

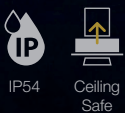
CASTOR

DOWNLIGHT SERIES

A series of pinhole downlights with reflector available in various sizes and finishing, designed with a deep aperture for optimum glare control. The Castor downlight is equipped with an off-set tilt mechanism that maximises light output for most demanding applications.



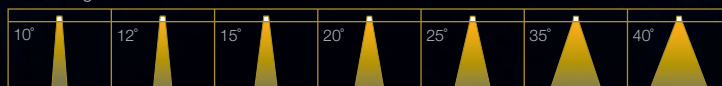
Fixture Features



Module Colour Temperature Variation



Beam Angle

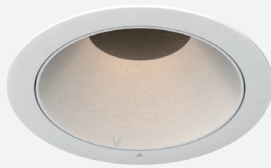


Driver Dimming Variation

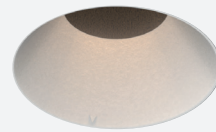


CASTOR 3 MINI

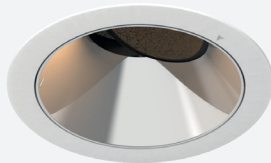
RECESSED ROUND FIX / TILT DOWNLIGHT LUMINAIRE



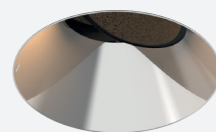
#ROUND
#FIX
#TRIM



#ROUND
#FIX
#TRIMLESS



#ROUND
#TILT
#TRIM



#ROUND
#TILT
#TRIMLESS

TECHNOLOGY AND FEATURES



Advanced Thermal Protection System



Low Flicker, No Risk (IEEE 1789)



Converging Optical Lens Maximising LOR



Ceiling Safe

Pinhole

AVAILABLE OPTIONS

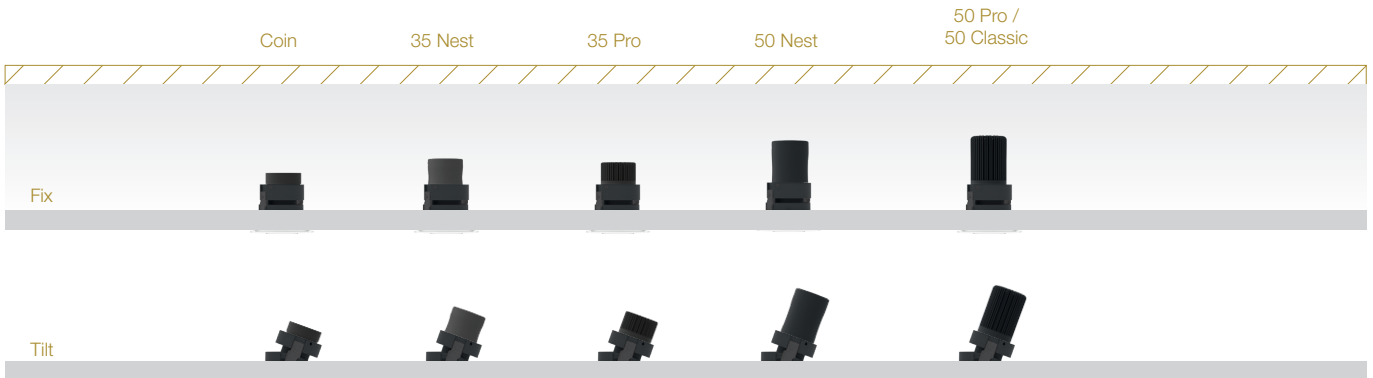
FITTURE COLOUR OPTIONS	Trim Colour Options	Reflector Colour Options				
	MATT WHITE RAL9003	MATT BLACK RAL9011	CHROME	CHROME BLACK	CHROME GOLD	
MATT WHITE RAL9003						
MATT BLACK RAL9011						
ACCESSORIES	Honeycomb Anti-Glare Louvre Soft Lens Linear Spread Lens Comfort Pro IP54 MR16 Holder GU10 Holder <p><i>*IP54 seal accessory is valid for fix angle fixtures only.</i></p>					
LED MODULE	50P/C 35P 50N 35N COIN 35P-HI 50N-HI 35N-HI COIN-HI MR16/GU10 10° 20° 35°					
<p><i>*Drivers for 24CV LED modules are sold separately.</i></p> <p><i>**tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.</i></p> <p><i>*Drivers for RGBW LED modules are sold separately.</i></p>	SINGLE CCT 2700K 3000K 3500K 4000K 5000K ProART ProART98	50P / 50C / 35P / 50N / 35N / COIN 35P-HI / 50N-HI / 35N-HI / COIN-HI	✓	✓	✓	
	ComfySHIFT 	35P / 50N	✓	✓	✓	
	WARM DIM 	50P / 35P / 50N / 35N / COIN	✓	✓	✓	
	tuneWHITE 	50P / 50N / COIN		✓	✓	
	flexiK 					
	RGBW 	50P			✓	
DRIVER DIMMING	(ND) (PH) (AN) (DA)					

CASTOR 3 MINI

#ROUND
#FIX
#TILT
#TRIM
#TRIMLESS

SPECIFICATIONS

FITTURE	
Family Type	Castor series
Fixture Colours	Matt white, matt black
Reflector Colours	Matt white, matt black, chrome, chrome black, chrome gold
Fixture Materials	Aluminium (and plastic for reflector)
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens, Comfort Pro, IP54 seal
Ingress Protection	IP40, IP54
LED MODULE & DRIVER	
Compatible LED Modules	50, 35, COIN series LED modules or MR16/GU10
Lifetime	Up to 50,000 hours L80 lamp life with LM80 tested LED chip packages
Beam Angles	10°, 20°, 35°
Colour Temperatures	2700K, 3000K, 3500K, 4000K, 5000K, ConfySHIFT, Warm Dim, tuneWHITE, flexiK, RGBW
CRI	High Efficiency (CRI-85), ProART (CRI-95), ProART98 (CRI-98)
Driver (Dimming)	Non-dim, phase (leading & trailing edge), 0-10V, DALI

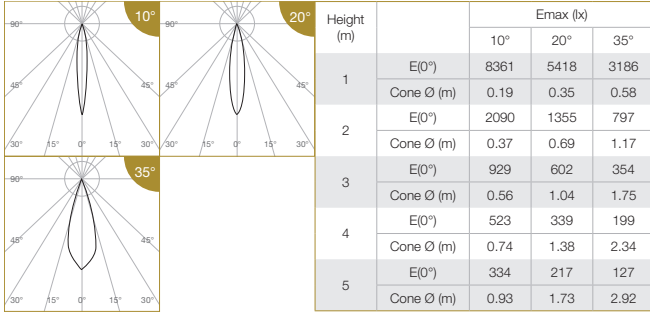


DIMENSIONS (MM)									
ROUND	Trim: Ø77 Flushmount: Ø76 cutout	Trim	Trimless	Fix	Tilt	Height (h)		Height increase with accessories: Comfort Pro : Height +20 (refer to module driver dimensions)	
		Ø86	Ø76			Module	Fix		Tilt
		42	42				50P / 50C:		118
					50N:	115	122		
					35P / 35N:	89	99		
					COIN:	65	78		
					50N-HI:	125	132		
					35P-HI / 35N-HI:	99	109		
					COIN-HI:	75	88		
					MR16 / GU10	89	99		

CASTOR 3 MINI

PHOTOMETRICS

50 PRO



Correction Factor:

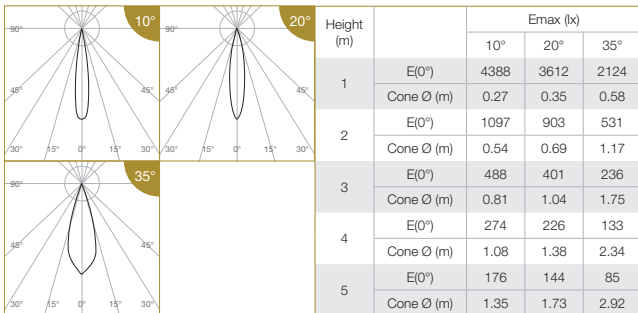
50P (10°) - f = 1.00	50P (20°, 35°) - f = 1.00
50C (10°) - f = 0.78	50C (20°, 35°) - f = 0.80
35P (10°) - f = 0.62	35P (20°, 35°) - f = 0.71
50N (10°) - f = 0.58	50N (20°, 35°) - f = 0.63
35N (10°) - f = 0.42	35N (20°, 35°) - f = 0.47
COIN (10°) - f = 0.35	COIN (20°, 35°) - f = 0.38
50P-24CV (10°) - f = 0.75	50P-24CV (20°, 35°) - f = 0.70
50C-24CV (10°) - f = 0.62	50C-24CV (20°, 35°) - f = 0.57
35P-24CV (10°) - f = 0.48	35P-24CV (20°, 35°) - f = 0.49
COIN-24CV (10°) - f = 0.28	COIN-24CV (20°, 35°) - f = 0.27

ELR LED Module				50P	50C	35P	50N	35N	COIN	
LED Power				12W	10W	8W	7.5W	5.5W	4.5W	
System Power				15.2W	12.8W	11W	10W	7.5W	6W	
Luminous Flux (lm)	Single CCT (3000K)	10°	Type	Beam Angle	CRI					
			High Efficiency Ra-85	962	755	599	555	407	333	
				ProART Ra-95	818	642	510	472	346	283
		ProART98 Ra-98	673	528	420	389	285	233		
		20°	High Efficiency Ra-85	1305	1044	931	827	609	496	
				ProART Ra-95	1109	887	792	703	518	422
	ProART98 Ra-98		914	731	652	579	426	347		
	35°	High Efficiency Ra-85	1320	1056	942	836	616	502		
			ProART Ra-95	1122	898	801	711	524	427	
		ProART98 Ra-98	924	739	659	585	431	351		
	Input Power (24CV)				12W	10W	8W			4.5W
	Luminous Flux (lm)	24CV Single CCT (3000K)	10°	Type	Beam Angle	CRI				
High Efficiency Ra-85				718	592	466			274	
				ProART Ra-95	611	503	397			233
ProART98 Ra-98			502	414	326			192		
20°			High Efficiency Ra-85	914	748	644			357	
				ProART Ra-95	777	636	547			304
		ProART98 Ra-98	639	524	451			250		
35°		High Efficiency Ra-85	924	757	651			361		
			ProART Ra-95	786	643	554			307	
		ProART98 Ra-98	647	530	456			253		

Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K. Higher CCT of 4000K and 5000K will have a nominal data value of 5% higher than published. (f = 1.05) High Efficiency CRI-85 will have a nominal data value of 15% higher than published. (f = 1.17) ProART98 CRI-98 will have a nominal data value of 18% lower than published. (f = 0.82)

Nominal CRI-85, equals to Ra>80-87, R9>0
Nominal CRI-95, equals to Ra>90-97, R9>50
Nominal CRI-98, equals to Ra>97-99, R9>93

35 PRO ComfySHIFT



Correction Factor:

35P CS - f = 1.00
50N CS - f = 0.94

ELR LED Module				35P	50N		
LED Power				8W	7.5W		
System Power				11W	10W		
Luminous Flux (lm)	ComfySHIFT (3100K)	10°	Type	Beam Angle	CRI		
			ComfySHIFT (3100K)	10°	ProART Ra-95	621	584
				20°	740	696	
		20°	ComfySHIFT (3100K)	20°	748	704	
				35°			

Data are based on maximum output at 3100K.
Nominal CRI-95, equals to Ra>90-97, R9>50

CASTOR 3 MINI

PHOTOMETRICS

50 PRO WARM DIM

Height (m)		E _{max} (lx)			ELR LED Module																
		10°	20°	35°	50P	35P	50N	35N	COIN												
1	E(0°)	6608	5439	3199	LED Power					12W	8W	7.5W	5.5W	4.5W							
	Cone Ø (m)	0.27	0.35	0.58	System Power					15.2W	11W	10W	7.5W	6W							
2	E(0°)	1652	1360	800	Luminous Flux (lm)	Type	Beam Angle	CRI	934	621	584	431	350								
	Cone Ø (m)	0.54	0.69	1.17																	
3	E(0°)	734	604	355										Warm Dim (3100K)	10°	ProART Ra-95	1114	740	696	513	418
	Cone Ø (m)	0.81	1.04	1.75													1126	748	704	519	422
4	E(0°)	413	340	200										35°							
	Cone Ø (m)	1.08	1.38	2.34																	
5	E(0°)	264	218	128																	
	Cone Ø (m)	1.35	1.73	2.92																	

*Data are based on maximum output at 3100K.
Nominal CRI-95, equals to Ra-90-97, R9-50*

Correction Factor:
 50P WD - f = 1.00
 35P WD - f = 0.66
 50N WD - f = 0.63
 35N WD - f = 0.46
 COIN WD - f = 0.38

50 PRO tuneWHITE/flexiK

Height (m)		E _{max} (lx)		ELR LED Module												
		20°	35°	50P	50N	COIN										
1	E(0°)	4249	2499	LED Power				12W	7.5W	4.5W						
	Cone Ø (m)	0.35	0.58	System Power				15.2W	10W	6W						
2	E(0°)	1062	625	Luminous Flux (lm)	Type	Beam Angle	CRI	870	522	313						
	Cone Ø (m)	0.69	1.17													
3	E(0°)	472	278								tuneWHITE / flexiK (4000K / 6500K)	20°	ProART Ra-95	880	528	317
	Cone Ø (m)	1.04	1.75											880	528	317
4	E(0°)	266	156								35°					
	Cone Ø (m)	1.38	2.34													
5	E(0°)	170	100													
	Cone Ø (m)	1.73	2.92													

*Data are based on maximum output at highest CCT (4000K / 6500K).
 2700K will have a nominal data value of 10% lower than published. (f = 0.90)
 1800K will have a nominal data value of 30% lower than published. (f = 0.70)
 Nominal CRI-95, equals to Ra-90-97, R9-50*

Correction Factor:
 50P TW / FK - f = 1.00
 50N TW / FK - f = 0.60
 COIN TW / FK - f = 0.36

50 PRO RGBW

Height (m)		E _{max} (lx)		ELR LED Module					
		35°	50P						
1	E(0°)	1512	12W						
	Cone Ø (m)	0.58	15.2W						
2	E(0°)	378	Luminous Flux (lm)	Type	Beam Angle	CRI			
	Cone Ø (m)	1.17					RGBW	35°	N/A
3	E(0°)	168							
	Cone Ø (m)	1.75							
4	E(0°)	94							
	Cone Ø (m)	2.34							
5	E(0°)	60							
	Cone Ø (m)	2.92							

Data are based on maximum output of all 4 RGBW channels.

35 PRO HIGH INTENSITY

Height (m)		E _{max} (lx)		ELR LED Module									
		10°	COIN-HI										
1	E(0°)	10417	8W	7.5W	5.5W	4.5W							
	Cone Ø (m)	0.19	11W	10W	7.5W	6W							
2	E(0°)	2604	Luminous Flux (lm)	Type	Beam Angle	CRI							
	Cone Ø (m)	0.37					Single CCT (3000K)	10°	High Efficiency Ra-85	568	533	391	318
3	E(0°)	1157							ProART Ra-95	482	453	333	271
	Cone Ø (m)	0.56							ProART98 Ra-98	397	373	274	223
4	E(0°)	651											
	Cone Ø (m)	0.74											
5	E(0°)	417											
	Cone Ø (m)	0.93											

*Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K.
 Higher CCT of 4000K and 5000K will have a nominal data value of 5% higher than published. (f = 1.05)
 High Efficiency CRI-85 will have a nominal data value of 15% higher than published. (f = 1.17)
 ProART98 CRI-98 will have a nominal data value of 18% lower than published. (f = 0.82)
 Nominal CRI-85, equals to Ra-80-87, R9-0
 Nominal CRI-95, equals to Ra-90-97, R9-50
 Nominal CRI-98, equals to Ra-97-99, R9-93*

