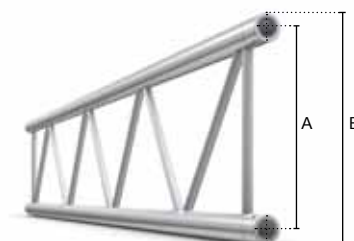


M390 Heavy-Duty

- Certified 48mm tube heavy-duty M390 series truss range
- Interior & exterior applications
- Fast connection for quick, simple and secure assembly
- Great free-span & loading characteristics (up to 20m / 65.61 ft)
- Custom lengths, junctions & curves available
- Connection kit supplied with every truss length & junction
- Compatible with 200/400/500/600 series cell clamps
- Powder coat colour finish available on request

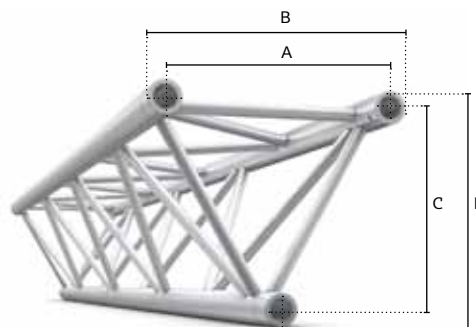
DUO



M390L

	Main Chords	Diagonals	Alloy	A	B	Coupler
BTL	48x3 (1.89x0.12)	20x2 (0.78x0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	CCB
BTLF	48x3 (1.89x0.12)	20x2 (0.78x0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	CCF

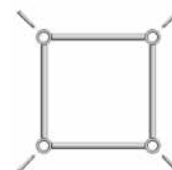
TRIO



M390L

	Main Chords	Diagonals	Alloy	A	B	C	D	Coupler
STL	48x3 (1.89x0.12)	20x2 (0.78x0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	294 (11.57)	342 (13.46)	CCB
STLF	48x3 (1.89x0.12)	20x2 (0.78x0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	294 (11.57)	342 (13.46)	CCF

QUATRO



M390L

	Main Chords	Diagonals	Alloy	A	B	Coupler
QTL	48x3 (1.89x0.12)	20x2 (0.78x0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	CCB
QTLF	48x3 (1.89x0.12)	20x2 (0.78x0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	CCF

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)	2.00 (4.41)	3.30 (7.28)	4.50 (10.01)	6.00 (13.23)	7.20 (16.03)	8.60 (19.05)	11.30 (25.07)	14.10 (31.11)
TRIO	kg (lbs)	3.10 (6.88)	5.60 (12.35)	7.90 (17.46)	10.50 (23.15)	12.60 (27.93)	15.30 (33.73)	20.50 (45.20)	25.00 (55.12)
QUATRO	kg (lbs)	3.50 (7.83)	7.60 (16.76)	10.80 (23.81)	14.00 (30.87)	17.10 (37.7)	20.30 (44.75)	26.40 (58.2)	33.00 (72.75)

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

M390L 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)
Point load	kg (lbs)	1249.30 (2754.23)	1154.60 (2545.45)	921.10 (2030.68)	765.00 (1686.53)	653.00 (1439.62)	568.80 (1253.99)	502.90 (1108.70)
Deflection	mm (in)	4.00 (0.16)	8.80 (0.35)	13.70 (0.54)	19.80 (0.78)	27.00 (1.06)	35.30 (1.39)	44.80 (1.76)
Two point load	kg (lbs)	624.60 (1377.01)	623.20 (1373.92)	621.80 (1370.83)	573.70 (1264.79)	489.80 (1079.82)	426.60 (940.49)	377.20 (831.58)
Deflection	mm (in)	3.40 (0.13)	8.10 (0.32)	15.80 (0.62)	25.20 (0.99)	34.40 (1.35)	44.90 (1.77)	56.80 (2.24)
Three point load	kg (lbs)	416.40 (918.00)	415.50 (916.02)	414.50 (913.81)	382.50 (843.27)	326.50 (719.81)	284.40 (626.99)	251.40 (554.24)
Deflection	mm (in)	3.20 (0.13)	7.50 (0.30)	14.70 (0.58)	23.50 (0.93)	32.00 (1.26)	41.80 (1.65)	52.90 (2.08)
Four point load	kg (lbs)	312.30 (688.50)	311.60 (686.96)	310.90 (685.42)	310.20 (683.87)	272.10 (599.88)	237.00 (522.49)	209.50 (461.87)
Deflection	mm (in)	3.00 (0.12)	7.20 (0.28)	14.00 (0.55)	24.20 (0.95)	33.90 (1.33)	44.30 (1.74)	56.10 (2.21)
Distrib. loading	kg (lbs)	416.40 (279.81)	311.60 (209.39)	248.70 (167.12)	206.80 (138.96)	176.80 (118.80)	142.20 (95.55)	111.70 (75.06)
Deflection	mm (in)	2.50 (0.10)	5.90 (0.23)	11.60 (0.46)	20.10 (0.79)	31.90 (1.26)	43.90 (1.73)	55.60 (2.19)

DUO figures are based on use in vertical mode and stabilized every 1m

M390L TRIO

LOADING CHART

Span	m (ft)	6.00 (19.69)	8.00 (26.25)	10.00 (32.81)	12.00 (39.37)	14.00 (45.93)	16.00 (52.49)	18.00 (59.06)
Point load	kg (lbs)	654.90 (1443.81)	482.50 (1063.73)	377.10 (831.36)	305.20 (672.85)	252.40 (556.45)	211.50 (466.28)	178.70 (393.97)
Deflection	mm (in)	17.20 (0.68)	30.70 (1.21)	48.40 (1.91)	70.40 (2.77)	97.00 (3.82)	128.40 (5.06)	165.00 (6.50)
Two point load	kg (lbs)	491.20 (1082.91)	361.90 (797.85)	282.80 (623.47)	228.90 (504.64)	189.30 (417.33)	158.60 (349.65)	134.00 (295.42)
Deflection	mm (in)	21.80 (0.86)	38.80 (1.53)	60.70 (2.39)	87.60 (3.45)	119.60 (4.71)	156.70 (6.17)	199.00 (7.83)
Three point load	kg (lbs)	327.50 (722.01)	241.30 (531.97)	188.50 (415.57)	152.60 (336.43)	126.20 (278.22)	105.80 (233.25)	89.30 (196.87)
Deflection	mm (in)	20.30 (0.80)	36.20 (1.43)	56.70 (2.23)	82.00 (3.23)	112.20 (4.42)	147.50 (5.81)	188.00 (7.40)
Four point load	kg (lbs)	272.90 (601.64)	201.00 (443.13)	157.10 (346.35)	127.10 (280.21)	105.20 (231.93)	88.10 (194.23)	74.40 (164.02)
Deflection	mm (in)	21.50 (0.85)	38.30 (1.51)	59.90 (2.36)	86.50 (3.41)	118.10 (4.65)	154.90 (6.10)	196.90 (7.75)
Distrib. loading	kg (lbs)	218.30 (146.69)	120.60 (81.04)	75.40 (50.67)	50.90 (34.20)	36.10 (24.26)	26.40 (17.74)	19.90 (13.37)
Deflection	mm (in)	21.30 (0.84)	38.00 (1.50)	59.50 (2.34)	85.90 (3.38)	117.30 (4.62)	153.90 (6.06)	195.60 (7.70)

TRIO figures are based on use in apex up/down orientation

M390L QUATRO

LOADING CHART

Span	m (ft)	6.00 (19.69)	8.00 (26.25)	10.00 (32.81)	12.00 (39.37)	14.00 (45.93)	16.00 (52.49)	18.00 (59.06)
Point load	kg (lbs)	1526.90 (3366.23)	1133.50 (2498.94)	894.70 (1972.47)	733.30 (1616.65)	616.10 (1358.27)	526.60 (1160.95)	455.40 (1003.98)
Deflection	mm (in)	19.80 (0.78)	35.40 (1.39)	55.60 (2.19)	80.50 (3.17)	110.30 (4.34)	145.30 (5.72)	185.60 (7.31)
Two point load	kg (lbs)	1054.00 (2323.67)	850.10 (1874.15)	671.00 (1479.30)	550.00 (1212.54)	462.10 (1018.75)	394.90 (870.60)	341.50 (752.88)
Deflection	mm (in)	23.20 (0.91)	44.90 (1.77)	70.20 (2.76)	101.30 (3.99)	138.10 (5.44)	180.70 (7.11)	229.20 (9.02)
Three point load	kg (lbs)	763.50 (1683.23)	566.70 (1249.36)	447.40 (986.35)	366.70 (808.43)	308.10 (679.24)	263.30 (580.48)	227.70 (501.99)
Deflection	mm (in)	23.50 (0.93)	41.80 (1.65)	65.50 (2.58)	94.50 (3.72)	129.10 (5.08)	169.20 (6.66)	215.00 (8.46)
Four point load	kg (lbs)	618.90 (1364.44)	472.30 (1041.24)	372.80 (821.88)	305.60 (673.73)	256.70 (565.93)	219.40 (483.69)	189.70 (418.22)
Deflection	mm (in)	24.20 (0.95)	44.30 (1.74)	69.30 (2.73)	99.90 (3.93)	136.30 (5.37)	178.40 (7.02)	226.40 (8.91)
Distrib. loading	kg (lbs)	412.60 (277.25)	283.40 (190.44)	178.90 (120.22)	122.20 (82.11)	88.00 (59.13)	65.80 (44.22)	50.60 (34.00)
Deflection	mm (in)	20.10 (0.79)	43.90 (1.73)	68.80 (2.71)	99.20 (3.91)	135.30 (5.33)	177.10 (6.97)	224.80 (8.85)

Point load



Two point load



Three point load



Four point load



Distributed point load



All truss loading calculations and TUV certifications are based on:

Truss supported or suspended at both ends • Static loadings only • Loads applied in the node points • Included self weight of the trusses • Spans made of different truss length • Interaction of bending moment and shear force at connector • Structural calculations based on DIN EN 1999-1-1 and DIN EN 1999-1-1/A2 made in 2014 • To comply with BS 7905-2 / ANSI E1.2-2006 / CWA 15902-2 all loading data should be multiplied by 0.85 • For any other application or in case of an assembled structure, contact Milos or a structural engineer • Safety factors used – self weight 1.35 / loading 1.5