

QL40A

Anti-torsion



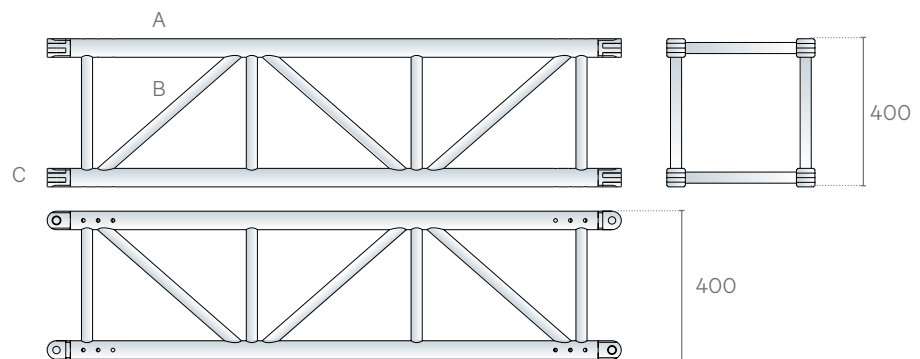
Square section High Load aluminium truss with 40 cm long sides. It is diagonalized on all faces and is provided with an aluminium fork connection. This guarantees excellent rigidity and elevated resistance in both horizontal and vertical applications despite its reduced section.

Chords A
Extruded tube \varnothing 50 x 4 mm
EN AW-6082 T6

Diagonals B
Extruded tube \varnothing 30 x 3 mm
EN AW-6082 T6

Ends C
Aluminium forks connector
EN AW-6082 T6

Connection systems
KHLP: cylindrical pin + safety R-clip



Gates and accessories

code	cm	kg
FL40035P	40 x 35 x 5	3.5
FL40049MS	40 x 49 x -5 x 5	17.50
MTC30F	48 x 48 x 1	5
MTC30G / MTC30D	48 x 48 x 1	4.2
KHLP	40 x 40 x 300	36.20

Linear elements

code	cm	kg
QL40100A	40 x 40 x 100	14.70
QL40130A	40 x 40 x 130	17.50
QL40200A	40 x 40 x 200	25.30
QL40300A	40 x 40 x 300	36.20



Load table / Fork connection

SPAN	Unif. distributed load			Centre point load			Third point load			Quarter point load			Fifth point load		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm	kg	kg	mm	kg	kg	mm	kg	kg	mm
3	1673	5018	3	3238	3238	4	2080	4161	4	1624	4871	4	1255	5018	4
4	1252	5007	8	2643	2643	7	1742	3484	8	1383	4149	9	1154	4615	9
5	999	4995	16	2230	2230	12	1497	2993	13	1206	3618	15	966	3862	15
6	742	4454	25	1926	1926	17	1310	2620	20	1068	3203	23	830	3320	23
7	542	3796	34	1692	1692	25	1163	2326	29	930	2789	32	726	2904	32
8	412	3300	45	1505	1505	33	1044	2088	39	819	2457	42	644	2576	42
9	323	2911	56	1353	1353	42	945	1889	50	728	2183	54	578	2310	54
10	260	2598	70	1227	1227	53	862	1724	63	650	1949	66	522	2087	68
11	213	2340	84	1119	1119	66	791	1582	78	585	1755	80	475	1902	83
12	177	2122	101	1027	1027	79	729	1459	95	531	1592	96	436	1742	100
13	149	1937	118	946	946	94	675	1350	113	484	1453	113	401	1604	118
14	127	1776	137	875	875	111	627	1254	133	444	1332	131	370	1480	138
15	109	1635	158	812	812	129	584	1169	154	409	1226	151	341	1363	159
16	94	1510	180	755	755	148	546	1091	177	378	1133	172	315	1259	181
17	82	1399	203	700	700	168	511	1021	202	350	1049	194	291	1166	205
18	72	1299	228	649	649	189	478	956	229	325	974	218	271	1082	230
19	64	1208	255	604	604	212	449	897	257	302	906	244	252	1006	256
20	56	1125	283	562	562	237	422	843	288	281	844	271	234	937	284

Cantilever load table / Fork connection

SPAN	Cantilever load (q)			Point load (F)		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm
0.5	5042	2521	0	2521	2521	0
1.0	2515	2515	1	2081	2081	1
1.5	1619	2429	2	1613	1613	4
2.0	1033	2066	4	1315	1315	7
2.5	720	1799	7	1108	1108	11
3.0	530	1590	11	955	955	17
3.5	406	1422	15	838	838	24
4.0	321	1284	21	745	745	32

Axial load table

SPAN	Axial load (F)	
	F _{am.}	F _{am.}
m	kg	kg
2	18054	17392
4	16913	9701
6	14903	5359
8	12244	
10	9631	
12	7507	
14	5898	
16	4696	

Load table has been prepared in accordance with UNI ENV 1999-1-1 (Eurocode 9). When calculating the allowable loads it is assumed that the load is suspended from the bottom chord and the truss is supported from the top chord at each end. The values shown in the table are the allowable static loads that can be applied to the truss. This is the live load or the payload.

The self weight of the truss has been taken into account when calculating the values in the table. It should be noted that this are idealised loading conditions and the User shall re-analyze the truss for the loading conditions which prevail for the application being considered.






QL40A System

High Load structures can be extended using specially designed accessories for suspension, transportation and reinforcement, including hooks, corner frames and skates. Only forked connectors with steel junction pins are used. Designed to withstand the highest stress and load levels, they offer guaranteed compatibility with the whole series. Gates are short, flat section High Load elements generally used when putting together corners or tower sleeve blocks. Code numbers shown under the pictures refer to the shape and make it easy to identify.

Connections

				
KHLB M20 screw bolt + spring washer	KHLD M20 screw nut + spring washer	KHLF Female fork connector complete	KHLG M20 Lifting Eye	KHLM 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	TZHL01 FL assembly kit	

Accessories

				
C040 Bar hook for 40 cm. truss	FP40Z1 Universal 40 cm truss floor plate	MTC30F Square frame with bolts for QF40	QL40X4C - HL40 4 ways compact corner	QL40X6C - HL4 6 ways compact corner



MTC30D - MT30
lower frame w/wheels



MTC30G - MT30
upper frame w/wheels
& eye bolts

Gates



FL40035P
HL 40 cm.
flat - 35 cm



FL40049M5P
HL 40 cm.
flat - 49.5 cm

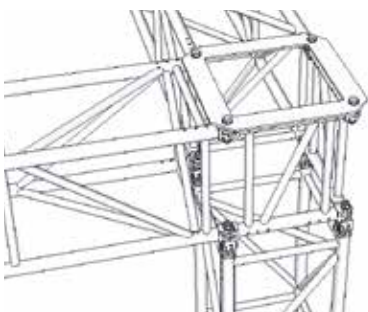


FL40047HS
HL40 cm flat - 47 cm gate
w/hoist support

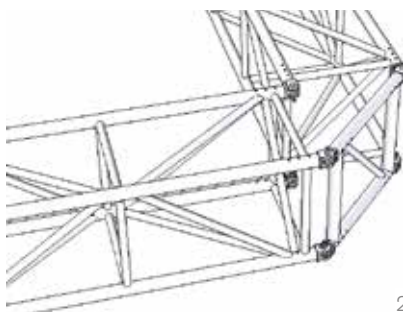


FL40047PH
HL40 cm flat - 47 cm gate
w/forks

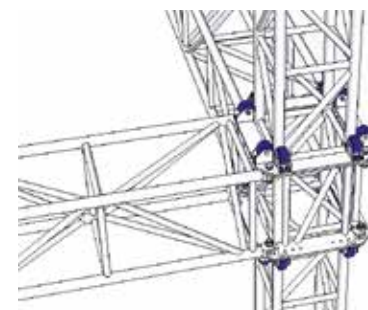
Corner solutions



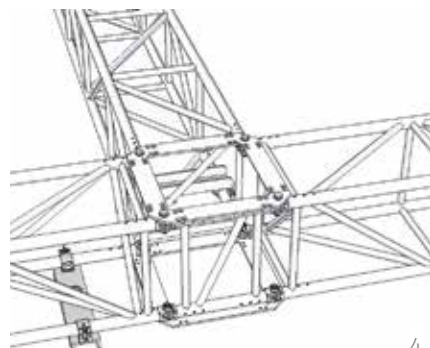
1



2



3



4

- 1 / 90° solution with pillar
- 2 / 90° solution with gate
- 3 / 90° solution with wheeled frame
- 4 / 3-way solution with frame