

Tracks (T)

MATERIAL	
Web (in)	8
Flange (in)	3
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.65
Cross Sectional Area: A (in ²)	0.780
Moment of Inertia: Ix (in ⁴)	7.583
Section Modulus: Sx (in ³)	1.896
Radius of Gyration: Rx (in)	3.117
Moment of Inertia: Iy (in ⁴)	0.670
Radius of Gyration: Ry (in)	0.927

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	5.449	4.749
Section Modulus: Sxe (in ³)	1.153	0.934
Allowable Bending Moment: Ma (in-k)	22.79	27.97
Allowable Shear Force: Va (lb)	2417	2898
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.834
Torsional Warping Constant: Cw (in ⁶)	7.412
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.680
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.660

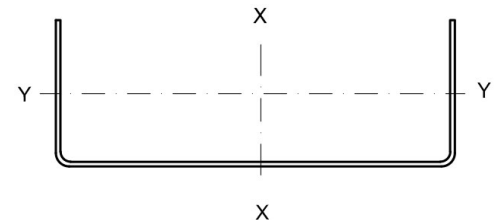


PRODUCTID

800T300-54 (8x3x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data