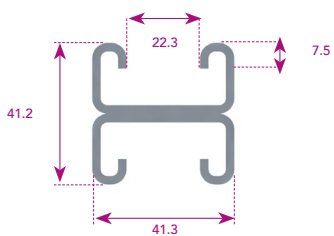



Shallow Back to Back Channel Slotted

- Steel with a Minimum yield strength 280 N/mm².
- Beams are assumed to be simply supported.
- Load and deflection are calculated using a safety factor of 1.6 and an allowable stress of 175 N/mm²
- Results given are for Pre-galvanised steel.
- Beam loads are calculated from the column face and effective length in BS5950.
- The tables show:
 1. the max safe working load
 2. the load to give 1-200 deflection
 3. load to give 1-360 deflection - the deflection used will depend on the installation designer
- This also applies to Point and UDL loads.

Fitting Type: IC-CNL-BBS-S Part Number: IC-CNL-BBS-S-SL -

Slots 26 x 13 @ 50mm Pitch

Sectional Properties

| CSA (mm ²) | Lxx (mm ⁴) | Zxx (mm ⁴) | Weight (kg/m) | Yield (N/mm ²) |
|------------------------|------------------------|------------------------|---------------|----------------------------|
| 464.0 | 56,340 | 2,728 | 3.44 | 280 |

= Select a Channel Length = Select a Finish

Material Configurations:



Safe Working Load Table

| Span (m) | Uniformly Distributed Load | | | | Point Load | | | | Safe Axial Load (kg) |
|----------|----------------------------|----------|------------------|---------------|-------------------|----------|------------------|---------------|----------------------|
| | Safe Working Load | | Deflection Limit | | Safe Working Load | | Deflection Limit | | |
| | Load (kg/m) | Def (mm) | Span/200 (kg) | Span/360 (kg) | Load (kg) | Def (mm) | Span/200 (kg) | Span/360 (kg) | |
| 0.8 | 644.32 | 2.91 | 644.32 | 491.92 | 257.73 | 2.33 | 257.73 | 245.96 | 3,908.07 |
| 1.0 | 411.19 | 4.54 | 411.19 | 250.09 | 205.59 | 3.64 | 205.59 | 156.30 | 3,094.74 |
| 1.2 | 284.54 | 6.54 | 260.66 | 143.19 | 170.73 | 5.25 | 170.73 | 107.39 | 2,422.64 |
| 1.4 | 208.18 | 8.91 | 162.80 | 88.82 | 145.73 | 7.16 | 142.45 | 77.72 | 1,922.47 |
| 1.6 | 158.62 | 11.64 | 107.86 | 58.30 | 126.90 | 9.37 | 107.86 | 58.30 | 1,552.92 |
| 1.8 | 124.64 | 14.74 | 74.67 | 39.86 | 112.18 | 11.88 | 84.00 | 44.85 | 1,276.41 |
| 2.0 | 100.34 | 18.21 | 53.45 | 28.07 | 100.34 | 14.70 | 66.81 | 35.09 | 1,065.63 |
| 2.2 | 82.35 | 22.05 | 39.25 | 20.19 | 90.59 | 17.83 | 53.97 | 27.76 | 901.87 |
| 2.4 | 68.68 | 26.27 | 29.40 | 14.71 | 82.41 | 21.28 | 44.09 | 22.07 | 772.33 |
| 2.6 | 58.03 | 30.86 | 22.34 | 10.79 | 75.44 | 25.05 | 36.31 | 17.54 | 668.19 |
| 2.8 | 49.59 | 35.82 | 17.16 | 7.92 | 69.42 | 29.15 | 30.03 | 13.85 | 583.26 |
| 3.0 | 42.77 | 41.16 | 13.27 | 5.75 | 64.16 | 33.57 | 24.89 | 10.79 | 513.09 |
| 3.2 | 37.20 | 46.88 | 10.30 | 4.10 | 59.51 | 38.34 | 20.59 | 8.20 | 454.44 |
| 3.4 | 32.58 | 52.99 | 7.98 | 2.81 | 55.38 | 43.45 | 16.95 | 5.98 | 404.91 |
| 3.6 | 28.70 | 59.48 | 6.15 | 1.80 | 51.66 | 48.92 | 13.83 | 4.04 | 362.69 |
| 3.8 | 25.42 | 66.35 | 4.68 | 0.98 | 48.31 | 54.75 | 11.12 | 2.33 | 326.40 |
| 4.0 | 22.63 | 73.62 | 3.49 | 0.32 | 45.25 | 60.94 | 8.73 | 0.81 | 294.95 |
| 4.2 | 20.22 | 81.28 | 2.52 | — | 42.46 | 67.51 | 6.62 | — | 267.52 |
| 4.4 | 18.13 | 89.34 | 1.72 | — | 39.89 | 74.46 | 4.73 | — | 243.43 |
| 4.6 | 16.31 | 97.80 | 1.05 | — | 37.51 | 81.81 | 3.02 | — | 222.15 |
| 4.8 | 14.71 | 106.66 | 0.49 | — | 35.31 | 89.56 | 1.46 | — | 203.25 |
| 5.0 | 13.30 | 115.93 | 0.01 | — | 33.25 | 97.73 | 0.04 | — | 186.37 |