

Structural Stud (s)



MATERIAL

Web (in)	3 $\frac{5}{8}$
Flange (in)	2
Lip (in)	0.625
Yield Strength Fy (KSI)	33
Tensile Strength Fu (KSI)	45
Design Thickness (in)	0.0348
Minimum Thickness (mil)	33
Gauge	20S
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.01
Cross Sectional Area: A (in ²)	0.297
Moment of Inertia: Ix (in ⁴)	0.648
Section Modulus: Sx (in ³)	0.358
Radius of Gyration: Rx (in)	1.478
Moment of Inertia: Iy (in ⁴)	0.177
Radius of Gyration: Ry (in)	0.772

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	0.646
Section Modulus: Sxe (in ³)	0.301
Local Buckling Allowable Moment: Mal (in-k)	5.96
Distortional Buckling Allowable Moment: Mad (in-k)	5.98
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

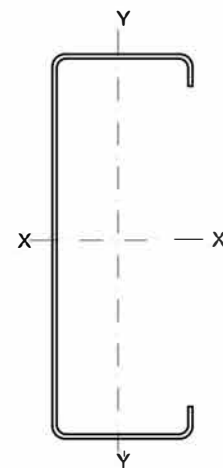
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.118
Torsional Warping Constant: Cw (in ⁶)	0.577
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.741
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.411

PRODUCT ID

362S 200-33 (3 $\frac{5}{8}$ x2x20Sga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data