80 | 2.50 | 2.50 | 10.29 | 8.08 | 1.38 | 994.92 | 58.03 | 76.53 | 9.11 | 9.83 | 2.37 |
| (#) 260x80 x 3.20 | 260 | 80 | 3.20 | 3.20 | 13.10 | 10.29 | 1.34 | 1256.79 | 73.25 | 96.68 | 11.56 | 9.79 | 2.36 |
| (#) 280x80 x 2.50 | 280 | 80 | 2.50 | 2.50 | 10.79 | 8.47 | 1.31 | 1187.57 | 59.11 | 84.83 | 9.18 | 10.49 | 2.34 |
| (#) 280x80 x 3.20 | 280 | 80 | 3.20 | 3.20 | 13.74 | 10.79 | 1.27 | 1501.06 | 74.63 | 107.22 | 11.65 | 10.45 | 2.33 |
| (#) 300x80 x 2.50 | 300 | 80 | 2.50 | 2.50 | 11.29 | 8.87 | 1.25 | 1401.80 | 60.10 | 93.45 | 9.24 | 11.14 | 2.31 |
| (#) 300x80 x 3.20 | 300 | 80 | 3.20 | 3.20 | 14.38 | 11.29 | 1.21 | 1772.81 | 75.88 | 118.19 | 11.72 | 11.10 | 2.30 |
| (#) 320x80 x 2.50 | 320 | 80 | 2.50 | 2.50 | 11.79 | 9.26 | 1.19 | 1638.63 | 61.00 | 102.41 | 9.30 | 11.79 | 2.27 |
| (#) 320x80 x 3.20 | 320 | 80 | 3.20 | 3.20 | 15.02 | 11.79 | 1.15 | 2073.34 | 77.03 | 129.58 | 11.80 | 11.75 | 2.26 |

Largo Máximo de Barra: 13 metros

Largo Mínimo de Barra: 4 metros

Troquelado: corte parcial a partir de 2.000 mm

Tolerancia en el largo -0 / +30 mm. Para largos especiales consultar por tolerancia restringida.

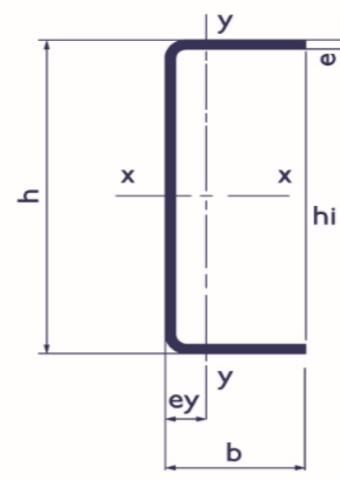
(1) Los valores indicados son a título informativo

(#) Perfiles normalizados según Norma IRAM IAS U 500-206 - 1 y 2

Medidas que no figuran en esta tabla consultar factibilidad de fabricación.

PERFIL U ENSAMBLABLE

MEDIDAS Y CARACTERÍSTICAS
GEOMÉTRICAS



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

Medidas y características geométricas

| Designación del Perfil | Altura (alma) | | Ala (rama) | Espesor | Radio de Acuerdo | Area nominal de la Sección | Masa Nominal | Distancias al centro de gravedad (1) | Momentos de Inercia (1) | | Modulos Resistentes (1) | | Radios de Giro (1) | |
|------------------------|---------------|----------|------------|---------|------------------|----------------------------|--------------|--------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|----------------------|
| | h mm | hi mm | b mm | e mm | r mm | S Cm ² | G Kg/m | ey Cm | I _x Cm ⁴ | I _y Cm ⁴ | W _x Cm ³ | W _y Cm ³ | i _x Cm | i _y Cm |
| (#) 125x50 x 2.50 | 125 | 120 | 50 | 2.50 | 2.50 | 5.42 | 4.25 | 0.97 | 126.66 | 12.79 | 20.27 | 3.38 | 4.83 | 1.54 |
| 125x60 x 3.20 | 125 | 120 | 60 | 3.20 | 3.20 | 7.35 | 5.77 | 1.09 | 179.39 | 19.87 | 28.86 | 4.33 | 4.94 | 1.64 |
| 145x60 x 2.50 | 145 | 140 | 60 | 2.50 | 2.50 | 6.42 | 5.04 | 1.18 | 196.84 | 20.18 | 27.15 | 4.18 | 5.54 | 1.77 |
| 146x50 x 3.20 | 146.4 | 140 | 50 | 3.20 | 3.20 | 8.19 | 6.43 | 1.12 | 246.37 | 23.69 | 33.52 | 4.85 | 5.47 | 1.70 |
| 146x60 x 2.50 | 146 | 141 | 60 | 2.50 | 2.50 | 6.35 | 4.98 | 1.06 | 205.45 | 17.81 | 28.23 | 3.80 | 5.69 | 1.68 |
| (#) 146x60 x 3.20 | 146.4 | 140 | 60 | 3.20 | 3.20 | 8.19 | 6.43 | 1.17 | 263.00 | 27.92 | 35.93 | 6.20 | 5.67 | 1.85 |
| 150x50 x 3.20 | 150.4 | 144 | 50 | 3.20 | 3.20 | 7.68 | 6.03 | 0.79 | 225.29 | 11.63 | 29.96 | 2.76 | 5.42 | 1.23 |
| (#) 166x60 x 3.20 | 166.4 | 160 | 60 | 3.20 | 3.20 | 8.83 | 6.93 | 1.08 | 355.82 | 28.97 | 42.77 | 6.30 | 6.35 | 1.81 |
| (#) 186x70 x 3.20 | 186.4 | 180 | 70 | 3.20 | 3.20 | 10.11 | 7.93 | 1.32 | 520.00 | 46.07 | 55.79 | 8.60 | 7.17 | 2.13 |
| 188x60 x 2.00 | 188 | 184 | 60 | 2.00 | 2.00 | 6.03 | 4.73 | 1.04 | 301.74 | 17.15 | 32.10 | 3.46 | 7.07 | 1.69 |
| 200x85 x 3.20 | 200.4 | 194 | 85 | 3.20 | 3.20 | 11.52 | 9.04 | 1.71 | 687.25 | 83.85 | 68.59 | 12.35 | 7.72 | 2.70 |
| (#) 206x70 x 3.20 | 206.4 | 200 | 70 | 3.20 | 3.20 | 10.75 | 8.44 | 1.23 | 661.77 | 47.39 | 64.13 | 8.70 | 7.85 | 2.10 |
| 206x80 x 3.20 | 206.4 | 200 | 80 | 3.20 | 3.20 | 11.39 | 8.94 | 1.52 | 701.94 | 67.75 | 68.02 | 10.45 | 7.85 | 2.44 |
| 206x90 x 3.20 | 206.4 | 200 | 90 | 3.20 | 3.20 | 12.03 | 9.45 | 1.86 | 771.31 | 102.30 | 74.74 | 14.32 | 8.01 | 2.92 |
| 206x100 x 3.20 | 206.4 | 200 | 100 | 3.20 | 3.20 | 12.67 | 9.95 | 2.21 | 840.68 | 146.92 | 81.46 | 18.86 | 8.14 | 3.40 |
| 228x80 x 3.20 | 228.4 | 222 | 80 | 3.20 | 3.20 | 12.10 | 9.50 | 1.43 | 893.35 | 67.75 | 78.23 | 10.31 | 8.59 | 2.37 |
| 228x90 x 3.20 | 228.4 | 222 | 90 | 3.20 | 3.20 | 12.74 | 10.00 | 1.75 | 978.55 | 102.30 | 85.69 | 14.12 | 8.77 | 2.83 |
| 228x100 x 3.20 | 228.4 | 222 | 100 | 3.20 | 3.20 | 13.38 | 10.50 | 2.09 | 1063.75 | 146.92 | 93.15 | 18.58 | 8.92 | 3.31 |
| 248x80 x 3.20 | 248.4 | 242 | 80 | 3.20 | 3.20 | 12.74 | 10.00 | 1.36 | 1092.69 | 67.75 | 87.98 | 10.20 | 9.26 | 2.31 |
| 248x90 x 3.20 | 248.4 | 242 | 90 | 3.20 | 3.20 | 13.38 | 10.50 | 1.67 | 1169.10 | 102.30 | 96.11 | 13.96 | 9.45 | 2.77 |
| 268x80 x 3.20 | 268.4 | 262 | 80 | 3.20 | 3.20 | 13.38 | 10.50 | 1.29 | 1317.56 | 67.75 | 98.18 | 10.10 | 9.92 | 2.25 |
| 268x90 x 3.20 | 268.4 | 262 | 90 | 3.20 | 3.20 | 14.02 | 11.00 | 1.59 | 1435.71 | 102.30 | 106.98 | 13.81 | 10.12 | 2.70 |
| 268x100 x 3.20 | 268.4 | 262 | 100 | 3.20 | 3.20 | 14.66 | 11.51 | 1.91 | 1553.87 | 146.92 | 115.79 | 18.16 | 10.30 | 3.17 |
| 288x80 x 3.20 | 288.4 | 282 | 80 | 3.20 | 3.20 | 14.02 | 11.00 | 1.23 | 1569.29 | 67.75 | 108.83 | 10.01 | 10.58 | 2.20 |
| 288x90 x 3.20 | 288.4 | 282 | 90 | 3.20 | 3.20 | 14.66 | 11.51 | 1.52 | 1705.94 | 102.30 | 118.30 | 13.68 | 10.79 | 2.64 |
| 288x100 x 3.20 | 288.4 | 282 | 100 | 3.20 | 3.20 | 15.30 | 12.01 | 1.83 | 1842.59 | 146.92 | 127.78 | 17.98 | 10.98 | 3.10 |
| 308x80 x 3.20 | 308.4 | 302 | 80 | 3.20 | 3.20 | 14.66 | 11.51 | 1.18 | 1849.23 | 67.75 | 119.92 | 9.93 | 11.23 | 2.15 |
| 308x90 x 3.20 | 308.4 | 302 | 90 | 3.20 | 3.20 | 15.30 | 12.01 | 1.46 | 2005.72 | 102.30 | 130.07 | 13.57 | 11.45 | 2.59 |
| 308x100 x 3.20 | 308.4 | 302 | 100 | 3.20 | 3.20 | 15.94 | 12.51 | 1.76 | 2162.21 | 146.92 | 140.22 | 17.82 | 11.65 | 3.04 |

Largo Máximo de Barra: 13 metros

Largo Mínimo de Barra: 4 metros

Tolerancia en el largo -0 / +30 mm. Para largos especiales consultar por tolerancia restringida.

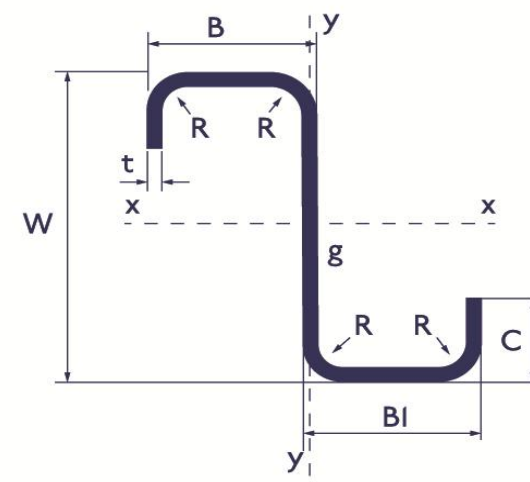
(1) Los valores indicados son a título informativo

(#) Perfiles normalizados según Norma IRAM IAS U 500-206 - 2 - Calidades de Acero F22/F24

Medidas que no figuran en esta tabla consultar factibilidad de fabricación.

PERFIL Z RIGIDIZABLE (Zr)

MEDIDAS Y CARACTERÍSTICAS
GEOMÉTRICAS



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

| Designación del Perfil | Medidas y Propiedades de la Sección | | | | | | | | | | | | | | |
|------------------------|-------------------------------------|---------------|---------------|------------------------|---------|----------------------------|--------------|--------------------------------------|----------------|-------------------------|-----------------|------------------------|-----------------|--------------------|----------------|
| | Altura (alma) | Ala1 (rama 1) | Ala2 (rama 2) | Ala Ríg. (rigidizador) | Espesor | Area Nominal de la Sección | Masa Nominal | Distancias al Centro de Gravedad (1) | | Momentos de Inercia (1) | | Módulos Resistente (1) | | Radios de Giro (1) | |
| | W | B | B1 | C | t | A | M | X _G | Y _G | I _x | I _y | S _x | S _y | r _x | r _y |
| | mm | mm | mm | mm | mm | Cm ² | Kg/m | Cm | Cm | Cm ⁴ | Cm ⁴ | Cm ³ | Cm ³ | Cm | Cm |
| 120x50x15x2.0 | 120 | 50 | 50 | 15 | 2.00 | 4.74 | 3.72 | 0.00 | 0.00 | 105.80 | 26.43 | 17.63 | 5.39 | 4.73 | 2.36 |
| 120x50x20x2.5 | 120 | 50 | 50 | 20 | 2.50 | 6.09 | 4.78 | 0.00 | 0.00 | 133.22 | 37.15 | 22.20 | 7.62 | 4.68 | 2.47 |
| 120x50x20x3.2 | 120 | 50 | 50 | 20 | 3.20 | 7.65 | 6.00 | 0.00 | 0.00 | 164.22 | 44.67 | 27.37 | 9.23 | 4.63 | 2.42 |
| 140x60x20x2.5 | 140 | 60 | 60 | 20 | 2.50 | 7.09 | 5.56 | 0.00 | 0.00 | 215.61 | 59.96 | 30.80 | 10.21 | 5.52 | 2.91 |
| 140x60x20x3.2 | 140 | 60 | 60 | 20 | 3.20 | 8.93 | 7.01 | 0.00 | 0.00 | 267.30 | 72.71 | 38.19 | 12.45 | 5.47 | 2.85 |
| 180x80x20x3.2 | 180 | 80 | 80 | 20 | 3.20 | 11.49 | 9.02 | 0.00 | 0.00 | 584.65 | 158.14 | 64.96 | 20.17 | 7.13 | 3.71 |
| 200x80x20x3.2 | 200 | 80 | 80 | 20 | 3.20 | 12.13 | 9.52 | 0.00 | 0.00 | 747.20 | 158.14 | 74.72 | 20.17 | 7.85 | 3.61 |
| 220x65x70x2.5 | 220 | 65 | 70 | 20 | 2.50 | 9.69 | 7.61 | 0.31 | 0.39 | 697.40 | 98.44 | 61.21 | 13.19 | 8.48 | 3.19 |
| 220x70x75x2.5 | 220 | 70 | 75 | 20 | 2.50 | 9.71 | 7.63 | 0.11 | 0.14 | 701.66 | 99.23 | 62.99 | 13.66 | 8.50 | 3.20 |
| 220x75x80x2.5 | 220 | 75 | 80 | 20 | 2.50 | 9.96 | 7.82 | 0.12 | 0.14 | 731.23 | 118.59 | 65.66 | 15.28 | 8.57 | 3.45 |
| 220x80x80x2.5 | 220 | 80 | 80 | 20 | 2.50 | 10.09 | 7.92 | 0.00 | 0.00 | 746.20 | 128.97 | 67.84 | 16.38 | 8.60 | 3.58 |
| 220x63.5x70x3.2 | 220 | 63.5 | 70 | 20 | 3.20 | 11.92 | 9.36 | 0.14 | 0.19 | 833.94 | 97.15 | 74.53 | 14.50 | 8.36 | 2.86 |
| 220x68.5x75x3.2 | 220 | 68.5 | 75 | 20 | 3.20 | 12.24 | 9.61 | 0.14 | 0.18 | 871.55 | 118.02 | 77.93 | 16.40 | 8.44 | 3.11 |
| 220x73.5x80x3.2 | 220 | 73.5 | 80 | 20 | 3.20 | 12.56 | 9.86 | 0.15 | 0.18 | 909.16 | 141.61 | 81.32 | 18.41 | 8.51 | 3.36 |
| 220x80x80x3.2 | 220 | 80 | 80 | 20 | 3.20 | 12.77 | 10.02 | 0.00 | 0.00 | 934.01 | 158.14 | 84.91 | 20.17 | 8.55 | 3.52 |
| 240x65x70x2.5 | 240 | 65 | 70 | 20 | 2.50 | 9.96 | 7.82 | 0.10 | 0.15 | 826.62 | 82.06 | 68.04 | 12.12 | 9.11 | 2.87 |
| 240x70x75x2.5 | 240 | 70 | 75 | 20 | 2.50 | 10.21 | 8.02 | 0.11 | 0.15 | 861.88 | 99.24 | 70.96 | 13.65 | 9.19 | 3.12 |
| 240x75x80x2.5 | 240 | 75 | 80 | 20 | 2.50 | 10.46 | 8.21 | 0.11 | 0.14 | 897.14 | 118.60 | 73.89 | 15.27 | 9.26 | 3.37 |
| 240x80x80x2.5 | 240 | 80 | 80 | 20 | 2.50 | 10.59 | 8.31 | 0.00 | 0.00 | 914.97 | 128.97 | 76.25 | 16.38 | 9.30 | 3.49 |
| 240x63.5x70x3.2 | 240 | 63.5 | 70 | 20 | 3.20 | 12.56 | 9.86 | 0.13 | 0.20 | 1026.98 | 97.16 | 84.21 | 14.49 | 9.04 | 2.78 |
| 240x68.5x75x3.2 | 240 | 68.5 | 75 | 20 | 3.20 | 12.88 | 10.11 | 0.14 | 0.19 | 1071.86 | 118.04 | 87.92 | 16.39 | 9.12 | 3.03 |
| 240x73.5x80x3.2 | 240 | 73.5 | 80 | 20 | 3.20 | 13.20 | 10.36 | 0.14 | 0.19 | 1116.73 | 141.63 | 91.64 | 18.40 | 9.20 | 3.28 |
| 240x80x80x3.2 | 240 | 80 | 80 | 20 | 3.20 | 13.41 | 10.52 | 0.00 | 0.00 | 1146.34 | 158.14 | 95.53 | 20.17 | 9.25 | 3.43 |
| 260x65x70x2.5 | 260 | 65 | 70 | 20 | 2.50 | 10.46 | 8.21 | 0.10 | 0.15 | 1001.08 | 82.06 | 76.11 | 12.11 | 9.78 | 2.80 |
| 260x70x75x2.5 | 260 | 70 | 75 | 20 | 2.50 | 10.71 | 8.41 | 0.10 | 0.15 | 1042.52 | 99.24 | 79.28 | 13.64 | 9.86 | 3.04 |
| 260x75x80x2.5 | 260 | 75 | 80 | 20 | 2.50 | 10.96 | 8.61 | 0.11 | 0.15 | 1083.97 | 118.60 | 82.45 | 15.26 | 9.94 | 3.29 |
| 260x80x80x2.5 | 260 | 80 | 80 | 20 | 2.50 | 11.09 | 8.70 | 0.00 | 0.00 | 1104.93 | 128.97 | 84.99 | 16.38 | 9.98 | 3.41 |
| 260x63.5x70x3.2 | 260 | 63.5 | 70 | 20 | 3.20 | 13.20 | 10.36 | 0.13 | 0.20 | 1245.15 | 97.17 | 94.31 | 14.47 | 9.71 | 2.71 |
| 260x68.5x70x3.2 | 260 | 68.5 | 75 | 20 | 3.20 | 13.52 | 10.61 | 0.13 | 0.20 | 1297.92 | 118.05 | 98.35 | 16.37 | 9.80 | 2.96 |
| 260x73.5x80x3.2 | 260 | 73.5 | 80 | 20 | 3.20 | 13.84 | 10.86 | 0.14 | 0.19 | 1350.69 | 141.64 | 102.38 | 18.38 | 9.88 | 3.20 |
| 260x80x80x3.2 | 260 | 80 | 80 | 20 | 3.20 | 14.05 | 11.03 | 0.00 | 0.00 | 1385.49 | 158.14 | 106.58 | 20.17 | 9.93 | 3.36 |
| 280x65x70x2.5 | 280 | 65 | 70 | 20 | 2.50 | 10.96 | 8.61 | 0.09 | 0.16 | 1196.46 | 82.07 | 84.51 | 12.10 | 10.45 | 2.74 |
| 280x70x75x2.5 | 280 | 70 | 75 | 20 | 2.50 | 11.21 | 8.80 | 0.10 | 0.15 | 1244.59 | 99.25 | 87.93 | 13.64 | 10.54 | 2.98 |
| 280x75x80x2.5 | 280 | 75 | 80 | 20 | 2.50 | 11.46 | 9.00 | 0.10 | 0.15 | 1292.73 | 118.61 | 91.35 | 15.26 | 10.62 | 3.22 |
| 280x80x80x2.5 | 280 | 80 | 80 | 20 | 2.50 | 11.59 | 9.10 | 0.00 | 0.00 | 1317.06 | 128.97 | 94.08 | 16.38 | 10.66 | 3.34 |
| 280x63.5x70x3.2 | 280 | 63.5 | 70 | 20 | 3.20 | 13.84 | 10.86 | 0.12 | 0.21 | 1489.71 | 97.18 | 104.85 | 14.46 | 10.38 | 2.65 |
| 280x68.5x75x3.2 | 280 | 68.5 | 75 | 20 | 3.20 | 14.16 | 11.11 | 0.12 | 0.20 | 1551.02 | 118.06 | 109.20 | 16.36 | 10.47 | 2.89 |
| 280x73.5x80x3.2 | 280 | 73.5 | 80 | 20 | 3.20 | 14.48 | 11.37 | 0.13 | 0.20 | 1612.32 | 141.65 | 113.55 | 18.37 | 10.55 | 3.13 |
| 280x80x80x3.2 | 280 | 80 | 80 | 20 | 3.20 | 14.69 | 11.53 | 0.00 | 0.00 | 1652.74 | 158.14 | 118.05 | 20.17 | 10.61 | 3.28 |
| 300x65x70x2.5 | 300 | 65 | 70 | 20 | 2.50 | 11.46 | 9.00 | 0.09 | 0.16 | 1413.77 | 82.07 | 93.24 | 12.10 | 11.11 | 2.68 |
| 300x70x75x2.5 | 300 | 70 | 75 | 20 | 2.50 | 11.71 | 9.20 | 0.09 | 0.16 | 1469.09 | 99.25 | 96.91 | 13.63 | 11.20 | 2.91 |
| 300x75x80x2.5 | 300 | 75 | 80 | 20 | 2.50 | 11.96 | 9.39 | 0.10 | 0.16 | 1524.42 | 118.61 | 100.59 | 15.25 | 11.29 | 3.15 |
| 300x80x80x2.5 | 300 | 80 | 80 | 20 | 2.50 | 12.09 | 9.49 | 0.00 | 0.00 | 1552.36 | 128.97 | 103.49 | 16.38 | 11.33 | 3.27 |
| 300x63.5x70x3.2 | 300 | 63.5 | 70 | 20 | 3.20 | 14.48 | 11.37 | 0.11 | 0.21 | 1761.94 | 97.19 | 115.82 | 14.45 | 11.03 | 2.59 |
| 300x68.5x75x3.2 | 300 | 68.5 | 75 | 20 | 3.20 | 14.80 | 11.62 | 0.12 | 0.21 | 1832.43 | 118.07 | 120.49 | 16.35 | 11.13 | 2.82 |
| 300x73.5x80x3.2 | 300 | 73.5 | 80 | 20 | 3.20 | 15.12 | 11.87 | 0.12 | 0.20 | 1902.91 | 141.66 | 125.16 | 18.36 | 11.22 | 3.06 |
| 300x80x80x3.2 | 300 | 80 | 80 | 20 | 3.20 | 15.33 | 12.03 | 0.00 | 0.00 | 1949.35 | 158.14 | 129.96 | 20.17 | 11.28 | 3.21 |
| 320x65x70x2.5 | 320 | 65 | 70 | 20 | 2.50 | 11.96 | 9.39 | 0.09 | 0.17 | 1654.01 | 82.08 | 102.31 | 12.09 | 11.76 | 2.62 |
| 320x70x75x2.5 | 320 | 70 | 75 | 20 | 2.50 | 12.21 | 9.59 | 0.09 | 0.16 | 1717.02 | 99.26 | 106.23 | 13.62 | 11.86 | 2.85 |
| 320x75x80x2.5 | 320 | 75 | 80 | 20 | 2.50 | 12.46 | 9.78 | 0.09 | 0.16 | 1780.03 | 118.62 | 110.16 | 15.24 | 11.95 | 3.08 |
| 320x80x80x2.5 | 320 | 80 | 80 | 20 | 2.50 | 12.59 | 9.88 | 0.00 | 0.00 | 1811.85 | 128.97 | 113.24 | 16.38 | 12.00 | 3.20 |
| 320x63.5x70x3.2 | 320 | 63.5 | 70 | 20 | 3.20 | 15.12 | 11.87 | 0.11 | 0.22 | 2063.13 | 97.20 | 127.21 | 14.44 | 11.68 | 2.54 |
| 320x68.5x75x3.2 | 320 | 68.5 | 75 | 20 | 3.20 | 15.44 | 12.12 | 0.11 | 0.21 | 2143.44 | 118.08 | 132.20 | 16.34 | 11.78 | 2.77 |
| 320x73.5x80x3.2 | 320 | 73.5 | 80 | 20 | 3.20 | 15.76 | 12.37 | 0.12 | 0.21 | 2223.74 | 141.67 | 137.19 | 18.35 | 11.88 | 3.00 |
| 320x80x80x3.2 | 320 | 80 | 80 | 20 | 3.20 | 15.97 | 12.53 | 0.00 | 0.00 | 2276.62 | 158.14 | 142.29 | 20.17 | 11.94 | 3.15 |

(1) Los valores indicados son a título informativo

Largo Máximo de Barra: 13 metros

Largo Mínimo de Barra: 4 metros

Tolerancia en el largo -0 / +30 mm. Para largos especiales consultar por tolerancia restringida.

Medidas que no figuran en esta tabla consultar factibilidad de fabricación.

Norma IRAM IAS U 500-206 - 1 y 6 - Acero Galvanizado Zar 250