



Kind of Product: Aluminium Truss System Type: F 34 P  
 Connecting cross section: square with a flange length of 240 mm relating to the centerline  
 Outer dimensions: square with a flange length of 290 mm relating to the outer edge  
 Effective length: 0,5 m – 5,0 m  
 Connecting elements: conical connecting element (AlCuSiPb F37) with conical safety bolt (quality 5.6)  
 Main tubes:  $\varnothing 50 \times 3$  mm EN AW 6082 T6  
 Braces:  $\varnothing 20 \times 2$  mm EN AW 6082 T6  
 Stress Resultants:  $M_{max} = 10,13$  kNm  
 $Q_{max} = 11,40$  kN  
 $N_{max} = 84,44$  kN

Load table:

| length | Equally distributed load | Central point load | Single load in third points | Single load in fourth points | Single load in fifth points |
|--------|--------------------------|--------------------|-----------------------------|------------------------------|-----------------------------|
| [m]    | [kg/m]                   | [kg]               | [kg]                        | [kg]                         | [kg]                        |
| 1      | 2276                     | 913,9              | 870,2                       | 758,6                        | 569,0                       |
| 2      | 1136                     | 794,1              | 730,2                       | 629,0                        | 568,0                       |
| 3      | 756,0                    | 701,9              | 629,0                       | 520,8                        | 471,0                       |
| 4      | 502,5                    | 629,0              | 552,5                       | 444,3                        | 396,6                       |
| 5      | 320,2                    | 569,8              | 492,6                       | 387,5                        | 332,2                       |
| 6      | 221,0                    | 520,8              | 444,3                       | 331,7                        | 275,3                       |
| 7      | 160,0                    | 479,5              | 404,7                       | 282,4                        | 234,4                       |
| 8      | 122,0                    | 444,3              | 367,9                       | 245,3                        | 203,6                       |
| 9      | 95,0                     | 413,9              | 324,2                       | 216,1                        | 179,4                       |
| 10     | 76,0                     | 385,2              | 288,9                       | 192,6                        | 159,9                       |
| 11     | 62,0                     | 346,4              | 259,8                       | 173,2                        | 143,7                       |
| 12     | 51,0                     | 313,6              | 235,3                       | 156,8                        | 130,2                       |
| 13     | 43,0                     | 285,7              | 214,3                       | 142,8                        | 118,6                       |
| 14     | 36,0                     | 261,4              | 196,1                       | 130,7                        | 108,5                       |
| 15     | 31,0                     | 240,1              | 180,1                       | 120,1                        | 99,6                        |
| 16     | 27,0                     | 221,2              | 165,9                       | 110,6                        | 91,8                        |
| 17     | 24,0                     | 204,4              | 153,3                       | 102,2                        | 84,4                        |
| 18     | 21,0                     | 189,1              | 141,8                       | 94,6                         | 78,5                        |

The load table has been approved for the load case mainload and simple supported beam. A permanent weight of 4,0 kg/m has been included.