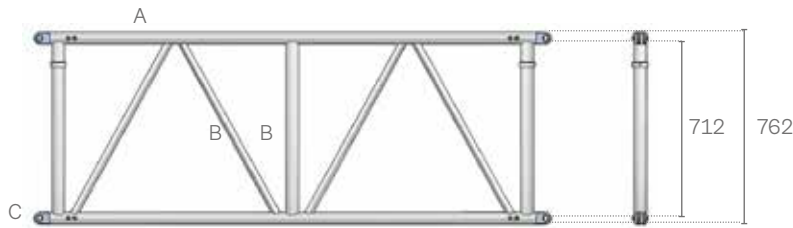


LIBERA FL76



This LIBERA System is ideal for large grids and complex installations, allowing to build structures of up to 22 metres long with standard centre-to-centre distances. Indoors, it is suitable for theatre grid structures, and TV and cinema studios with innumerable advantages.



Chords A

Extruded tube Ø 50 x 4 mm
EN AW – 6082 T6

Diagonals B

Extruded tube Ø 30 x 3 mm
EN AW – 6082 T6

Braces C

Extruded tube Ø 50 x 4 mm
EN AW – 6082 T6

Ends D

steel forks connector
11SMnPb37

Connection system

KHLP: Cylindrical pin + safety R-clip
KHLM+KHLF

LIBERA system FL76

47 to 200 cm flat trusses – FL56

Available in two versions: standard and with built-in roofing sheet guides

Ends with aluminium forks

50 x 4 mm tubes and 30 x 3 mm diagonals made from EN AW-6082 T6 aluminium

Curved parts for grid structure end fittings

Universal four-way connection

Truss

code	H cm	L cm
FL76047V	flat section 76	47
FL76086V	flat section 76	86
FL76100V	flat section 76	100
FL76186V	flat section 76	186
FL76200V	flat section 76	200
FL76047R	flat section 76	47 with guide
FL76086R	flat section 76	86 with guide
FL76100R	flat section 76	100 with guide
FL76186R	flat section 76	186 with guide
FL76200R	flat section 76	200 with guide
FL76111RHC	flat section 76	105 curved

*V - standard truss

*R - built-in rail for canopy



Load table / Type A

4-WAY STAR CONNECTION



SPAN	Unif. distributed load			Centre point load		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm
3	818	2453	1	2118	2118	1
4	610	2441	2	1579	1579	2
5	486	2430	4	1253	1253	3
6	344	2067	6	1033	1033	5
7	250	1750	8	875	875	6
8	189	1510	10	755	755	8
9	147	1320	13	660	660	11
10	117	1167	16	583	583	13
11	94	1039	19	519	519	16
12	78	930	23	465	465	19
13	64	836	27	418	418	23
14	54	755	32	377	377	27
15	45	682	37	341	341	31
16	39	617	42	309	309	36
17	33	559	47	279	279	41
18	28	505	53	253	253	46
19	24	456	60	228	228	52
20	21	411	66	206	206	58
21	18	369	73	185	185	65
22	15	330	81	165	165	72
23	13	293	89	147	147	80
24	11	259	97	129	129	88

Load table / Type B

MALE/FEMALE FORK CONNECTION



SPAN	Unif. distributed load			Centre point load		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm
3	462	1387	0	1387	1387	1
4	344	1375	1	1375	1375	2
5	273	1364	2	1253	1253	3
6	225	1352	4	1033	1033	5
7	192	1341	6	875	875	6
8	166	1329	9	755	755	8
9	146	1318	13	660	660	11
10	117	1167	16	583	583	13
11	94	1039	19	519	519	16
12	78	930	23	465	465	19
13	64	836	27	418	418	23
14	54	755	32	377	377	27
15	45	682	37	341	341	31
16	39	617	42	309	309	36
17	33	559	47	279	279	41
18	28	505	53	253	253	46
19	24	456	60	228	228	52
20	21	411	66	206	206	58
21	18	369	73	185	185	65
22	15	330	81	165	165	72
23	13	293	89	147	147	80
24	11	259	97	129	129	88

Cantilever load table / Type A



SPAN	Unif. distributed load			Centre point load		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm
1.0	1232	1232	0	1232	1232	0
1.5	818	1226	1	1057	1057	1
2.0	610	1221	1	787	787	2
2.5	486	1215	2	625	625	3
3.0	344	1031	3	515	515	5
3.5	249	873	5	436	436	6
4.0	188	753	6	377	377	8

Cantilever load table / Type B














SPAN	Unif. distributed load			Centre point load		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm
1.0	699	699	0	699	699	0
1.5	462	693	0	693	693	1
2.0	344	688	1	688	688	2
2.5	273	682	1	625	625	3
3.0	225	676	2	515	515	5
3.5	192	670	4	436	436	6
4.0	166	665	5	377	377	8

LIBERA FL76 System

LIBERA is an open structural system. The distinguishing feature of the system is that it uses standard modular elements connected together in ways that allow varied design and geometry of the finished structure. These two pages show connections and accessories that are helpful in the assembly or set up of your LIBERA FL76 system. The wide range of accessories for LIBERA System include bar hooks, spacers for the construction of arched geometries, complimentary elements for sleeve-blocks and transport trolley systems for flat trusses.

Connections

					
KHLB M20 screw bolt + spring washer	KHLD M20 screw nut + spring washer	KHLF Female fork connector complete	KHLG M20 Lifting Eye	KMLM Male fork connector complete	KHLP Cylindrical pin + 3 mm safety R-clip
					
KHL180A 180° double fork aluminum connector	KHL180S 180° double fork steel connector	KHL90LA 90° double fork alum. connector, left	KHL90LS 90° double fork steel connector, left	KHL90RA 90° double fork alum. connector, right	KHL90RS 90° double fork steel connector, right
					
KHL180AL149R Alusfera 76 spacer A	FL76CS02 2-way fork connection system	FL76CS03 3-way fork connection system	FL76CS04 4-way fork connection system	FL76CS04C 4-way fork conn. system rounded end	FL76CS04L 4-way fork conn. system w/foot
					
FL76CS04Z1 4-way cross special connection	FL76CS04Z2 4-way cross special connection	FL76CS04R 4-way fork conn. system w/foot and vertical fork	TZHL01 FL assembly kit		

Accessories



C052D

Bar hook
for 52 cm. truss

C066

Bar hook
for 61 cm. truss

FL76059HS

HL 76 cm. gate
cm 59 truss -
hoist support

FL76047HSV

HL 76 cm. gate
cm 47 truss -
hoist support

FL76MSZ1

Hoist support

FLRS52E-L

Inclination system
for MT52 tower/Libera
76 - Left



FLRS52E-R

Inclination system
for MT52 tower/
Libera 76 - Right

FLRS40E-L

Inclination system
for MT40 tower/
Libera 76 - Left

FLRS40E-R

Inclination system
for MT40 tower/
Libera 76 - Right

FL76ST

FL76 transport trolley
system for 20 pieces

FL76FP

Stage floor plate



FL76TT

Support for truss

RA / Reinforcement arm

RA050 – working length 73 cm
RA100 – working length 123 cm
RA200 – working length 223 cm
RA300 – working length 323 cm

RAF / Reinforced tube w/forks

RAF047 – working length 47 cm
RAF086 – working length 86 cm
RAF100 – working length 100 cm
RAF186 – working length 186 cm
RAF200 – working length 200 cm



RAH / Diagonal brace w/hooks

RAH014M2P – working length 14.2 cm
RAH049P – working length 49 cm
RAH141M4 – working length 141 cm
RAH158M8 – working length 158 cm
RAH205M9S – working length 205 cm
RAH213M5 – working length 213 cm
RAH223M6 – working length 223 cm
RAH250M6 – working length 250 cm
RAH282M8 – working length 282 cm

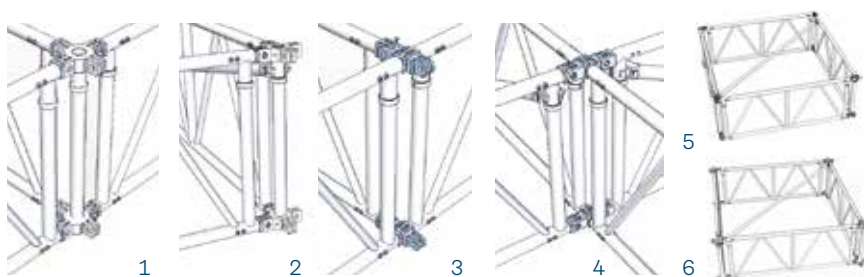
RAL / 4 mm Aluminium pipe

RAL047 – length 47 cm
RAL086 – length 86 cm
RAL100 – length 100 cm
RAL186 – length 186 cm
RAL200 – length 200 cm

RAT / Aluminium pipe w/caps

RAT050 – working length 50 cm
RAT100 – working length 100 cm
RAT150 – working length 150 cm
RAT200 – working length 200 cm
RAT250 – working length 250 cm
RAT300 – working length 300 cm

Frames



1 / FL76 truss
fixed onto 4-way
connection system
FL76CS04

2 / Detail RAH fixed
onto FL76 end
brace

3 / FL76 truss fixed
onto end brace
KHLM + KHLF

4 / Detail of FL76
module with RAH
fixed onto end brace

5 / FL76 module
with RAH fixed onto
end brace

6 / FL76 module
with 4-way
connection