

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)	0.0451
Minimum Thickness (mil)	43
Gauge	18
Available Finish G60, G90	

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	1.31
Cross Sectional Area: A (in ²)	0.385
Moment of Inertia: Ix (in ⁴)	0.836
Section Modulus: Sx (in ³)	0.461
Radius of Gyration: Rx (in)	1.474
Moment of Inertia: Iy (in ⁴)	0.227
Radius of Gyration: Ry (in)	0.767

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixe (in ⁴)	0.836
Section Modulus: Sxe (in ³)	0.436
Local Buckling Allowable Moment: Mal (in-k)	8.62
Distortional Buckling Allowable Moment: Mad (in-k)	8.41
Allowable strong axis shear away from punch: Vag (lb)	1740
Allowable strong axis shear at punch: Vanet (lb)	676
(check web crippling)	

TORSIONAL SECTION PROPERTIES

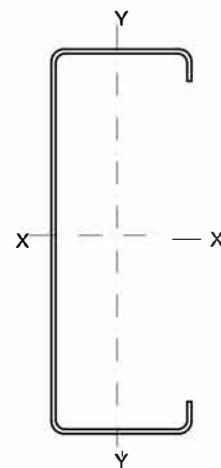
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.261
Torsional Warping Constant: Cw (in ⁶)	0.734
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.729
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.398

PRODUCT ID

362S 200-43 (3 $\frac{5}{8}$ x2x18ga) (Grade 33)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data