Structural Stud (S)

MATERIAL	
Web (in)	3⅝
Flange (in)	1⅜
Lip (in)	0.375
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)	0.80
Cross Sectional Area: A (in^2)	0.236
Moment of Inertia: Ix (in^4)	0.479
Section Modulus: Sx (in^3)	0.264
Radius of Gyration: Rx (in)	1.424
Moment of Inertia: Iy (in^4)	0.059
Radius of Gyration: Ry (in)	0.501

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in^4)	0.479
Section Modulus: Sxe (in^3)	0.239
Local Buckling Allowable Moment: Mal (in-k)	4.73
Distortional Buckling Allowable Moment: Mad (in-k)	4.45
Allowable strong axis shear away from punch: Vag (lb)	1024
Allowable strong axis shear at punch: Vanet (lb)	521
(check web crippling)	

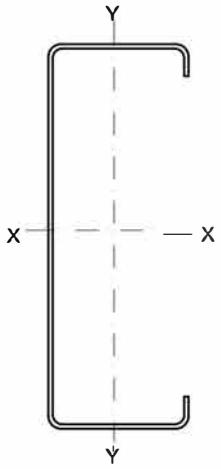
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	0.094
Torsional Warping Constant: Cw (in^6)	0.165
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.003
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.813

PRODUCT ID

362S 137-33 (3⅝x1⅜x20Sga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual for complete design data

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