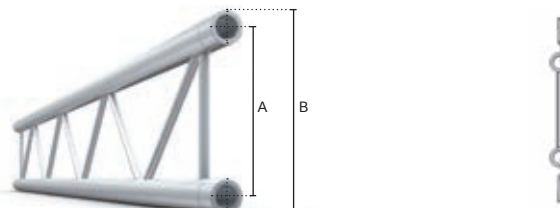


# M290 Regular

- Certified 50mm tube M290 series modular truss range
- Interior & exterior applications
- Durable construction with diagonal anti-twist end brace
- Fast connection for quick, simple and secure assembly
- Great free-span & loading characteristics (up to 20m / 65.61 ft)
- Connection kit supplied with every truss length & junction
- Compatible with 200/400/500/600 series cell clamps
- Compatible with Xtruss accessories
- Powder coat colour finish available on request

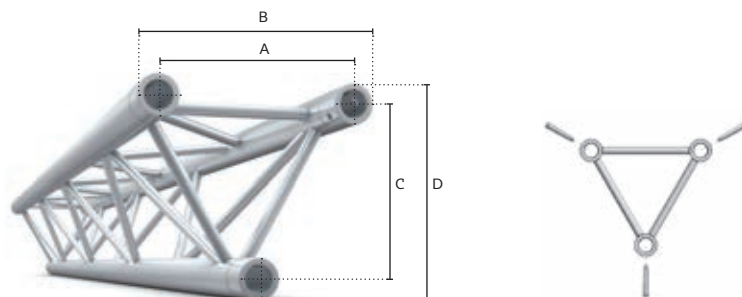
## DUO



### M290

|     | Main Chords   | Diagonals        | Alloy           | A          | B           | Coupler |
|-----|---------------|------------------|-----------------|------------|-------------|---------|
| BTB | 50x2 (2x0.08) | 16x2 (0.62x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | CCB     |
| BTF | 50x2 (2x0.08) | 16x2 (0.62x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | CCF     |
| BTU | 50x2 (2x0.08) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | CCU     |

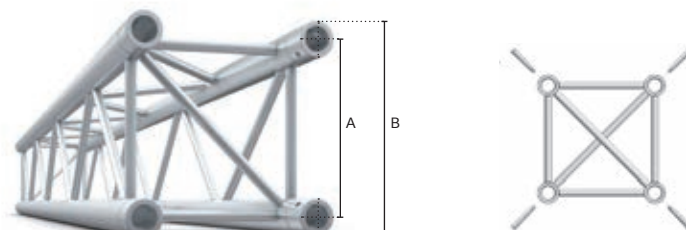
## TRIO



### M290

|     | Main Chords   | Diagonals        | Alloy           | A          | B           | C          | D           | Coupler |
|-----|---------------|------------------|-----------------|------------|-------------|------------|-------------|---------|
| STB | 50x2 (2x0.08) | 16x2 (0.62x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | 207 (8.15) | 257 (10.12) | CCB     |
| STF | 50x2 (2x0.08) | 16x2 (0.62x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | 207 (8.15) | 257 (10.12) | CCF     |
| STU | 50x2 (2x0.08) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | 207 (8.15) | 257 (10.12) | CCU     |

## QUATRO



### M290

|     | Main Chords   | Diagonals        | Alloy           | A          | B           | Coupler |
|-----|---------------|------------------|-----------------|------------|-------------|---------|
| QTB | 50x2 (2x0.08) | 16x2 (0.62x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | CCB     |
| QTF | 50x2 (2x0.08) | 16x2 (0.62x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | CCF     |
| QTU | 50x2 (2x0.08) | 20x2 (0.78x0.08) | EN - AW 6082 T6 | 240 (9.44) | 290 (11.41) | CCU     |

## STANDARD LENGTHS AND WEIGHTS AVAILABLE

|        | m (ft)   | 0.50 (1.64) | 1.00 (3.28)  | 1.50 (4.92)  | 2.00 (6.56)   | 2.50 (8.20)   | 3.00 (9.84)   | 4.00 (13.12)  | 5.00 (16.41)  |
|--------|----------|-------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| DUO    | kg (lbs) | 1.60 (3.52) | 2.60 (5.73)  | 3.60 (7.94)  | 4.50 (9.92)   | 5.40 (11.90)  | 6.60 (14.55)  | 8.30 (18.29)  | 10.30 (22.71) |
| TRIO   | kg (lbs) | 2.60 (5.73) | 4.30 (9.47)  | 6.00 (13.22) | 7.70 (16.98)  | 9.10 (20.06)  | 10.80 (23.81) | 14.10 (31.09) | 18.00 (39.68) |
| QUATRO | kg (lbs) | 3.90 (8.60) | 6.00 (13.23) | 8.30 (18.30) | 10.60 (23.37) | 12.90 (28.44) | 15.00 (33.07) | 19.60 (43.21) | 23.50 (51.81) |

Connection material (pins/clips/couplers) and packaging are not included in above weights

## M290 DUO

LOADING CHART

| Span                             | m (ft)        | 3.00 (9.84)      | 4.00 (13.12)     | 5.00 (16.40)     | 6.00 (19.69)    | 7.00 (22.97)    | 8.00 (26.25)    | 9.00 (29.53)    |
|----------------------------------|---------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|
| Centre Point Load (CPL)          | kg (lbs)      | 667.50 (1471.58) | 577.60 (1273.39) | 460.00 (1014.13) | 381.10 (840.18) | 324.50 (715.40) | 281.70 (621.04) | 248.10 (546.97) |
| Deflection                       | mm (in)       | 6.00 (0.24)      | 12.30 (0.48)     | 19.30 (0.76)     | 27.80 (1.09)    | 38.00 (1.50)    | 49.80 (1.96)    | 63.20 (2.49)    |
| Third Point Load (TPL)           | kg (lbs)      | 333.70 (735.68)  | 332.60 (733.26)  | 331.40 (730.61)  | 285.80 (630.08) | 243.30 (536.38) | 211.20 (465.62) | 186.10 (410.28) |
| Deflection                       | mm (in)       | 5.10 (0.20)      | 12.10 (0.48)     | 23.60 (0.93)     | 35.40 (1.39)    | 48.20 (1.90)    | 63.00 (2.48)    | 79.70 (3.14)    |
| Quarter Point Load (QPL)         | kg (lbs)      | 222.50 (490.53)  | 221.70 (488.76)  | 220.90 (487.00)  | 190.60 (420.20) | 162.20 (357.59) | 140.80 (310.41) | 124.10 (273.59) |
| Deflection                       | mm (in)       | 4.70 (0.19)      | 11.20 (0.44)     | 22.00 (0.87)     | 32.90 (1.30)    | 44.90 (1.77)    | 58.70 (2.31)    | 74.40 (2.93)    |
| Fifth Point Load (FPL)           | kg (lbs)      | 166.90 (367.95)  | 166.30 (366.63)  | 165.70 (365.31)  | 158.80 (350.09) | 135.20 (298.06) | 117.40 (258.82) | 103.40 (227.96) |
| Deflection                       | mm (in)       | 4.50 (0.18)      | 10.70 (0.42)     | 21.00 (0.83)     | 34.90 (1.37)    | 47.50 (1.87)    | 62.10 (2.44)    | 78.70 (3.10)    |
| Uniformly Distributed Load (UDL) | kg/m (lbs/ft) | 222.50 (149.51)  | 166.30 (111.75)  | 132.50 (89.04)   | 110.10 (73.98)  | 92.70 (62.29)   | 70.40 (47.31)   | 55.10 (37.03)   |
| Deflection                       | mm (in)       | 3.80 (0.15)      | 8.90 (0.35)      | 17.40 (0.69)     | 30.10 (1.19)    | 47.20 (1.86)    | 61.60 (2.43)    | 78.10 (3.07)    |

DUO figures are based on use in vertical mode and stabilized every 1m • Higher loading values for U version available

## M290 TRIO

LOADING CHART

| Span                             | m (ft)        | 4.00 (13.12)     | 6.00 (19.69)    | 8.00 (26.25)    | 10.00 (32.81)   | 12.00 (39.37)   | 16.00 (52.49)  | 20.00 (65.61)  |
|----------------------------------|---------------|------------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|
| Centre Point Load (CPL)          | kg (lbs)      | 497.20 (1096.14) | 325.60 (717.82) | 238.00 (524.70) | 184.10 (405.87) | 147.00 (324.08) | 97.90 (215.83) | 65.60 (144.62) |
| Deflection                       | mm (in)       | 10.60 (0.42)     | 24.00 (0.94)    | 43.10 (1.70)    | 68.10 (2.68)    | 99.50 (3.92)    | 183.20 (7.21)  | 299.20 (11.77) |
| Third Point Load (TPL)           | kg (lbs)      | 372.90 (822.10)  | 244.20 (538.37) | 178.50 (393.52) | 138.10 (304.46) | 110.20 (242.95) | 73.40 (161.82) | 49.20 (108.46) |
| Deflection                       | mm (in)       | 13.50 (0.53)     | 30.40 (1.20)    | 54.10 (2.13)    | 84.80 (3.34)    | 122.50 (4.82)   | 219.60 (8.65)  | 346.80 (13.65) |
| Quarter Point Load (QPL)         | kg (lbs)      | 248.60 (548.07)  | 162.80 (358.91) | 119.00 (262.35) | 92.00 (202.83)  | 73.50 (162.04)  | 48.90 (107.81) | 32.80 (72.31)  |
| Deflection                       | mm (in)       | 12.50 (0.49)     | 28.30 (1.11)    | 50.50 (1.99)    | 79.40 (3.13)    | 115.00 (4.53)   | 207.80 (8.18)  | 331.30 (13.04) |
| Fifth Point Load (FPL)           | kg (lbs)      | 207.20 (456.80)  | 135.70 (299.17) | 99.20 (218.70)  | 76.70 (169.09)  | 61.20 (134.92)  | 40.80 (89.95)  | 27.30 (60.18)  |
| Deflection                       | mm (in)       | 13.30 (0.52)     | 30.00 (1.18)    | 53.40 (2.10)    | 83.70 (3.30)    | 121.00 (4.76)   | 217.30 (8.56)  | 343.70 (13.53) |
| Uniformly Distributed Load (UDL) | kg/m (lbs/ft) | 248.60 (167.05)  | 108.50 (72.91)  | 59.50 (39.98)   | 36.80 (24.73)   | 24.50 (16.46)   | 12.20 (8.20)   | 6.60 (4.43)    |
| Deflection                       | mm (in)       | 13.20 (0.52)     | 29.70 (1.17)    | 53.00 (2.09)    | 83.10 (3.27)    | 120.20 (4.73)   | 216.00 (8.50)  | 342.00 (13.46) |

TRIO figures are based on use in apex up/down orientation • Higher loading values for U version available

## M290 QUATRO

LOADING CHART

| Span                             | m (ft)        | 4.00 (13.12)      | 6.00 (19.69)     | 8.00 (26.25)     | 10.00 (32.81)   | 12.00 (39.37)   | 16.00 (52.49)   | 20.00 (65.61)   |
|----------------------------------|---------------|-------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|
| Centre Point Load (CPL)          | kg (lbs)      | 1155.40 (2547.22) | 762.50 (1681.02) | 563.70 (1242.74) | 442.50 (975.54) | 360.20 (794.10) | 253.80 (559.53) | 186.20 (410.50) |
| Deflection                       | mm (in)       | 12.30 (0.48)      | 27.80 (1.09)     | 49.70 (1.96)     | 78.30 (3.08)    | 113.70 (4.48)   | 206.40 (8.13)   | 331.10 (13.03)  |
| Third Point Load (TPL)           | kg (lbs)      | 665.30 (1466.73)  | 571.90 (1260.82) | 422.80 (932.11)  | 331.90 (731.71) | 270.10 (595.47) | 190.30 (419.54) | 139.60 (307.76) |
| Deflection                       | mm (in)       | 12.10 (0.48)      | 35.40 (1.39)     | 63.00 (2.48)     | 98.50 (3.88)    | 142.10 (5.59)   | 253.90 (10.00)  | 399.20 (15.71)  |
| Quarter Point Load (QPL)         | kg (lbs)      | 443.50 (977.75)   | 381.30 (840.62)  | 281.80 (621.26)  | 221.30 (487.88) | 180.10 (397.05) | 126.90 (279.77) | 93.10 (205.25)  |
| Deflection                       | mm (in)       | 11.20 (0.44)      | 32.90 (1.30)     | 58.70 (2.31)     | 91.90 (3.62)    | 132.90 (5.23)   | 238.50 (9.39)   | 377.10 (14.85)  |
| Fifth Point Load (FPL)           | kg (lbs)      | 332.60 (733.26)   | 317.70 (700.41)  | 234.90 (517.87)  | 184.40 (406.53) | 150.10 (330.91) | 105.70 (233.03) | 77.60 (171.07)  |
| Deflection                       | mm (in)       | 10.70 (0.42)      | 34.90 (1.37)     | 62.10 (2.44)     | 97.20 (3.83)    | 140.30 (5.52)   | 250.90 (9.88)   | 394.90 (15.54)  |
| Uniformly Distributed Load (UDL) | kg/m (lbs/ft) | 332.60 (223.50)   | 220.20 (147.97)  | 140.90 (94.68)   | 88.50 (59.47)   | 60.00 (40.32)   | 31.70 (21.30)   | 18.60 (12.50)   |
| Deflection                       | mm (in)       | 8.90 (0.35)       | 30.10 (1.19)     | 61.60 (2.43)     | 96.50 (3.80)    | 139.30 (5.48)   | 249.20 (9.81)   | 392.4 (15.44)   |

Higher loading values for U version available

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                  |                                      |                                      |                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------------------------|
| CPL<br>↓<br>(Centre Point Load)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TPL<br>↓ ↓<br>(Third Point Load) | QPL<br>↓ ↓ ↓<br>(Quarter Point Load) | FPL<br>↓ ↓ ↓ ↓<br>(Fifth Point Load) | UDL<br>↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓<br>(Uniformly Distributed Load) |
| <p>All truss loading calculations are based on:</p> <p>Truss supported or suspended at both ends • Static loadings only • Loads applied in the node points • Self-weight of the truss is included in all listed load capacities • Spans made of different truss lengths • Interaction of bending moment and shear force at connector is considered • Structural analysis based on EN 1999 • All loading data should be multiplied by 0.85 to comply with BS 7905-2 and ANSI E1.2-2006 • For any other application, or in case of an assembled structure, contact Milos or a structural engineer • Safety factors used: self-weight 1.35 / variable loads 1.5</p> |                                  |                                      |                                      |                                                        |