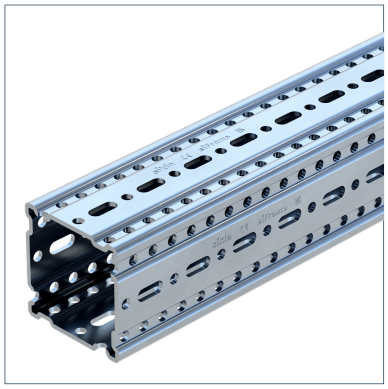
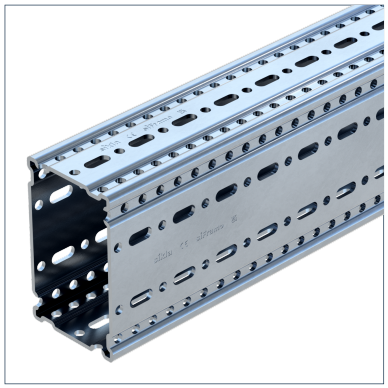
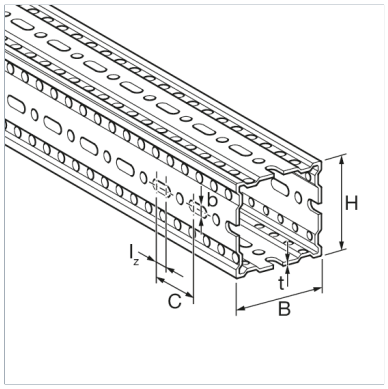
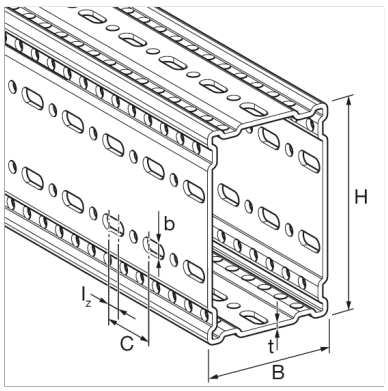
Beam Section TP F100 HCP









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,Rd}	V{X,Rd}	-V{Y,Rd}	V{Y,Rd}	-V{Z,Rd}	V{Z,Rd}
TP F100 6M HCP	423.6 kN	423.6 kN	31.9 kN	31.9 kN	31.9 kN	31.9 kN
TP F100/160 6M HCP	500 kN	500 kN	39.4 kN	39.4 kN	38.6 kN	38.6 kN

Moments

Type	-M{X,Rd}	M{X,Rd}	-M{Y,Rd}	M{Y,Rd}	-M{Z,Rd}	M{Z,Rd}
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)

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	10.800 kg/m	6 m	112904
TP F100/160 6M HCP	14.310 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

siFramo - ETA-24/0471

Static Guideline - siFramo & siMotec