PROEL

TRUSSING

INFO
INTRODUZIONE TECNICA

CHE COS'E' UNA TRUSS?

• Si definisce truss una struttura realizzata con tubi in allumino saldati tra loro che formano un reticolo regolare. Le truss sono, in genere, fabbricate secondo parametri standard, ma possono essere realizzate anche su misura. È stato volutamente scelto l'alluminio per sfruttarne alcune peculiarità:

• peso specifico pari a circa 1/3 di quello dell'acciaio

• manutenzione praticamente nulla, in quanto è altamente resistente alla corrosione degli agenti esterni (es. fenomeni atmosferici)

• alta resistenza alla trazione

• l'aspetto (è bello a vedersi in quanto si presenta brillante e levigato)

• materiale completamente riciclabile

Gli elementi fondamentali che compongono una truss in allumino sono i tubi principali, le diagonali e gli elementi di connessione.

Esistono in commercio diverse tipologie di truss, a seconda della sezione: in genere le più usate sono quelle a sezione piana, triangolare e quadrata. Ognuna di queste presenta differenti caratteristiche in termini di prestazioni, versatilità di utilizzo, aspetto estetico e costo.

TIPI DI FORZE A CUI E' SOTTOPOSTA UNA TRUSS

Flessione:

• Considerando una truss in orizzontale, l'azione di una forza su di essa (ad es. la gravità), ne provoca la flessione: i tubi nella parte superiore sono sottoposti a compressione mentre quelli nella parte inferiore a trazione. Tale forza può essere quantificata attraverso l'applicazione di un momento flettente (prodotto di una forza per una distanza), che provoca l'entità della flessione della truss, rispetto all'asse neutro. Esso viene in genere calcolato nei casi specifici di carico uniformemente distribuito lungo la truss (UDL) e carico concentrato in mezzeria (CPL).

Il parametro che indica l'entità dell'inarcamento si definisce con il termine "freccia", valore che esprime la massima distanza tra la posizione assunta dalla truss sotto carico e la posizione a riposo.

Torsione:

• Considerando una truss vincolata ad un solo estremo, la forza di torsione è quella che, applicata all'estremo libero, tende a far ruotare la truss attorno al proprio asse. In un sistema di truss, la torsione si manifesta essenzialmente negli elementi verticali (torri). Per impedire il fenomeno, si consiglia di utilizzare, soprattutto per le torri, una truss antitorsiva, in cui gli elementi diagonali contrastano l'evento indesiderato.

Taglio:

• E' il fenomeno che si manifesta quando due forze antagoniste si contrappongono in corrispondenza di una sezione della truss: l'una che tende a far scorrere la sezione verso il basso, l'altra verso l'alto. Lo sforzo di taglio di maggiore entità, in genere, si concentra in corrispondenza dei cambi di direzione delle truss (da verticale ad orizzontale).

COME SI LEGGONO I GRAFICI E LE TABELLE

• Le tabelle indicano l'entità della freccia per ciascun tipo di truss, a seconda del carico applicato (distribuito o concentrato). In caso di mancata indicazione di un valore, è necessario ridurre il carico o impiegare una truss con caratteristiche superiori.

Es. considerando la tabella del carico della truss QUADRO lato 250 mm (connessione con Spigot e Pin), supponiamo di voler verificare qual è la freccia di una struttura di 8 m, con un carico distribuito di 50 kg/m. Incrociando la colonna "UDL" con la riga "8m", si ottiene nella colonna "Def"un valore di freccia pari a 66 mm.

QUADRO 25 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	432	161	320	215	160	13
6	279	93	210	140	116	37
8	201	50	151	100	84	66
10	152	30	114	76	63	105
12	117	20	88	59	49	150
14	91	13	68	46	38	201

• I grafici, infine, evidenziano l'andamento delle portate al variare della lunghezza della truss, sia nella configurazione con carico distribuito che con carico concentrato. Ad es. una truss QUADRO lato 250 mm (connessione con Spigot e Pin), di lunghezza 8 m, ha una capacità di carico uniformemente distribuito pari a circa 50 kg/m ed una capacità di carico concentrato in mezzeria pari a circa 200 kg.

INFO
TECHNICAL INTRODUCTION

WHAT IS A TRUSS?

• A truss is defined as a structural unit made of aluminium round tubes welded together to form a regular module. Trusses are usually made according to standard measures, but they can also be customized. Aluminium has been chosen on purpose in order to make the most of some of its special features:

• low self weight, aprox. 1/3 of the weight of steel

• maintenance is almost nil, since it is highly resistant to the corrosion caused by external agents (e.g. Atmospheric phenomena)

• high tensile strength

• attractive finish (it looks good being bright and shiny)

• fully recyclable material

The basic elements making up an aluminium truss are the following: the main tubes or chords, the diagonal braces and the coupling elements.

There are several different types of trussing on the market, depending on the cross section: usually the most used are the flat section, the triangular section and the square section trusses. Each one of them presents different features in terms of performance, versatility of use,
appearance and cost.

TYPES OF FORCES A TRUSS IS EXPOSED TO

Bending:

• Considering a span, the action of a force upon it (e.g. gravity) causes its deflection: the top chords are exposed to compression and the bottom chords to tension.

The bending force can be quantified through application of a bending moment (resulting from the principle of a force multiplied by a distance) that leads to the bending of a truss around the neutral axis. The bending force has specific formulas for typical loading situations such as UDL (Uniformly Distributed Load) and CPL (Central Point Load).

The parameter expressing the entity of bending is defined with the term "deflection". It expresses the maximum distance between the position of the truss under load and its position at rest.

Torsion:

• Considering a truss bound at one end and free at the other one, the torsion force, applied to the free end, tends to make the truss twist around its own axis.

In a system of trusses, the torsion force is basically active in the vertical elements (towers). In order to oppose this phenomenon, it is recommendable, especially for towers, the use of an anti-torsion truss, where the diagonals contrast the unwanted effect.

Shear:

• The shear force is the load acting across a truss at its supports or at the position of a point load, in such a way as to cut the truss vertically at the supports.

The maximum shear force is usually active at the changes of direction of the truss (from vertical to horizontal).

HOW TO READ THE DIAGRAMS AND TABLES

• The tables show the entity of the bending effect for each kind of truss, depending on the load applied (distributed or concentrated). In case a parameter is not indicated, the load needs to be reduced or, if not possible, a higher capacity truss needs to be used.

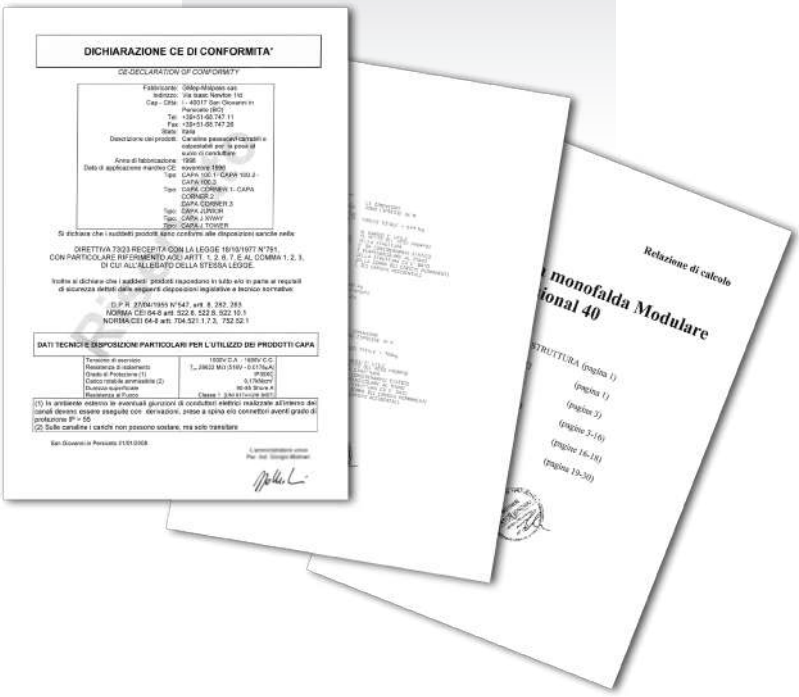
E.g. The table shows the load on the QUADRO truss with a 250 mm side section (connection with Spigot and Pins). Supposing we want to check what is the bending effect of an 8 mt span with a distributed load of 50 kg/mt, crossing the raw "8m" with the column "UDL" we obtain on the column "Def" a deflection of 66 mm.

QUADRO 25 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	432	161	320	215	160	13
6	279	93	210	140	116	37
8	201	50	151	100	84	66
10	152	30	114	76	63	105
12	117	20	88	59	49	150
14	91	13	68	46	38	201

• The charts, finally, stress the performance of the total loads with different spans, both in the distributed and concentrated load configurations. For example, a QUADRO truss with a 250 mm side section and an 8 mt span (connection with Spigots and Pins), can support a load of about 50Kg/m with the load evenly distributed and about 200Kg with a concentrated load applied to the middle.

LIGHTING TRUSS
QUALITY



• Le materie prime ed i vari componenti dei nostri tralicci sono certificati secondo i rispettivi standard europei di qualità.

• The raw materials and various components of our trusses are certified according to the relevant European quality standards.

BENEFITS

- connessione rapida
- ampia certificazione
- estrema leggerezza e facilità di trasporto
- compatibilità con altre aziende primarie
- estetica e rifiniture curate
- estrema versatilità negli utilizzi: fiere spettacoli,architetture d'interni,installazioni pubbliche
- imballo singolo
- ottimo rapporto qualità-prezzo
- resistenza nel tempo
- grande capacità di portata

- quick connection
- full certification
- light and easy to transport
- compatibility with other leading companies
- appealing look and attention to details
- high versatility of use: exhibitions, shows, indoor, architecture, public installations
- separate packaging for each module
- excellent quality-price relationship
- long time strength
- excellent load capacity

LIGHTING TRUSS
DUO 25

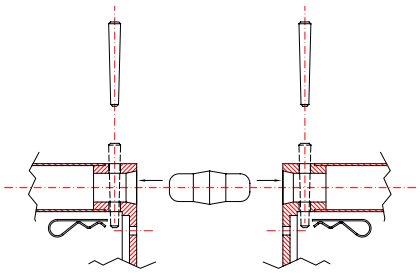
PLDSET02PLUS

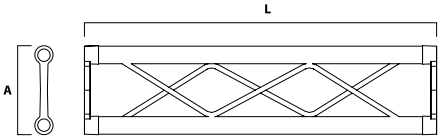
PLDSET01

TRUSS DUO 25

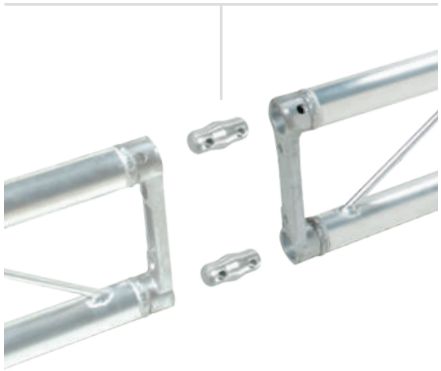
• *Struttura a sezione piana con lato da 250 mm dotata di piastra in fusione d'alluminio. Tale caratteristica conferisce alla struttura ottimi vantaggi dal punto di vista della robustezza, con relativo incremento dei valori di antitorsione.*

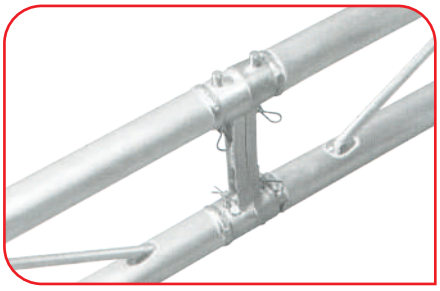
• *Flat section structure features a 250 mm long side and cast aluminium end-plate. These features give the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*





CODE	Description	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLRD005	Linear truss	250	500	2,186	6,25
PLRD010	Linear truss	250	1000	3,389	12,50
PLRD015	Linear truss	250	1500	4,593	18,75
PLRD020	Linear truss	250	2000	5,796	25,00
PLRD025	Linear truss	250	2500	7	31,25
PLRD030	Linear truss	250	3000	8,204	37,50
PLRD040	Linear truss	250	4000	10,611	50,00





• *Possibilità di connessione tramite spinotto tornito spina e molla sicurezza o tramite viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit*

LIGHTING TRUSS
DUO 25

SPECIFICHE TECNICHE

• *La truss a sezione piana da 250 mm presenta due tipi di connessione: una rapida con ogive, spine e molle (PLDSET02PLUS), l'altra con viti e dadi (PLDSET01).*

La struttura è in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono a filo continuo con alluminio estruso, con diametro da 12 mm e spessore 1,5 mm.
I terminali piastra sono in fusione d'alluminio.
La soluzione della greca continua rende la struttura gradevole.

TECHNICAL SPECIFICATIONS

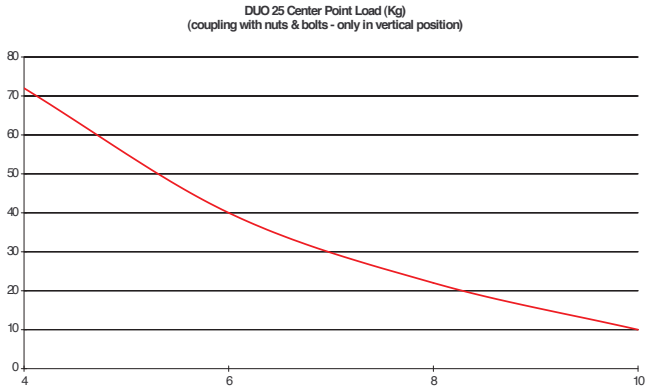
• *The flat section truss with 250 mm long side features two kinds of connection: by means of spigots, pins and split pins for quick connection,*
code PLDSET02PLUS, and by means of nuts and bolts, code PLDSET01.
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal braces are a continuous line and are made of extruded aluminium with a 12 mm diameter and a 1,5 mm thickness.
The end-plates are made of cast aluminium
The solution of the uninterrupted fret pattern gives the structure a good aesthetic impact:

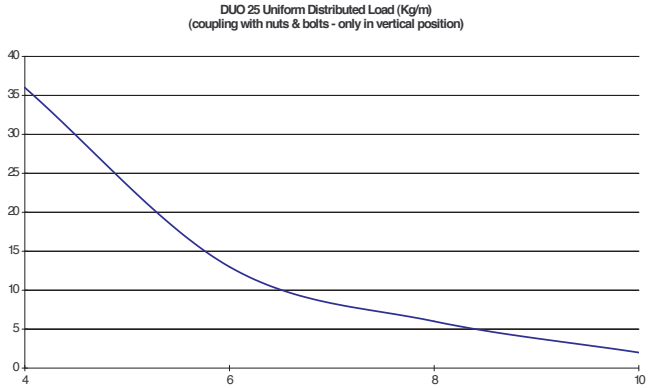
DUO 25 (coupling with nuts & bolts)*

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	72	36	54	36	30	3
6	40	13	30	20	17	7
8	22	6	17	11	9	13
10	10	2	7	5	4	20

* Only in vertical position

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection





DUO 25 (COUPLING WITH SPIGOTS & PINS)*

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def
m	kg	kg/m	kg	kg	kg	mm
4	150	75	117	78	65	9
6	90	30	74	50	41	20
8	60	15	54	36	30	34
10	40	8	41	28	23	51
12	24	5	36	24	20	77

* Only in vertical position

• CPL = Center Point Load
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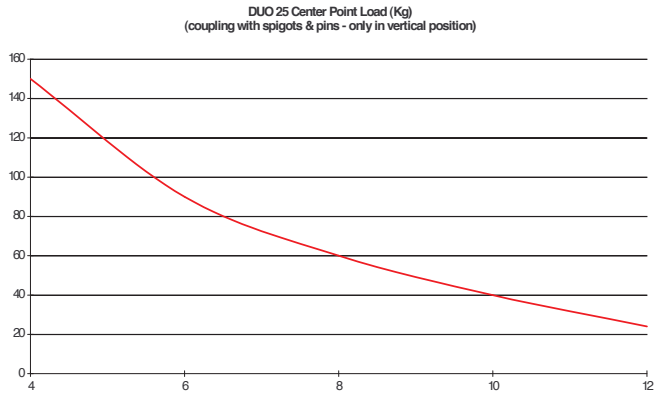
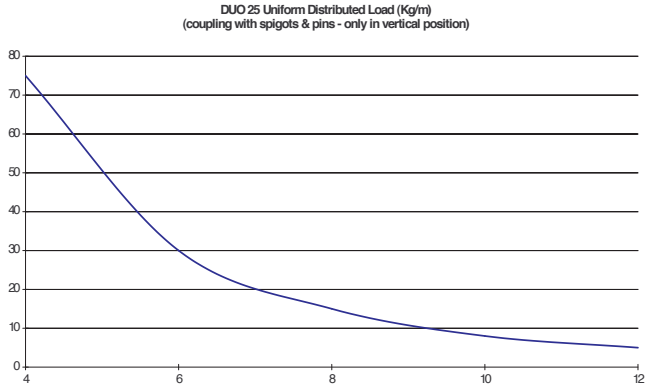
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection





LIGHTING TRUSS
DUO 25

SISTEMA CUBO

• *La progettazione del cubo nasce dall'esigenza di ottimizzare e razionalizzare, quanto più possibile, lo stock di angoli di cui disporre. La modularità del prodotto, composto da poche unità, consente di avere sempre una valida alternativa d'uso. Nello specifico, il progetto gravita attorno ad un nodo pressofuso a sei facce, le cui molteplici soluzioni di composizione determinano la piena libertà di assemblaggio. I singoli nodi sono uniti da tubi rinforzati non saldati, per cui è possibile effettuare facilmente interventi di manutenzione o sostituzione. Il sistema di assemblaggio e serraggio è agevolato dalla chiave dima (PLTZ30K01).*

È una soluzione altamente versatile che consente di ottenere sia mini torri con snodi a 2-3-4 vie per le versioni piane sia una faccia a quattro nodi per collegare americane piane ad americane quadrate.

CUBE SYSTEM

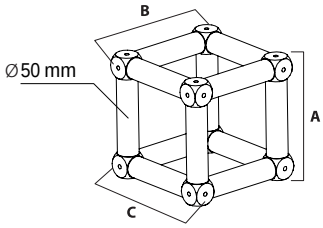
• *The design of the cube arises from the need to optimize and rationalize as much as possible, the storage of corner sections kept in stock. The modularity of the product allows, with reletively few units, a wide range of uses. The cube is a six-faced die-cast joint granting its user full freedom to assemble, thanks to its several setting solutions. The single joints are connected by reinforced tubes without welding, making maintenance or replacement easy. The assembling and tightening is carried out by an assembly template (PLTZ30K01).*

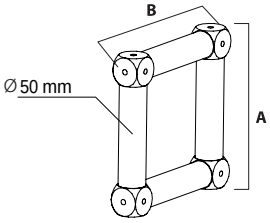
The cube is a highly versatile solution allowing the realization of mini-towers featuring 2-3-4-way joints for the flat configuration and the four-way joint face to connect flat sections and square sections.

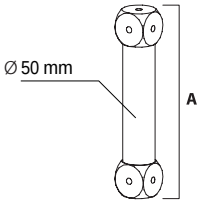
PLRQCUB

PLRQK4

PLRQK2



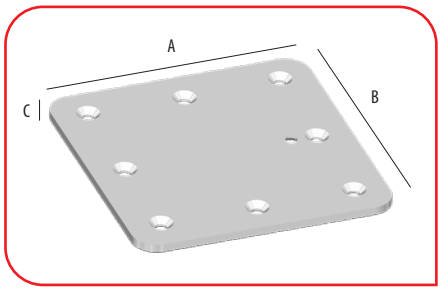


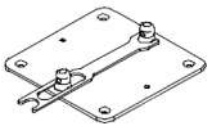


Code	Description	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLRQK2	mini tower	250	50	50	1,398	0,63
PLRQK4	flat connection	250	250	50	3,443	3,13
PLRQCUB	cube	250	250	250	8,491	15,63
PLQBASE01	base duo trio quadro	250	250	5	2,944	0,31

PLTZ30K01

PLQXKFC





PLQBASE01

• *Base per DUO TRIO QUADRO 25.*

• *Base for DUO TRIO QUADRO 25.*

LIGHTING TRUSS
TRIO 25

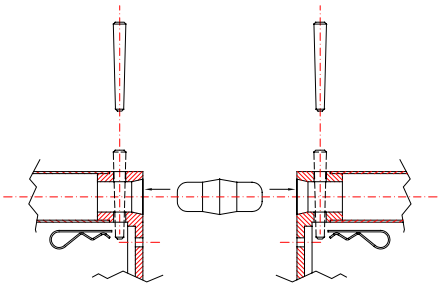
TRUSS TRIO 25

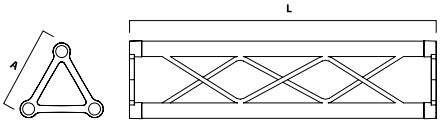
• *Struttura a sezione triangolare con lato da 250 mm dotata di piastra in fusione d'alluminio, caratteristica che rende la struttura robusta, con relativo incremento dei valori di antitorsione.*

• *Triangular section structure features a 250 mm long side and cast aluminium end-plate. These features give the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*

PLTSET02PLUS

PLTSET01





Code	Description	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLRTC012	linear compensation truss	250	125	2,436	3,38
PLRTC025	linear compensation truss	250	250	2,877	6,77
PLRT005	linear truss	250	500	3,757	13,53
PLRT010	linear truss	250	1000	5,519	27,06
PLRT015	linear truss	250	1500	7,28	40,59
PLRT020	linear truss	250	2000	9,041	54,13
PLRT025	linear truss	250	2500	10,803	67,66
PLRT030	linear truss	250	3000	12,264	81,19
PLRT040	linear truss	250	4000	16,086	108,25

• *Possibilità di connessione tramite ogiva tornita e relativi agganci o tramite serie di viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.*

LIGHTING TRUSS
TRIO 25

SPECIFICHE TECNICHE

• *La truss a sezione triangolare da 250 mm di lato presenta due tipi di connessione: una rapida con ogive, spine e molle (PLTSET02PLUS), l'altra con viti e dadi (PLTSET01).*

Struttura in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore. Le diagonali interne sono a filo continuo con alluminio estruso di diametro da 12 mm e spessore 1,5 mm.

I terminali piastra sono in fusione di alluminio. La soluzione della greca continua rende la struttura gradevole.

TECHNICAL SPECIFICATIONS

• *The triangular section truss with 250 mm long side section features two kinds of connections: by means of spigots, pins and split pins for quick connection, code PLTSET02PLUS, and by means of nuts and bolts, code PLTSET01.*

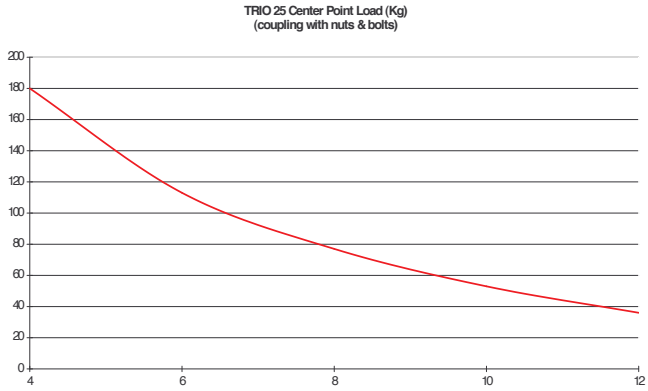
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness. Diagonal braces are a continuous line and are made of extruded aluminium with a 12 mm diameter and a 1,5 mm thickness.

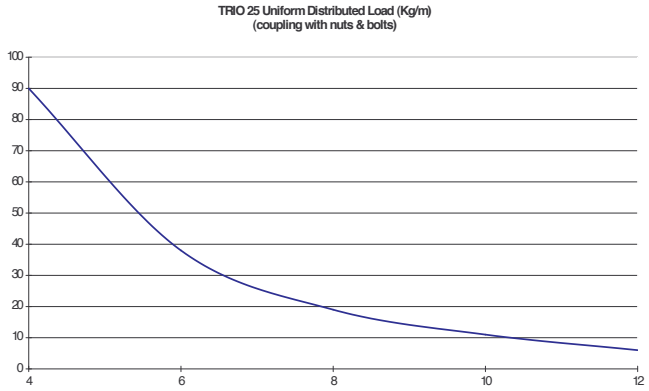
The end-plates are made of cast aluminium. The solution of the uninterrupted fret pattern gives the structure a good aesthetic impact.

TRIO 25 (COUPLING WITH NUTS & BOLTS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	180	90	135	90	75	8
6	113	38	84	56	47	17
8	77	19	57	38	32	30
10	53	11	40	27	22	47
12	36	6	27	18	15	68

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection

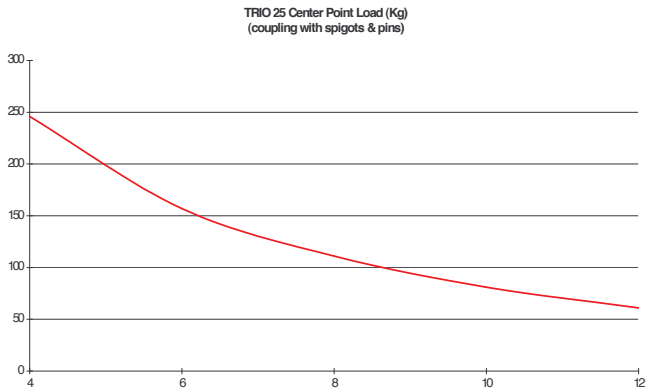


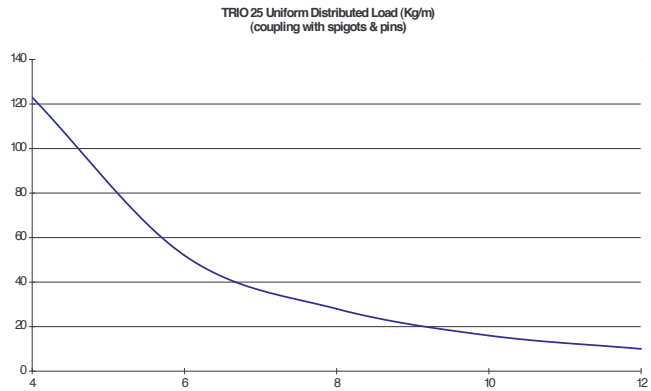


TRIO 25 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	246	123	184	123	102	10
6	157	52	118	79	65	22
8	111	28	83	55	46	40
10	81	16	61	41	34	60
12	61	10	45	30	25	78

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection





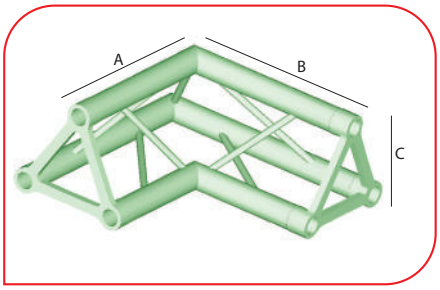
LIGHTING TRUSS
TRIO 25

ANGOLI E RACCORDI

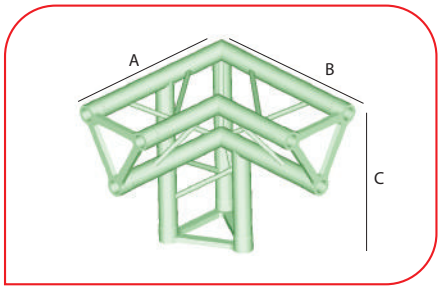
• *Gli angoli con configurazione a sezione triangolare sono realizzati con tubo estruso in alluminio di diametro 50 mm e spessore 2 mm. Le diagonali interne sono composte da tubo estruso di diametro 16 mm e spessore 1,8 mm. I terminali piastra sono in fusione di alluminio.*
Le connessioni avvengono tramite set rapido PLTSET02PLUS oppure con viti e dadi PLTSET01.

CORNERS AND CONNECTIONS

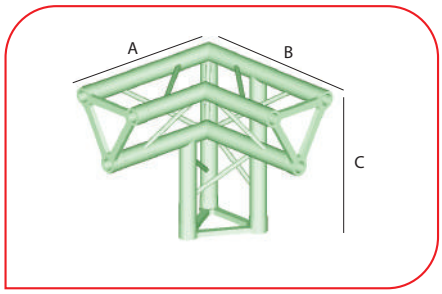
• *Corners featuring the triangular section configuration are made with extruded aluminium tubes with a diameter of 50 mm and a thickness of 2 mm.*
The internal diagonal bracing is made with extruded aluminium tube with a diameter of 16 mm and a thickness of 1,8 mm.
The end-plates are made of cast aluminium .
The connections are made with quick fit kit PLTSET02PLUS or with nuts and bolts kit PLTSET01.



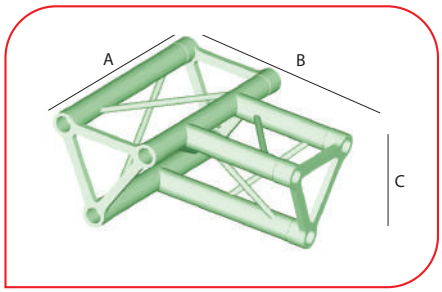
PLRT02A
• *Angolo 90° 2 vie vertice alto/basso.*
• *90° 2-ways corner vertex up/down.*



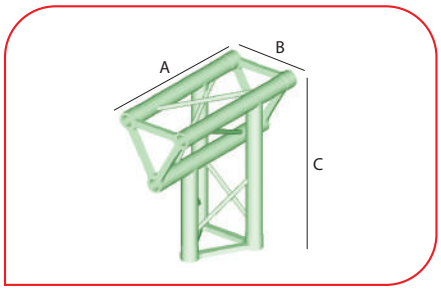
PLRT03B
• *Angolo 90° 3 vie vertice. basso gamba destra.*
• *90° 3-ways corner vertex. down right leg.*



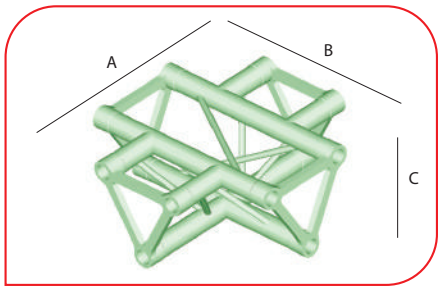
PLRT03BS
• *Angolo 90° 3 vie vertice. basso gamba sinistra.*
• *90° 3-ways corner vertex. down left leg.*



PLRT03TS
• *Angolo 90° 3 vie vertice alto/basso.*
• *90° 3-ways corner vertex up/down.*

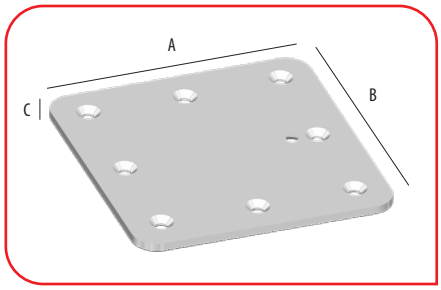


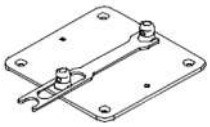
PLRT03TB
• *Angolo 90° 3 vie a T vertice. basso.*
• *90° 3-ways T corner vertex. down.*



PLRT04S
• *Incrocio 90° 4 vie vertice. alto/basso.*
• *90° 4-ways T cross vertex. up/down.*

Code	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLRT02A	500	500	216,5	4,124	54,13
PLRT03B	500	500	500	6,105	125,00
PLRT03BS	500	500	500	6,105	125,00
PLRT03TS	500	500	216,5	5,909	54,13
PLRT03TB	500	250	500	6,023	62,50
PLRT04S	500	500	216,5	7,736	54,13
PLQBASE01	250	250	5	2,944	0,31





PLQBASE01
• *Base per DUO TRIO QUADRO 25.*
• *Base for DUO TRIO QUADRO 25.*

LIGHTING TRUSS
QUADRO 25

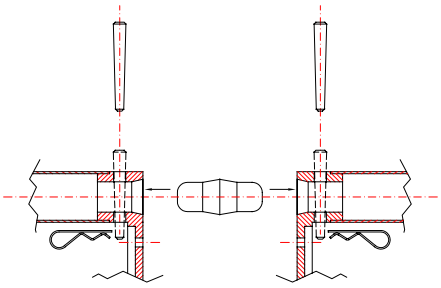
TRUSS QUADRO 25

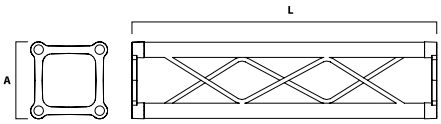
• Struttura a sezione quadrata con lato da 250 mm dotata di piastra in fusione d'alluminio. Tale caratteristica rende la struttura robusta, con relativo incremento dei valori di antitorsione.

• Square section structure features a 250 mm long side and cast aluminium end-plate. These features gives the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.

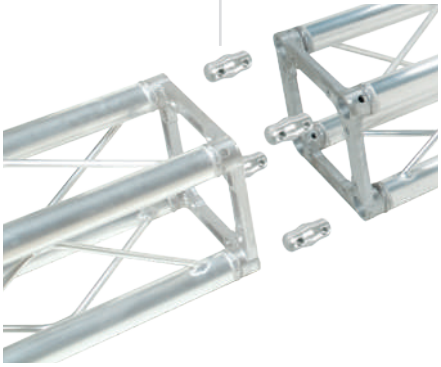
PLQSET02PLUS

PLQSET01





CODE	DESCRIPTION	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLRQC025	Linear compensation truss	250	250	3,571	15,63
PLRQ005	Linear truss	250	500	4,843	31,25
PLRQ010	Linear truss	250	1000	7,087	62,50
PLRQ015	Linear truss	250	1500	9,33	93,75
PLRQ020	Linear truss	250	2000	11,574	125,00
PLRQ025	Linear truss	250	2500	13,817	156,25
PLRQ030	Linear truss	250	3000	16,06	187,50
PLRQ040	Linear truss	250	4000	20,547	250,00



• Possibilità di connessione tramite spinotto tornito e relativi agganci o tramite viti e dadi.

• Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.

LIGHTING TRUSS
QUADRO 25

SPECIFICHE TECNICHE

• La truss a sezione quadrata da 250 mm di lato presenta due tipi di connessione: una rapida con ogive, spine e molle (PLQSET02PLUS) e l'altra con viti e dadi (PLQSET01).
La struttura è in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono a filo continuo con alluminio estruso di diametro da 12 mm e spessore 1,5 mm.
I terminali piastra sono in fusione d'alluminio.
La soluzione della greca continua rende la struttura gradevole.

TECHNICAL SPECIFICATIONS

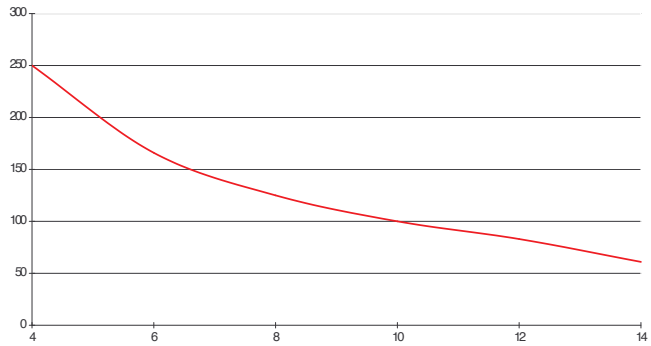
• The square section truss with 250 mm long side features two kinds of connection: by means of spigots, pins and split pins for quick connection, code PLQSET02PLUS, and by means of nuts and bolts, code PLQSET01.
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal braces are a continuous line and are made of extruded aluminium with a 12 mm diameter and a 1,5 mm thickness.
The end-plates are made of cast aluminium
The solution of the uninterrupted fret pattern gives the structure a good aesthetic impact.

QUADRO 25 (coupling with nuts & bolts)

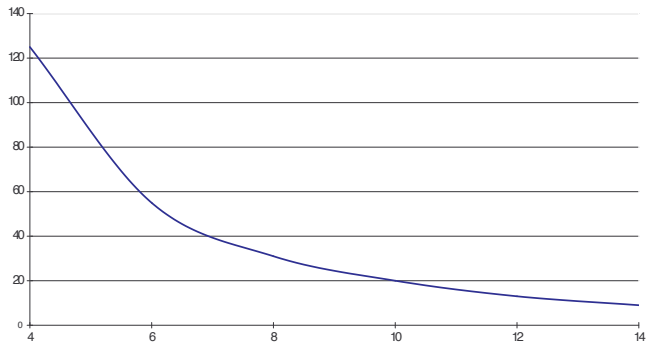
DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	250	125	190	125	105	8
6	166	55	125	84	70	18
8	125	31	95	63	52	35
10	100	20	75	50	41	59
12	83	13	63	42	34	89
14	61	9	55	36	28	130

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection

QUADRO 25 Center Point Load (Kg)
(coupling with nuts & bolts)



QUADRO 25 Uniform Distributed Load (Kg/m)
(coupling with nuts & bolts)

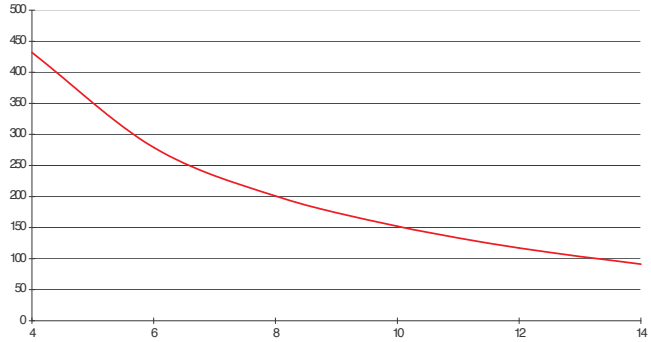


QUADRO 25 (COUPLING WITH SPIGOTS & PINS)

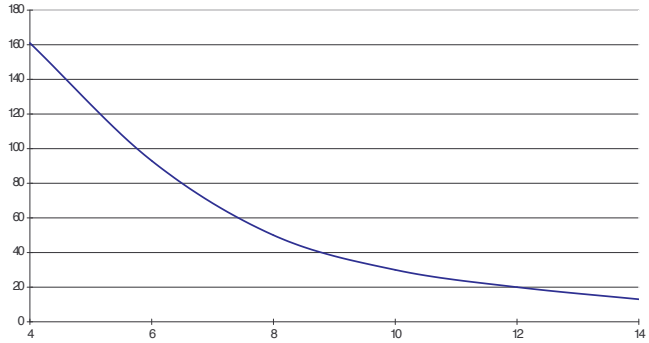
DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	432	161	320	215	160	13
6	279	93	210	140	116	37
8	201	50	151	100	84	66
10	152	30	114	76	63	105
12	117	20	88	59	49	150
14	91	13	68	46	38	201

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection

QUADRO 25 Center Point Load (Kg)
(coupling with spigots & pins)



QUADRO 25 Uniform Distributed Load (Kg/m)
(coupling with spigots & pins)



LIGHTING TRUSS
QUADRO 25

SISTEMA CUBO

• *La progettazione del cubo nasce dall'esigenza di ottimizzare e razionalizzare, quanto più possibile, lo stock di angoli di cui disporre. La modularità del prodotto, composto da poche unità, consente di avere sempre una valida alternativa d'uso. Nello specifico, il progetto gravita attorno ad un nodo pressofuso a sei facce, le cui molteplici soluzioni di composizione determinano la piena libertà di assemblaggio. I singoli nodi sono uniti da tubi rinforzati non saldati, per cui è possibile effettuare facilmente interventi di manutenzione o sostituzione. Il sistema di assemblaggio e serraggio è agevolato dalla chiave dima (PLTZ30K01).*
È una soluzione altamente versatile che consente di ottenere sia mini torri con snodi a 2-3-4 vie per le versioni piane sia una faccia a quattro nodi per collegare americane piane ad americane quadrate.

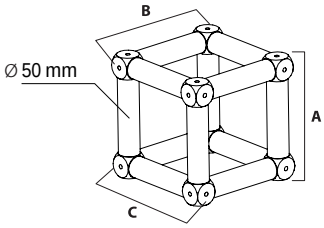
CUBE SYSTEM

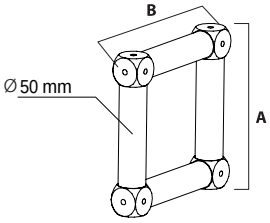
• *The design of the cube arises from the need to optimize and rationalize as much as possible, the storage of corner sections kept in stock. The modularity of the product allows, with reletively few units, a wide range of uses. The cube is a six-faced die-cast joint granting its user full freedom to assemble, thanks to its several setting solutions. The single joints are connected by reinforced tubes without welding, making maintenance or replacement easy. The assembling and tightening is carried out by an assembly template (PLTZ30K01).*
The cube is a highly versatile solution allowing the realization of mini-towers featuring 2-3-4-way joints for the flat configuration and the four-way joint face to connect flat sections and square sections.

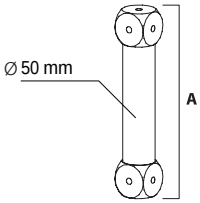
PLRQCUB

PLRQK4

PLRQK2



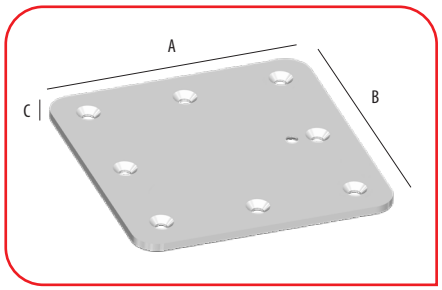


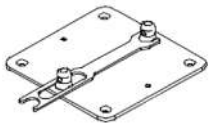


Code	Description	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLRQK2	mini tower 25	250	50	50	1,398	0,63
PLRQK4	flat connection 25	250	250	50	3,443	3,13
PLRQCUB	cube 25	250	250	250	8,491	15,63
PLQBASE01	base DUO TRIO QUADRO 25	250	250	5	2,944	0,31

PLTZ30K01

PLQXKFC





PLQBASE01

• *Base per DUO TRIO QUADRO 25.*
• *Base for DUO TRIO QUADRO 25.*

LIGHTING TRUSS
DUO 29

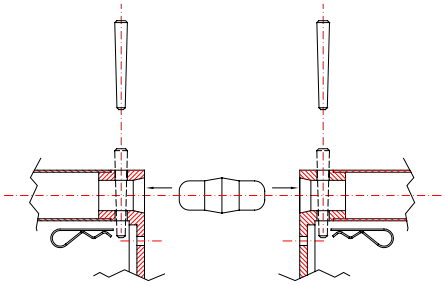
PLDSET02PLUS

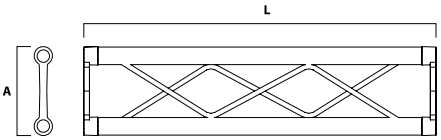
PLDSET01M10

TRUSS DUO 29

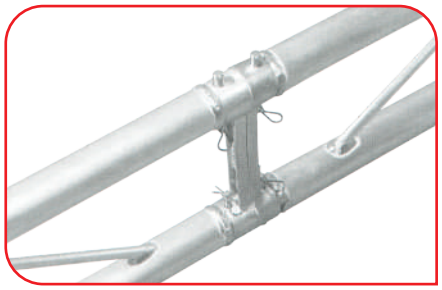
• Struttura a sezione piana con lato da 290 mm dotata di piastra in fusione d'alluminio. Tale caratteristica conferisce alla struttura ottimi vantaggi dal punto di vista della robustezza, con relativo incremento dei valori di antitorsione.

• Flat section structure features a 290 mm long side and cast aluminium end-plate. These features give the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.





Code	Description	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLMDC021	Linear compensation truss	290	210	1,667	3,05
PLMDC029	Linear compensation truss	290	290	1,833	4,21
PLMD005	Linear truss	290	500	2,271	7,25
PLMD010	Linear truss	290	1000	3,485	14,50
PLMD015	Linear truss	290	1500	4,7	21,75
PLMD020	Linear truss	290	2000	6,964	29,00
PLMD025	Linear truss	290	2500	7,128	36,25
PLMD030	Linear truss	290	3000	9,393	43,50
PLMD040	Linear truss	290	4000	10,771	58,00



• Possibilità di connessione tramite spinotto tornito spina e molla sicurezza o tramite viti e dadi.

• Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.

LIGHTING TRUSS
DUO 29

SPECIFICHE TECNICHE

• La truss a sezione piana da 290 mm presenta due tipi di connessione: una rapida con ogive, spine e molle (PLDSET02PLUS), l'altra con viti e dadi (PLDSET01M10).

La struttura è in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono in tubo di alluminio estruso, con diametro da 20 mm e spessore 2 mm.
I terminali piastra sono in fusione d'alluminio.

TECHNICAL SPECIFICATIONS

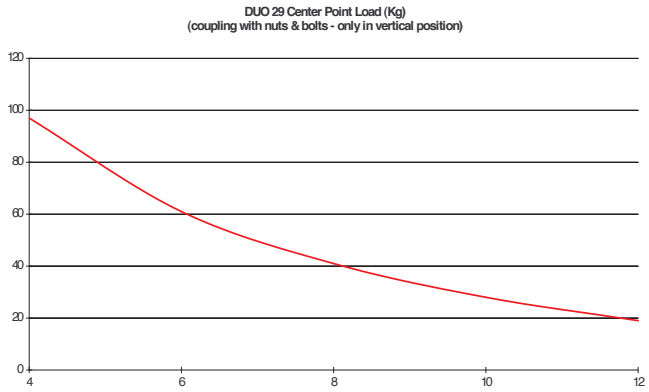
• The flat section truss with 290 mm long side features two kinds of connection: by means of spigots, pins and split pins for quick connection, code PLDSET02PLUS, and by means of nuts and bolts, code PLDSET01M10.
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal bracing is made of extruded aluminium with a 20 mm diameter and a 2 mm thickness.
The end-plates are made of cast aluminium.

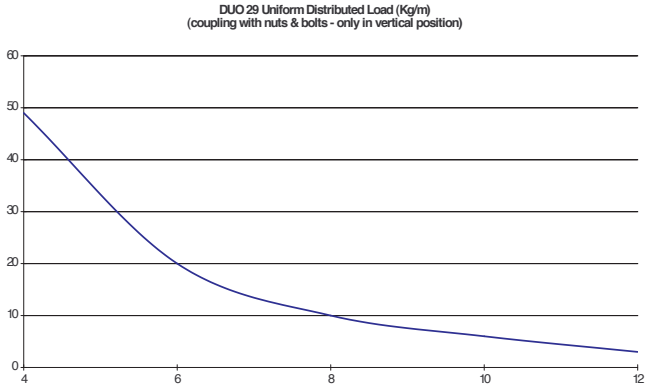
DUO 29 (COUPLING WITH NUTS & BOLTS)*

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	97	49	73	49	41	4
6	61	20	46	30	25	9
8	41	10	31	21	17	16
10	28	6	21	14	12	25
12	19	3	14	10	8	37

* Only in vertical position

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection



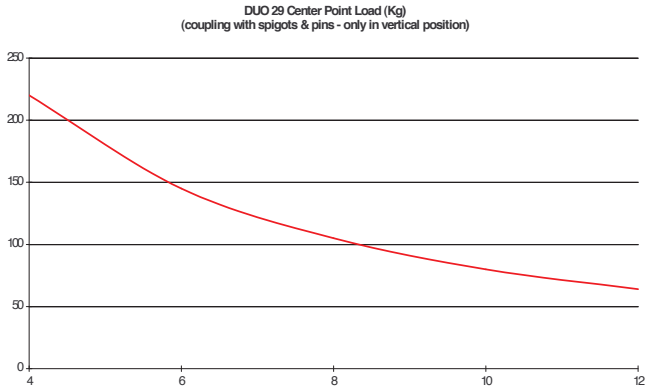


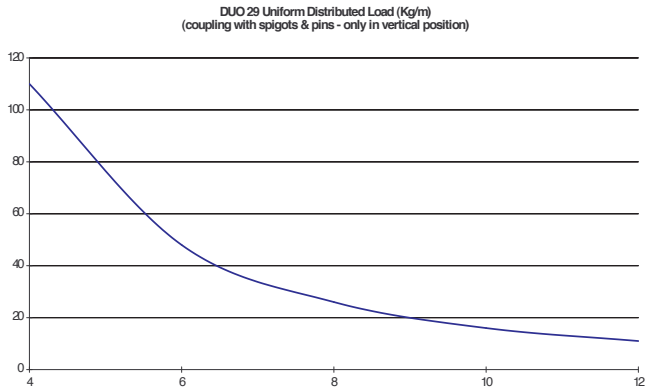
DUO 29 (COUPLING WITH SPIGOTS & PINS)*

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	220	110	171	114	95	9
6	145	48	117	78	65	21
8	105	26	90	60	50	38
10	80	16	75	50	42	62
12	64	11	68	45	38	96

* ONLY IN VERTICAL POSITION

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection





LIGHTING TRUSS
DUO 29

SISTEMA CUBO

• *La progettazione del cubo nasce dall'esigenza di ottimizzare e razionalizzare, quanto più possibile, lo stock di angoli di cui disporre. La modularità del prodotto, composto da poche unità, consente di avere sempre una valida alternativa d'uso. Nello specifico, il progetto gravita attorno ad un nodo pressofuso a sei facce, le cui molteplici soluzioni di composizione determinano la piena libertà di assemblaggio. I singoli nodi sono uniti da tubi rinforzati non saldati, per cui è possibile effettuare facilmente interventi di manutenzione o sostituzione. Il sistema di assemblaggio e serraggio è agevolato dalla chiave dima (PLTZ30K01).*
È una soluzione altamente versatile che consente di ottenere sia mini torri con snodi a 2-3-4 vie per le versioni piane sia una faccia a quattro nodi per collegare americane piane ad americane quadrate.

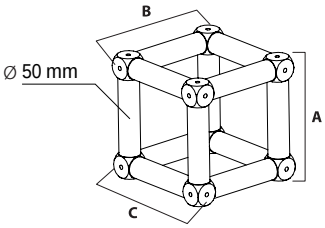
CUBE SYSTEM

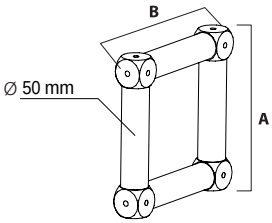
• *The design of the cube arises from the need to optimize and rationalize as much as possible, the storage of corner sections kept in stock. The modularity of the product allows, with reletively few units, a wide range of uses. The cube is a six-faced die-cast joint granting its user full freedom to assemble, thanks to its several setting solutions. The single joints are connected by reinforced tubes without welding, making maintenance or replacement easy. The assembling and tightening is carried out by an assembly template (PLTZ30K01).*
The cube is a highly versatile solution allowing the realization of mini-towers featuring 2-3-4-way joints for the flat configuration and the four-way joint face to connect flat sections and square sections.

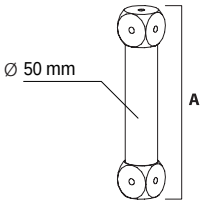
PLMQCUB

PLMQK4

PLMQK2



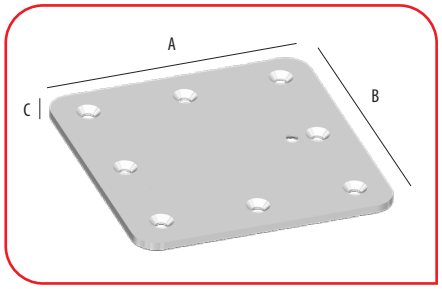


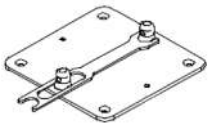


CODE	DESCRIPTION	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLMQK2	mini tower	290	50	50	1,445	0,73
PLMQK4	flat connection	290	290	50	3,629	4,21
PLMQCUB	cube	290	290	290	9,05	24,39
PLQBASE02	base DUO TRIO QUADRO	290	290	5	3,415	0,42

PLTZ30K01

PLQXKFC





PLQBASE02

• *Base per DUO TRIO QUADRO 29.*
• *Base for DUO TRIO QUADRO 29.*

LIGHTING TRUSS
TRIO 29

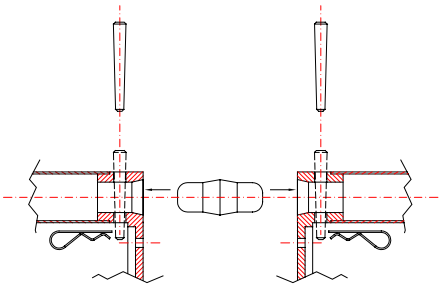
TRUSS TRIO 29

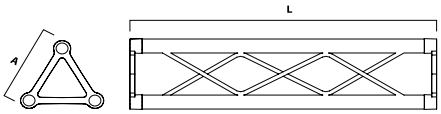
• *Struttura a sezione triangolare con lato da 290 mm dotata di piastra in fusione d'alluminio, caratteristica che rende la struttura robusta, con relativo incremento dei valori di antitorsione.*

• *Triangular section structure features a 290 mm long side and cast aluminium end-plate. These features give the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*

PLTSET02PLUS

PLTSET01M10





CODE	DESCRIPTION	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLMTC010	linear compensation truss	290	105	2,721	3,64
PLMTC021	linear compensation truss	290	210	3,039	7,65
PLMT005	linear truss	290	500	4,175	18,21
PLMT010	linear truss	290	1000	6,203	36,42
PLMT015	linear truss	290	1500	8,232	54,62
PLMT020	linear truss	290	2000	10,26	72,83
PLMT025	linear truss	290	2500	12,032	91,04
PLMT030	linear truss	290	3000	14,061	109,25
PLMT040	linear truss	290	4000	18,117	145,67

• *Possibilità di connessione tramite ogiva tornita e relativi agganci o tramite serie di viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.*

LIGHTING TRUSS
TRIO 29

SPECIFICHE TECNICHE

• *La truss a sezione triangolare da 290 mm di lato presenta due tipi di connessione: una rapida con ogive, spine e molle (PLTSET02PLUS), l'altra con viti e dadi (PLTSET01M10). Struttura in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore. Le diagonali interne sono in alluminio estruso di diametro da 20 mm e spessore 2 mm. I terminali piastra sono in fusione di alluminio.*

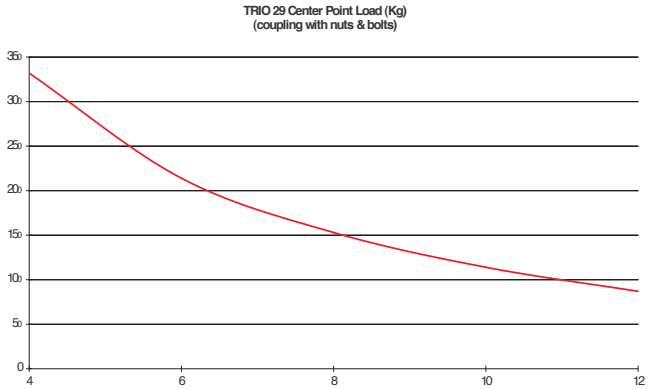
TECHNICAL SPECIFICATIONS

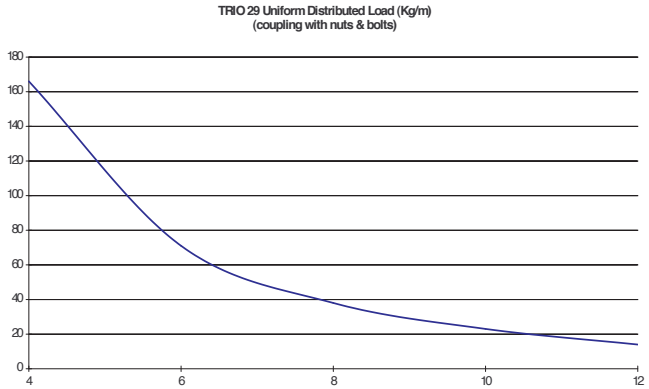
• *The triangular section truss with 290 mm long side section features two kinds of connections: by means of spigots, pins and split pins for quick connection, code PLTSET02PLUS, and by means of nuts and bolts, code PLTSET01M10. The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness. Diagonal braces are made of extruded aluminium with a 20 mm diameter and a 2 mm thickness. The end-plates are made of cast aluminium.*

TRIO 29 (COUPLING WITH NUTS & BOLTS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	332	166	249	166	138	14
6	214	71	160	107	89	30,0
8	153	38	114	76	64	54
10	114	23	85	57	47	85
12	87	14	65	43	36	122

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection

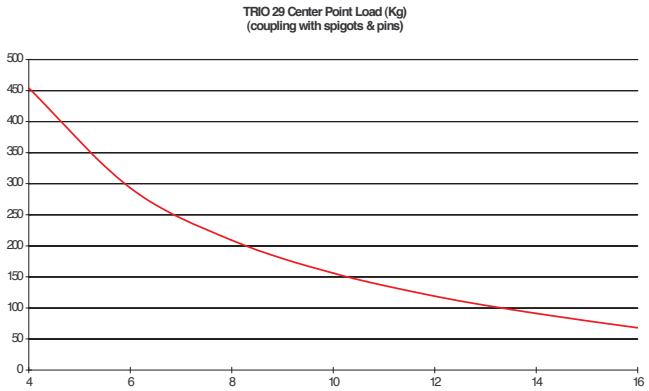


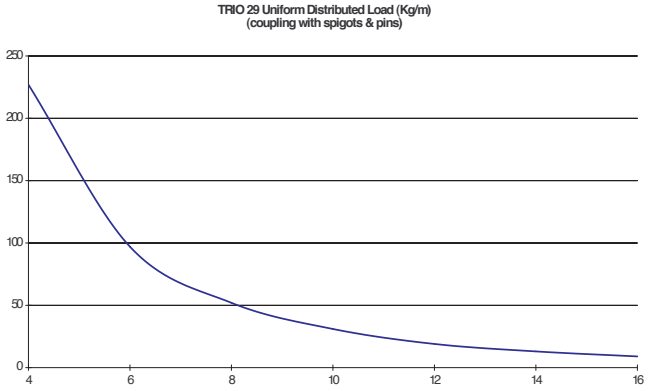


TRIO 29 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	454	227	305	203	169	18
6	293	97	198	132	110	41
8	209	52	144	96	80	71
10	156	31	109	73	61	109
12	119	19	86	57	48	148
14	91	13	68	45	38	202
16	68	9	54	36	30	263

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection





LIGHTING TRUSS
TRIO 29

ANGOLI E RACCORDI

• *Gli angoli con configurazione a sezione triangolare sono realizzati con tubo estruso in alluminio di diametro 50 mm e spessore 2 mm.*

Le diagonali interne sono composte da tubo estruso di diametro 20 mm e spessore 2mm. I terminali piastra sono in fusione di alluminio.

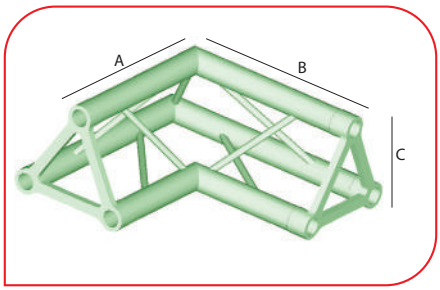
Le connessioni avvengono tramite set rapido PLTSET02PLUS oppure con viti e dadi PLTSET01M10.

CORNERS AND CONNECTIONS

• *Corners featuring the triangular section configuration are made with extruded aluminium tubes with a diameter of 50 mm and a thickness of 2 mm.*

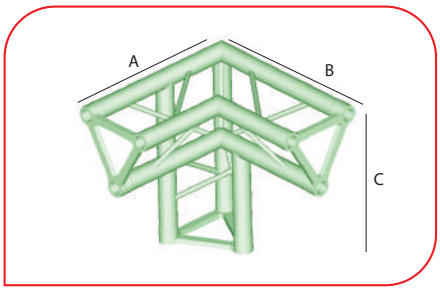
The internal diagonal bracing is made with extruded aluminium tube with a diameter of 20 mm and a thickness of 1,8 mm. The end-plates are made of cast aluminium .

The connections are made with quick fit kit PLTSET02PLUS or with nuts and bolts kit PLTSET01M10.



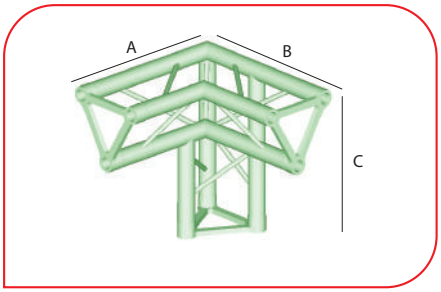
PLMT02A

• *Angolo 90° 2 vie vertice alto/basso.*
• *90° 2-ways corner vertex up/down.*



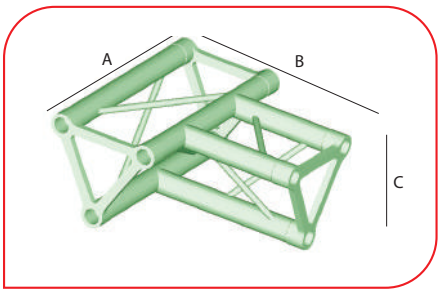
PLMT03B

• *Angolo 90° 3 vie vertice. basso gamba destra.*
• *90° 3-ways corner vertex. down right leg.*



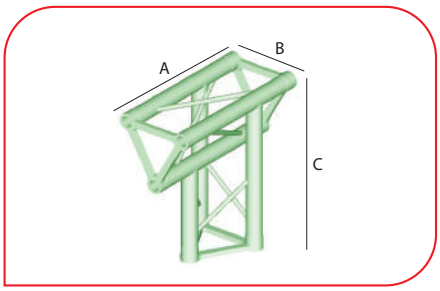
PLMT03BS

• *Angolo 90° 3 vie vertice. basso gamba sinistra.*
• *90° 3-ways corner vertex. down left leg.*



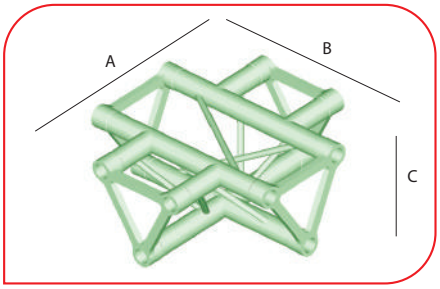
PLMT03TS

• *Angolo 90° 3 vie vertice alto/basso.*
• *90° 3-ways corner vertex up/down.*



PLMT03TB

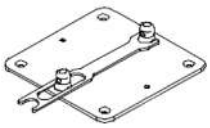
• *Angolo 90° 3 vie a T vertice. basso.*
• *90° 3-ways T corner vertex. down.*

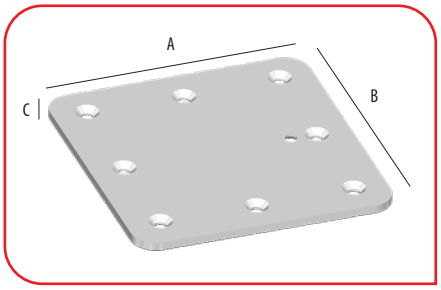


PLMT04S

• *Incrocio 90° 4 vie vertice. alto/basso.*
• *90° 4-ways T cross vertex. up/down.*

CODE	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLMT02A	500	500	251,1	5,408	62,78
PLMT03B	500	500	500	7,959	125,00
PLMT03BS	500	500	500	7,959	125,00
PLMT03TS	500	500	251,1	6,916	62,78
PLMT03TB	500	290	500	7,648	72,50
PLMT04S	500	500	251,1	8,623	62,78
PLQBASE02	290	290	5	3,415	0,42





PLQBASE02

• *Base per DUO TRIO QUADRO 29.*
• *Base for DUO TRIO QUADRO 29.*

LIGHTING TRUSS
QUADRO 29

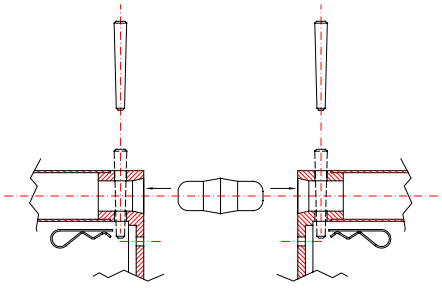
TRUSS QUADRO 29

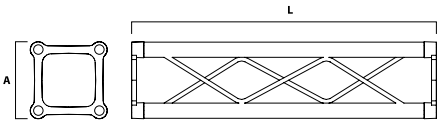
• *Struttura a sezione quadrata con lato da 290 mm dotata di piastra in fusione d'alluminio. Tale caratteristica rende la struttura robusta, con relativo incremento dei valori di antitorsione.*

• *Square section structure features a 290 mm long side and cast aluminium end-plate. These features gives the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*

PLQSET02PLUS

PLQSET01M10





CODE	DESCRIPTION	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLMQC021	Linear compensation truss	290	210	3,815	17,66
PLMQC029	Linear compensation truss	290	290	4,126	24,39
PLMQ005	Linear truss	290	500	5,283	42,05
PLMQ010	Linear truss	290	1000	7,907	84,10
PLMQ015	Linear truss	290	1500	10,531	126,15
PLMQ020	Linear truss	290	2000	13,155	168,20
PLMQ025	Linear truss	290	2500	15,779	210,25
PLMQ030	Linear truss	290	3000	18,404	252,30
PLMQ040	Linear truss	290	4000	23,652	336,40

• *Possibilità di connessione tramite spinotto tornito e relativi agganci o tramite viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.*

LIGHTING TRUSS
QUADRO 29

SPECIFICHE TECNICHE.

• La truss a sezione quadrata da 290 mm di lato presenta due tipi di connessione: una rapida con ogive, spine e molle (PLQSET02PLUS) e l'altra con viti e dadi (PLQSET01M10).

La struttura è in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono in alluminio estruso di diametro da 20 mm e spessore 2 mm.
I terminali piastra sono in fusione d'alluminio.

TECHNICAL SPECIFICATIONS

• The square section truss with 290 mm long side features two kinds of connection: by means of spigots, pins and split pins for quick connection, code PLQSET02PLUS, and by means of nuts and bolts, code PLQSET01M10.
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal braces are made of extruded aluminium with a 20 mm diameter and a 2 mm thickness.
The end-plates are made of cast aluminium.

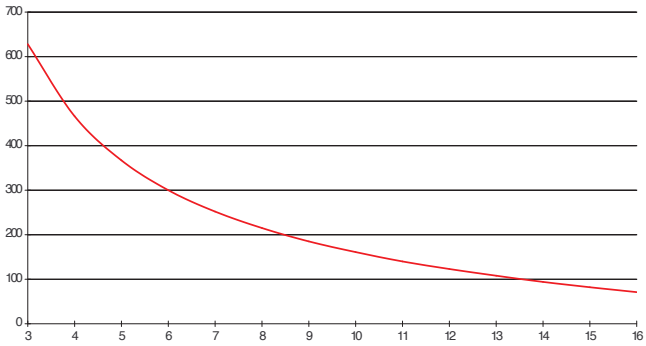
QUADRO 29 (COUPLING WITH NUTS & BOLTS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
3	628	418	471	314	260	4
4	466	233	349	233	193	8
5	367	147	275	183	152	12
6	300	100	225	150	125	17
7	252	72	189	126	105	23
8	215	53	161	107	89	30
9	185	41	139	92	77	39

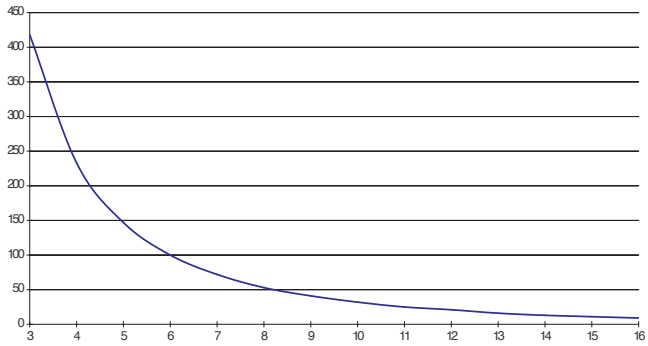
DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
10	161	32	121	80	66	48
11	140	25	105	70	58	58
12	123	21	92	61	51	69
13	108	16	81	54	44	80
14	94	13	71	47	39	93
15	82	11	62	42	34	107
16	71	9	53	36	29	122

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection

QUADRO 29 Center Point Load (Kg)
(coupling with nuts & bolts)



QUADRO 29 Uniform Distributed Load (Kg/m)
(coupling with nuts & bolts)



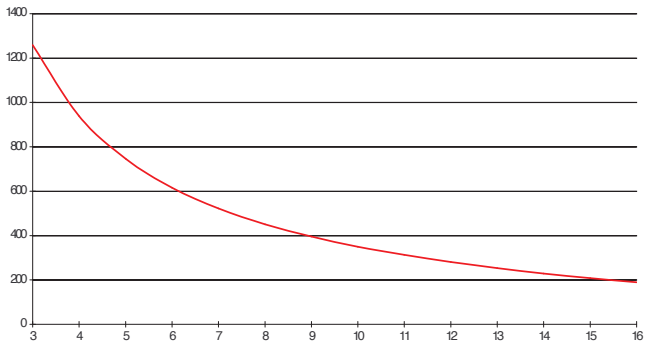
QUADRO 29 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	DEF.
m	kg	kg/m	kg	kg	kg	mm
3	1259	753	944	629	522	9
4	939	469	704	469	389	15
5	746	298	559	373	309	24
6	616	205	462	308	256	35
7	522	149	392	261	217	47
8	451	113	338	226	187	62
9	396	88	296	197	164	78

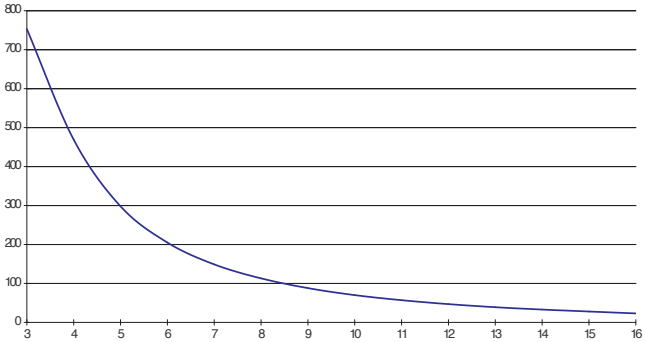
DIMENSION	CPL	UDL	DPL	TPL	QPL	DEF.
m	kg	kg/m	kg	kg	kg	mm
10	350	70	262	175	145	97
11	313	57	234	156	129	117
12	281	47	210	140	116	139
13	253	39	190	126	105	164
14	229	33	172	115	95	190
15	208	28	156	104	86	218
16	189	23	142	95	78	248

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection

QUADRO 29 Center Point Load (Kg)
(coupling with spigots & pins)



QUADRO 29 Uniform Distributed Load (Kg/m)
(coupling with spigots & pins)



LIGHTING TRUSS
QUADRO 29

SISTEMA CUBO

• *La progettazione del cubo nasce dall'esigenza di ottimizzare e razionalizzare, quanto più possibile, lo stock di angoli di cui disporre. La modularità del prodotto, composto da poche unità, consente di avere sempre una valida alternativa d'uso. Nello specifico, il progetto gravita attorno ad un nodo pressofuso a sei facce, le cui molteplici soluzioni di composizione determinano la piena libertà di assemblaggio. I singoli nodi sono uniti da tubi rinforzati non saldati, per cui è possibile effettuare facilmente interventi di manutenzione o sostituzione. Il sistema di assemblaggio e serraggio è agevolato dalla chiave dima (PLTZ30K01).*
È una soluzione altamente versatile che consente di ottenere sia mini torri con snodi a 2-3-4 vie per le versioni piane sia una faccia a quattro nodi per collegare americane piane ad americane quadrate.

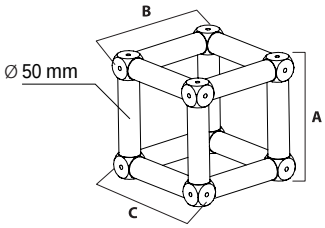
CUBE SYSTEM

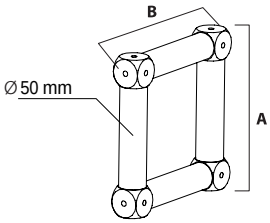
• *The design of the cube arises from the need to optimize and rationalize as much as possible, the storage of corner sections kept in stock. The modularity of the product allows, with reletively few units, a wide range of uses. The cube is a six-faced die-cast joint granting its user full freedom to assemble, thanks to its several setting solutions. The single joints are connected by reinforced tubes without welding, making maintenance or replacement easy. The assembling and tightening is carried out by an assembly template (PLTZ30K01).*
The cube is a highly versatile solution allowing the realization of mini-towers featuring 2-3-4-way joints for the flat configuration and the four-way joint face to connect flat sections and square sections.

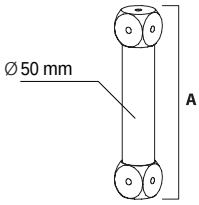
PLMQCUB

PLMQK4

PLMQK2



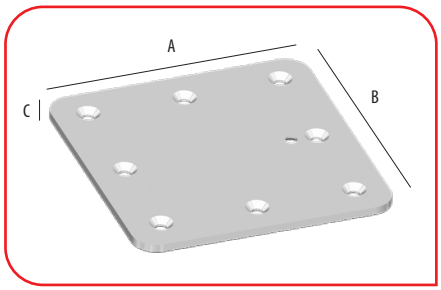


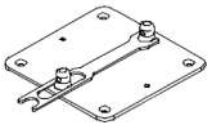


CODE	DESCRIPTION	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLMQK2	mini tower	290	50	50	1,445	0,73
PLMQK4	flat connection	290	290	50	3,629	4,21
PLMQCUB	cube	290	290	290	9,05	24,39
PLQBASE02	base DUO TRIO QUADRO	290	290	5	3,415	0,42

PLTZ30K01

PLQXKFC





PLQBASE02

• *Base per DUO TRIO QUADRO 29.*
• *Base for DUO TRIO QUADRO 29.*

LIGHTING TRUSS
DUO 40

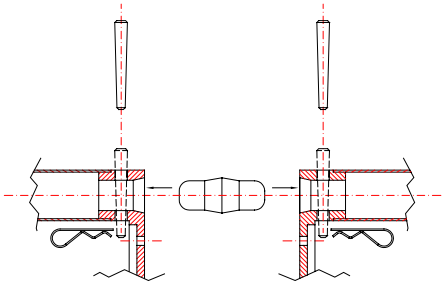
PLDSET02PLUS

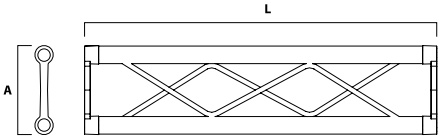
PLDSET01M10

TRUSS DUO 40

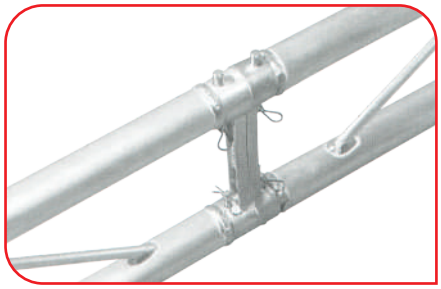
• *Struttura a sezione piana con lato da 400 mm dotata di piastra in fusione d'alluminio. Tale caratteristica conferisce alla struttura ottimi vantaggi dal punto di vista della robustezza, con relativo incremento dei valori di antitorsione.*

• *Flat section structure features a 400 mm long side and cast aluminium end-plate. These features give the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*





Code	Description	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLPDC010	Linear compensation truss	400	100	1,671	2,00
PLPDC040	Linear compensation truss	400	400	2,546	8,00
PLPD005	Linear truss	400	500	2,792	10,00
PLPD010	Linear truss	400	1000	4,429	20,00
PLPD015	Linear truss	400	1500	5,931	30,00
PLPD020	Linear truss	400	2000	7,433	40,00
PLPD025	Linear truss	400	2500	8,935	50,00
PLPD030	Linear truss	400	3000	10,437	60,00
PLPD040	Linear truss	400	4000	13,442	80,00



• *Possibilità di connessione tramite spinotto tornito spina e molla sicurezza o tramite viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.*

LIGHTING TRUSS
DUO 40

SPECIFICHE TECNICHE

• La truss a sezione piana da 400 mm presenta due tipi di connessione: una rapida con ogive, spine e molle (PLDSET02PLUS), l'altra con viti e dadi (PLDSET01M10).

La struttura è in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono in tubo di alluminio estruso, con diametro da 25 mm e spessore 2 mm.
I terminali piastra sono in fusione d'alluminio.

TECHNICAL SPECIFICATIONS

• The flat section truss with 400 mm long side features two kinds of connection: by means of spigots, pins and split pins for quick connection, code PLDSET02PLUS, and by means of nuts and bolts, code PLDSET01M10.

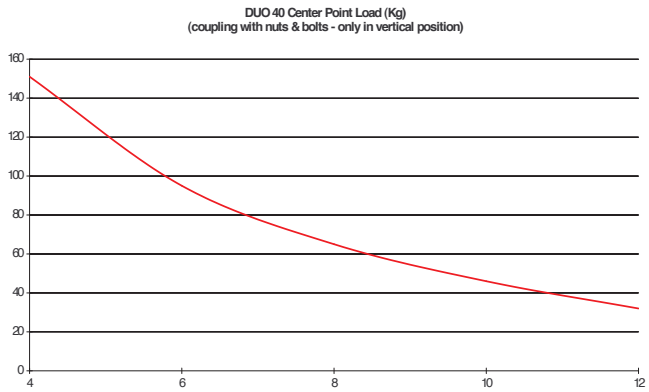
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal bracing is made of extruded aluminium with a 25 mm diameter and a 2 mm thickness.
The end-plates are made of cast aluminium.

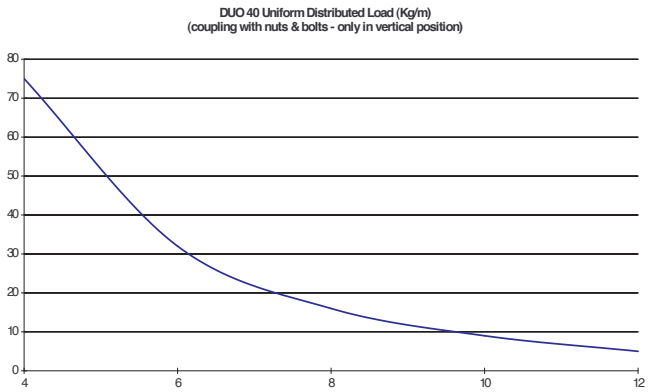
DUO 40 (coupling with nuts & bolts)*

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	151	75	113	75	63	3
6	95	32	71	47	39	7
8	65	16	49	32	27	13
10	46	9	34	23	19	20
12	32	5	24	16	13	28

* Only in vertical position

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection



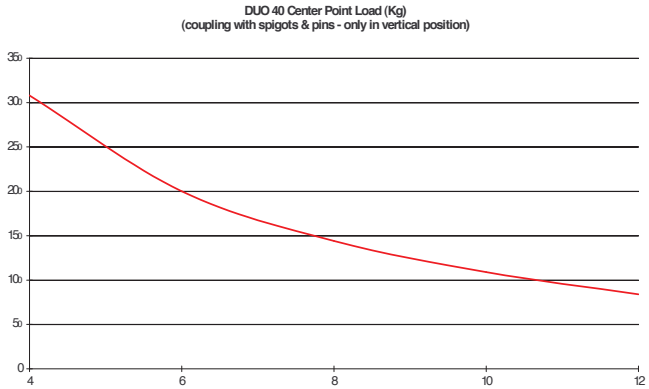


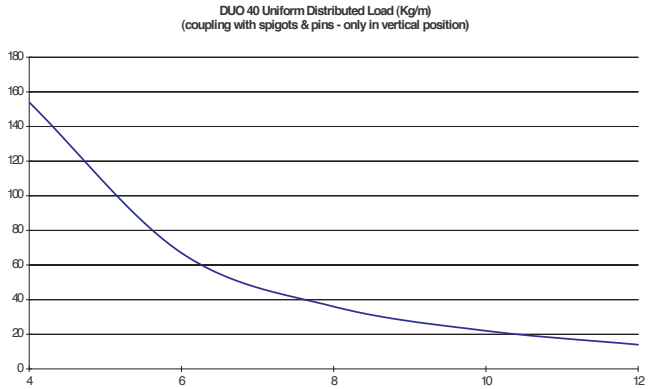
DUO 40 (COUPLING WITH SPIGOTS & PINS)*

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	308	154	231	154	128	6
6	200	67	150	100	83	14
8	144	36	108	72	60	25
10	109	22	81	54	45	39
12	84	14	63	42	35	56

* Only in vertical position

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection





LIGHTING TRUSS
DUO 40

SISTEMA CUBO

• *La progettazione del cubo nasce dall'esigenza di ottimizzare e razionalizzare, quanto più possibile, lo stock di angoli di cui disporre. La modularità del prodotto, composto da poche unità, consente di avere sempre una valida alternativa d'uso. Nello specifico, il progetto gravita attorno ad un nodo pressofuso a sei facce, le cui molteplici soluzioni di composizione determinano la piena libertà di assemblaggio. I singoli nodi sono uniti da tubi rinforzati non saldati, per cui è possibile effettuare facilmente interventi di manutenzione o sostituzione. Il sistema di assemblaggio e serraggio è agevolato dalla chiave dima (PLTZ40K01).*
È una soluzione altamente versatile che consente di ottenere sia mini torri con snodi a 2-3-4 vie per le versioni piane sia una faccia a quattro nodi per collegare americane piane ad americane quadrate. .

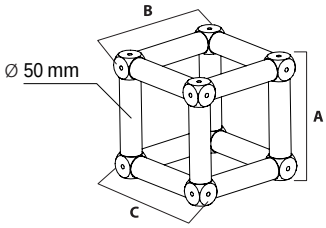
CUBE SYSTEM

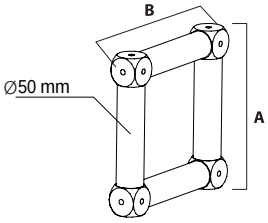
• *The design of the cube arises from the need to optimize and rationalize as much as possible, the storage of corner sections kept in stock. The modularity of the product allows, with reletively few units, a wide range of uses. The cube is a six-faced die-cast joint granting its user full freedom to assemble, thanks to its several setting solutions. The single joints are connected by reinforced tubes without welding, making maintenance or replacement easy. The assembling and tightening is carried out by an assembly template (PLTZ40K01).*
The cube is a highly versatile solution allowing the realization of mini-towers featuring 2-3-4-way joints for the flat configuration and the four-way joint face to connect flat sections and square sections.

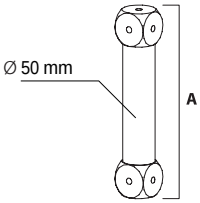
PLPQCUB

PLPQK4

PLPQK2



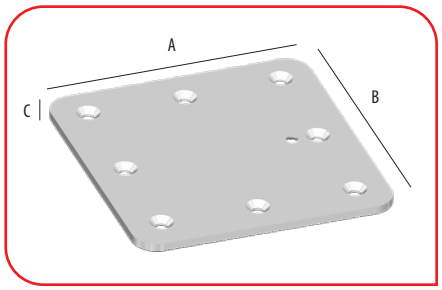


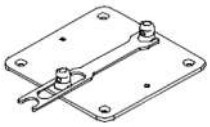


CODE	DESCRIPTION	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLPQK2	mini tower	400	50	50	1,577	1,00
PLPQK4	flat connection	400	400	50	4,16	8,00
PLPQCUB	cube	400	400	400	11,19	64,00
PLQBASE03	base DUO TRIO QUADRO	400	400	5	4,71	0,80

PLTZ40K01

PLQXKFC





PLQBASE03

• *Base per DUO TRIO QUADRO 40.*
• *Base for DUO TRIO QUADRO 40.*

LIGHTING TRUSS
TRIO 40

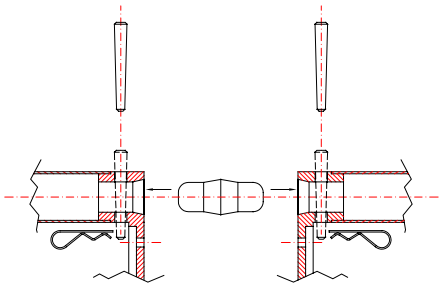
TRUSS TRIO 40

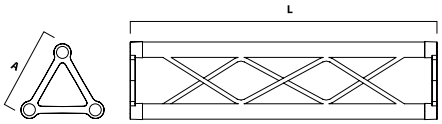
• *Struttura a sezione triangolare con lato da 400 mm dotata di piastra in fusione d'alluminio, caratteristica che rende la struttura robusta, con relativo incremento dei valori di antitorsione.*

• *Triangular section structure features a 400 mm long side and cast aluminium end-plate. These features give the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*

PLTSET02PLUS

PLTSET01M10





CODE	DESCRIPTION	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLPT005	linear truss	400	500	5,26	34,64
PLPT010	linear truss	400	1000	8,11	69,28
PLPT015	linear truss	400	1500	10,557	103,92
PLPT020	linear truss	400	2000	13,004	138,56
PLPT025	linear truss	400	2500	15,451	173,21
PLPT030	linear truss	400	3000	17,898	207,85
PLPT040	linear truss	400	4000	22,791	277,13

• *Possibilità di connessione tramite ogiva tornita e relativi agganci o tramite serie di viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.*

LIGHTING TRUSS
TRIO 40

SPECIFICHE TECNICHE

• *La truss a sezione triangolare da 400 mm di lato presenta due tipi di connessione: una rapida con ogive, spine e molle (PLTSET02PLUS), l'altra con viti e dadi (PLTSET01M10).*
Struttura in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono in alluminio estruso di diametro da 25 mm e spessore 2 mm.
I terminali piastra sono in fusione di alluminio.

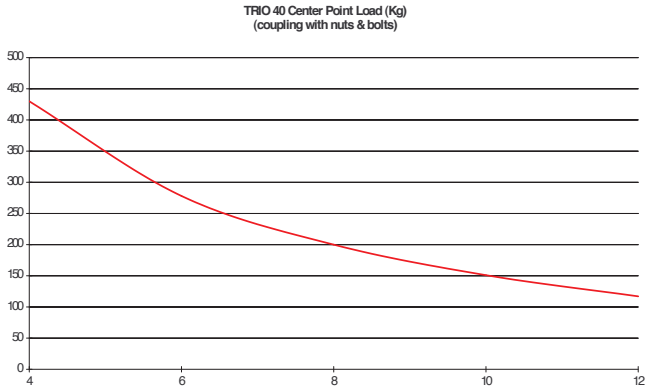
TECHNICAL SPECIFICATIONS

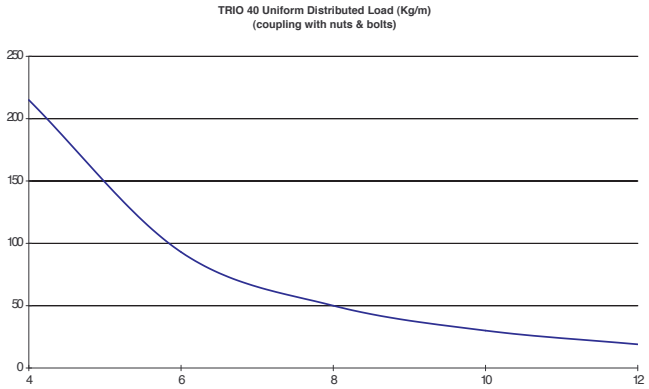
• *The triangular section truss with 400 mm long side section features two kinds of connections: by means of spigots, pins and split pins for quick connection, code PLTSET02PLUS, and by means of nuts and bolts, code PLTSET01M10.*
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal braces are made of extruded aluminium with a 25 mm diameter and a 2 mm thickness.
The end-plates are made of cast aluminium.

TRIO 40 (COUPLING WITH NUTS & BOLTS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	430	215	323	215	179	9
6	278	93	209	139	116	20,0
8	200	50	150	100	83	35
10	151	30	113	76	63	55
12	117	19	88	58	49	79

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection

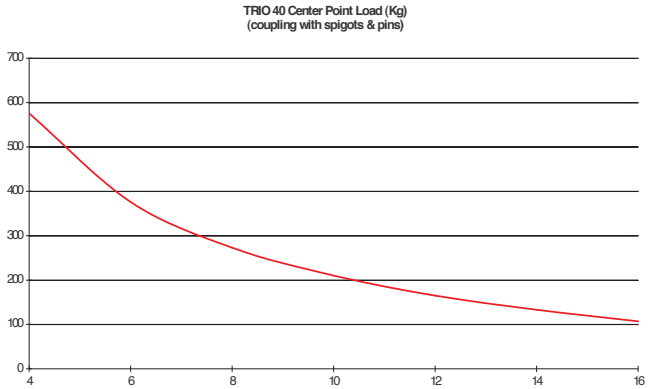


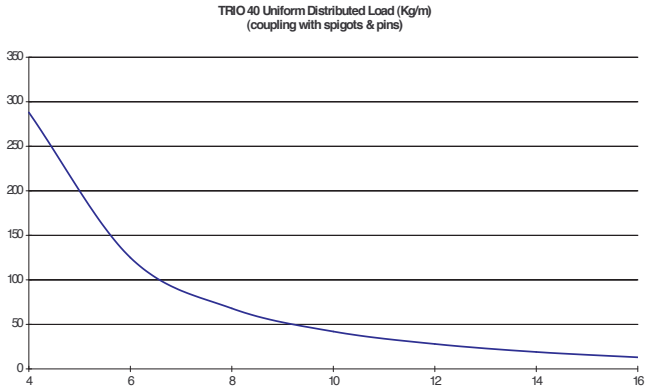


TRIO 40 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	576	288	432	288	240	12
6	376	125	282	188	157	26
8	273	68	205	137	114	47
10	210	42	157	105	87	73
12	165	28	124	83	69	105
14	133	19	99	66	55	143
16	107	13	80	53	44	186

• CPL = Center Point Load
• UDL = Uniform Distributed Load
• DPL = Double Point Load
• TPL = Triple Point Load
• QPL = Quadruple Point Load
• Def. = Deflection





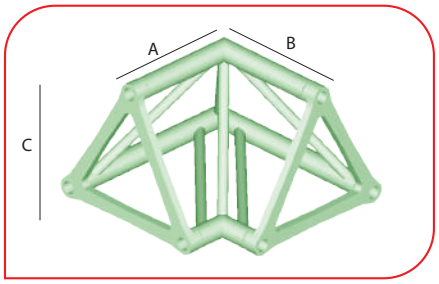
LIGHTING TRUSS
TRIO 40

ANGOLI E RACCORDI

• *Gli angoli con configurazione a sezione triangolare sono realizzati con tubo estruso in alluminio di diametro 50 mm e spessore 2 mm. Le diagonali interne sono composte da tubo estruso di diametro 25 mm e spessore 2 mm.*
I terminali piastra sono in fusione di alluminio. Le connessioni avvengono tramite set rapido PLTSET02PLUS oppure con viti e dadi PLTSET01M10.

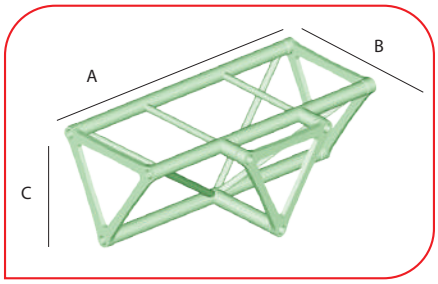
CORNERS AND CONNECTIONS

• *Corners featuring the triangular section configuration are made with extruded aluminium tubes with a diameter of 50 mm and a thickness of 2 mm.*
The internal diagonal bracing is made with extruded aluminium tube with a diameter of 25 mm and a thickness of 2 mm.
The end-plates are made of cast aluminium . The connections are made with quick fit kit PLTSET02PLUS or with nuts and bolts kit PLTSET01M10.



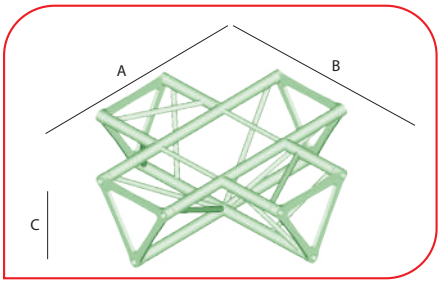
PLPT02A

• *Angolo 90° 2 vie vertice alto/basso.*
• *90° 2-ways corner vertex up/down.*



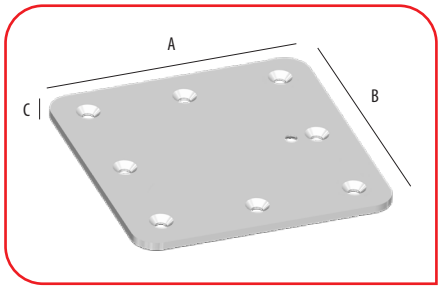
PLPT03TS

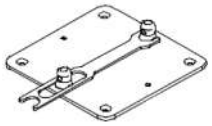
• *Angolo 90° 3 vie vertice alto/basso.*
• *90° 3-ways corner vertex up/down.*



PLPT04S

• *Incrocio 90° 4 vie vertice. alto/basso.*
• *90° 4-ways T cross vertex. up/down.*





PLQBASE03

• *Base per DUO TRIO QUADRO 40.*
• *Base for DUO TRIO QUADRO 40.*

CODE	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLPT02A	500	500	346,4	5,554	86,60
PLPT03TS	1000	500	346,4	8,642	173,20
PLPT04S	1000	1000	346,4	10,467	251,10
PLQBASE03	400	400	0,5	4,71	0,80

LIGHTING TRUSS
QUADRO 40

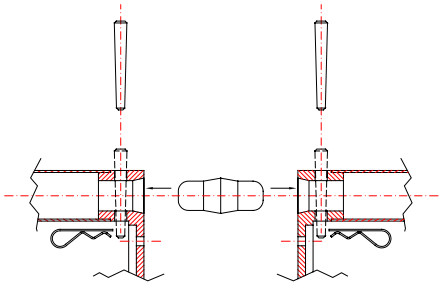
TRUSS QUADRO 40

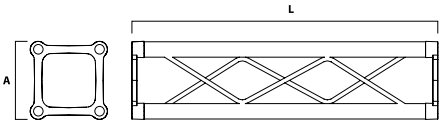
• *Struttura a sezione quadrata con lato da 400 mm dotata di piastra in fusione d'alluminio. Tale caratteristica rende la struttura robusta, con relativo incremento dei valori di antitorsione.*

• *Square section structure features a 400 mm long side and cast aluminium end-plate. These features gives the structure greatly increased sturdiness, with a relevant increase of the antitorsion parameters.*

PLQSET02PLUS

PLQSET01M10





CODE	DESCRIPTION	A (mm)	L (mm)	Weight (kg)	Volume (dmc)
PLPQC010	Linear compensation truss	400	100	4,966	16,00
PLPQC040	Linear compensation truss	400	400	6,732	64,00
PLPQ005	Linear truss	400	500	7,141	80,00
PLPQ010	Linear truss	400	1000	10,802	160,00
PLPQ015	Linear truss	400	1500	13,924	240,00
PLPQ020	Linear truss	400	2000	17,046	320,00
PLPQ025	Linear truss	400	2500	20,169	400,00
PLPQ030	Linear truss	400	3000	23,291	480,00
PLPQ040	Linear truss	400	4000	30,074	640,00

• *Possibilità di connessione tramite spinotto tornito e relativi agganci o tramite viti e dadi.*

• *Connection is possible by means of a turned spigot and pins or by means of a nuts and bolts kit.*

LIGHTING TRUSS
QUADRO 40

SPECIFICHE TECNICHE

• La truss a sezione quadrata da 400 mm di lato presenta due tipi di connessione: una rapida con ogive, spine e molle (PLQSET02PLUS) e l'altra con viti e dadi (PLQSET01M10).
La struttura è in alluminio estruso con tubi correnti da 50 mm di diametro e 2 mm di spessore.
Le diagonali interne sono in alluminio estruso di diametro da 25 mm e spessore 2 mm.
I terminali piastra sono in fusione d'alluminio.
.

TECHNICAL SPECIFICATIONS

• The square section truss with 400 mm long side features two kinds of connection: by means of spigots, pins and split pins for quick connection, code PLQSET02PLUS, and by means of nuts and bolts, code PLQSET01M10.
The structure is made of extruded aluminium featuring transverse sections with a 50mm diameter and a 2 mm thickness.
Diagonal braces are made of extruded aluminium with a 25 mm diameter and a 2 mm thickness.
The end-plates are made of cast aluminium.

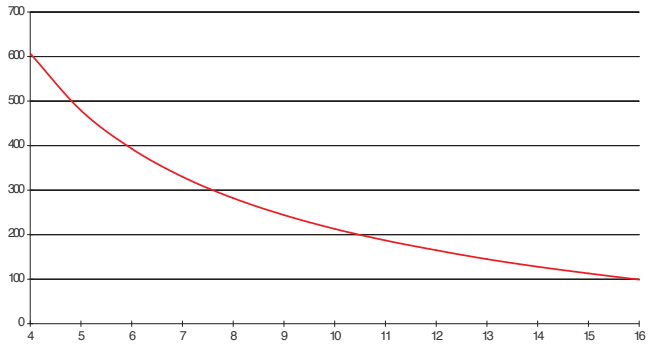
QUADRO 40 (COUPLING WITH NUTS & BOLTS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	607	293	455	302	252	0,8
5	479	185	359	239	199	1,2
6	393	126	294	196	163	1,7
7	330	90	247	165	137	2,3
8	282	68	212	141	116	3,0
9	244	52	183	122	100	3,9
10	213	41	160	106	87	4,8

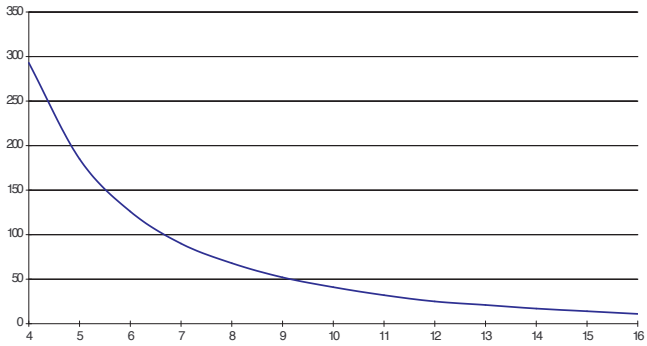
DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
11	187	32	140	93	76	5,8
12	165	25	123	82	67	6,9
13	145	21	109	72	59	8,0
14	128	17	96	64	52	9,3
15	113	14	84	56	45	10,7
16	99	11	74	49	40	12,2

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection

QUADRO 40 Center Point Load (Kg)
(coupling with nuts & bolts)



QUADRO 40 Uniform Distributed Load (Kg/m)
(coupling with nuts & bolts)



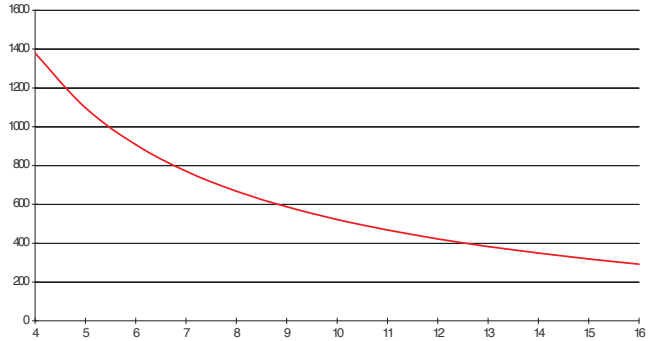
QUADRO 40 (COUPLING WITH SPIGOTS & PINS)

DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
4	1379	477	955	636	477	1,0
5	1097	381	822	548	455	1,6
6	908	302	680	454	376	2,4
7	771	220	579	385	320	3,2
8	668	167	501	334	277	4,2
9	588	130	440	293	243	5,3

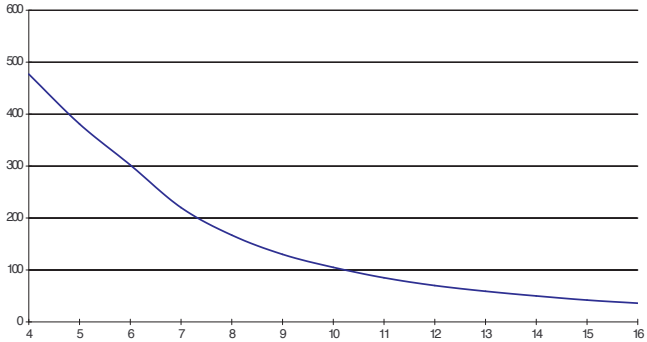
DIMENSION	CPL	UDL	DPL	TPL	QPL	Def.
m	kg	kg/m	kg	kg	kg	mm
10	522	105	391	261	216	6,5
11	468	85	351	234	194	7,9
12	422	70	316	211	175	9,4
13	383	59	287	191	159	11,1
14	349	50	261	174	145	12,8
15	319	42	239	159	132	14,7
16	292	36	219	146	121	16,7

- CPL = Center Point Load
- UDL = Uniform Distributed Load
- DPL = Double Point Load
- TPL = Triple Point Load
- QPL = Quadruple Point Load
- Def. = Deflection

QUADRO 40 Center Point Load (Kg)
(coupling with spigots & pins)



QUADRO 40 Uniform Distributed Load (Kg/m)
(coupling with spigots & pins)



LIGHTING TRUSS
QUADRO 40

SISTEMA CUBO

• *La progettazione del cubo nasce dall'esigenza di ottimizzare e razionalizzare, quanto più possibile, lo stock di angoli di cui disporre. La modularità del prodotto, composto da poche unità, consente di avere sempre una valida alternativa d'uso. Nello specifico, il progetto gravita attorno ad un nodo pressofuso a sei facce, le cui molteplici soluzioni di composizione determinano la piena libertà di assemblaggio. I singoli nodi sono uniti da tubi rinforzati non saldati, per cui è possibile effettuare facilmente interventi di manutenzione o sostituzione. Il sistema di assemblaggio e serraggio è agevolato dalla chiave dima (PLTZ40K01).*

È una soluzione altamente versatile che consente di ottenere sia mini torri con snodi a 2-3-4 vie per le versioni piane sia una faccia a quattro nodi per collegare americane piane ad americane quadrate.

CUBE SYSTEM

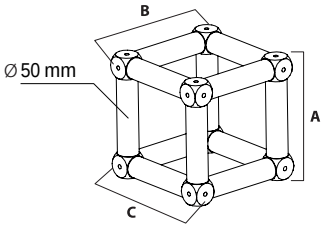
• *The design of the cube arises from the need to optimize and rationalize as much as possible, the storage of corner sections kept in stock. The modularity of the product allows, with reletively few units, a wide range of uses. The cube is a six-faced die-cast joint granting its user full freedom to assemble, thanks to its several setting solutions. The single joints are connected by reinforced tubes without welding, making maintenance or replacement easy. The assembling and tightening is carried out by an assembly template (PLTZ40K01).*

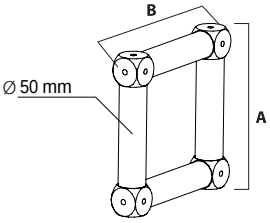
The cube is a highly versatile solution allowing the realization of mini-towers featuring 2-3-4-way joints for the flat configuration and the four-way joint face to connect flat sections and square sections.

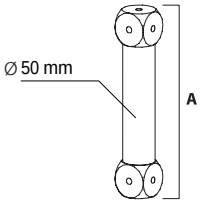
PLPQCUB

PLPQK4

PLPQK2



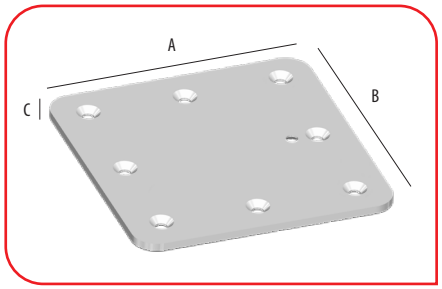


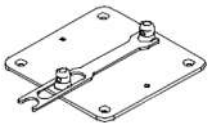


CODE	DESCRIPTION	A (mm)	B (mm)	C (mm)	Weight (kg)	Volume (dmc)
PLPQK2	mini tower	400	50	50	1,577	1,00
PLPQK4	flat connection	400	400	50	4,16	8,00
PLPQCUB	cube	400	400	400	11,19	64,00
PLQBASE03	base DUO TRIO QUADRO	400	400	5	4,71	0,80

PLTZ40K01

PLQXKFC





PLQBASE03

• *Base per DUO TRIO QUADRO 40.*
• *Base for DUO TRIO QUADRO 40.*

LIGHTING TRUSS
CIRCLES

• Tutte le configurazioni delle truss Proel consentono di realizzare cerchi aventi un diametro minimo di 2 metri. La misura del settore di cerchio sarà di volta in volta diversa a seconda del diametro. Oltre un certo diametro, si preferisce aumentare il numero di settori, senza però superare la lunghezza massima di 3,5 mt. per non incorrere in problemi inerenti al trasporto. Oltre a cerchi regolari, è possibile creare, a disegno, forme ellittiche e curve irregolari.
Le tipologie del settore di cerchio sono:
• Una per la versione a sezione piana con posizione orizzontale.
• Una per la versione a sezione triangolare con vertice basso-alto.
• Una per quella quadrata.
Per quanto riguarda le caratteristiche dei tubi e delle piastre di connessione si rimanda al dettaglio del traliccio base scelto.

• Proel trusses, in all of their configurations, can be realized as circles, providing the diameter is not less than 2 metres. The size of the circle section is not standard but it changes depending on the diameter required. Once a certain diameter is exceeded, the number of sections used is increased - limiting each single section to no longer than 3,5 mts in order – to make transport and handling easier. In addition to regular circles, it is possible to realize customized elliptical shapes or irregular curved shapes.
The types of different circle sections:
• One type for the flat section with horizontal position.
• One types for the triangular section with face downface up corner.
• One type for the square version.
Regarding the features of the tubes and connecting end plates, refer to the details of the basic truss chosen.

CIRCLE DUO

20

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLCD200	200	2000	4	2,5	9,89
PLCD300	200	3000	4	3,5	15,39

*volume and weight for sigle arc.

25

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLRDC200A4	250	2000	4	4,5	17,17
PLRDC300A4	250	3000	4	6,5	26,98
PLRDC400A4	250	4000	4	8,25	36,80

*volume and weight for sigle arc.

29

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLMDC200A4	290	2000	4	5,25	19,46
PLMDC300A4	290	3000	4	7,25	30,85
PLMDC400A4	290	4000	4	9	42,23

*volume and weight for sigle arc.

CIRCLE TRIO

25

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLRTC200A4	250	2000	4	8	74,35
PLRTC300A4	250	3000	4	10,75	116,84
PLRTC400A4	250	4000	4	13,75	159,33
PLRTC600A8	250	6000	8	10,5	122,15

*volume and weight for sigle arc.

29

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLMTC200A4	290	2000	4	8,75	97,76
PLMTC300A4	290	3000	4	11,75	154,94
PLMTC400A4	290	4000	4	15	212,11
PLMTC600A8	290	6000	8	11,5	163,23

*volume and weight for sigle arc.

CIRCLE QUADRO

20

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLCQ200	200	2000	4	4,5	56,52
PLCQ300	200	3000	4	8	87,92

*volume and weight for sigle arc.

25

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLRQC200A4	250	2000	4	10	85,86
PLRQC300A4	250	3000	4	13,5	134,92
PLRQC400A4	250	4000	4	17,25	183,98
PLRQC600A8	250	6000	8	13,25	141,05

*volume and weight for sigle arc.

29

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLMQC200A4	290	2000	4	11,25	85,86
PLMQC300A4	290	3000	4	14,25	134,92
PLMQC400A4	290	4000	4	18,25	183,98
PLMQC600A8	290	6000	8	15,25	141,05

*volume and weight for sigle arc.

40

Code	A (mm)	Diam. (mm)	Sectors	Weight (kg)*	Volume (dmc)*
PLPQC200A4	400	2000	4	15	85,86
PLPQC300A4	400	3000	4	17	134,92
PLPQC400A4	400	4000	4	22,5	183,98
PLPQC600A8	400	6000	8	20	141,05

*volume and weight for sigle arc.

LIGHTING TRUSS CONNECTIONS

CONNECTION DUO

- *PLDSET01 for DUO 25*
- *PLDSET01M10 for DUO 29*

PLDSET01
PLDSET01M10

CONNECTION TRIO

- *PLTSET01 for TRIO 25*
- *PLTSET01M10 for TRIO 29*

PLTSET01
PLTSET01M10

CONNECTION QUADRO

- *PLQSET01 for QUADRO 25*
- *PLQSET01M10 for QUADRO 29-40*

PLQSET01
PLQSET01M10

CONNECTION DUO
- *PLDSHSETN for DUO 20*
- *PLDSET02PLUS for DUO 25-29*

PLDSHSETN
PLDSET02PLUS

CONNECTION TRIO
- *PLTSET02PLUS for TRIO 25-29*

PLTSET02PLUS

CONNECTION QUADRO
- *PLQSHSETN for QUADRO 20*
- *PLQSET02PLUS for QUADRO 25-29-40*

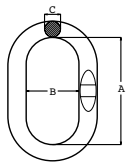
PLQSHSETN
PLQSET02PLUS

LIGHTING TRUSS
ACCESSORIES

• Funi di sicurezza, catene, grilli dritti e nastri con e senza cricchetto tenditore.
• The wire safety ropes, chains, straight shackles and straps with or without a tightening ratchet.

CAMPANELLE
• Solidi anelli in acciaio utili per la connessione di ancoraggi tramite grilli.

STEEL MASTER LINK RINGS
• Strong steel master links, very useful in rigging situations, to be used with shackles.



PLC5001

CODE	a (mm)	b (mm)	c (mm)	load (kg)	weight (kg)
PLC5001	110	60	13	1600	0,34
PLC5002	110	60	16	2000	0,53
PLC5003	135	75	18	3000	0,8

FUNI AD ANELLO IN FIBRA SISTETICA PORTATA KG 1000
• Funi tonde in fibra sintetica, ricoperte da guaina tubolare protettiva in tessuto.

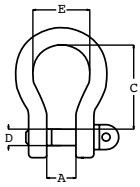
SYNTHETIC FIBRE ROPES LOAD KG 1000
• Rounded synthetic fibre ropes, covered by a protective fibre tubular sheath.

PLVI1010

CODE	L (m)	load (kg)	weight (kg)
PLVI1010	1	1000	0,178
PLVI1020	2	1000	0,285
PLVI1030	3	1000	0,475
PLVI1040	4	1000	0,616

GRILLI
• Elementi indispensabili per la connessione di ancoraggi e tiranti.

SHACKLES
• Fundamental elements in rigging situation, when fastening systems.



PLG716N

CODE	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	load (kg)	weight (kg)
PLG716N	17	10	36,5	11	26	1000	0,146
PLG720N	18,5	11	43	12	29	1500	0,225
PLG722N	22	13,5	51	16	32	2000	0,299
PLG725N	27	16	64	19	43	3250	0,613

CINGHIE DI ANCORAGGIO
• PLCT6512 *Sistema di ancoraggio realizzato con nastro da 35 mm composto da 2 parti separate munite di ganci metallici. Portata kg 5000.*
• PLCT6101 *Sistema di ancoraggio realizzato con nastro da 25 mm di lunghezza 1 metro disponibili con sistema a cricchetto. Portata kg 1000.*

RATCHET STRAP BELT
• PLCT612 *Fastening system made of 35 mm belt with 2 different parts supplied with metal hooks. Load kg 5000.*
• PLCT6101 *Light Ratchet strap belt, made of 25 mm belt, whose length is 1 m. Load kg 1000.*

PLCT6512

CODE	L (m)	load (kg)	weight (kg)
PLCT6512	12	5000	6,5
PLCT6101	1	1000	0,3

FUNI IN ACCIAIO
• Tiranti a fune in acciaio completi di redance e manicotti. Portata kg 1000 / 2000.

STEEL WIRE ROPES
• Steel wire ropes, redance and sockets. Load kg 1000 / 2000.

PLT41010

CODE	L (m)	load (kg)	weight (kg)
PLT41010	1	1000	0,92
PLT41015	1,5	1000	1,22
PLT41020	2	1000	1,52
PLT41030	3	1000	2,12
PLT41060	6	1000	4,25
PLT41090	9	1000	6,36
PLT41100	10	1000	7,6
PLT41120	12	1000	8,5

CODE	L (m)	load (kg)	weight (kg)
PLT42010	1	2000	2
PLT42015	1,5	2000	2,5
PLT42020	2	2000	3
PLT42030	3	2000	4
PLT42060	6	2000	6
PLT42090	9	2000	9,5
PLT42100	10	2000	12
PLT42120	12	2000	16

LIGHTING TRUSS
ROOF COVERING
INDEX

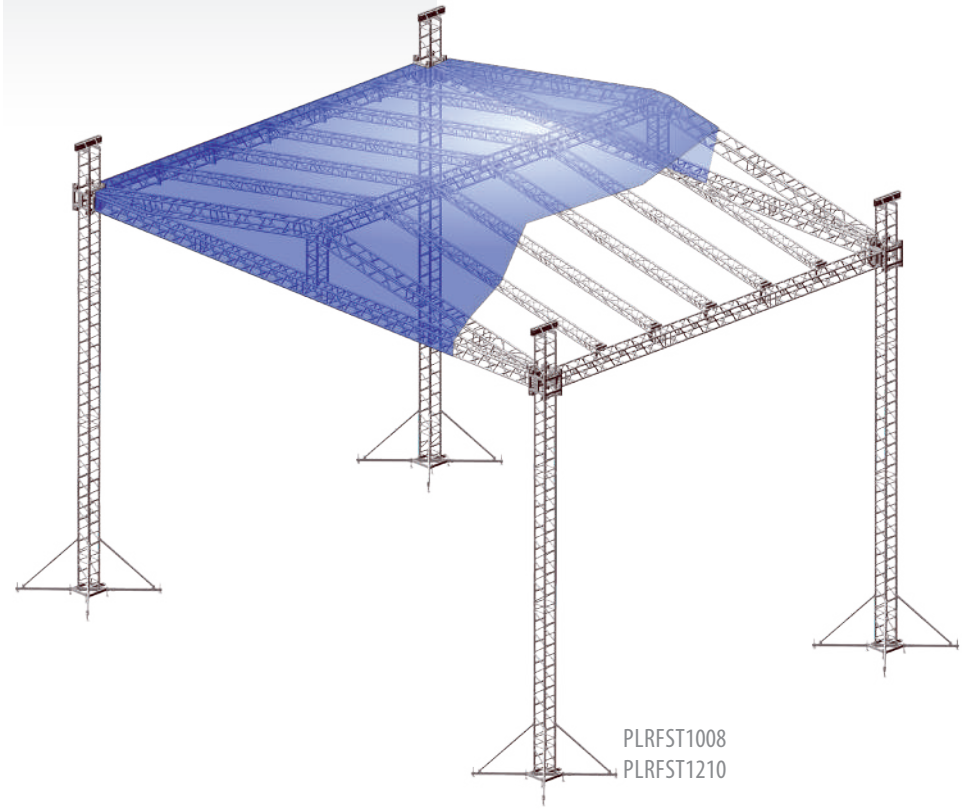
• La modularità dei tralicci tradizionali consente un'ampia gamma di utilizzo che va dai tradizionali ring alle nuovissime strutture da spettacolo coperte. Tali realizzazioni offrono buone soluzioni coreografiche e permettono il fissaggio delle attrezzature sotto un manto idoneo ad affrontare qualsiasi avversità atmosferica, senza dover provvedere alla singola protezione delle strutture presenti sul palco.
Le due versioni, elettrica e manuale, consentono di soddisfare ogni esigenza.

• The modularity of the standard section structures allows a very wide range of uses, from the traditional rings to the brand-new stage covered structures. As such it allows combinations to provide the right solution spotlights and other large lighting units can be suspended from it and with the excellent covering, suitable to face any atmospheric adversity, eliminates the need of protective structures on stage.
The two versions, motorized and manual, are designed to satisfy any requirement.

LIGHTING TRUSS
MANUAL ROOF COVERING

• *Le Coperture a due spioventi inclinati lateralmente e a telo unico (mt.10x8 – mt.12x10) rappresentano il meglio che il panorama dell'attuale mercato possa proporre.*
Facili da impiegare risultano molto performanti nelle portate, e possono essere dotati di verricello manuale o di motore (venduti separatamente).Le misure riportate in tabella mostrano i parametri standard dei prodotti.
In collaborazione con il team tecnico di PROEL è possibile realizzare strutture con metratura e portata personalizzate.
La misura massima consentita è di mt 12 (larghezza) e mt 7 (altezza torre).

• *Sideways tilted gable roof coverage, with one complete canvas (10X8 mts – 12x10 mts) is the best solution on the market today.*
It is simple to employ and reliable and can be supplied with a manual winch or a motor assembly (sold separately)
The chart shows the standard parameters of the products. In collaboration with the Proel technical team it's possible to design and produce structures for specific project and with custom lengths. The maximum dimensions possible are width of 12 mts and height of 7mts (height tower).



Code	PLRFST1008	PLRFST1210
L (m)	10	12
A (m)	8	10
H (m)	7	7
loading capacity (kg)	5436	3468
Tower type	Alltower	Alltower
Ring truss type	quadro 40	quadro 40

LIGHTING TRUSS
MANUAL ROOF COVERING

• *Le Coperture ad arco rappresentano un nuovo modo di intendere i ring coperti per spettacoli di medio livello. Esse presentano infatti diversi plus che le contraddistinguono dalle ormai consolidate coperture a una falda o a casetta. Lo standard di misura Proel è di mt 8X6.*
Facili da impiegare e montare creano un deflusso della pioggia unico. Possono essere dotati di verricello manuale o di motore (venduti separatamente). Le misure riportate in tabella mostrano i parametri standard dei prodotti.
In collaborazione con il team tecnico di PROEL è possibile realizzare strutture con metratura e portata personalizzate.
La misura massima consentita è di mt 8 (larghezza) e mt 7 (altezza torre).
Il prodotto nello specifico, e le eventuali personalizzazioni, sono dotati di certificazioni di conformità.

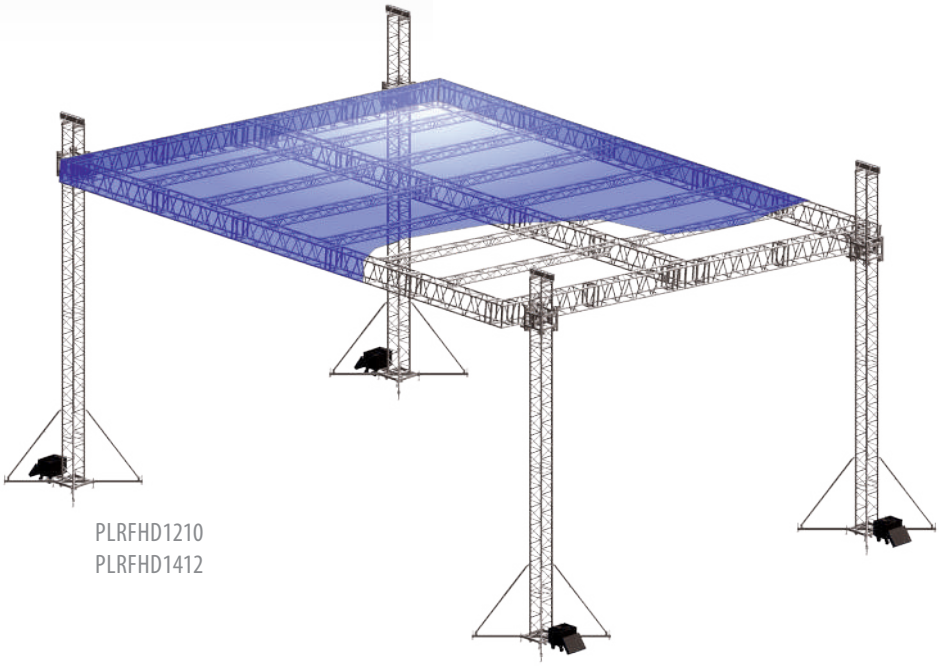
• *The ARC coverage represents a new way to protect a stage area for mid-level performances.*
The ARC is simple to employ and assemble and creates a straightforward and unique outlet for rain. It is supplied with a manual lifting winch but can also be specified with a motor assembly (sold separately).
Proel's standard dimension is 8 mts x 6 mts. The chart provides the standard measurements available. But it is possible to plan structures of specific size and load capacity for custom projects, with our technical department.
The maximum front span of this structure is 8 mts (width) and height to which it can be lifted is 7 mts (height tower).

PLRFST0806

Code	PLRFST0806
L (m)	8
A (m)	6
H (m)	9
loading capacity (kg)	4300
Tower type	Alltower
Ring truss type	quadro 29

LIGHTING TRUSS
MOTORIZED
ROOF COVERING

• Copertura a falda spiovente verso il retro con piano inclinato e telo unico.
Struttura concepita con sistema di sollevamento motorizzato (motori non inclusi). Le misure riportate in tabella esprimono i parametri standard.
In collaborazione con il team tecnico di PROEL è possibile realizzare strutture con metratura e portata personalizzate.
La larghezza massima consentita è di m 14 e l'altezza massima consentita è di m 8 (altezza torre).
• Rear sloping roof, with one hanging plane and a single sheet.
Structure requires electrical motors for lifting (not included). The parameters shown in the table express the standard measures produced. It is possible to plan structures of specific sizes and load capacities together with our technical department.
The maximum front span of this structure is 14 mts and maximum height to which it can be lifted is 8 mts . (Height tower).



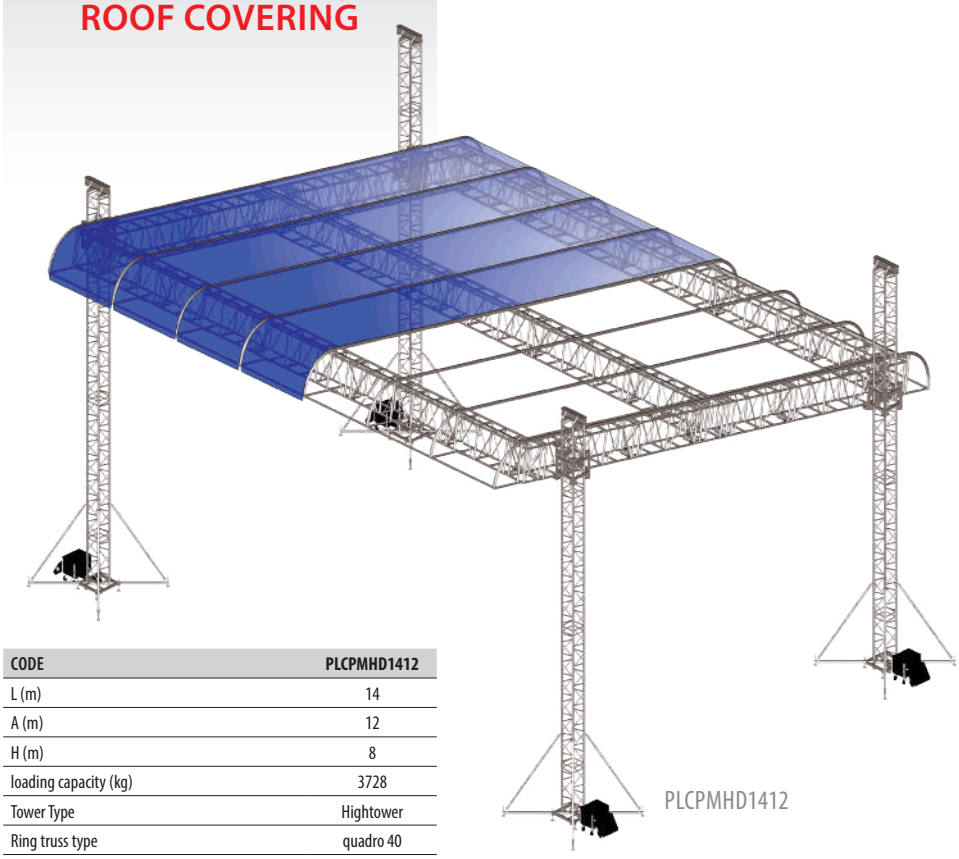
PLRFHD1210
PLRFHD1412

CODE	PLRFHD1210	PLRFHD1412
L (m)	12	14
A (m)	10	12
H (m)	8	8
loading capacity (kg)	2948	3728
Tower Type	Hightower	Hightower
Ring truss type	quadro 40	quadro 40

LIGHTING TRUSS
MODULAR ROOF COVERING

• *Le coperture modulari nascono con il doppio scopo di creare un riparo confortevole per i professionisti dello spettacolo contro gli effetti degli agenti atmosferici (in particolare vento e pioggia), e fornire una struttura utile a sostenere ed ospitare al meglio l'equipaggiamento indispensabile per l'organizzazione di eventi e spettacoli all'aperto.*
A differenza delle già note coperture monofalda e a due falde, la modulare ha come caratteristica principale quella di coprire superfici di molteplici dimensioni, adoperando sempre gli stessi componenti: è questa la modularità, da cui il nome della struttura.
Il particolare sistema modulare, che interessa anche il telo ignifugo in PVC, permette al professionista dello spettacolo di aggiungere e rimuovere elementi a proprio piacimento per modificare di volta in volta la dimensione della propria struttura ed adattarla ad ogni tipo di ambiente ed evento.
Il telo in PVC, è composto da moduli, così come i tralicci che coprono il tetto. Aggiungendo di volta in volta un modulo di telo od eliminandolo, il cliente potrà correggere e variare le dimensioni della struttura con un notevole risparmio economico.
Ogni struttura è corredata da manuale di montaggio e relativa certificazione.

• *Modular Roof Systems basically have two aims: being a comfortable shelter for showbiz professionals during the exposure to atmospheric agents (wind and water in particular), and secondly, providing the users with a useful structure to keep open air events equipment safe.*
The main difference between the well-known downhill/peak roof systems and the modular roof is the opportunity to take advantage of different roof dimensions using the same trussing components: this is actually known as trussing modularity, where the name of the structure comes from.
The specific modular system, which is the main feature of both the truss and the PVC ceiling, allows the professionals to have everytime a different structure in shape and dimension to perfectly fit the purposes of whatever event and place.
Even though the PVC ceiling concept has been changed to be adapted to the modular system, its main safety features are kept unchanged.
The PVC ceiling is made of modular parts, which can be added or removed, providing the customer with an unbelievable money saving.
We always provide the customers with a structure certification, both standard and custom.



CODE	PLCPMHD1412
L (m)	14
A (m)	12
H (m)	8
loading capacity (kg)	3728
Tower Type	Hightower
Ring truss type	quadro 40

LIGHTING TRUSS
TOWER TRUSS
INDEX

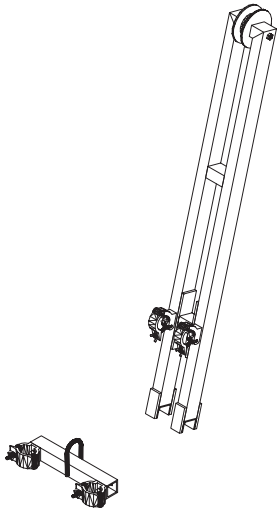
• Proel propone due torri utilizzabili conformemente al sistema di sollevamento delle strutture a catalogo.
Le attrezzature sono provviste delle certificazioni d'uso e dei relativi documenti di collaudo.
E' possibile utilizzare gli elevatori compatti sia con motore elettrico sia ad alzata con argano manuale. Fanno parte della linea anche elevatori telescopici di varie portate ed altezze. Per ogni tipologia di utilizzo è prevista una specifica certificazione.
Il carrello universale può ospitare le varie configurazioni delle truss lineari.
Anche le torri per il sollevamento di sistemi audio sono disponibili nelle versioni manuale e elettrica.

• Proel offers two towers that can be raised using the lifting systems presented elsewhere in the catalogue.
The equipment is tested and certified. The lifting systems are compact and they work with either a manual winch or an electric chain hoist. The same line features telescopic lifting systems with several load capacities and heights.
A specific certification is supplied for each kind of use. The universal lifting truck, is compatible with all of the different configurations of flat trusses.
The towers designed for flying audio systems also come in both the manual and electrical versions.

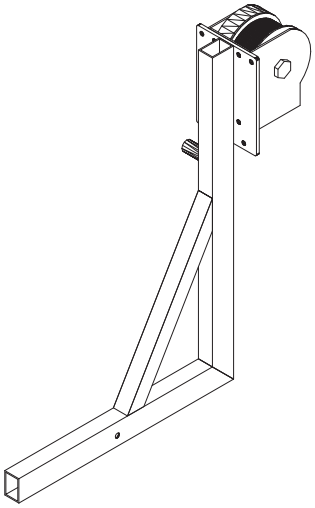
LIGHTING TRUSS
SOUNDPOWER

• Il sollevatore per diffusori acustici, nasce per soddisfare tutte le esigenze dei professionisti dello spettacolo.
Dotato di una struttura robusta tutt'altro che ingombrante, il SOUNDPOWER è ideale in ogni situazione lavorativa. Composto da traliccio in alluminio, serie 30 Quadro, è stato progettato per sollevare diffusori acustici fino ad un'altezza di 7 metri, con una portata massima di 550 kg. La rapidità e semplicità di montaggio, unite alla comodità di occupare uno spazio ridottissimo, fanno del SOUNDPOWER un prodotto ideale per service e operatori dello spettacolo in genere. Ideale in situazioni in cui è necessario integrare le potenzialità di coperture già sufficientemente cariche e impossibilitate a sostenere altri diffusori acustici, o quando si utilizzano torri che non sempre riescono a soddisfare esigenze estetiche e dinamiche.

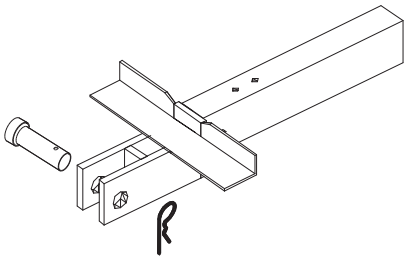
• The idea of a lifter for loudspeakers comes from show professionals' needs to have a light and dynamic system.
Thanks to its strong, tough, versatile but small structure, SOUNDPOWER is suitable in any professional situation. It is made of Aluminium Truss, Quadro 30 Series, and designed to lift loudspeakers up to 7 mt, with a maximum loading capacity of 550 Kg.
Assembling ease and quickness make SOUNDPOWER be the most suitable product for service organizers and show business operators in general.
SOUNDPOWER is the best solution when professionals need to integrate the potential of traditional Roof Systems, when already overloaded, or when other building structures (towers, for instance) turn out to be too eHDensive, too static or aesthetically unappealing to fit simpler purposes.



PLTFRS01
Kit di sollevamento per PLFTMQ30.
Hoisting kit for PLFTMQ30.

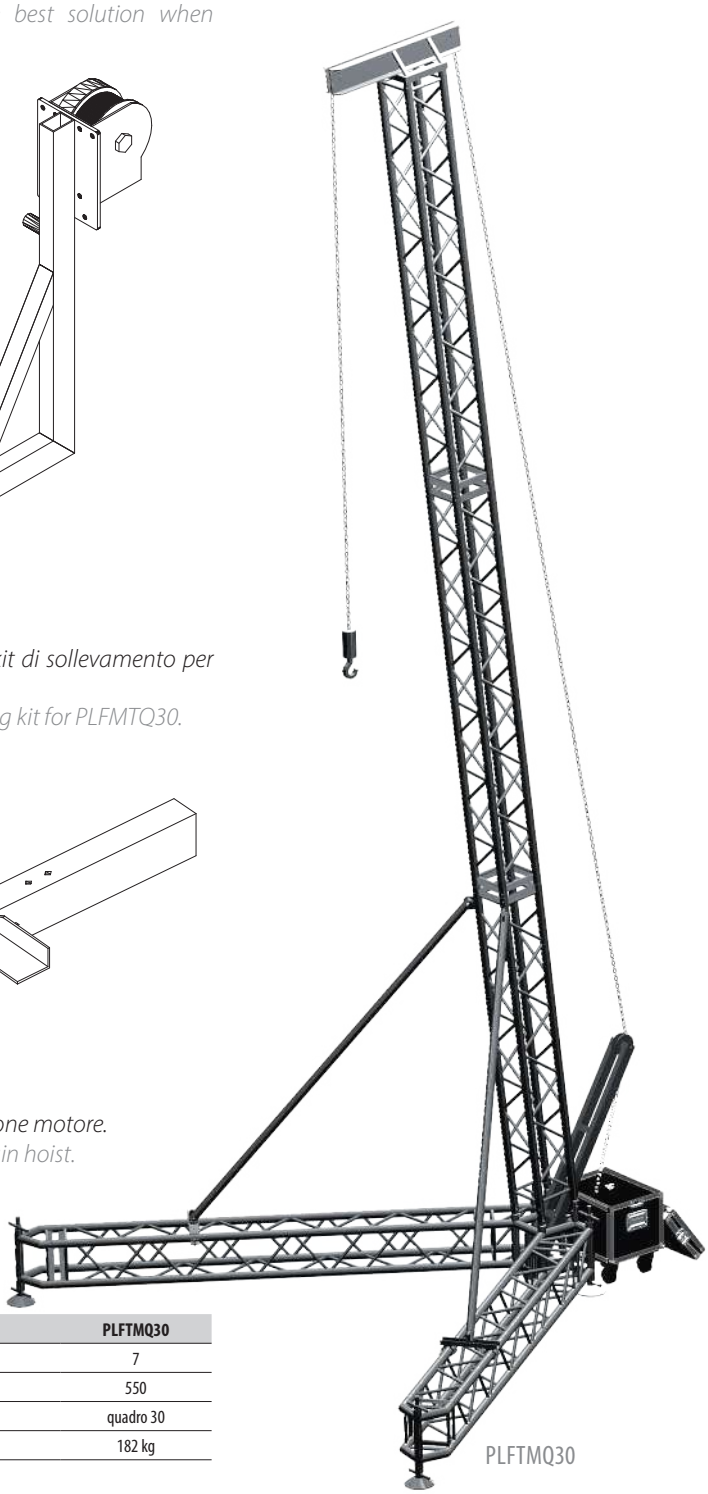


PLTFWS02
Argano manuale per kit di sollevamento per PLFTMQ30.
Hand winch for hoisting kit for PLFMTQ30.



PLTFRMTKIT
Supporto per connessione motore.
Support for electric chain hoist.

CODE	PLFTMQ30
Height (m)	7
Load (kg)	550
Truss Type	quadro 30
Total weight	182 kg

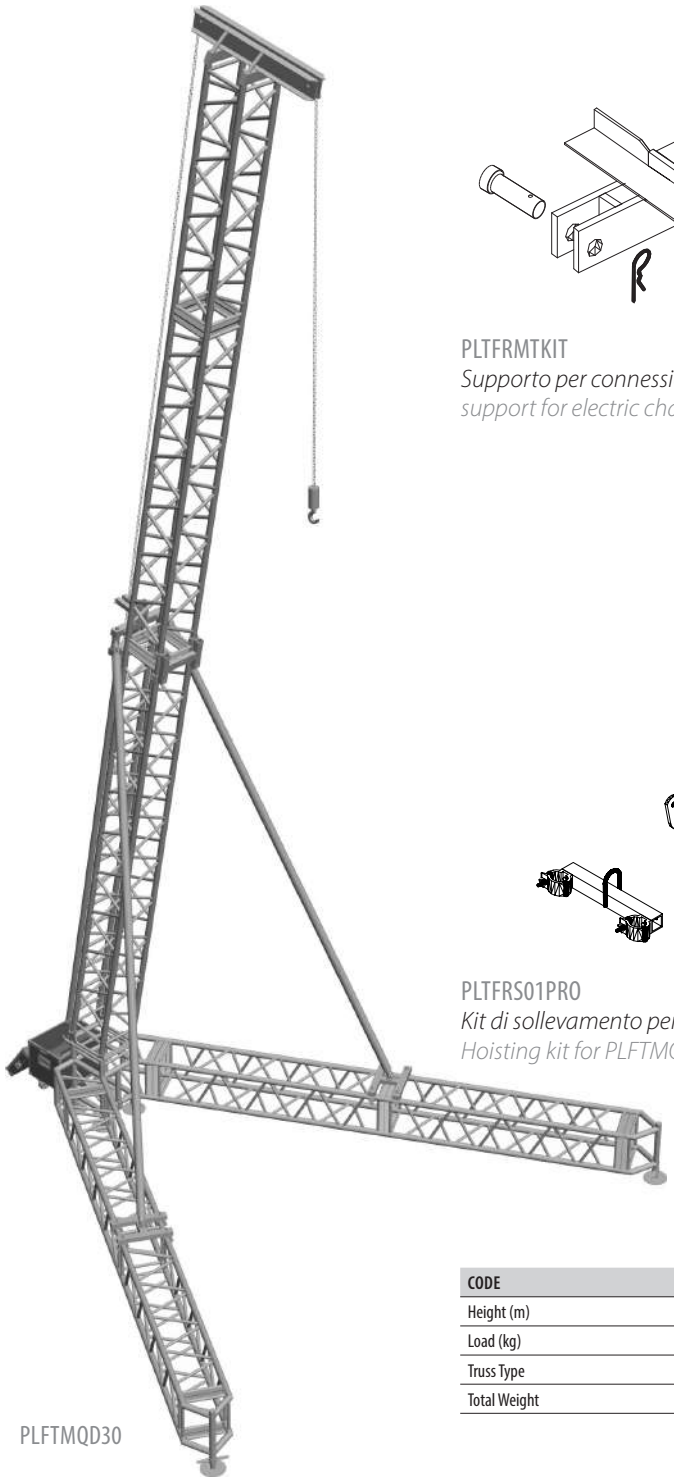


PLFTMQ30

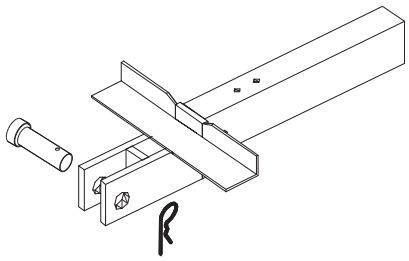
LIGHTING TRUSS
SOUNDPOWER MAXI

• Il sollevatore per diffusori acustici, nasce per soddisfare tutte le esigenze dei professionisti dello spettacolo.
Dotato di una struttura robusta tutt'altro che ingombrante, il SOUNDPOWER MAXI è ideale in ogni situazione lavorativa. Composto da traliccio in alluminio, 40 Quadro, è stato progettato per sollevare diffusori acustici fino ad un'altezza di 10 metri, con una portata massima di 900 kg. La rapidità e semplicità di montaggio, unite alla comodità di occupare uno spazio ridottissimo, fanno del SOUNDPOWER MAXI un prodotto ideale per service e operatori dello spettacolo in genere. Ideale in situazioni in cui è necessario integrare le potenzialità di coperture già sufficientemente cariche e impossibilitate a sostenere altri diffusori acustici, o quando si utilizzano torri che non sempre riescono a soddisfare esigenze estetiche e dinamiche.

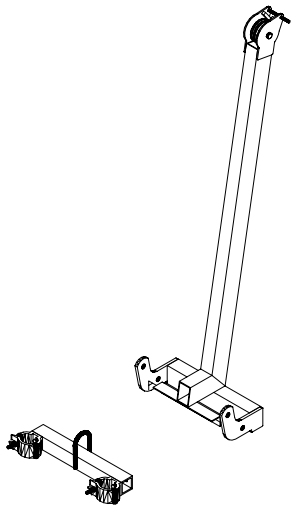
• The idea of a lifter for loudspeakers comes from show professionals' needs to have a light and dynamic system.
Thanks to its strong, tough, versatile but small structure, SOUNDPOWER MAXI is suitable in any professional situation. It is made of Aluminium Truss, Square 40, and designed to lift loudspeakers up to 10 mt, with a maximum loading capacity of 900 Kg.
Assembling ease and quickness make SOUNDPOWER MAXI be the most suitable product for service organizers and show business operators in general.
SOUNDPOWER MAXI is the best solution when professionals need to integrate the potential of traditional Roof Systems, when already overloaded, or when other building structures (towers, for instance) turn out to be too eHDensive, too static or aesthetically unappealing to fit simpler purposes.



PLTFMQD30



PLTFRMTKIT
Supporto per connessione motore.
support for electric chain hoist.



PLTFRS01PRO
Kit di sollevamento per PLFTMQD30.
Hoisting kit for PLFTMQD30.

CODE	PLFTMQD30
Height (m)	10
Load (kg)	900
Truss Type	quadro 40
Total Weight	613 kg

LIGHTING TRUSS
ALLTOWER

ALLTOWER

• *Torre a traliccio con lato da 300 mm, manuale o motorizzata.*
Il modulo di base è costruito completamente in alluminio ed è dotato di stabilizzatori ripiegabili, top e carrello di scorrimento.
La torre può raggiungere un'altezza di 7 m con una portata massima di 1000 Kg.
Carrello universale incluso.

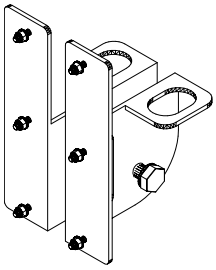
ALLTOWER

• *The tower featuring a truss with 300 mm long side sections. It can be used with the manual winch lifting system or motorized lift system.*
The basic module is entirely realized in aluminium and features folding stabilizing feet, top section and sleeve block.
The tower is suitable for lifting loads of up to 1000 Kg to a height of 7 mts.
Universal sleeve block included.

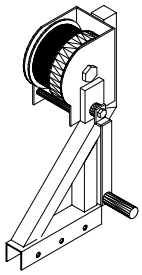
CODE	PLMQTL
Height (m)	7
Load (kg)	1000
Truss Type	quadro 29

PLQXKFCT

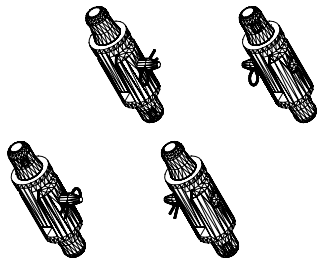
PLQXKFCT
Kit di connessione traliccio a carrello.
Connection kit for truss on the sleeve block.



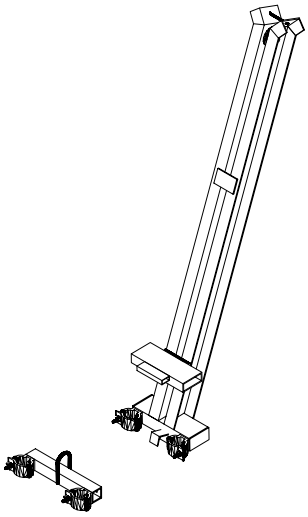
PLMTLU30MS
Supporto aggancio motore su carrello.
Support for electric chain hoist conne. ction on the sleeve block.



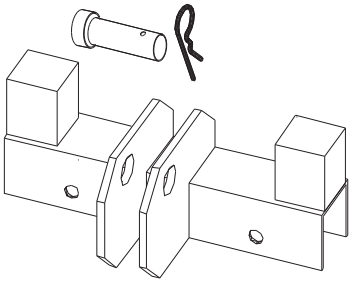
PLTFW9560
Argano manuale portata 750 Kg.
Hand winch Load 750 Kg.



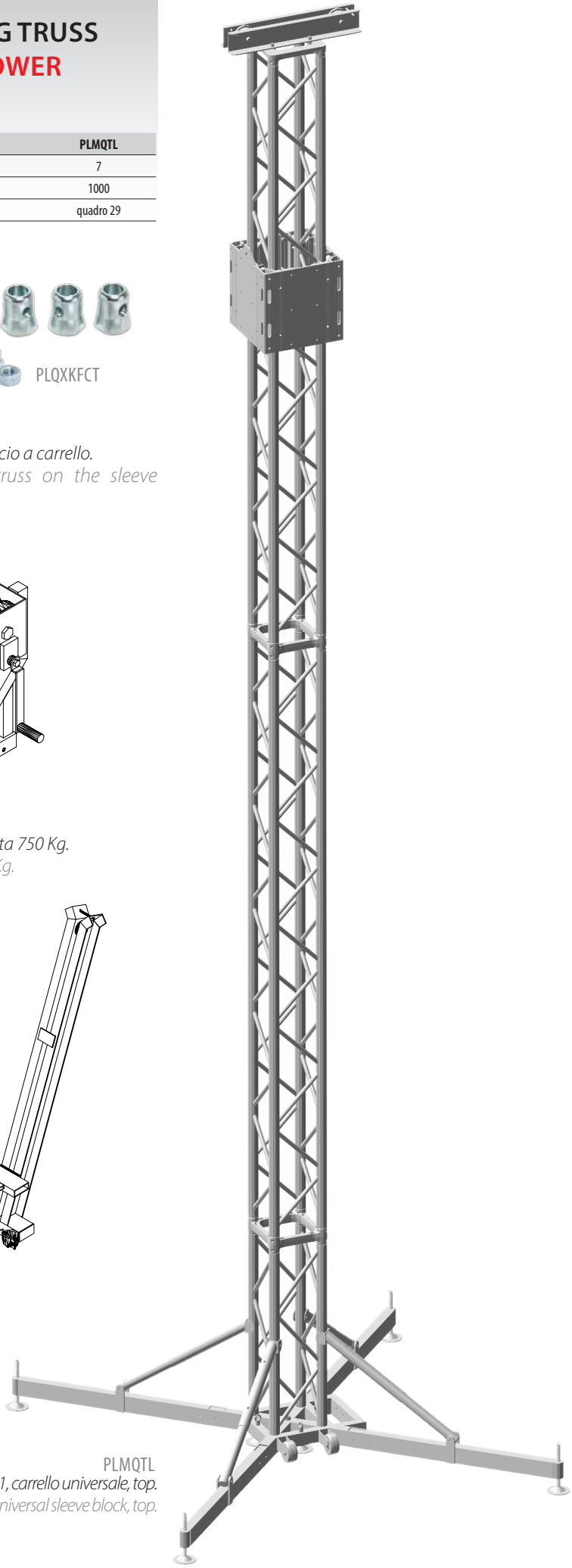
PLQSETTW
Ovetti snodati per assemblaggio torri Alltower e Hightower.
Joint spigots for assembling tower Alltower and Hightower.



PLTFW9549
Kit di sollevamento.
Hoisting kit.



PLTFW4040
Supporto per connessione motore.
Support for electric chain hoist.



PLMQTL
Include: base, traliccio mt. 1, carrello universale, top.
Incudes: base, truss mt.1, universal sleeve block, top.

LIGHTING TRUSS
HIGHTOWER

HIGHTOWER

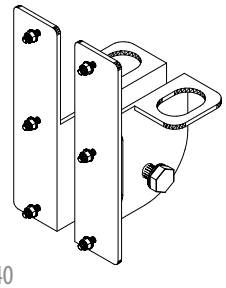
• *Sono le torri di maggior portata, predisposte per il sollevamento con paranco a motore. Disponibili con traliccio di lato pari a 400 mm. Le torri sono dotate di bracci di prolunga che consentono l'impiego della struttura anche in presenza di terreni irregolari, o con forte pendenza; lo snodo a cerniera permette di innalzare facilmente il traliccio in posizione verticale. Carrello universale incluso.*

HIGHTOWER

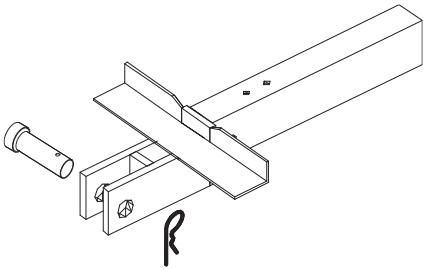
• *Towers featuring the highest load capacity, for use with a chain hoist. Available with truss 400 mm.*
The tower features special feet that can be extensively adjusted for easy positioning even on sloping and irregular surfaces.
The hinge joint allows easy lifting of the truss from the horizontal to the vertical position.
Universal sleeve block included.

CODE	PLQD40A
Height (m)	9
Load (kg)	1000
Truss Type	quadro 40

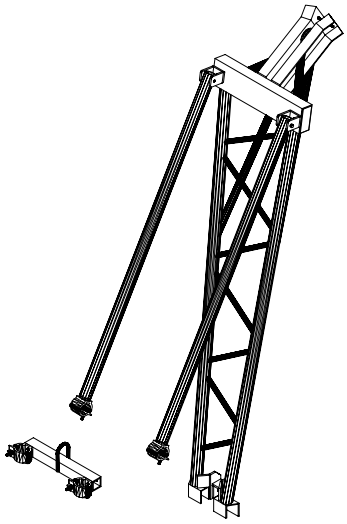
PLQXKFCT
Kit di connessione traliccio a carrello.
Connection kit for truss on the sleeve block.



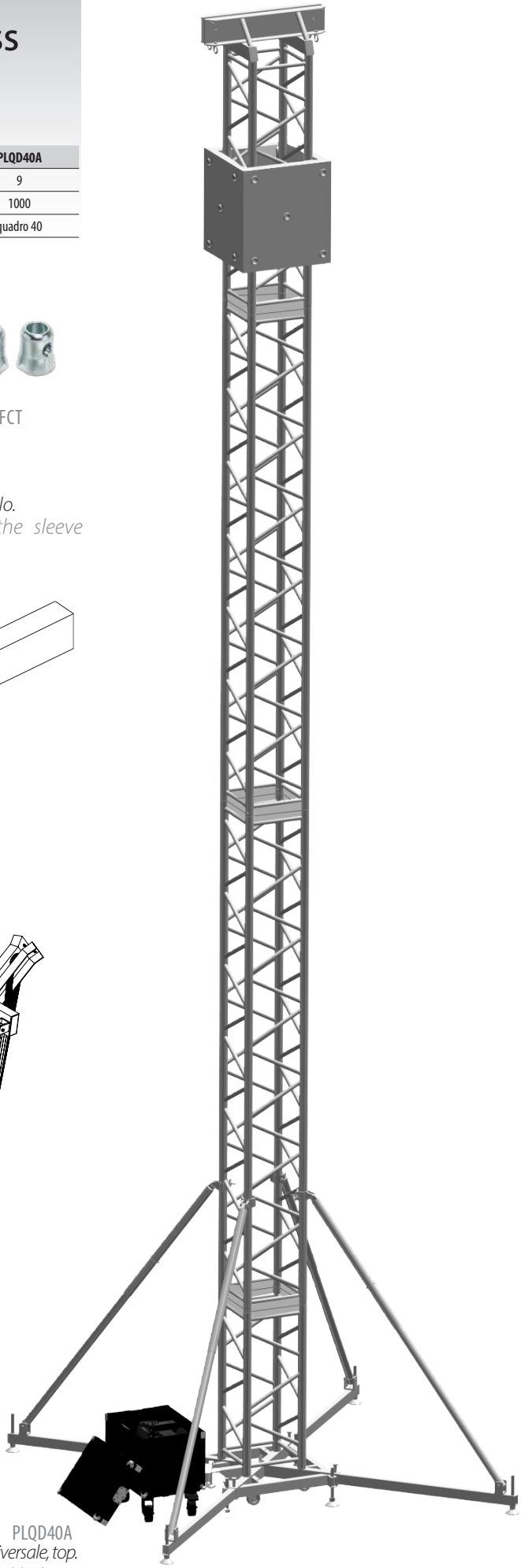
PLMTLU3040
Supporto aggancio motore su carrello.
Support for electric chain hoist connection on the sleeve block.



PLTFRMTKIT
Supporto per connessione motore.
Support for electric chain hoist.



PLTLV40R
Kit di sollevamento.
Hoisting kit.

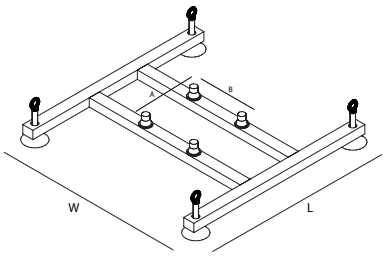


PLQD40A
Include: base, traliccio mt. 1, carrello universale, top.
Incudes: base, truss mt.1, universal sleeve block, top.

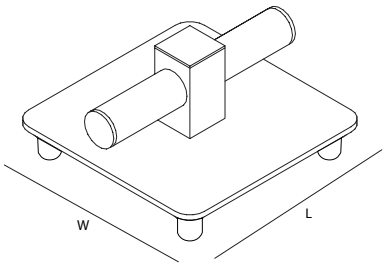
LIGHTING TRUSS
MINITOWER

• *I "cerini" nascono dall'esigenza nuova di collocare teste mobili e scanner non appesi ma elevati dal piano del palco.*
Si tratta di strutture standard di traliccio quadro che, dotate di una base particolare, possono sostenere nella parte superiore i proiettori intelligenti.
Il top presenta un sistema di aggancio per aliscaff adatto a qualsiasi tipologia di motorizzato.
Altezza massima consentita mt 3.
Portata massima kg 100.

• *The "Mini Towers" arise from the new requirement to place not hanged but raised, moving heads and scanners from the stage level.*
They are standard structures of square truss with a particular base that can support, in the superior par, the intelligent projectors.
The top has an hooking system for clamps, proper to every motorized projector typology.
Maximum allowed height 3 mt.
Maximum load 100 kg.

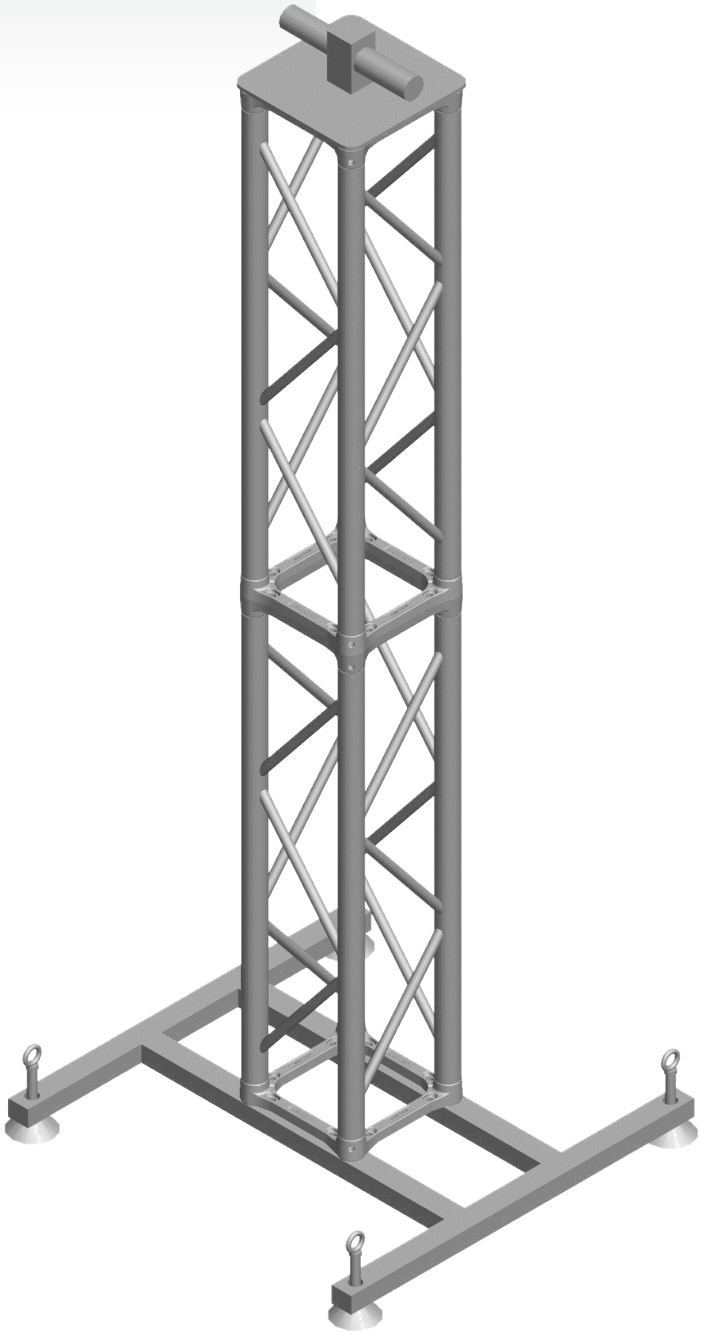


PLBASCR
Base per truss 29.
Base for truss 29.
PLBASCRPR
Base per truss 40.
Base for truss 40.



PLTOPCR
Top per truss 29.
Top for truss 29
PLTOPCRPR
Top per truss 40.
Top for truss 40..

CODE	L (mm)	W (mm)	A(mm)	B(mm)
PLBASCR	850	850	290	290
PLBASCRPR	850	850	400	400
PLTOPCR	300	300		
PLTOPCRPR	400	400		



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