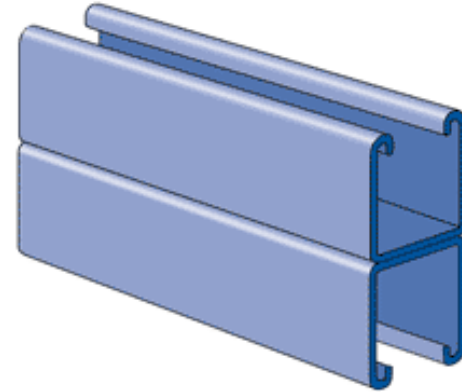
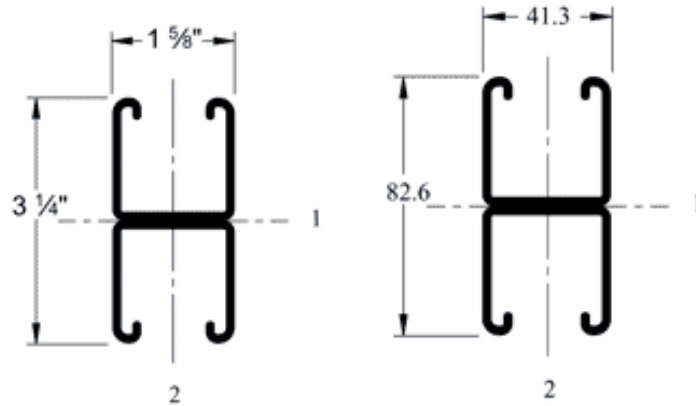


P1001 - 1-5/8" x 3-1/4", 12 Gage Back-to-Back, Solid



Column Loading - P1001

Beam Loading - P1001

| Unbraced Height (in) | Allowable Load at Slot Face (lbs) | Max Column Load Applied at C.G. | | | | Span (in) | Max Allowable Uniform Load (lbs) | Defl at Uniform load (in) | Uniform Loading at Deflection | | | Lateral Bracing Reduction Factor |
|----------------------|-----------------------------------|---------------------------------|--------------|--------------|--------------|-----------|----------------------------------|---------------------------|-------------------------------|-----------------|-----------------|----------------------------------|
| | | K=0.65 (lbs) | K=0.65 (lbs) | K=0.65 (lbs) | K=0.65 (lbs) | | | | Span /180 (lbs) | Span /240 (lbs) | Span /360 (lbs) | |
| 24 | 6,430 | 24,280 | 23,610 | 22,700 | 21,820 | 24 | *3,470 | 0.02 | *3,470 | *3,470 | *3,470 | 1.00 |
| 36 | 6,290 | 22,810 | 21,820 | 20,650 | 19,670 | 36 | 3,190 | 0.07 | 3,190 | 3,190 | 3,190 | 1.00 |
| 48 | 6,160 | 21,410 | 20,300 | 18,670 | 16,160 | 48 | 2,390 | 0.13 | 2,390 | 2,390 | 2,390 | 1.00 |
| 60 | 6,000 | 20,210 | 18,670 | 15,520 | 12,390 | 60 | 1,910 | 0.20 | 1,910 | 1,910 | 1,620 | 0.97 |
| 72 | 5,620 | 18,970 | 16,160 | 12,390 | 8,950 | 72 | 1,600 | 0.28 | 1,600 | 1,600 | 1,130 | 0.93 |
| 84 | 5,170 | 16,950 | 13,630 | 9,470 | 6,580 | 84 | 1,370 | 0.39 | 1,370 | 1,240 | 830 | 0.89 |
| 96 | 4,690 | 14,890 | 11,190 | 7,250 | 5,040 | 96 | 1,200 | 0.51 | 1,200 | 950 | 630 | 0.85 |
| 108 | 4,170 | 12,850 | 8,950 | 5,730 | 3,980 | 108 | 1,060 | 0.64 | 1,000 | 750 | 500 | 0.81 |
| 120 | 3,690 | 10,900 | 7,250 | 4,640 | * | 120 | 960 | 0.79 | 810 | 610 | 410 | 0.78 |
| 144 | 2,930 | 7,630 | 5,040 | * | * | 144 | 800 | 1.14 | 560 | 420 | 280 | 0.70 |
| *KL/r > 200 | | | | | | 168 | 680 | 1.53 | 410 | 310 | 210 | 0.63 |
| | | | | | | 192 | 600 | 2.02 | 320 | 240 | 160 | 0.56 |
| | | | | | | 216 | 530 | 2.54 | 250 | 190 | 130 | 0.49 |

| | | | | | | |
|-----|-----|-------|-----|------|------|-------|
| 240 | 480 | 3.16' | 200 | 150' | 100' | 6.44' |
|-----|-----|-------|-----|------|------|-------|

*Load limited by weld shear

[Channel Selection Chart](#)[Related Channel Nuts](#)**Finishes:** [GR](#) [PG](#) [HG](#) [ZD](#) [PL](#) [EA](#) [SS](#) [ST](#)**Weight:**380 Lbs/100 Ft
(566 Kg/100 m)[Additional Specifications](#)**Elements of Section**Area of Section - 1.112 in² (7.2 cm²)

Axis 1-1

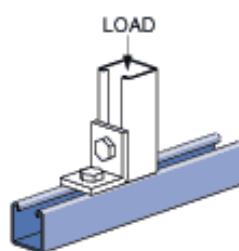
- Moment of Inertia (I) - 0.930 in⁴ (38.7 cm⁴)
- Section Modulus (S) - 0.572 in³ (9.4 cm³)
- Radius of Gyration (r) - 0.915 in (2.3 cm)

Axis 2-2

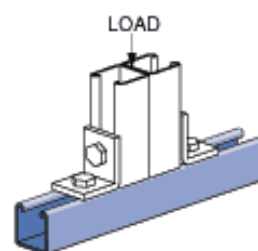
- Moment of Inertia (I) - 0.472 in⁴ (19.6 cm⁴)
- Section Modulus (S) - 0.580 in³ (9.5 cm³)
- Radius of Gyration (r) - 0.651 in (1.7 cm)

Notes:

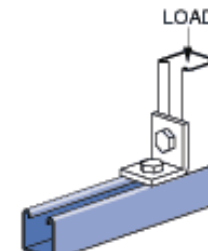
1. Above loads include the weight of the member. This weight must be deducted to arrive at the net allowable load the beam will support.
2. Long span beams should be supported so as to prevent rotation and twist.
3. Allowable uniformly distributed loads are listed for various simple spans, that is, a beam on two supports. If load is concentrated at the center of the span, multiply load from the table by 0.5 and corresponding deflection by 0.8.
4. The lateral bracing factor should be multiplied by the load to determine the load retained based on the distance between lateral braces.

Bearing Load on Channel:

Max Load
5,000 Lbs
2,268 Kg



Max Load
8,000 Lbs
3,629 Kg



Max Load
3,500 Lbs
1,588 Kg