



SECTION DESIGNATION: 600S162-54 [50] Single

Section Dimensions:

Web Height =	6.000 in
Top Flange =	1.625 in
Bottom Flange =	1.625 in
Stiffening Lip =	0.500 in
Inside Corner Radius =	0.0849 in
Punchout Width =	1.500 in
Punchout Length =	4.000 in
Design Thickness =	0.0566 in



Steel Properties:

Fy =	50.000 ksi
Fu =	65.000 ksi
Fya =	55.318 ksi

Gross Properties

A(gross) (in ²)	Weight (lb/ft)	A(net) (in ²)
0.5563	1.6931	0.4714

Effective Properties

Ixx(defl) (in ⁴)	Sxx (in ³)	Ma-xx (Ft-Lb)
2.8604	0.9156	2527.1

K-phi for Distortional Buckling = 0.00 lb*in/in

Torsional Properties

Jx1000 (in ⁴)	Cw (in ⁶)	Xo (in)
0.5941	1.3372	-1.049

Warping Torsional Properties

a (in ³)	Sxx(lip) (in ³)	Wn(1) (in ²)
76.7	1.0951	3.7421

Web Crippling - Allowable Loads, Pa (lb)

End Bearing Length = 1.00 (in)
Interior Bearing Length = 3.50 (in)

Cond. 1 (E1F)
599

Cond. 2 (I1F)
1713

Cond. 3 (E2F)
482

Cond. 4 (I2F)
1802

Punchout Reduction Factor Cond. 1, R_c(E1F) = 0.925 + 0.083x/h <= 1.0
Punchout Reduction Factor Cond. 2, R_c(I1F) = 0.888 + 0.053x/h <= 1.0

Sxx (in ³)	Ixx (in ⁴)	Rx (in)	Iyy (in ⁴)	Ry (in)
0.9535	2.8604	2.2675	0.1804	0.5695
Ma-x(dist) (Ft-Lb)	Vag (lb)	Vanet (lb)	Syy (in ³)	Ma-y (Ft-Lb)
2158.3	2823	1947	0.1319	329.0
m (in)	Ro (in)	Beta	Wn(2) (in ²)	Wn(6) (in ²)
0.663	2.562	0.832	2.6893	-3.7421
Wn(3) (in ²)	Wn(4) (in ²)	Wn(5) (in ²)		
-1.9715	1.9715	-2.6893		