

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	2
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	3.88
Cross Sectional Area: A (in ²)	1.140
Moment of Inertia: Ix (in ⁴)	20.799
Section Modulus: Sx (in ³)	3.396
Radius of Gyration: Rx (in)	4.272
Moment of Inertia: Iy (in ⁴)	0.294
Radius of Gyration: Ry (in)	0.508

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	19.283	18.029
Section Modulus: Sxe (in ³)	2.386	2.060
Allowable Bending Moment: Ma (in-k)	47.14	61.68
Allowable Shear Force: Va (lb)	2712	2712
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.9313
Torsional Warping Constant: Cw (in ⁶)	8.431
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.725
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.363

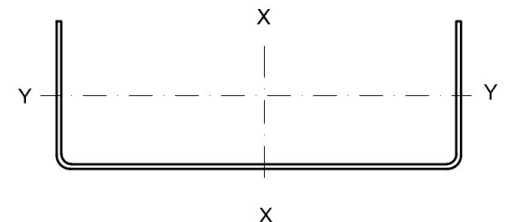


PRODUCT ID

1200T200-68 (12x2x14ga)

CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S100-16



See Hermes/Hephaistos Technical Manual
for complete design data