

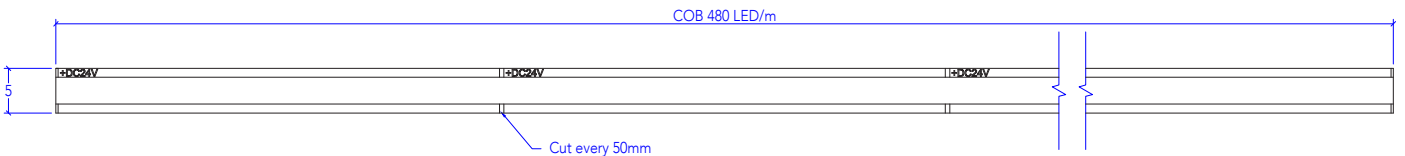
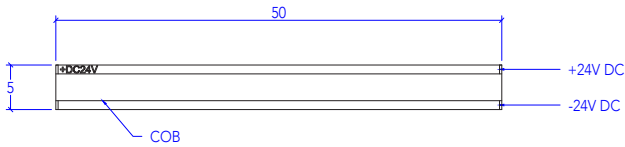
TOVO



LED RIBBON _ NANO RANGE COB

| | |
|-----------------|-----------------------------|
| DESCRIPTION | Nano COB LED Ribbon |
| CODES | 6001_NR |
| COLOUR TEMP | 2700K, 3000K & 4000K |
| CRI | ≥90 |
| WATTAGE/LUMENS | 7W - 560Lm/m |
| EFFICACY | 80Lm/W |
| FIXTURE VOLTAGE | 24V DC Constant Voltage |
| DIMMING | Based On Driver Selection |
| DRIVER | Remote Driver Required |
| DRIVER OPTIONS | Non-Dim, Phase, Touch, DALI |
| IP RATING | IP20 |

Notes:
 All data stipulated are nominal values based on 2700K with accuracy of +/- 5%.
 Standard length 5000mm.
 150mm cables/tails provided on both ends.
 Maximum length on one power feed is 5000mm.
 When used with the correct profile, the light will be fully diffused, "dot free".



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MANUFACTURING OPTIONS

| FIXTURE | | | | DRIVER |
|---------|--------------------|------------|-----------|----------------|
| CODE | WATTAGE | CCT | IP | DIMMING |
| 6001_NR | COB - 7W per meter | 27 - 2700K | 20 - IP20 | ND - Non-Dim |
| | | 30 - 3000K | | PH - Phase Dim |
| | | 40 - 4000K | | TH - Touch Dim |
| | | | | DA - DALI |

Example Code: 6001_NR_COB_27_20_DA

Notes:
Phase dimmable drivers are not recommended for 24V DC fixtures due to possible flickering, but can be provided upon request.

EXTRUSION OPTIONS

NANO RANGE



6101_NC
Nano Corner



6101_NR
Nano Recessed



6101_NS
Nano Surface

Notes:
Please refer to each specific extrusion's data sheet for detailed specifications.
When using Nano range LED ribbon in the above extrusions, the light will be fully diffused "dot free".

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WIRING INFORMATION

- Multiple 24V DC fixtures can be connected to a single driver in parallel only.
- The total connected load of a circuit should not exceed the maximum driver load rating.
- We recommend running drivers at 80% of their maximum load rating to ensure heat and output performance are maximized.
- The required DC cable size should be calculated based on the connected load, cable length, voltage and allowable voltage drop percentage.
- Maximum Amp rating of the selected cable should be considered based total connected load.
- We recommend using a twin Sheath Automotive cable with a high strand count where applicable.
- Please note that industry standard sizes do not match actual cable cross section area (CSA) measured in mm² that is required for voltage drop calculations.
- The Below table illustrates typical cable sizes in mm², connected loads in Watts and their associated maximum cable lengths in meter, based on a allowable voltage drop of 5%.

| | 0.50 mm ² | 0.75 mm ² | 1.00 mm ² | 1.50 mm ² | 2.50 mm ² | 4.00 mm ² | 6.00 mm ² | 10.00 mm ² |
|------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| 10W | 36m | 55m | 73m | 108m | 180m | 290m | 436m | 753m |
| 20W | 18m | 27m | 36m | 54m | 90m | 145m | 218m | 376m |
| 30W | 12m | 18m | 24m | 36m | 60m | 96m | 145m | 251m |
| 40W | 9m | 13m | 18m | 27m | 45m | 72m | 109m | 188m |
| 50W | 7m | 11m | 14m | 21m | 36m | 58m | 87m | 150m |
| 60W | 6m | 9m | 12m | 18m | 30m | 48m | 72m | 125m |
| 70W | 5m | 7m | 10m | 15m | 25m | 41m | 62m | 107m |
| 80W | 4m | 6m | 9m | 13m | 22m | 36m | 54m | 94m |
| 90W | 4m | 6m | 8m | 12m | 20m | 32m | 48m | 83m |
| 100W | 3m | 5m | 7m | 10m | 18m | 29m | 43m | 75m |
| 110W | 3m | 5m | 6m | 9m | 16m | 26m | 39m | 68m |
| 120W | 3m | 4m | 6m | 9m | 15m | 24m | 36m | 62m |
| 130W | 2m | 4m | 5m | 8m | 13m | 22m | 33m | 57m |
| 140W | 2m | 3m | 5m | 7m | 12m | 20m | 31m | 53m |
| 150W | 2m | 3m | 4m | 7m | 12m | 19m | 29m | 50m |
| 160W | 2m | 3m | 4m | 6m | 11m | 18m | 27m | 47m |
| 170W | 2m | 3m | 4m | 6m | 10m | 17m | 25m | 44m |
| 180W | 2m | 3m | 4m | 6m | 10m | 16m | 24m | 41m |
| 190W | 1m | 2m | 3m | 5m | 9m | 15m | 22m | 39m |
| 200W | | 2m | 3m | 5m | 9m | 14m | 21m | 37m |

- The Below table illustrates typical Industry cable sizes/names and their exact cross section area (CSA) sizes in mm², connected loads in Watts and their associated maximum cable lengths in meter, based on a allowable voltage drop of 5%.

| | 2.0 mm | 3.0 mm | 4.0 mm | 5.0 mm | 6.0 mm | 8 B&S | 6 B&S | Industry Size/Name |
|------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|--------------------------|
| | 0.56 mm ² | 1.13 mm ² | 1.84 mm ² | 2.90 mm ² | 4.59 mm ² | 7.71 mm ² | 13.50 mm ² | Cross Section Area (CSA) |
| 10W | 32m | 91m | 151m | 240m | 378m | 600m | 1028m | |
| 20W | 16m | 45m | 75m | 120m | 189m | 300m | 514m | |
| 30W | 10m | 30m | 50m | 80m | 126m | 200m | 342m | |
| 40W | 8m | 22m | 37m | 60m | 94m | 150m | 257m | |
| 50W | 6m | 18m | 30m | 48m | 75m | 120m | 205m | |
| 60W | 5m | 15m | 25m | 40m | 63m | 100m | 171m | |
| 70W | 4m | 13m | 21m | 34m | 54m | 85m | 146m | |
| 80W | 4m | 11m | 18m | 30m | 47m | 75m | 128m | |
| 90W | 3m | 10m | 16m | 26m | 42m | 66m | 114m | |
| 100W | 3m | 9m | 15m | 24m | 37m | 60m | 102m | |
| 110W | 2m | 8m | 13m | 21m | 34m | 54m | 93m | |
| 120W | 2m | 7m | 12m | 20m | 31m | 50m | 85m | |
| 130W | 2m | 7m | 11m | 18m | 29m | 46m | 79m | |
| 140W | 2m | 6m | 10m | 17m | 27m | 42m | 73m | |
| 150W | 2m | 6m | 10m | 16m | 25m | 40m | 68m | |
| 160W | 2m | 5m | 9m | 15m | 23m | 37m | 64m | |
| 170W | 1m | 5m | 8m | 14m | 22m | 35m | 60m | |
| 180W | 1m | 5m | 8m | 13m | 21m | 33m | 57m | |
| 190W | 1m | 4m | 7m | 12m | 19m | 31m | 54m | |
| 200W | | 4m | 7m | 12m | 18m | 30m | 51m | |

If more specific calculations are required, please refer to the below link:

<https://tovolighting.com.au/cable-calculator>