

Deep 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-D-S

Part Number: IC-CNL-D-S-SL□○



Sectional Properties

| CSA (mm ²) | Ixx (mm ⁴) | Zxx (mm ³) | Weight (kg/m) | Yield (N/mm ²) |
|------------------------|------------------------|------------------------|---------------|----------------------------|
| 248.7 | 60743 | 2860 | 2.59 | 280 |

□ = Select a Channel Length* ○ = Select a Finish

Finishes & Materials:



Safe Working Load Table

| Span (m) | Uniformly Distributed Load | | | | Point Load | | | | Column 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 | 781.28 | 2.96 | 781.28 | 585.17 | 312.51 | 2.37 | 312.51 | 292.59 | 1608.53 |
| 1 | 499.17 | 4.63 | 499.17 | 298.32 | 249.58 | 3.71 | 249.58 | 186.45 | 1488.99 |
| 1.2 | 345.92 | 6.67 | 310.86 | 171.53 | 207.55 | 5.35 | 207.55 | 128.65 | 1352.75 |
| 1.4 | 253.52 | 9.08 | 194.79 | 107.05 | 177.46 | 7.28 | 170.44 | 93.67 | 1197.92 |
| 1.6 | 193.54 | 11.87 | 129.62 | 70.84 | 154.83 | 9.52 | 129.62 | 70.84 | 1055.63 |
| 1.8 | 152.43 | 15.02 | 90.26 | 48.97 | 137.18 | 12.07 | 101.54 | 55.09 | 930.01 |
| 2 | 123.01 | 18.56 | 65.08 | 34.99 | 123.01 | 14.92 | 81.35 | 43.73 | 821.31 |
| 2.2 | 101.25 | 22.46 | 48.24 | 25.63 | 111.38 | 18.08 | 66.33 | 35.24 | 728.01 |
| 2.4 | 84.70 | 26.74 | 36.56 | 19.14 | 101.64 | 21.56 | 54.83 | 28.71 | 648.06 |
| 2.6 | 71.82 | 31.40 | 28.19 | 14.49 | 93.37 | 25.34 | 45.81 | 23.55 | 579.44 |
| 2.8 | 61.60 | 36.44 | 22.05 | 11.08 | 86.24 | 29.45 | 38.58 | 19.39 | 520.34 |
| 3 | 53.36 | 41.86 | 17.43 | 8.51 | 80.04 | 33.88 | 32.68 | 15.97 | 469.22 |
| 3.2 | 46.61 | 47.66 | 13.90 | 6.55 | 74.57 | 38.63 | 27.80 | 13.11 | 424.79 |
| 3.4 | 41.02 | 53.84 | 11.15 | 5.03 | 69.73 | 43.72 | 23.70 | 10.68 | 385.97 |
| 3.6 | 36.33 | 60.40 | 8.98 | 3.82 | 65.39 | 49.14 | 20.20 | 8.59 | 351.90 |
| 3.8 | 32.36 | 67.35 | 7.24 | 2.85 | 61.49 | 54.89 | 17.20 | 6.78 | 321.85 |
| 4 | 28.98 | 74.69 | 5.83 | 2.07 | 57.95 | 60.99 | 14.58 | 5.18 | 295.21 |
| 4.2 | 26.06 | 82.41 | 4.68 | 1.43 | 54.73 | 67.44 | 12.29 | 3.75 | 271.51 |
| 4.4 | 23.54 | 90.53 | 3.73 | 0.90 | 51.78 | 74.24 | 10.25 | 2.48 | 250.32 |
| 4.6 | 21.33 | 99.04 | 2.93 | 0.46 | 49.07 | 81.41 | 8.43 | 1.32 | 231.30 |
| 4.8 | 19.40 | 107.94 | 2.27 | 0.09 | 46.56 | 88.93 | 6.80 | 0.27 | 214.17 |
| 5 | 17.69 | 117.25 | 1.70 | — | 44.23 | 96.83 | 5.32 | — | 198.68 |