

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

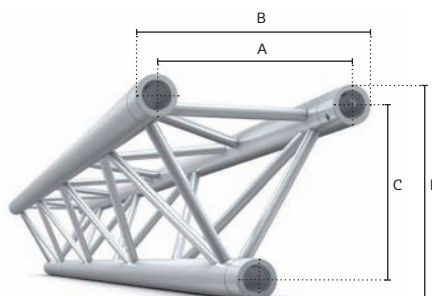
DUO



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

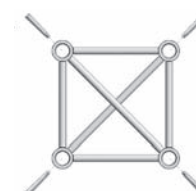
TRIO



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

Duo loading data are based on use in vertical orientation with lateral stabilisation of both the top and bottom main chord every 1m³

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)

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 (14.55)
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 (41.00)
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 (Centre Point Load)	TPL (Third Point Load)	QPL (Quarter Point Load)	FPL (Fifth Point Load)	UDL (Uniformly Distributed Load)
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All truss loading calculations are based on:

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 E12-2006 • 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