

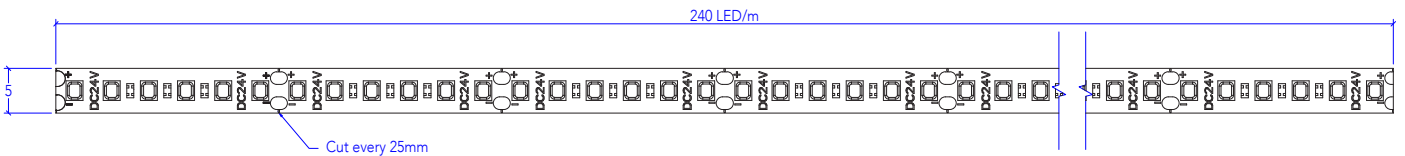
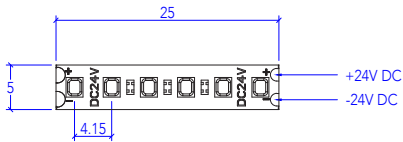
# TOVO



## LED RIBBON \_ NANO RANGE

DESCRIPTION	Nano LED Ribbon
CODES	6001_NR
COLOUR TEMP	2700K, 3000K & 4000K
CRI	≥90
WATTAGE/LUMENS	5W - 310Lm/m 10W - 620Lm/m
EFFICACY	62Lm/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 / IP54

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".



# LED RIBBON \_ NANO RANGE

---

## MANUFACTURING OPTIONS

---

FIXTURE				DRIVER
CODE	WATTAGE	CCT	IP	DIMMING
6001_NR	05W - 5W per meter	27 - 2700K	20 - IP20	ND - Non-Dim
	10W - 10W per meter	30 - 3000K	54 - IP54	PH - Phase Dim
		40 - 4000K		TH - Touch Dim
				DA - DALI

Example Code: 6001\_NR\_10W\_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".

# LED RIBBON \_ NANO RANGE

## 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 mm<sup>2</sup> that is required for voltage drop calculations.
- The Below table illustrates typical cable sizes in mm<sup>2</sup>, connected loads in Watts and their associated maximum cable lengths in meter, based on a allowable voltage drop of 5%.

	0.50 mm <sup>2</sup>	0.75 mm <sup>2</sup>	1.00 mm <sup>2</sup>	1.50 mm <sup>2</sup>	2.50 mm <sup>2</sup>	4.00 mm <sup>2</sup>	6.00 mm <sup>2</sup>	10.00 mm <sup>2</sup>
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 mm<sup>2</sup>, 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 <sup>2</sup>	1.13 mm <sup>2</sup>	1.84 mm <sup>2</sup>	2.90 mm <sup>2</sup>	4.59 mm <sup>2</sup>	7.71 mm <sup>2</sup>	13.50 mm <sup>2</sup>	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>