



KEY FEATURES

- Beam Options: 6 | 10 | 16 | 30 | 50
- Light Engine Performance: 653lm | 8.40W
- Movement: 360 Pan | 180 Tilt
- Tool-less field changeable optics
- Ultra narrow high intensity beams
- Interchangeable accessories
- UK Part L1 / L2 (Display) Compliant



OVERVIEW

Evo 16 is a Constant Voltage single source LED spotlight that is machined from aerospace grade aluminium 6063-T6 and comes as standard in white, black and brushed aluminium along with three premium brass finishes. It has five site-changeable optics for flexible beam distribution and fully lockable bearing aided pan and tilt. Our 653lm | 8.40W light engine has a max peak intensity of 28223cd. There are 3 snoot options, Short, Glare Guard and Long. An accessory holder is available separately that can accommodate 55mm (2.16") lenses and louvers. The Jack Plug is compatible with Precision Lighting's 24V Jack systems. The onboard 24V DC driver ensures overcurrent protection and is not polarity sensitive. An external AC to 24V DC power supply is required.

PERFORMANCE

	Intense				
	U. Narrow	Narrow	Medium	Flood	W. Flood
FWHM	6°	10°	16°	30°	50°
Luminous Flux	650 lm	653 lm	623 lm	637 lm	605 lm
Peak Intensity	28223 cd	15476 cd	5671 cd	1652 cd	633 cd
CCT	2700K   3000K   3500K   4000K				
CRI Min.	92   92   92   90				
LED Current	0.700 A				
Voltage	24 V				
Input Wattage	9 W				
Efficacy	77.7 lm/W				
Driver Type	Constant Voltage   Remote AC to 24VDC				
Class	SELV   Class III				

ORDER CODE

Model	Type	Shape	Output	CCT	Beam Angle	Finish
EVO16 Evo 16	MJ No mounting <sup>2</sup>	SN Short Snoot	IO Intense Output	27K 2700K	UN Ultra Narrow 6°	WH White
	FMJ Flat Monopoint	LN Long Snoot		30K 3000K	NR Narrow 10°	BK Black
	SMJ Surface Monopoint	GL Glare Guard		35K 3500K	ME Medium 16°	AL Br. Aluminium
	NMJ Node Monopoint			40K 4000K	FL Flood 30°	RBZ Rubbed Bronze
	TMJ Trimless Monopoint				WF Wide Flood 50°	BR Br. Brass
	BT Basis Track <sup>1</sup>					PB Polished Brass
	BTW Basis Track Wall <sup>1</sup>					

Example code: EVO16-MJ-SN-IO-27K-UN-WH

<sup>1</sup> BT and BTW are available for AL and RBZ only <sup>2</sup> MJ requires the specification of a separate mounting point.

See Drivers, Power Supplies and Accessories sections for further order codes

LIGHT ENGINE SELECTION

This product is available with our Intense static white light engine option outlined below.

▸ intense ▸

Precisions signature intense light engines offer tight, surgical beams combined with the highest peak intensity values available.

- Ultra-tight beams
- High Peak Cd

LIFETIME & ENVIRONMENTAL

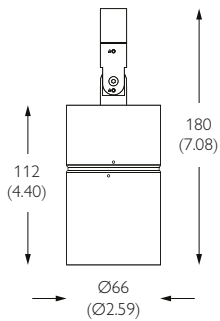
At Precision, we design and engineer our products with longevity in mind. Many of the components that make up our light fixtures are both modular and re-usable, making it possible to service and repair them throughout their life in service. Once our products reach the end of their useful life, it is possible to re-work and renew them in to a new product. We prioritise the use of recyclable materials in both our products and packaging, and encourage our customers to engage responsibly in the correct disposal of any materials we supply.

CIBSE TM65	18.98 Kg/CO2e
CIBSE TM66	2.4
RoHS Compliance	Yes
REACH Compliance	Yes
WEEE Compliance	Yes - Registered Producer
Declare	Declared
Lifetime	L90B10 100,000hrs
Warranty	5 Years

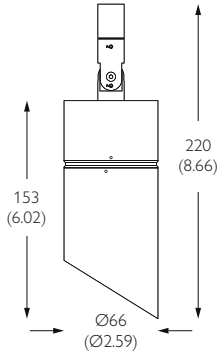
UK PART L

Part L1A / L1B (Dwellings)	Compliant 105 lm/W ≥75 lm/W source lumens	Source lm (882 lm) / Source W (8.40 W)
Part L2A (General)	≥95lm/W delivered lumens	-
Part L2A (Display)	≥80 lm/W source lumens	Compliant 105 lm/W Source lm (882 lm) / Source W (8.40 W)

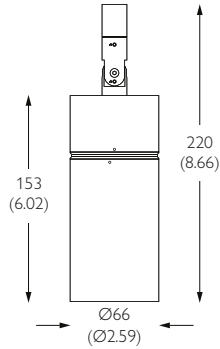
DIMENSIONS



EVO 16  
SHORT SNOOT



EVO 16  
GLARE GUARD



EVO 16  
LONG SNOOT

MECHANICAL

Location	IP20   Indoor Dry Location Only	Cutout	N/A
Mounting	Basis Track   24V Monopoints	Ceiling Thickness	N/A
Adjustability	360 Pan   180 Tilt	Product Class	SELV   Class III
Lockable	Pan & Tilt	Material	Machined AL 6063-T6   Machined Brass
Accessories	Snoots   Louver   Lenses	Weight	450g   0.99lb

FINISHES



100W | 0-10V | Remote | Constant Voltage

Input Voltage	230VAC   50/60 Hz
Driver Type	Remote   Constant Voltage
Location	IP20   Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	12 AWG - 10m (33')



	All CCT's		L	W	H
Max. Lights	1 to 9	mm	240	50	34
Order Code	PSCV-100-24-A-OS	in	9.45	1.97	1.34

130W | 0-10V | Remote | Constant Voltage

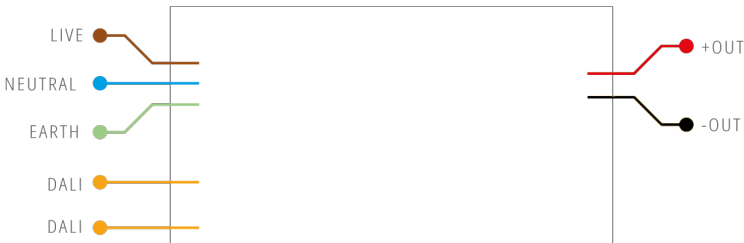
Input Voltage	230VAC   50/60 Hz
Driver Type	Remote   Constant Voltage
Location	IP20   Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	12 AWG - 10m (33')



	All CCT's		L	W	H
Max. Lights	1 to 12	mm	240	63	37
Order Code	PSCV-130-24-A-OS	in	9.45	2.48	1.46

100W | DALI-2 | Remote | Constant Voltage

Input Voltage	230VAC   50/60 Hz
Driver Type	Remote   Constant Voltage
Location	IP20   Indoor Location Only
Dimming Control	DALI-2
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	12 AWG - 10m (33')



	All CCT's		L	W	H
Max. Lights	1 to 10	mm	388	42	30
Order Code	PSCV-100-24-D-EL	in	15.28	1.65	1.18

INSTALLATION

To ensure consistent dimming performance when using monopoints, it is recommended to use a 12 AWG / 4 mm<sup>2</sup> cable. The increased cross-sectional area of 12 AWG / 4 mm<sup>2</sup> cable minimizes voltage drop between lights, maintaining consistent brightness levels across the entire circuit, especially when dimmed.

Minimize Total Circuit Length:

- To reduce voltage drop, the total length of the lighting circuit should be kept as short as possible.

Close the Loop:

- Arranging the circuit in a U-shape, L-shape, or ring configuration (by joining the first and last lights) helps to balance voltage distribution.
- This technique effectively reduces voltage variation between lights, promoting uniform brightness.

Wiring in a Ring:

- Creating a ring circuit allows current to flow from both ends, significantly reducing the impact of voltage drop along the line.
- This approach is especially beneficial in larger installations or where long cable runs are unavoidable.

Positioning the Power Supply:

- Place the power supply as centrally as possible to reduce voltage drop to the furthest points.
- Consider using multiple supplies for larger installations to maintain consistent voltage.

100W | 0-10V | Remote | Constant Voltage

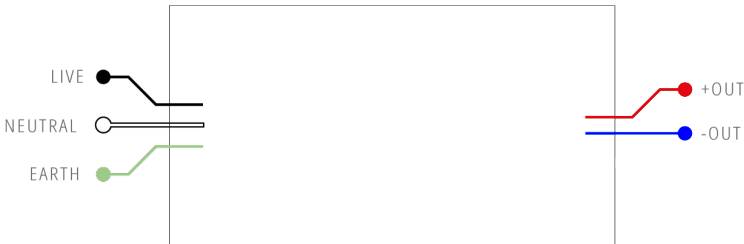
Input Voltage	120-277V   50/60 Hz
Driver Type	Remote   Constant Voltage
Location	IP20   Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	12 AWG - 10m (33')



	All CCT's		L	W	H
Max. Lights	1 to 9	mm	550	65	57
Order Code	USCV-100-24-A-MW-ENC	in	21.65	2.56	2.24

96W | Phase | Remote | Constant Voltage

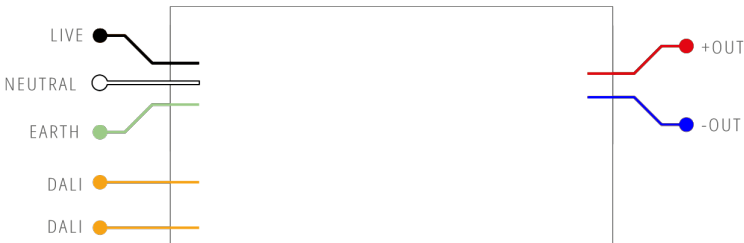
Input Voltage	120V   50/60Hz
Driver Type	Remote   Constant Voltage
Location	IP20   Indoor Location Only
Dimming Control	Phase
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	12 AWG - 10m (33')



	All CCT's		L	W	H
Max. Lights	1 to 8	mm	380	77	57
Order Code	USCV-96-24-P-LU	in	14.96	3.03	2.24

100W | DALI-2 | Remote | Constant Voltage

Input Voltage	120-277V   50/60 Hz
Driver Type	Remote   Constant Voltage
Location	IP20   Indoor Location Only
Dimming Control	DALI-2
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	12 AWG - 10m (33')



	All CCT's		L	W	H
Max. Lights	1 to 9	mm	550	65	57
Order Code	USCV-100-24-D-EL-ENC	in	21.65	2.56	2.24

INSTALLATION

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OUTPUT SCALING

CCT	Output Multiplier	CRI	R9 Typ.	TM-30: Rf	TM-30: Rg	Max Lm
2400K	-	-	-	-	-	-
2700K	0.90	92	50	90	99	588
3000K	1.00	92	50	90	99	653
3500K	1.00	92	50	90	99	653
4000K	1.00	90	50	90	98	653

Colour Consistency: 2 SDCM at 2700K / 3000K, 3DCM at 3500 / 4000K

PHOTOMETRY

ULTRA NARROW

FWHM

6°

Delivered Flux

650 lm

Peak Intensity

28223 cd

0.10m	28223lx	3136fc	0.3'
1m		3'	
0.21m	7056lx	784fc	0.6'
2m		6'	
0.31m	3136lx	348fc	0.9'
3m		9'	
0.42m	1764lx	196fc	1.3'
4m		12'	
0.52m	1129lx	125fc	1.6'
5m		15'	
		87fc	1.9'
			18'

NARROW

FWHM

10°

Delivered Flux

653 lm

Peak Intensity

15476 cd

0.17m	15476lx	1720fc	0.5'
1m		3'	
0.35m	3869lx	430fc	1.0'
2m		6'	
0.52m	1720lx	191fc	1.6'
3m		9'	
0.70m	967lx	107fc	2.1'
4m		12'	
0.87m	619lx	69fc	2.6'
5m		15'	
		48fc	3.1'
			18'

MEDIUM

FWHM

16°

Delivered Flux

623 lm

Peak Intensity

5671 cd

0.28m	5671lx	630fc	0.8'
1m		3'	
0.56m	1418lx	158fc	1.7'
2m		6'	
0.84m	630lx	70fc	2.5'
3m		9'	
1.12m	354lx	39fc	3.4'
4m		12'	
1.41m	227lx	25fc	4.2'
5m		15'	
		18fc	5.1'
			18'

FLOOD

FWHM

30°

Delivered Flux

637 lm

Peak Intensity

1652 cd

0.54m	1652lx	184fc	1.6'
1m		3'	
1.07m	413lx	46fc	3.2'
2m		6'	
1.61m	184lx	20fc	4.8'
3m		9'	
2.14m	103lx	11fc	6.4'
4m		12'	
2.68m	66lx	7fc	8.0'
5m		15'	
		5fc	9.6'
			18'

WIDE FLOOD

FWHM

50°

Delivered Flux

605 lm

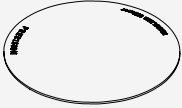
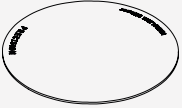



Peak Intensity

633 cd

0.93m	633lx	70fc	2.8'
1m		3'	
1.87m	158lx	18fc	5.6'
2m		6'	
2.80m	70lx	8fc	8.4'
3m		9'	
3.73m	40lx	4fc	11.2'
4m		12'	
4.66m	25lx	3fc	14.0'
5m		15'	
		2fc	16.8'
			18'

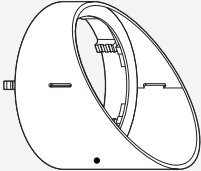
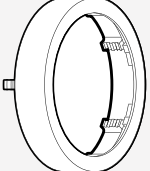
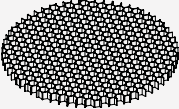
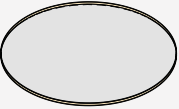
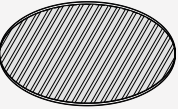
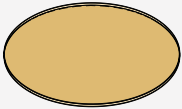

OPTICS

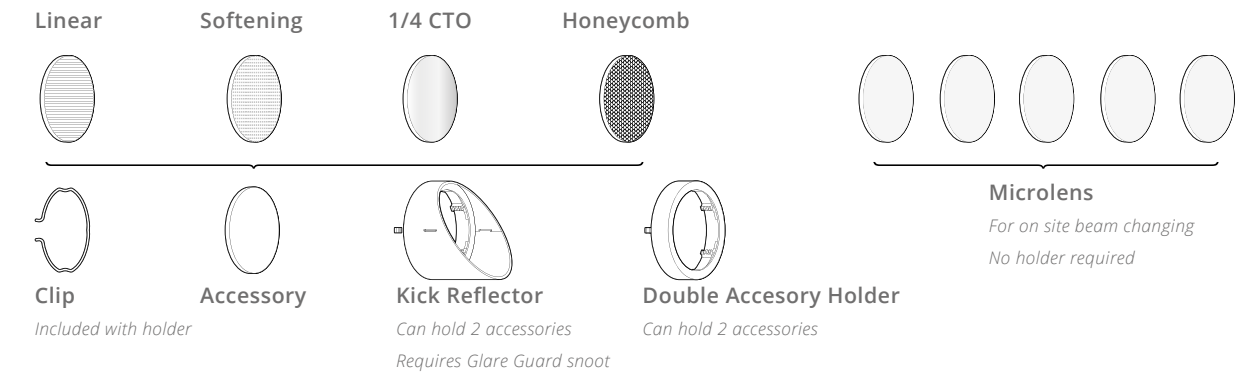
There are 5 tool-less interchangeable optics, cross reference the text on the optic disc for beam.

Optic Disc	Optic Disc	Optic Disc	Optic Disc	Optic Disc
				
<b>Ultra Narrow Disc</b> FWHM 6 deg <b>Order Code</b> 931-01	<b>Narrow Disc</b> FWHM 10 deg <b>Order Code</b> 931-02	<b>Medium Disc</b> FWHM 16 deg <b>Order Code</b> 931-03	<b>Flood Disc</b> FWHM 30 deg <b>Order Code</b> 931-04	<b>Wide Flood Disc</b> FWHM 50 deg <b>Order Code</b> 931-05

ACCESSORIES

This product can hold 2 x accessories using the double accessory holder. The kick reflector must be paired with the glare guard snoot. Accessories are pre-installed unless otherwise requested.

Accessory Holder	Accessory Holder	Glare Control	Beam Shaping	Beam Shaping
				
<b>Double Reflector Holder</b> W63xH54mm   W2.48xH2.13" <b>Order Code</b> 255-BK	<b>Double Accessory Holder</b> W63xH14mm   W2.48xH0.55" <b>Order Code</b> 254-BK	<b>Honeycomb Louver</b> W55xH3.2mm   W2.17xH0.13" <b>Order Code</b> 995-55-BK	<b>Softening Lens</b> W55xH3.2mm   W2.17xH0.13" <b>Order Code</b> 991-55	<b>Linear Lens</b> W55xH3.2mm   W2.17xH0.13" <b>Order Code</b> 992-55
Colour Change	Colour Change			
				
<b>1/4 CTO</b> W55xH1.8mm   W2.17xH0.07" <b>Order Code</b> 997-1/4CTO-55	<b>Custom Colour Filter</b> W55xH1.8mm   W2.17xH0.07" <b>Order Code</b> Contact Sales Rep			



Clip



Included with holder

Accessory



Kick Reflector



Can hold 2 accessories  
Requires Glare Guard snoot

Double Accessory Holder



Can hold 2 accessories

Microlens

For on site beam changing  
No holder required



# 24V CONSTANT VOLTAGE SYSTEM

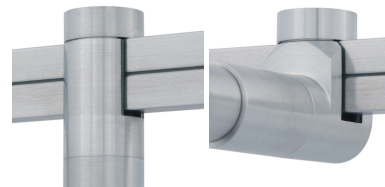
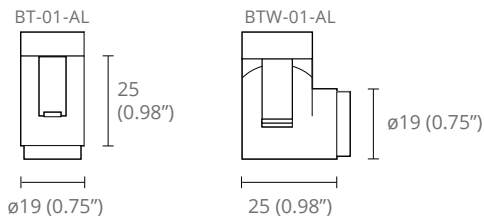
## MOUNTING OPTIONS

### MOUNTING OPTIONS

#### BT & BTW - BASIS TRACK

For use with Precision Lighting Basis Track

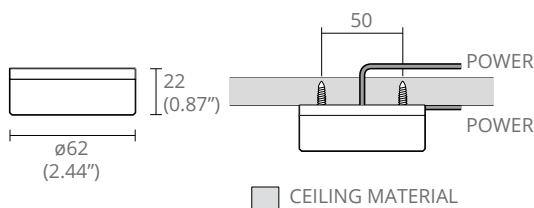
ADAPTOR CODE	FINISH
BT-01-AL	Brushed Aluminium
BT-01-RB	Rubbed Bronze
BTW-01-AL	Brushed Aluminium
BTW-01-RB	Rubbed Bronze



#### MPZ - SURFACE MONOPOINT

For blind mounting on solid surfaces

MONOPOINT CODE	FINISH
MPZ-01-AL	Brushed Aluminium
MPZ-01-WH	White RAL 9010
MPZ-01-BK	Black RAL 9005
MPZ-01-RB	Rubbed Bronze
MPZ-01-PB	Polished Brass
MPZ-01-SB	Brushed Brass

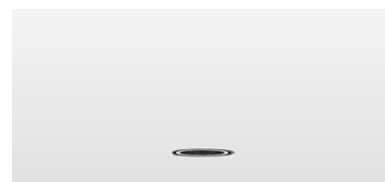
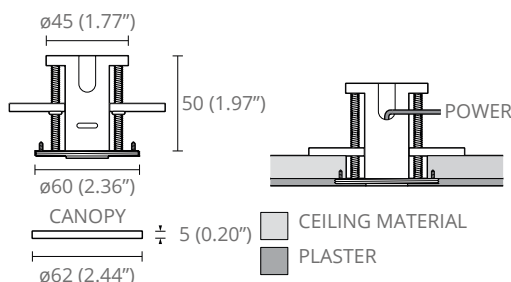


#### MPS - TRIMLESS MONOPOINT

For use with plasterboard / sheetrock

*Note: Canopy not standard, for non-trimless install.*

MONOPOINT CODE	FINISH
MPS-01-AL	Brushed Aluminium
CANOPY CODE	FINISH
MPS-02-AL	Brushed Aluminium
MPS-02-BK	Black RAL 9005
MPS-02-WH	White RAL 9010

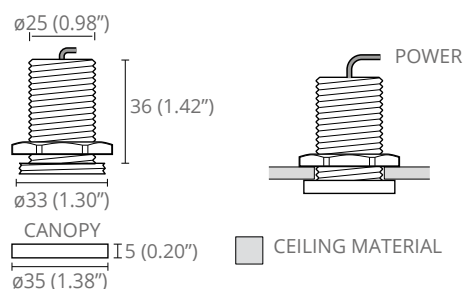


#### MPY - NODE MONOPOINT

For use in cabinetry

*Note: rear access required after install*

MONOPOINT CODE	FINISH
MPY-05-AL	Brushed Aluminium
MPY-05-WH	White RAL 9010
MPY-05-BK	Black RAL 9005
MPY-05-RB	Rubbed Bronze
MPY-05-PB	Polished Brass
MPY-05-SB	Brushed Brass



#### MPX - FLAT MONOPOINT

For use with most mounting surfaces

*Note: wiring void required*

MONOPOINT CODE	FINISH
MPX-02-AL	Brushed Aluminium
MPX-02-WH	White RAL 9010
MPX-02-BK	Black RAL 9005
MPX-02-RB	Rubbed Bronze
MPX-01-PB	Polished Brass
MPX-01-SB	Brushed Brass

