

# 25A lighting busbar



Our 25A range of lighting busbar is used mainly for overhead installation as it is suitable for all types of commercial & industrial lighting making it ideal for use in retail stores, offices and hotels due to its flexibility in creating specific lighting designs. The aluminium-clad trunking is available in 4 and 6 pole configuration with tap off positions every metre along a standard 3m length. Simple to install, with no requirement for bolting lengths together, the range also incorporates a flexible corner to accommodate changes in height or direction.

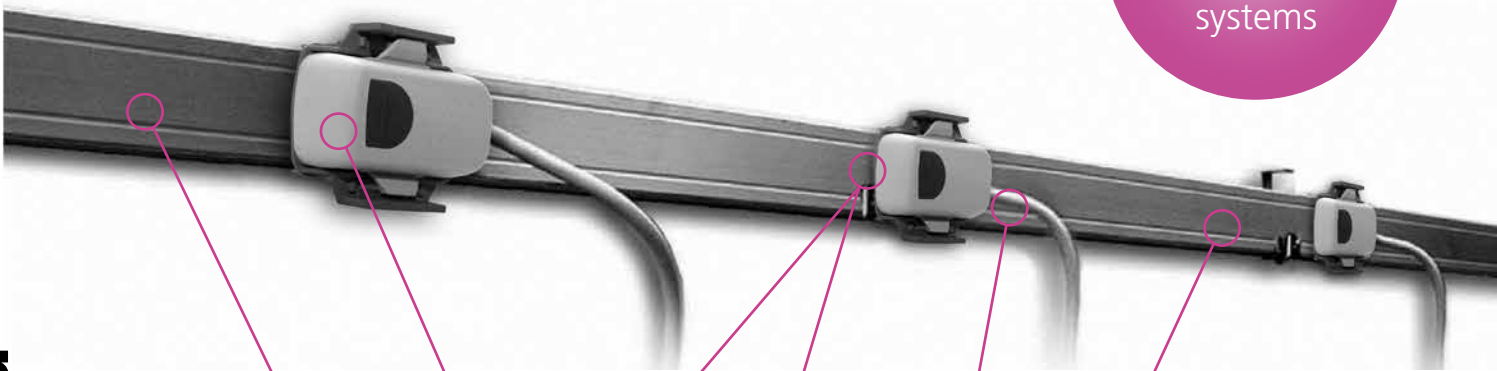
**General Construction** - Strong extruded aluminium housing with rigid copper conductors

**Enclose** - Degree of protection to BS EN 60529 (IEC 60529); IP41 Standard; IP55 available on request

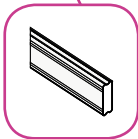
**Conductor Bars** - Four and Six copper conductors (Protective earth conductor provided by the housing)

**Insulation** - Tap off points are marked on the 25A lighting busbar with moulded internal polyester supporting the individual busbars - classified flammability grade UL-94 V-O

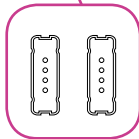
Compatible with our lighting control systems



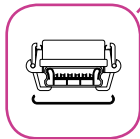
power distribution



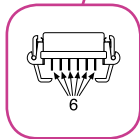
Aluminium housing



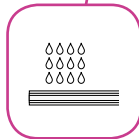
4 & 6 pole versions with tap offs on one side



Retaining spring on all tap offs



Multi pole tap off

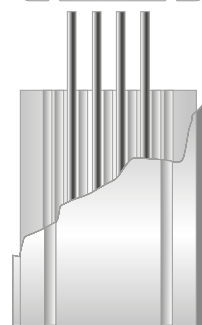
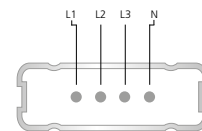


Degree of protection up to IP55

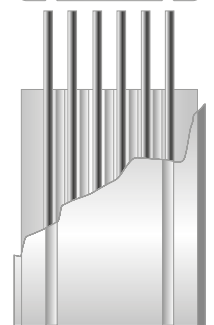
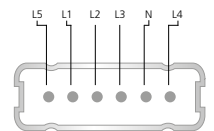


Ceiling bracket is available

## Reinforcement bracket is available



40A Busbar 4P+PE



40A Busbar 6P+PE



End Feed



Flexible Corner Kit



Tap Off



Rubber Joint Cover



Rubber End Cap



Contact Carriers



Light Fitting Bracket



Wall/Ceiling Bracket

## 25A Lighting Busbar Range

| Code          | Description  | Weight  | Length | Rating | Outlets |
|---------------|--|---------|--------|--------|---------|
| PNBA25A106    | 25A 6P+PE 1m 3-Phase or 3-Phase/DALI Lighting Busbar | 0.7kg   | 1m     | 25A    | 1       |
| PNBA25A30     | 25A 4P+PE 3m 3-Phase Lighting Busbar                 | 1.65kg  | 3m     | 25A    | 3       |
| PNBA25A306    | 25A 6P+PE 3m 3-Phase and DALI Lighting Busbar        | 2.1kg   | 3m     | 25A    | 3       |
| PNATSX25A     | 25A 4P+PE 3-Phase Left Hand End Feed                 | 0.22kg  | 0.235m | 25A    | N/A     |
| PNATDX25A     | 25A 4P+PE 3-Phase Right Hand End Feed                | 0.38kg  | 0.235m | 25A    | N/A     |
| PNATSX25A6    | 25A 6P+PE 3-Phase and DALI Left Hand End Feed        | 0.538kg | 0.365m | 25A    | N/A     |
| PNATDX25A6    | 25A 6P+PE 3-Phase and DALI Right Hand End Feed       | 0.85kg  | 0.365m | 25A    | N/A     |
| PNFLX25A4P0.5 | 25A 4 Pole 0.5M Flexible Corner Kit*                 | 0.786kg | 0.5m   | 25A    | N/A     |
| PNFLX25A6P0.5 | 25A 6 Pole 0.5M Flexible Corner Kit*                 | 0.85kg  | 0.5m   | 25A    | N/A     |

\*Supplied in kit form, which requires assembly

## 25A Lighting Busbars Accessories (Common to all lighting busbars)

| Code       | Description  |
|------------|--|
| PNSFIPN    | Unwired 6A Fused 4 Pole Tap Off Phase Selectable c/w 2 contacts  |
| PNSBM6A    | Unwired 6A Fused 6 Pole Tap Off Phase Selectable c/w 2 contacts  |
| PNSBM16A   | Unwired 16A Fused 6 Pole Tap Off Phase Selectable c/w 2 contacts |
| PNCTIP55   | IP55 Rubber End Cap for Left Hand Feeds                          |
| PNCTIP55DX | IP55 Rubber End Cap for Right Hand Feeds                         |
| PNGRIP55   | IP55 Rubber Joint Cover  |
| PNGRFP     | Busbar Joint Reinforcement Sleeve                                |
| PNCMCF     | 6.3A Fused Contact Carrier for 6A Tap Offs                       |
| PNCMCF16   | 16A Fused Contact Carrier for 16A Tap Offs                       |
| PNCMSF16   | 16A UnFused Contact Carrier for 16A Tap Offs                     |
| PNSTCWB    | Wall/Ceiling Steel Universal Bracket                             |
| PNSTCI     | Light Fitting Steel Bracket - 12Kg Max                           |
| PNSTLN     | Light Fitting Steel Bracket - 20Kg Max                           |

# 40A lighting busbar



Our 40A range of lighting busbar is used mainly for overhead installation as it is suitable for all types of commercial & industrial lighting making it ideal for use in retail stores, offices and hotels due to its flexibility in creating specific lighting designs. The aluminium-clad trunking is available in 4 and 6 pole configuration with tap off positions every metre along a standard 3m length. Simple to install, with no requirement for bolting lengths together, the range also incorporates a flexible corner to accommodate changes in height or direction.

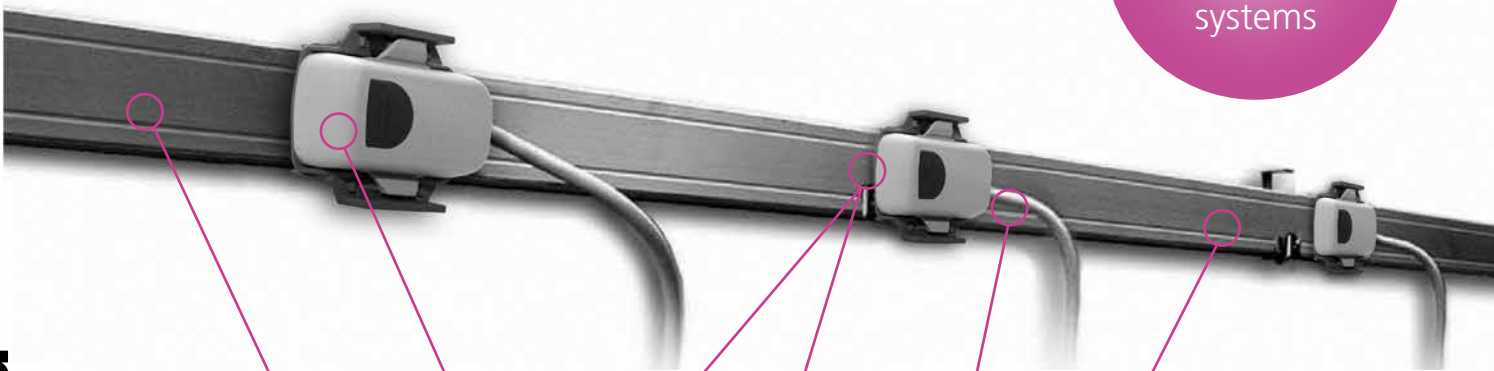
**General Construction** - Strong extruded aluminium housing with rigid copper conductors

**Enclose** - Degree of protection to BS EN 60529 (IEC 60529); IP41 Standard; IP55 available on request

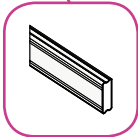
**Conductor Bars** - Four and Six copper conductors (Protective earth conductor provided by the housing)

**Insulation** - Tap off points are marked on the 40A lighting busbar with moulded internal polyester supporting the individual busbars - classified flammability grade UL-94 V-O

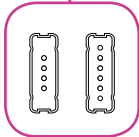
Compatible with our lighting control systems



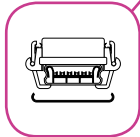
power distribution



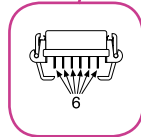
Aluminium housing



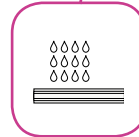
4 & 6 pole versions with tap offs on one side



Retaining spring on all tap offs



Multi pole tap off

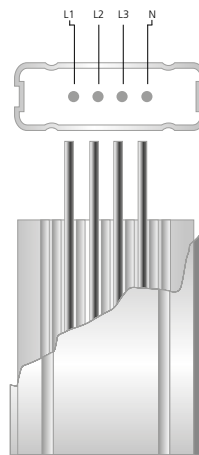


Degree of protection up to IP55

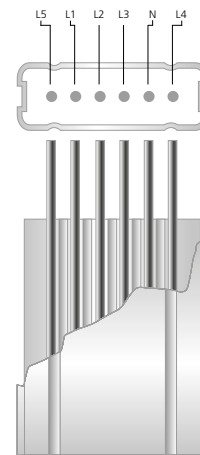


Ceiling bracket is available

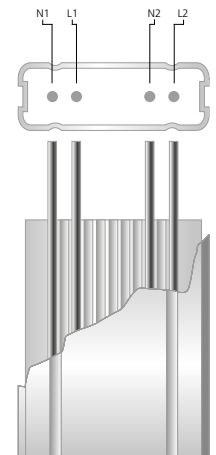
## Reinforcement bracket is available



40A Busbar 4P+PE



40A Busbar 6P+PE



40A Busbar Dual Circuit 4P+PE



## 40A Lighting Busbar Range

| Code          | Description   | Weight  | Length | Rating | Outlets |
|---------------|---|---------|--------|--------|---------|
| PNBA40A106    | 40A 6P+PE 1m 3-Phase or 3-Phase and DALI Lighting Busbar  | 0.8kg   | 1m     | 40A    | 1       |
| PNBA40A10S2C  | 40A 4P+PE 1m Dual Circuit Lighting Busbar                 | 0.7kg   | 3m     | 40A    | 3       |
| PNBA40A30     | 40A 4P+PE 3m 3-Phase Lighting Busbar                      | 2.1kg   | 3m     | 40A    | 3       |
| PNBA40A30S2C  | 40A 4P+PE 3m Dual Circuit Lighting Busbar                 | 2.1kg   | 3m     | 40A    | 5       |
| PNBA40A306    | 40A 6P+PE 3m 3-Phase and DALI Lighting Busbar             | 2.4kg   | 3m     | 40A    | 3       |
| PNATSX40A6    | 40A 6P+PE 3-Phase or 3-Phase and DALI Left Hand End Feed  | 0.606kg | 0.365m | 40A    | N/A     |
| PNATDX40A6    | 40A 6P+PE 3-Phase or 3-Phase and DALI Right Hand End Feed | 0.58kg  | 0.365m | 40A    | N/A     |
| PNATSX40A6S2C | 40A 6P+PE Dual Circuit Left Hand End Feed                 | 0.606kg | 0.34m  | 40A    | N/A     |
| PNATDX40A6S2C | 40A 6P+PE Dual Circuit Right Hand End Feed                | 0.58kg  | 0.34m  | 40A    | N/A     |
| PNFLX40A4P0.5 | 40A 4 Pole 0.5M Flexible Corner Kit*                      | 2.2kg   | 0.5m   | 40A    | N/A     |
| PNFLX40A6P0.5 | 40A 6 Pole 0.5M Flexible Corner Kit*                      | 2.25kg  | 0.5m   | 40A    | N/A     |

\*Supplied in kit form, which requires assembly

## 40A Lighting Busbars Accessories (Common to all lighting busbars)

| Code       | Description  |
|------------|--|
| PNSFIPN    | Unwired 6A Fused 4 Pole Tap Off Phase Selectable c/w 2 contacts  |
| PNSBM6A    | Unwired 6A Fused 6 Pole Tap Off Phase Selectable c/w 2 contacts  |
| PNSBM16A   | Unwired 16A Fused 6 Pole Tap Off Phase Selectable c/w 2 contacts |
| PNCTIP55   | IP55 Rubber End Cap for Left Hand Feeds                          |
| PNCTIP55DX | IP55 Rubber End Cap for Right Hand Feeds                         |
| PNGRIP55   | IP55 Rubber Joint Cover  |
| PNGRFP     | Busbar Joint Reinforcement Sleeve                                |
| PNCMCF     | 6.3A Fused Contact Carrier for 6A Tap Offs                       |
| PNCMCF16   | 16A Fused Contact Carrier for 16A Tap Offs                       |
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| PNSTCWB    | Wall/Ceiling Steel Universal Bracket                             |
| PNSTCI     | Light Fitting Steel Bracket - 12Kg Max                           |
| PNSTLN     | Light Fitting Steel Bracket - 20Kg Max                           |

| Conformity   |  | IEC 439-2 EN 60439-2 |                     |                     |                     |                     |                     |
|--|--|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|  |  | 25A 4<br>Pole 3m     | 25A 6<br>Pole 3m    | 25A 6<br>Pole 1m    | 40A 4<br>Pole 3m    | 40A 6<br>Pole 3m    | 40A 6<br>Pole 1m    |
| Live conductors  |  | 4                    | 6                   | 6                   | 4                   | 6                   | 6                   |
| Weight   | kg   | 1.55                 | 1.65                | 0.7                 | 2.1                 | 2.5                 | 0.9                 |
| Standard number of sockets   |  | 3<br>(5 if dual)     | 3                   | 1                   | 3<br>(5 if dual)    | 3                   | 1                   |
| Standard socket spacing  | mm   | 1000                 | 1000                | n/a                 | 1000                | 1000                | n/a                 |
| Non-standard number of sockets (Quantity dependant)  |  | 5/10                 | 5/10                | 1                   | 5/10                | 5/10                | 1                   |
| Housing thickness  | mm   | 0.8                  | 0.8                 | 0.8                 | 0.8                 | 0.8                 | 0.8                 |
| Rate current   | $I_n$ [A]  | 25                   | 25                  | 25                  | 40                  | 40                  | 40                  |
| Frequency  | f [Hz]   | 50/60                | 50/60               | 50/60               | 50/60               | 50/60               | 50/60               |
| Rated insulation voltage   | $U_i$ [V]  | 660                  | 660                 | 660                 | 660                 | 660                 | 660                 |
| Rated operation voltage  | $U_e$ [V]  | 230/400              | 230/400             | 230/400             | 230/400             | 230/400             | 230/400             |
| Protection degree / accessories IEC 592  |  | IP41/55              | IP41/55             | IP41/55             | IP41/55             | IP41/55             | IP41/55             |
| Resistance 20°   | [mΩ/m]   | 6.8                  | 6.8                 | 6.8                 | 3.0                 | 3.0                 | 3.0                 |
| Resistance 35°   | [mΩ/m]   | 8.3                  | 8.5                 | 8.5                 | 3.8                 | 3.8                 | 3.8                 |
| Reactance Greg. H <sub>2</sub> 50  | [mΩ/m]   | 0.21                 | 0.22                | 0.22                | 0.19                | 0.19                | 0.19                |
| Resistance 35°   | [mΩ/m]   | 7.2                  | 7.2                 | 7.2                 | 4.0                 | 4.0                 | 4.0                 |
| PE Housing   | mm <sup>2</sup> AL   | 100                  | 100                 | 100                 | 100                 | 100                 | 100                 |
| L1, L2, L3, L4, L5, Cross section  | mm <sup>2</sup> Cu   | 2.5                  | 2.5                 | 2.5                 | 5.3                 | 5.3                 | 5.3                 |
| Joule losses   | $I^2$ RW/m   | 3.8                  | 3.8                 | 3.8                 | 5.8                 | 5.8                 | 5.8                 |
| Short circuit 3 phase  | kA   | 2.8                  | 2.8                 | 2.8                 | 3.0                 | 3.0                 | 3.0                 |
| Voltage drop for 3-phase 50Hz current, in Volts per 100m and per ampere with loads distributed along the run. Voltage drop for single phase 50Hz current: divide these values by 0.866 | For COS. Ø=0.8   |                      | V/100m/A            | 0.68                | 0.25                | 0.59                | 0.25                |
|  | For COS. Ø =0.9  |                      | V/100m/A            | 0.76                | 0.29                | 0.66                | 0.29                |
|  | For COS. Ø=1   |                      | V/100m/A            | 0.83                | 0.31                | 0.72                | 0.31                |
| Average loop resistance between live connectors  | Rb1 ph ph OR ph N (at thermal stabilisation temperature 0 1) mΩ/m  | 16.66                | 16.66               | 16.66               | 7.10                | 7.10                | 7.10                |
|  | Rb1 ph ph OR ph N (at conventional short circuit temperature) mΩ/m | 20.90                | 20.90               | 20.90               | 8.52                | 8.52                | 8.52                |
| Average loop reactance   | Xb ph ph mΩ/m  | 1.68                 | 1.68                | 1.68                | 0.79                | 0.79                | 0.79                |
|  | Xb ph N mΩ/m   | 2.08                 | 2.08                | 2.08                | 0.83                | 0.83                | 0.83                |
| Average loop resistance between live and PE conductors   | Rb1 ph PE (at thermal stabilisation temperature 0 1) mΩ/m          | 9.08                 | 9.08                | 9.08                | 3.81                | 3.81                | 3.81                |
|  | Rb1 ph PE (at conventional short circuit temperature) mΩ/m         | 10.90                | 10.90               | 10.90               | 4.57                | 4.57                | 4.57                |
| Average loop reactance   | Xb ph PE mΩ/m  | 1.3                  | 1.3                 | 1.3                 | 1.28                | 1.28                | 1.28                |
| IPK  | Ka   | 4.4                  | 5.0                 | 5.0                 | 5.3                 | 5.3                 | 5.3                 |
| PT   | kA <sup>2</sup> S  | 195.10 <sup>3</sup>  | 195.10 <sup>3</sup> | 195.10 <sup>3</sup> | 900.10 <sup>3</sup> | 900.10 <sup>3</sup> | 900.10 <sup>3</sup> |
| Temperature departing  |  | 15°                  | 20°                 | 25°                 | 35°                 | 40°                 | 45°                 |
|  |  | 1.1                  | 1.08                | 1.07                | 1                   | 0.95                | 0.92                |