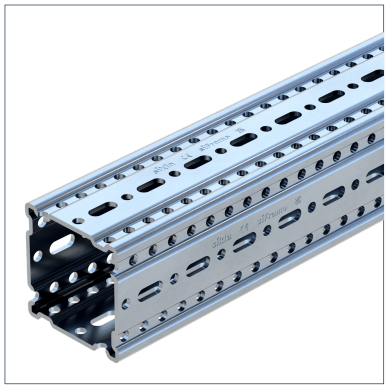
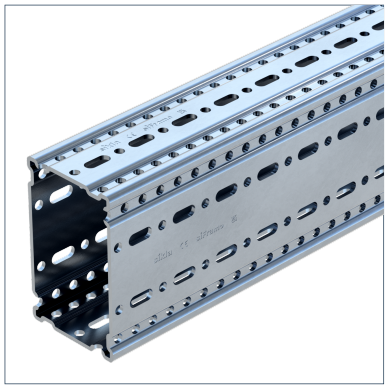
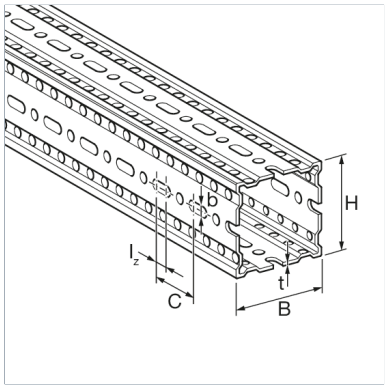
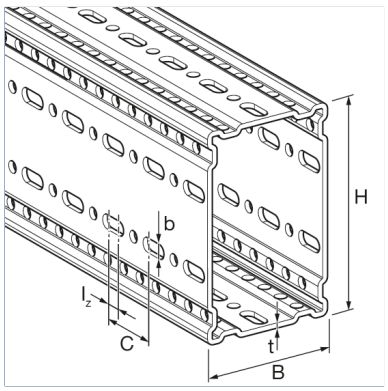
# Beam Section TP F100 HCP








## General Information

Galvanised box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes are designed to receive Self Forming Screw FLS in conjunction with relevant components.

## Material Properties

| | |
|---|---|
| Halogen-free | 0 |
| UV-resistant | 0 |

## Material

| | |
|---|---|
| Primary element material | steel |
| Surface finish | HCP |
| Corrosion protection class | C4 |

## Forces

| Type | -V{X,perm.} | V{X,perm.} | -V{Y,perm.} | V{Y,perm.} | -V{Z,perm.} | V{Z,perm.} |
|---|---|---|---|---|---|---|
| TP F100 6M HCP | 423,60 kN | 423,60 kN | 31,90 kN | 31,90 kN | 31,90 kN | 31,90 kN |
| TP F100/160 6M HCP | 500,00 kN | 500,00 kN | 39,40 kN | 39,40 kN | 38,60 kN | 38,60 kN |

## Moments

| Type | -M{X,perm.} | M{X,perm.} | -M{Y,perm.} | M{Y,perm.} | -M{Z,perm.} | M{Z,perm.} |
|---|---|---|---|---|---|---|
| TP F100 6M HCP | 2,9 kNm | 2,9 kNm | 10,5 kNm | 10,5 kNm | 10,5 kNm | 10,5 kNm |
| TP F100/160 6M HCP | 4,8 kNm | 4,8 kNm | 21,7 kNm | 21,7 kNm | 13,8 kNm | 13,8 kNm |

## Cross-section values 1

| Type | Elastic modulus Wy | Elastic modulus Wz | Second moment of area Iy | Second moment of area Iz |
|---|---|---|---|---|
| TP F100 6M HCP | 32,83 cm³ | 32,83 cm³ | 173,44 cm^4 | 173,44 cm^4 |
| TP F100/160 6M HCP | 67,49 cm³ | 47,15 cm³ | 547,73 cm^4 | 269,90 cm^4 |

## Cross-section values 2

| Type | Torsional constant It | Cross-sectional area A |
|---|---|---|
| TP F100 6M HCP | 129,35 cm^4 | 7,60 cm² |
| TP F100/160 6M HCP | 185,62 cm^4 | 14,22 cm² |

## Note on loadings

The specified load values are design loads Rd and include a partial safety factor γM2 = 1.25 (DIN EN 1993-1-8:2025-04, Table 4.1)

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A partial safety factor of γG = 1.35 (DIN EN 1990:2021-10, Table A1.2(B)) must be taken into account for permanent loads.

### Additional information

Also available with DualShield for high corrosion protection within C5H environments.

### Types

| Type | Weight | Quantity | Part number |
|---|---|---|---|
| TP F100 6M HCP | 10,8 kg/m | 6 m | 112904 |
| TP F100/160 6M HCP | 14,31 kg/m | 6 m | 112905 |

### Dimensions

| Type | B | b | C | H | Iz | t |
|---|---|---|---|---|---|---|
| TP F100 6M HCP | 100 mm | 11 mm | 50 mm | 100 mm | 15 mm | 4 mm |
| TP F100/160 6M HCP | 100 mm | 11 mm | 50 mm | 160 mm | 15 mm | 4 mm |

### Certification

CE mark (Declaration of performance see www.sikla.co.uk/service/downloads) - ETA-24/0471

### Documents

Static Guideline - siFramo & siMotec

siFramo - ETA-24/0471