

Tracks (T)



MATERIAL	
Web (in)	8
Flange (in)	1½
Yield Strength Fy (KSI)	33
Tensile Strength Fu (KSI)	45
Design Thickness (in)	0.0346
Minimum Thickness (mil)	33
Gauge	20S
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.29
Cross Sectional Area: A (in ²)	0.380
Moment of Inertia: Ix (in ⁴)	3.181
Section Modulus: Sx (in ³)	0.781
Radius of Gyration: Rx (in)	2.892
Moment of Inertia: Iy (in ⁴)	0.060
Radius of Gyration: Ry (in)	0.397

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in ⁴)	2.569
Section Modulus: Sxe (in ³)	0.414
Allowable Bending Moment: Ma (in-k)	6.83
Allowable Shear Force: Va (lb)	465
(check web crippling)	

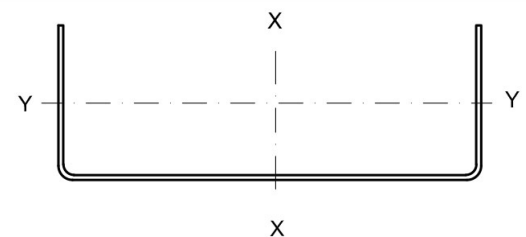
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.152
Torsional Warping Constant: Cw (in ⁶)	0.751
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.588
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.977

PRODUCT ID

800T150-33 (8x1½x20Sga) Grade 33

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data