## Railway Contact Wire

Specification: BS EN 50149
Patent: 991480


## Application:

Electrification Conductor for Railway locomotives.

## Construction:

Shaped solid bare copper.
Theft deterrent, a brass wire is incorporated inside the copper shaped rod.

| Size | $\mathrm{mm}^{2}$ nom. | 80 | 107 | 161 |
| :---: | :---: | :---: | :---: | :---: |
| Electrical data |  |  |  |  |
| Cross sectional tolerance | $\mathrm{mm}^{2}$ |  | $\pm 0.3$ |  |
| Conductor mass nominal | kg/km | 711 | 951 | 1431 |
| Gross mass ( 1000 m ) | kg/km | 761 | 1001 | 1481 |
| Resistance dc @ $20^{\circ} \mathrm{C}$ (Hard drawn) | ת/km max | 0.228 | 0.170 | 0.113 |
| Mechanical data |  |  |  |  |
| Pull Force (maximum) | kg | 380 | 508 | 765 |
| Breaking load (maximum) | kN | 28 | 38 | 57 |
| Elongation at break | \% |  | 3 to 10 |  |


| Dimensional data |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Height (D) nominal | mm | 10.7 $\pm 0.15$ | 12.3 $\pm 0.15$ | 15.0さ0.15 |
| Height (b) nominal | mm | 1.40 | 4.43 | 5.82 |
| Groove width (a) nominal | mm | $5.54 \pm 0.15$ | $6.92 \pm 0.15$ | $8.50 \pm 0.15$ |
| Corner radius (r) nominal | mm | 0.38 | 0.38 | 0.38 |
| Angle ( $\mathrm{e}^{\circ}$ ) nominal | - | 51.1+0 | 51.1+1 | 51.1+1 |
| Angle ( $\mathrm{f}^{\circ}$ ) nominal | - | 27+0 | 27+1 | 27+1 |
| Drum dimensional data |  |  |  |  |
| Flange | mm |  | 1650-2000 |  |
| Barrel | mm |  | 2200 |  |
| Width | mm |  | 900 |  |
| Conductor length | mm |  | 3000 |  |



