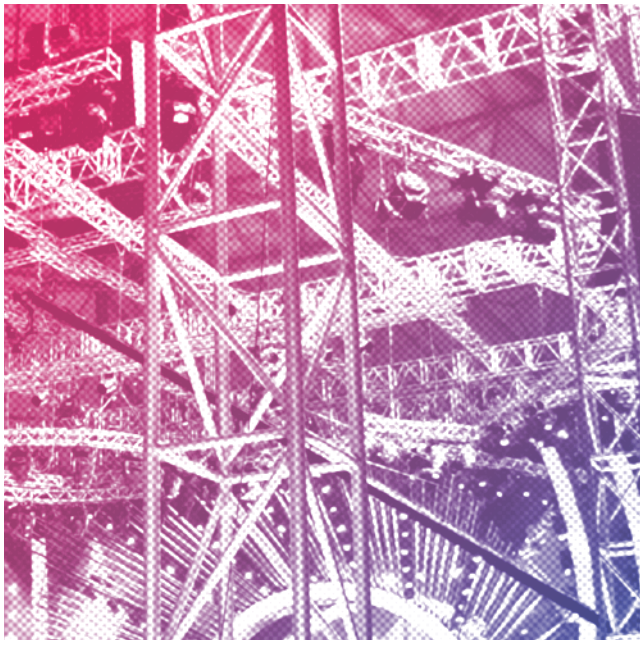
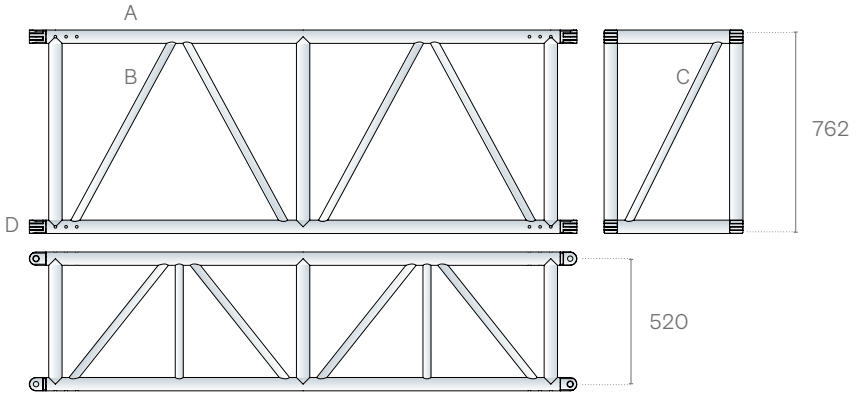
RL76A

Anti-torsion



Rectangular section High Load aluminium truss with 76 x 52 cm long sides. It is diagonalized on all faces and is provided with steel fork connections. It ensures high load capacity on medium-long spans thanks to the design of its main components.



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 C
Steel forks connector
11SMnPb37

Connection systems
KHLP: cylindrical pin + safety R-clip

Linear elements

code	cm	kg
RL76100A	76.2 x 52 x 100	19.40
RL76200A	76.2 x 52 x 200	45.00
RL76300A	76.2 x 52 x 300	52.00

Corners and sleeve block

code	cm	kg
FL76047P	76.2 x 47 x 5	8.9
FL76066M5	76.2 x 66.5 x 5	9.7
MTC40F	59 x 59 x 1	4.3
MTC40G / MTC40D	59 x 59 x 1	13.3 / 14.5
KHLP	Ø2	0.15

Axial load table

SPAN	$F_{am.}$	$F_{am.}$
m	kg	kg
3	16542	14191
6	15175	7669
9	12818	
12	9984	
13	9093	
14	8266	
15	7508	
16	6821	
17	6202	
18	5645	

Load table / Fork connection

	Unif. distributed load			Centre point load			Third point load			Quarter point load			Fifth point load		
SPAN	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	1910	5729	2	5593	5593	3	2864	5729	3	1910	5729	3	1432	5729	3
4	1428	5711	5	4633	4633	7	2855	5711	7	1904	5711	7	1428	5711	6
5	1139	5693	10	3952	3952	11	2601	5202	13	1898	5693	13	1423	5693	12
6	946	5675	18	3441	3441	17	2299	4597	20	1846	5539	22	1419	5675	21
7	808	5657	28	3043	3043	24	2057	4114	28	1669	5006	32	1314	5258	32
8	705	5639	42	2724	2724	33	1859	3718	38	1492	4476	42	1172	4688	42
9	586	5271	57	2462	2462	43	1694	3387	50	1318	3953	54	1056	4224	55
10	471	4710	70	2242	2242	54	1553	3106	63	1177	3532	66	959	3836	69
11	386	4247	85	2054	2054	66	1432	2864	78	1062	3186	81	877	3508	84
12	322	3859	101	1892	1892	80	1326	2652	95	965	2894	96	804	3216	101
13	271	3528	118	1751	1751	96	1233	2466	113	882	2646	113	735	2940	119
14	232	3241	137	1621	1621	112	1150	2301	133	810	2431	131	675	2701	138
15	199	2991	158	1495	1495	129	1076	2152	155	748	2243	151	623	2492	159
16	173	2769	180	1384	1384	148	1009	2018	179	692	2077	172	577	2307	181
17	151	2571	203	1286	1286	167	948	1896	204	643	1928	194	536	2143	205
18	133	2394	228	1197	1197	189	892	1785	232	598	1795	218	499	1995	230
19	118	2233	255	1116	1116	211	837	1675	260	558	1675	244	465	1861	256
20	104	2086	283	1043	1043	235	782	1565	288	522	1565	271	435	1738	285
21	93	1952	312	976	976	261	732	1464	318	488	1464	299	407	1626	314
22	83	1828	343	914	914	288	686	1371	349	457	1371	329	381	1523	345
23	75	1714	376	857	857	316	643	1285	382	428	1285	361	357	1428	378
24	67	1607	410	804	804	347	603	1205	417	402	1205	394	335	1339	412
25	60	1508	446	754	754	379	565	1131	453	377	1131	429	314	1256	448

Cantilever load table / Fork connection

SPAN	Point load	Full load	Central deflection	Point load	Central deflection
m	kg/m	kg	mm	kg	mm
1.0	2873	2873	0	2873	1
2.0	1428	2855	3	2305	7
3.0	917	2751	10	1707	17
4.0	564	2257	20	1348	32
5.0	380	1902	34	1106	52
6.0	272	1633	52	931	77

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.

RL76A 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

C052D
Bar hook for 52 cm truss

FP7652Z1
Universal 52 cm truss
floor plate

MTC40D
Lower frame MT40,
w/ wheels

MTC40F
Square frame with bolts

MTC40G
Upper frame MT40,
w/ wheels and rings

MTC52D
Lower frame - QL52A truss, w/ wheels

MTC52G
Upper frame - QL52A truss, w/ wheels and rings

FL76047HS
HL 76 cm. gate - 47 cm truss - hoist support

FL76047HSZ1
HL76 cm gate - 47 cm truss - hoist support

Gates

FL76047P
HL 76 cm ladder cm 47 truss with horizontal forks

FL76059P
HL 76 cm. gate - cm. 59 truss w/ horizontal forks - FL76

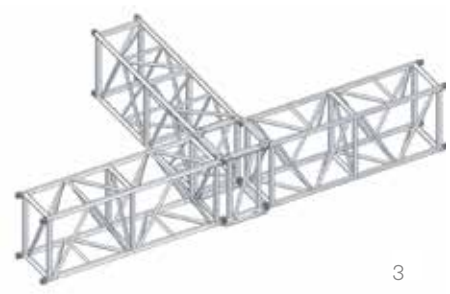
FL76059PH
HL 76 cm. gate - cm. 59 truss w/ coupling - RL76/ FL76

FL76066M5P
HL 76 cm. ladder - cm. 66.5 truss with horizontal forks

Corner solutions

1

2



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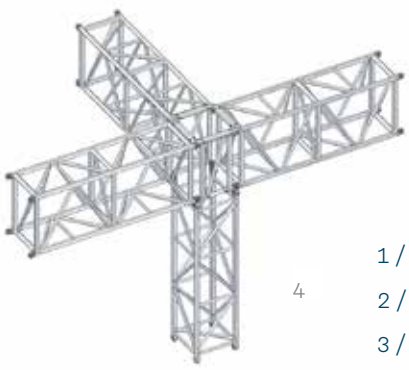

4

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