

Structural Stud (s)



MATERIAL

Web (in)	3½
Flange (in)	1⅝
Lip (in)	0.500
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.75
Cross Sectional Area: A (in ²)	0.515
Moment of Inertia: Ix (in ⁴)	0.985
Section Modulus: Sx (in ³)	0.563
Radius of Gyration: Rx (in)	1.383
Moment of Inertia: Iy (in ⁴)	0.184
Radius of Gyration: Ry (in)	0.597

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	0.985
Section Modulus: Sxe (in ³)	0.551
Local Buckling Allowable Moment: Mal (in-k)	18.26
Distortional Buckling Allowable Moment: Mad (in-k)	17.49
Allowable strong axis shear away from punch: Vag (lb)	4203
Allowable strong axis shear at punch: Vanet (lb)	897
(check web crippling)	

TORSIONAL SECTION PROPERTIES

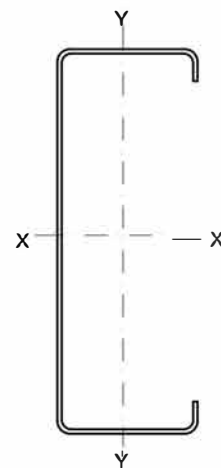
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.872
Torsional Warping Constant: Cw (in ⁶)	0.514
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.280
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.977

PRODUCT ID

350S 162-68 (3½x1⅝x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data