

TWIST 100

trimless

048-1121218M 048-2796117 002-90780



Project / Type

Notes

Count / Date



Round recessed spotlight in die-cast aluminium; 1 lamp; surface jet black powder coated; installation without tools in mounting set due to patented ball catch system; for trimless installation in plasterboard ceilings; suitable for ceiling thickness of 12.5/15/25 mm; 360° rotatable and 45° tiltable outward; passive cooling of the LEDs through improved heat sink geometry; with COB (Chip on Board) technology for maximum efficiency; no appearance of multiple shadows; light colour 3500 K; binning initial MacAdam ≤ 2 SDCM; CRI ≥ 90; min. 80% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; including high quality aluminium reflector with spherical reflector; high gloss anodised; neutral colour reflection through absolute freedom from interference colour; for brilliant object staging; precise radiation characteristic with 27° beam; optical attachments available as accessories; optical attachments can be combined; degree of protection IP20; PC2; 220-240 V; incl. converter, non dimmable; through wiring connection box, 3-pole or 5-pole, available as an accessory; accessories are listed separately; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

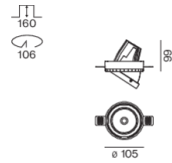
Light distribution



medium 27°

h (m)	EO° (lx)	ø (m)
1	10200	0.49
2	2600	0.97
3	1100	1.46
4	600	1.95
5	400	2.43

Product drawing



General

Ceiling | Recessed

tilt max 45°

rotation 360°

jet black | RAL 9005

Mounting set traffic white

front IP20 | back IP20

3190 lm

fixture 140 lm/W ¹

LED

3500 K

CRI ≥ 90

L80 / 50000 h

initial MacAdam ≤ 2 SDCM

R_g: 99 | R_r: 92 | R_{t[1-15]}: 93

MR 0.61 | MDER 0.55

Optical

medium | beam angle 27°

PstLM ≤ 1.0 ² | SVM ≤ 0.4 ²

Electrical

non DIM

PC2 | 220-240 V

system 25.3 W | fixture 22.7 W

650 mA

Physical

diameter 105 mm | height 99 mm

0.48 kg

Cutout

diameter 106 mm

min. ceiling thickness 12.5 mm | max. ceiling thickness 25 mm

recessed depth 160 mm

¹ incl. consideration of optical losses & internal control unit losses
² Value of containing product at full load (undimmed)

Installation instructions



Lighting calculator



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Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.977	0.94	0.905	0.871	0.838
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF ^a		Room Surface Maintenance Factor
MF	Maintenance Factor		LLMF		Lamp Lumens Maintenance Factor
LMF ^a	Luminaire Maintenance Factor		LSF		Lamp Survival Factor

^a According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

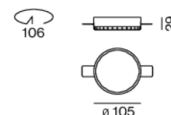
Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	20
B16	32
C10	33
C16	53

Components

MOUNTING SET trimless

TYPE	COLOUR	Ø (MM)	ARTICLE NUMBER(S)
for plasterboard ceilings 12.5/15/25 mm	traffic white	105	048-2796117



POWER SUPPLY

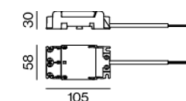
L-W-H (MM)	ARTICLE NUMBER(S)
143-43-30	002-90780



Mounting accessories

THROUGH WIRING CONNECTION BOX

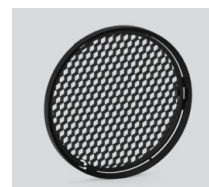
TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
non DIM cable ø 4 – 12 mm	105-58-30	005-2531110
DALI cable ø 4 – 12 mm	105-58-30	005-2551110



Optical accessories

HONEYCOMB LOUVER

Ø (MM)	ARTICLE NUMBER(S)
75	080-6401118



[048-1121218M 048-2796117 002-90780] The technical data represent rated values for an ambient temperature of 25°C. The data values for the luminous flux are initially subject to a tolerance of +/- 10%, those for the electrical connected load are initially subject to a tolerance of +/- 10%, and those for the colour temperature are initially subject to a tolerance of +/- 150 K. No liability is assumed for typographical or printing errors. The general terms and conditions of XAL GmbH apply.

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Optical accessories

LINEAR PRISMATIC LENS

Ø (MM)
75

ARTICLE NUMBER(S)
080-6402110P



Optical accessories

SNOOT short

Ø (MM)
66

ARTICLE NUMBER(S)
080-6403118



SNOOT medium

Ø (MM)
66

ARTICLE NUMBER(S)
080-6403218



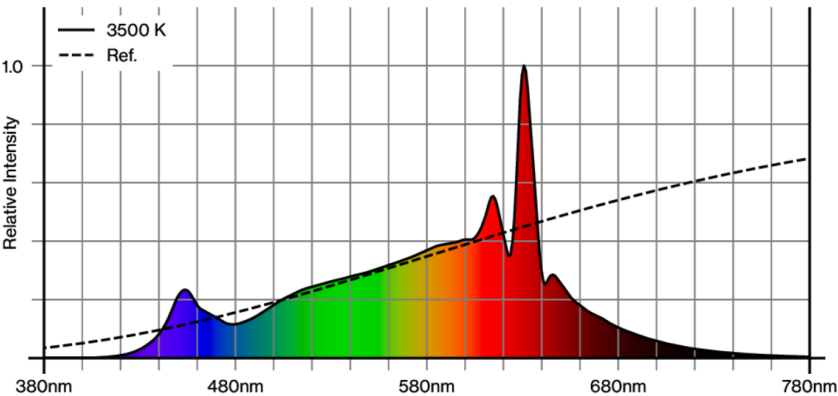
SNOOT angle

Ø (MM)
66

ARTICLE NUMBER(S)
080-6403318



Colour rendering



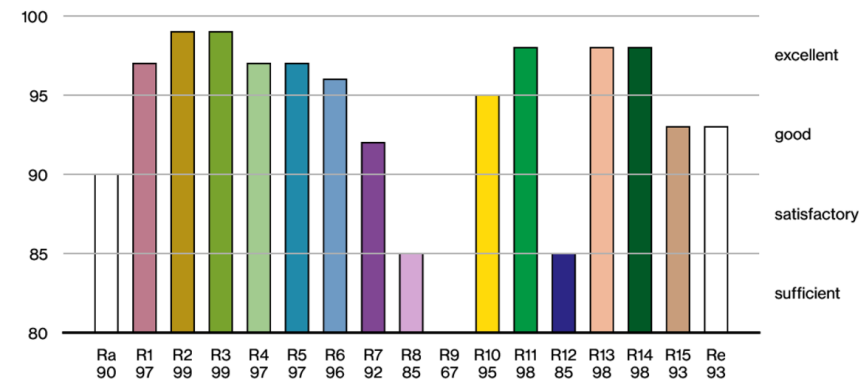


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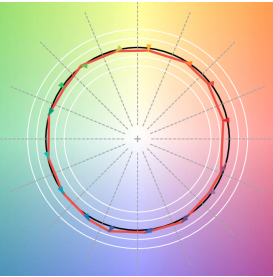
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CRI/R_a ≥ 95 R_e ≥ 93 (3500 K)



TM30 colour vector graphic



The black line represents the black body reference. The red line indicates the results of the test light source. The deviation from the test light source to the reference is shown and is marked by arrows. The shorter the arrows, the higher the color rendering.