

# THORN

## Mica Slim

Shallow, in-ground 'drive over' luminaires for accent or guidance lighting









# Now there's Mica Slim – a shallow version of Thorn's in-ground 'drive-over' Mica luminaire

Mica Slim – a notable example of Thorn's PEC programme – is up to 60 per cent shallower than Mica A and Mica S and can be installed in various types of ground. It considerably increases the functionality and desirability of the Mica range.

Made from die-cast aluminium body and stainless steel frame, the circular luminaire is available in three sizes (SST, ST and AT), distinguished by diameter and depth.

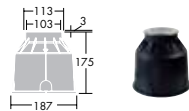
The drive over Mica Slim complements the current walk over E/Fact Slim range.

## MICA RANGE

## MICA SLIM RANGE

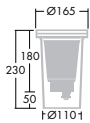
### Mica Slim SST (small)

LED and dichroic halogen



### Mica S

Dichroic halogen and compact fluorescent



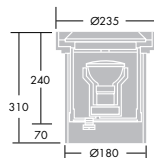
### Mica Slim ST (medium)

LED, dichroic halogen and compact fluorescent



### Mica A

QPAR and compact fluorescent

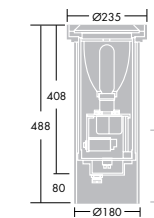


### Mica Slim AT (large)

LED, HIT and compact fluorescent



### HST and HIT

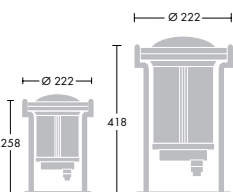


LED, HIT and compact fluorescent



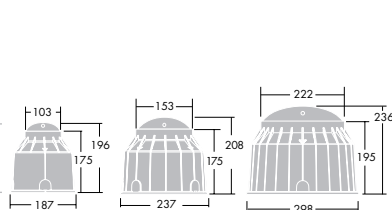
### Mica A dome windows

HIT and compact fluorescent



### Mica Slim dome windows

LED, halogen and HIT










# Mica Slim – Flexibility

Mica Slim is remarkably flexible, in each size there is the option for the designer to achieve illumination or guidance

This allows a wide variety of subjects to be lit – such as above ground items like sculptures and foliage, as well as identifying pathways and entrances. Lighting of building façades and the creation of dramatic and colourful effects is equally possible. (See to the right)



Mica Slim SST 1.2W 1 power LED

MICA SLIM SST	Glass	Light sources	SAP codes	Light Distribution
	<b>Guidance</b>			
	Frosted	4.5W 9 soft LED White	96503752	 2x30°
		2W 10 soft LED monochromatic R/G/B/Y	96503753 to 96503756	
	Windows	1.2W x 1 power LED monochromatic	1 window 96503619 to 96503623	
			2 windows 96503624 to 96503628	
			8 windows 96503629 to 96503633	
	<b>Illumination</b>			
Clear	10W QR-CBC	96503611	 2x16.5°	
	1.2W x 1 power LED monochromatic	96503614 to 96503618	 2x3°	


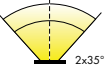
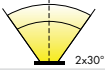








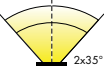





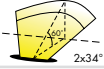
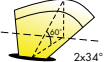
Mica Slim AT dome 8 windows



Mica Slim ST 6W T2

Mica Slim AT 20W HIT-TC-CE R6° + antiglare louvre

MICA SLIM ST	Glass	Light sources	SAP codes	Light Distribution
	<b>Guidance</b>			
	Frosted	6W T2	96503634	 2x35°
		4.5W x 16 soft LED monochromatic	96503641 to 96503645	 2x30°
	Windows	20W QT12	1 window 96503653	
			2 windows 96503654	
			8 windows 96503655	
	<b>Illumination</b>			
Clear	20W QR-CBC	96503635	 2x19°	
	3.6W x 3 power LED monochromatic	96503636 to 96503640	 2x4°	

MICA SLIM AT	Glass	Light sources	SAP codes	Light Distribution
	<b>Guidance</b>			
	Frosted	18W TC-TEL	96503659	 2x35°
		20W HIT-TC-CE R30°	96503660	 2x15°
	Windows	35W HIT-TC-CE	1 window 96503672	
			2 windows 96503673	
			8 windows 96503674	
	<b>Illumination</b>			
Clear	20W HIT-TC-CE R6°	96503661	 2x3°	
	20W HIT-TC-CE A/S	96503662	 2x34°	
	35W HIT-TC-CE A/S	96503663	 2x34°	

## Considering Obtrusive Light

In-ground lighting units must be carefully used to avoid contributing to obtrusive light. There are a number of simple pointers to consider:

- Units can be positioned close to the subject for lighting – for instance, illuminate foliage from directly underneath
- For building façades, position ground recessing units close to the building and use angled lighting to distribute all of the output onto the façade, not into the sky
- For marking out pathways, use low wattage light sources, frosted glass or better still, consider using directional 'windows' to direct the light output near to the horizontal.
- The limitation of obtrusive light is also helped by using the minimum quantity of light. In many installations, surprisingly little light is required to produce a dramatic effect. The actual amount will vary depending upon ambient lighting levels, so reference levels are needed before a design can be produced.
- The advantage of Mica Slim is that because the source is effectively concealed, the effect on the lit subject is what you see. The appeal of the lit subject is not marred by bright sources intruding into the visual field.







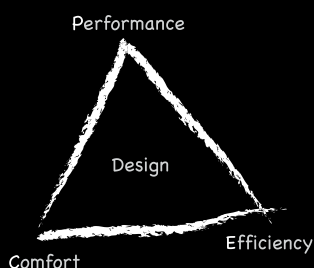






## Performance, Efficiency and Comfort (PEC) – for a better lit environment

Mica Slim evokes the spirit of Thorn Lighting's dynamic, results-orientated PEC programme



The programme is based on the principle that Performance, Efficiency and Comfort determine the effectiveness of lighting, its impact on the people using it, and its impact on the natural environment. Mica Slim delivers the right light on the right place at the right time.

**Performance:** Providing the best visual effectiveness

- Excellent visual effectiveness for guidance and accent lighting thanks to a wide choice of light sources, front glasses and optics
- Numerous light patterns can be created giving excellent modelling and contrast – patterns in objects, shadows and texture can all be revealed
- Broad lamp choice ensures good colour rendition

**Efficiency:** Minimising the use of energy, CO<sub>2</sub> emissions and waste

- Wide selection of energy efficient light sources, including LEDs for low energy, long life and low maintenance
- Electronic ballast for reduced power consumption and longer lamp life
- The use of frosted glasses, filterable and asymmetric optics, plus domed windows limits obtrusive light
- Highly practical. Slim depth of unit widens usability. Recessing box separates the luminaire from the ground. Luminaire is pre-wired for quick connection
- Sealed to IP67 with high mechanical resistance, IK10. Flat toughened front glass gives a static load capacity of 5000kg and aluminium domed windows 2000kg. Norm IEC 60 598-2-13. Car speed: 30 km/h for flat front glass versions and 20 km/h for dome window versions

**Comfort:** giving people satisfaction and stimulation

- The choice of accent or guidance lighting adds to the ambience and atmosphere of an area. Users can generate feelings of intimacy or spaciousness, safety or security, excitement or drama
- Provides lighting at a human level
- All units are low temperature 'Touch' for public safety
- Colour choice, using either LEDs or coloured filters, creates aesthetically pleasing and static or dynamic dramatic effects
- Electronic ballast gives flicker free light







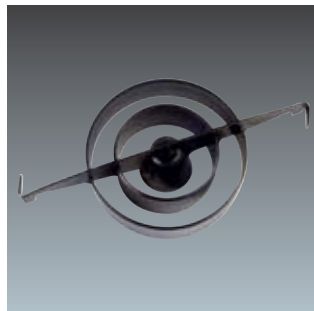
## Product Features

Mica Slim is remarkably flexible, in each size there is the option for the designer to achieve illumination/effect lighting or guidance/marker lighting

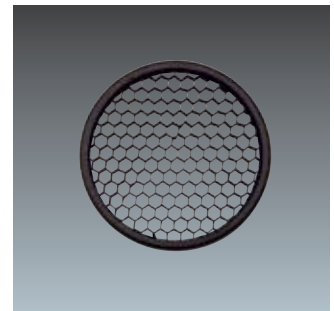
- Shallow installation depth: 175mm for the small (SST) and medium (ST) sizes, and 195mm for the larger size (AT)
- Three diameter sizes: 113mm, 165mm and 235mm
- All versions are low temperature 'Touch' (<80°C) and LED versions are <40°C
- Supplied with electronic gear offering reduced power consumption, flicker free operation and increased lamp life
- Pre-wired for quick installation within the recessing box (0.40m cable length)
- Broad choice of light sources: soft/high power LEDs and conventional lamp types (6W T2 to 35W HIT-TC-CE)
- Ability to select colour. Choice of 5 LED colours – white, blue, green, red and yellow – for monochromatic. Also available, coloured glass filters – blue, green, yellow and red (medium and large sizes)
- Choice of optics for guidance or illumination lighting design
- Tiltable versions for illumination (+/-15°) with clear or semi-frosted front glass. Also an asymmetric beam option for the large size
- Selection of front glass finishes – clear and part-frosted for illumination and frosted for guidance
- Curved glasses with window attachments provide directional focus (1, 2 or 8 windows)
- Round stainless steel frame offers pleasing aesthetic



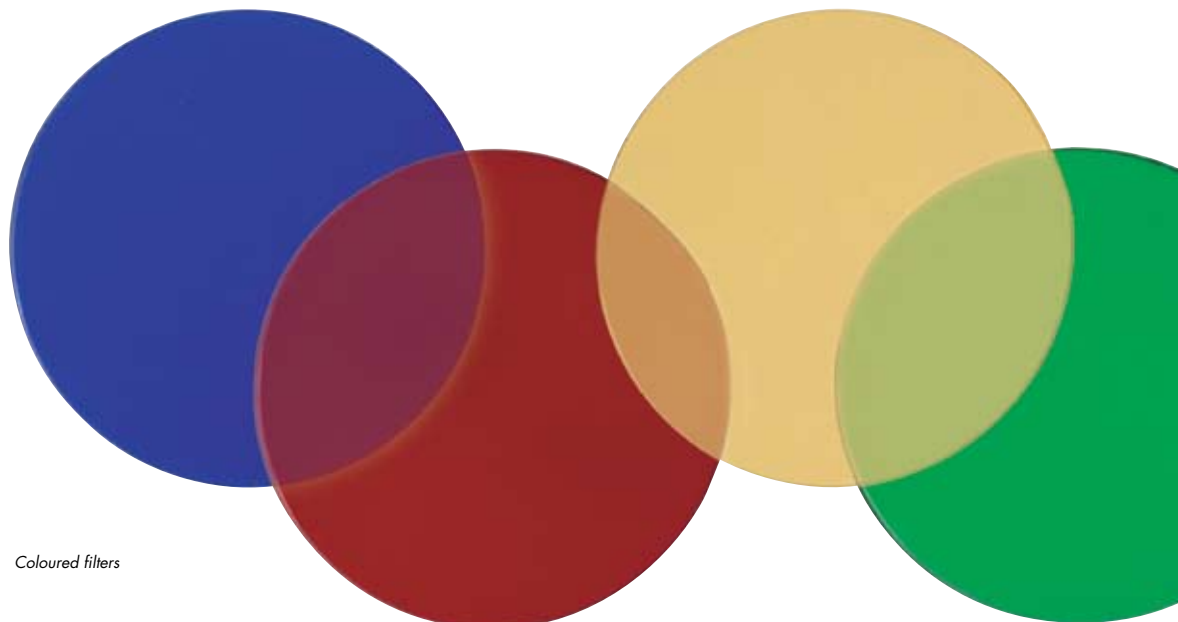
Mica Slim ST 3.6W 3LED



Anti-glare louvre



Honeycomb louvre



Coloured filters

# Technical details

## Dimensions

## Photometric data



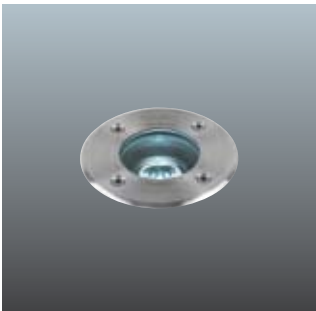
Mica Slim SST 10W QR-CBC



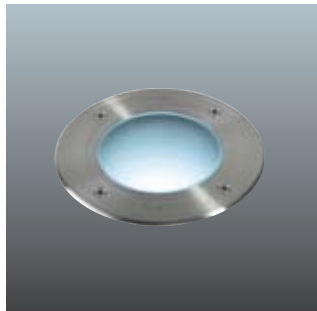
Mica Slim ST 3.6W 3 LED



Mica Slim AT 20W HIT-TC-CE + anti glare louvre



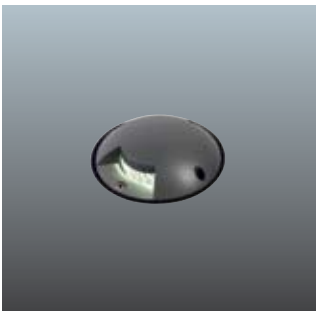
Mica Slim SST 1.2W 1LED



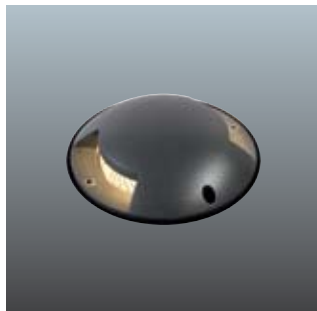
Mica Slim ST 4.5W 16LED



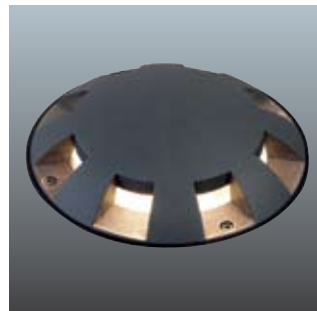
Mica Slim AT 20W HIT-TC-CE + anti glare louvre



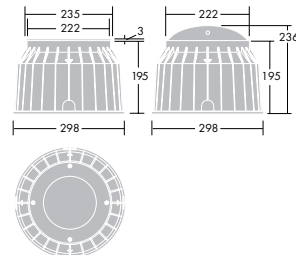
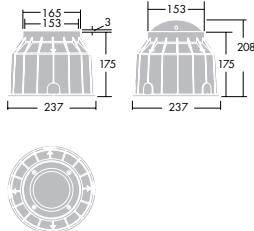
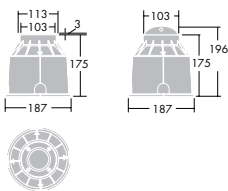
Mica Slim SST 1.2W 1LED, 1 window



Mica Slim ST 20W QT12, 2 windows



Mica Slim AT 35W HIT-TC-CE, 8 windows



### LED

(pre-fixed PCB)

For guidance:

Mica Slim SST  
monochromatic R/G/B/Y:  
2W for 10 LEDs  
Mica Slim SST White:  
4.5W for 9 LEDs  
Mica Slim SST dome versions:  
1.2W for 1 LED  
Mica Slim ST monochromatic:  
4.5W for 16 LEDs

For illumination:

Mica Slim SST monochromatic:  
1.2W for 1LED  
Mica Slim ST monochromatic:  
3.6W for 3 LEDs

### Lamps

10W QR-CBC (HR) dichroic halogen. Cap: GU4  
 20W QR-CBC (HR) dichroic halogen. Cap: GU5.3  
 20W QT12 (HSG) low voltage halogen capsule. Cap: GY6.35  
 6W T2 (FB) compact fluorescent (Sylvania only). Cap: GX53  
 18W TC-TEL (FSM) compact fluorescent. Cap: GX24q-2  
 20-35W HIT-TC-CE (MT) metal halide. Cap: PGJ5

### Materials/Finish

Body: die-cast aluminium, ENAB44100 (copper free) with powdered paint finish for high corrosion resistance  
Frame: stainless steel AISI 316L (3mm thick) treated against corrosion  
Retaining screws: stainless steel  
Front glass: toughened clear, frosted or part frosted sodic glass (15mm thick)  
Gasket: anti-ageing silicon  
Recessing box: polypropylene  
Cable: rubber (H07RN-F)  
Dome attachments: painted aluminium

### Standards

Designed and manufactured to comply with EN60598-2-13

Class I Electrical  
IK10 IP67 CE



### Installation/Mounting

For outdoor applications, 30cm drainage gravel or any equivalent drainage system must be used beneath the housing to ensure water evacuation. The recessing box can be embedded in asphalt with good drainage once the temperature of the asphalt is approx. 80°C.

Luminaire must be operated for 45 minutes without its front glass to avoid moisture build-up inside the housing.

Recessing box has four cable entries, each ninety degree. Luminaire supplied pre-wired with 0.4m cable (H07RN-F).

To facilitate quick installation, the wiring can be connected inside the recessing box. For the medium (ST) and the large (AT) size luminaires use wiring connectors IP67 (SAP code 60800175 or 60800343). For the small size (SST) use only the connector IP67, SAP code 60800175.

For through wiring, IP67 connection boxes can be used (SAP codes 60800235, 60800432 or 60800549).

Maximum drive-over resistance for a static load: 5000kg for the flat glass and 2000kg for the dome window(s). All static loads are according to the norm IEC 60598-2-13. Speed of 30 km/h for flat front glass versions and 20 km/h for dome window versions.

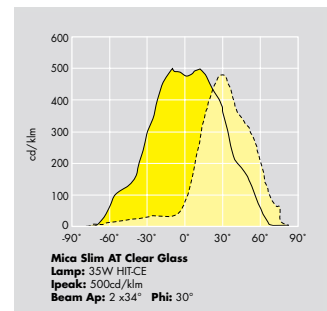
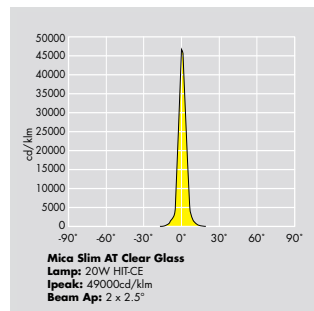
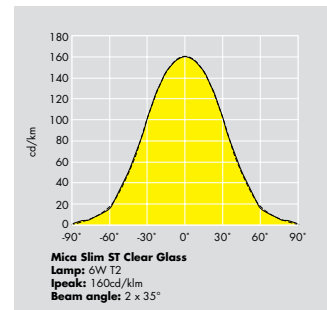
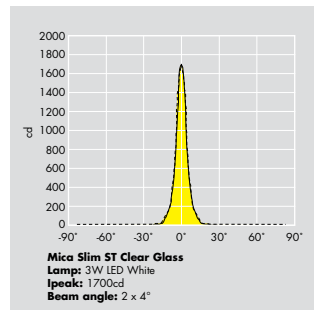
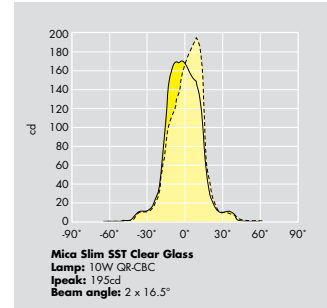
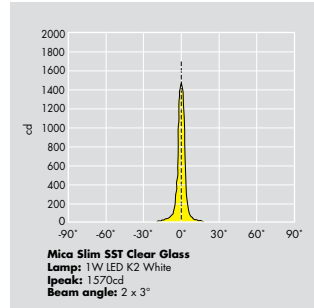
For more details, please visit the website [www.thornlighting.co.uk](http://www.thornlighting.co.uk)

### Specification

To specify state: Shallow recessed, low temperature, drive-over luminaire, 113/165/235mm Ø. Round with polypropylene recessing box and stainless steel frame/painted aluminium dome with windows. Die cast aluminium body sealed to IP67. Choice of lamp types/LED versions. With a choice of 5 monochromatic colours.

For ground installation with front clear/part-frosted flat glass enclosure for illumination or frosted glass/dome windows for guidance.

As Thorn Mica Slim.



# Ordering Guide

Integrated gear.

Lamps to be ordered separately (except LED versions).

The complete fitting includes the recessing housing box, the body and the frame/glass or domed windows.

The MICA SLIM AT is the only one to have an asymmetrical distribution.

In all sizes, fittings with clear and semi-frosted glass are tiltable +/-15° (except the MICA SLIM AT 20W and 35W HIT-CE asymmetrical).

Guidance range				
Description	Ilcos code	Socket	Weight (kg)	SAP code
<b>Small size - MICA SLIM SST</b>				
<b>Frosted flat glass luminaire</b>				
MICA SLIM SST 4.5W 9LED WHI EFL/FR			1.75	96503752
MICA SLIM SST 2W 10LED BLU EFL/FR			1.75	96503753
MICA SLIM SST 2W 10LED RED EFL/FR			1.75	96503754
MICA SLIM SST 2W 10LED GRN EFL/FR			1.75	96503755
MICA SLIM SST 2W 10LED YEL EFL/FR			1.75	96503756
<b>Domed window luminaire</b>				
MICA SLIM SST 1.2W 1LED WHI EDO EW1			1.55	96503619
MICA SLIM SST 1.2W 1LED BLU EDO EW1			1.55	96503620
MICA SLIM SST 1.2W 1LED RED EDO EW1			1.55	96503621
MICA SLIM SST 1.2W 1LED GRN EDO EW1			1.55	96503622
MICA SLIM SST 1.2W 1LED YEL EDO EW1			1.55	96503623
MICA SLIM SST 1.2W 1LED WHI EDO EW2			1.54	96503624
MICA SLIM SST 1.2W 1LED BLU EDO EW2			1.54	96503625
MICA SLIM SST 1.2W 1LED RED EDO EW2			1.54	96503626
MICA SLIM SST 1.2W 1LED GRN EDO EW2			1.54	96503627
MICA SLIM SST 1.2W 1LED YEL EDO EW2			1.54	96503628
MICA SLIM SST 1.2W 1LED WHI EDO EW8			1.53	96503629
MICA SLIM SST 1.2W 1LED BLU EDO EW8			1.53	96503630
MICA SLIM SST 1.2W 1LED RED EDO EW8			1.53	96503631
MICA SLIM SST 1.2W 1LED GRN EDO EW8			1.53	96503632
MICA SLIM SST 1.2W 1LED YEL EDO EW8			1.53	96503633
<b>Medium size - MICA SLIM ST</b>				
<b>Frosted flat glass luminaire</b>				
MICA SLIM ST 6W T2/GX53 SY EFL/FR*	FB	GX53	2.51	96503634
MICA SLIM ST 4.5W 16LED WHI EFL/FR			2.82	96503641
MICA SLIM ST 4.5W 16LED BLU EFL/FR			2.82	96503642
MICA SLIM ST 4.5W 16LED RED EFL/FR			2.82	96503643
MICA SLIM ST 4.5W 16LED GRN EFL/FR			2.82	96503644
MICA SLIM ST 4.5W 16LED YEL EFL/FR			2.82	96503645
<b>Domed window luminaire</b>				
MICA SLIM ST 20W QT12/GY6,35 EDO EW1	HSG	GY6,35	2.72	96503653
MICA SLIM ST 20W QT12/GY6,35 EDO EW2	HSG	GY6,35	2.69	96503654
MICA SLIM ST 20W QT12/GY6,35 EDO EW8	HSG	GY6,35	2.68	96503655
<b>Large size - MICA SLIM AT</b>				
<b>Frosted flat glass luminaire</b>				
MICA SLIM AT 18W TC-TEL/GX24Q-2 FR	FSM	GX24q-2	5.83	96503659
MICA SLIM AT 20W HIT-TC-CE/PGJ5 FR R30	MT	PGJ5	5.80	96503660
<b>Domed window luminaire</b>				
MICA SLIM AT 35W HIT-TC-CE/PGJ5 EDO EW1	MT	PGJ5	5.39	96503672
MICA SLIM AT 35W HIT-TC-CE/PGJ5 EDO EW2	MT	PGJ5	5.31	96503673
MICA SLIM AT 35W HIT-TC-CE/PGJ5 EDO EW8	MT	PGJ5	5.30	96503674

#### Notes

EDO EW1: dome with 1 window, EDO EW2: dome with 2 windows, EDO EW8: dome with 8 windows

EFL: flat glass, FR: frosted glass,

\*6W T2/GX53 SY: Sylvania lamp **must** be used

See accessories for filters, louvres, connectors



### Illumination range

Description	Ilcos code	Socket	Weight (kg)	SAP code
<b>Small size - MICA SLIM SST</b>				
<b>Clear flat glass luminaire</b>				
MICA SLIM SST 10W QR-CBC/GU4 EFL/CL	HR	GU4	1.64	96503611
MICA SLIM SST 1.2W 1LED WHI EFL/CL			1.75	96503614
MICA SLIM SST 1.2W 1LED BLU EFL/CL			1.75	96503615
MICA SLIM SST 1.2W 1LED RED EFL/CL			1.75	96503616
MICA SLIM SST 1.2W 1LED GRN EFL/CL			1.75	96503617
MICA SLIM SST 1.2W 1LED YEL EFL/CL			1.75	96503618

#### Medium size - MICA SLIM ST

<b>Clear flat glass luminaire</b>				
MICA SLIM ST 20W QR-CBC/GU5,3 EFL/CL	HR	GU5,3	2.62	96503635
MICA SLIM ST 3.6W 3LED WHI EFL/CL			2.96	96503636
MICA SLIM ST 3.6W 3LED BLU EFL/CL			2.96	96503637
MICA SLIM ST 3.6W 3LED RED EFL/CL			2.96	96503638
MICA SLIM ST 3.6W 3LED GRN EFL/CL			2.96	96503639
MICA SLIM ST 3.6W 3LED YEL EFL/CL			2.96	96503640

#### Large size - MICA SLIM AT

<b>Clear flat glass luminaire</b>				
MICA SLIM AT 20W HIT-TC-CE/PGJ5 CL R6	MT	PGJ5	5.80	96503661
MICA SLIM AT 20W HIT-TC-CE/PGJ5 CL A/S	MT	PGJ5	5.76	96503662
MICA SLIM AT 35W HIT-TC-CE/PGJ5 CL A/S	MT	PGJ5	5.84	96503663

Notes  
EFL: flat glass, CL: clear glass, A/S: asymmetrical distribution,  
See accessories for filters, louvres, connectors

### Accessories

#### Small size - MICA SLIM SST

No dedicated accessories

#### Medium size - MICA SLIM ST

MICA SLIM ST FILTER/BLU*	BLUE FILTER		0.08	96503647
MICA SLIM ST FILTER/RED*	RED FILTER		0.08	96503648
MICA SLIM ST FILTER/GRN*	GREEN FILTER		0.08	96503649
MICA SLIM ST FILTER/YEL*	YELLOW FILTER		0.08	96503650
MICA SLIM ST HC**	HONEYCOMB LOUVRE		0.04	96503646

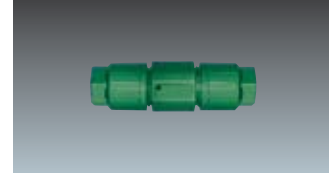
#### Large size - MICA SLIM AT

MICA SLIM AT FILTER/BLU***	BLUE FILTER		0.20	96503666
MICA SLIM AT FILTER/RED***	RED FILTER		0.20	96503667
MICA SLIM AT FILTER/GRN***	GREEN FILTER		0.20	96503668
MICA SLIM AT FILTER/YEL***	YELLOW FILTER		0.20	96503669
MICA SLIM AT LVBACK 6D****	ANTI-GLARE LOUVRE		0.16	96503685

#### Connection Fittings

CON CABLE 2/4X1,5 <sup>2</sup> IP67	CONNECTOR 1 FITTING 1,5mm <sup>2</sup> IP67		0.04	60800175
CON CABLE 2/3X4,0 <sup>2</sup> IP67	CONNECTOR 1 FITTING 4,0mm <sup>2</sup> IP67		0.08	60800343
CON CABLE BOX 4/6X2,5 <sup>2</sup> IP67	CONNECTION BOX IP67 4 ENTRIES		0.40	60800235
CON CABLE BOX 3/4X2,5 <sup>2</sup> IP67	MINI CONNECTION BOX IP67 3 ENTRIES		0.37	60800432
CON CABLE 3/3X1,5 <sup>2</sup> IP67	MICRO CONNECTION BOX IP67 3 ENTRIES		0.10	60800549

Notes  
\* for the 20W QR-CBC and 6W T2 versions, \*\* for the 20W QR-CBC and 3.6W 3LED,  
\*\*\* for the 18W TC-TEL, 20W HIT-TC-CE symmetrical with 6° and 30°, \*\*\*\* for the 20W HIT-TC-CE symmetrical with 6°



**60800175** The IP67 cable ends are inserted and sealed in the terminals in the same way as with a cable gland. This connection can be disconnected at any time in order to replace the circuit board unit.



**60800343** The IP67 connector makes it possible to secure feed lines on an internal terminal block using screw terminals. The terminal blocks are designed for a maximum core cross-sectional area of 4mm<sup>2</sup> and up to 3 strands.



**60800235** A IP67 universal connection box for through wiring or cross wiring to terminals for cable diameters of 0.8 to 2.5mm.



**60800432** Small IP67 connection box allowing pressurised-water-tight connection of up to 3 suitable feed lines (H07RNF, etc.) for through wiring outside a luminaire unit. It can be used as an alternative to self-bonding tape or splice sleeves.



**60800549** 3-way cable connector, 1.5mm<sup>2</sup>, IP67 with connecting terminal; allows up to 3 cables to be connected; can also be used for through-wiring.

# THORN

Lighting people and places

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