

# MINO 60 direct / indirect high lumen ceiling /

suspended system

046-502851XH



Project / Type

Notes

Count / Date



## General

Ceiling , Suspended

special colours

IP20

indirect 5240 lm

direct 4430 lm

total 9670 lm

4120 lm/m

## LED

3000 K

CRI  $\geq$  80

L90 / 50000 h

initial MacAdam  $\leq$  3 SDCM

MR 0.56

MDER 0.51

## Optical

High Performance Opal

opal (lambertsch)

## Electrical

non DIM

220-240 V

system 70 W

system 138 lm/W<sup>1</sup>

PC1

30 W/m

## Physical

length 2344 mm

width 60 mm

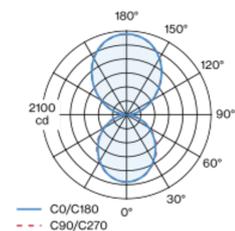
height 80 mm

5.9 kg

Luminaire housing made of extruded aluminium profile; angular design; for continuous lighting systems; light tight final end caps made of aluminium (available as an accessory); no visible screws; surface special colours powder coated; for suspended mounting (1500 mm cable suspension as an accessory); with integrated toolless suspension height adjustment on the luminaire; spring clip attachment to the luminaire; freely positionable; LED light inset consisting of highly reflective lacquered aluminium for improved thermal management; light colour 3000 K; binning initial MacAdam  $\leq$  3 SDCM; CRI  $\geq$  80; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; HPO (High Performance Opal) cover for uniform illumination; direct/indirect illumination characteristic; indirect light component with integrated PC boards for maximum, homogeneous ceiling illumination; degree of protection IP20; PC1; 220-240 V; internal wiring in light halogen free; incl. converter, non dimmable; accessories are listed separately; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

## Light distribution

## Product drawing



<sup>1</sup> FIXTURE: incl. consideration of optical losses & internal control unit losses SYSTEM: incl. consideration of optical losses, internal control unit losses & operating device efficiency.

## Installation instructions

## Lighting calculator



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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.96	0.94	0.92	0.9
LSF	1	1	1	1	1

MF	LMF × RSMF × LLMF × LSF	RSMF <sup>a</sup>	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF <sup>a</sup>	Luminaire Maintenance Factor	LSF	Lamp Survival Faktor

<sup>a</sup> 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	15
B13	19
B16	24
B20	30
C10	25
C13	32
C16	40
C20	49

## Mounting accessories

### END CAPS

TYPE	COLOUR	L-W-H (MM)	ARTICLE NUMBER(S)
1 pair	traffic white	60-40-4	046-5010017
1 pair	jet black	60-40-4	046-5010018
1 pair	white aluminium	60-40-4	046-501001G
1 pair	special colours	60-40-4	046-501001X



## Mounting accessories

### LINEAR CONNECTOR

TYPE	ARTICLE NUMBER(S)
1 piece	005-40046
10 pieces	005-40046.10



### OPAL COVER LINEAR CONNECTOR

ARTICLE NUMBER(S)  
006-14000



## Mounting accessories

### CABLE SUSPENSION

ARTICLE NUMBER(S)  
005-2122110



### CABLE RAIL

Ø (MM)	ARTICLE NUMBER(S)
1200	005-2491110



[046-502851XH] 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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## Electrical accessories

### THROUGH WIRE

#### TYPE

3 x 1,5 mm<sup>2</sup> | 10 pieces

5 x 1,5 mm<sup>2</sup> | 10 pieces

#### ARTICLE NUMBER(S)

004-90003

004-90005



## Electrical accessories

### CANOPY / FEEDER CABLE

#### TYPE

3 x 1,5 mm<sup>2</sup>

3 x 1,5 mm<sup>2</sup>

5 x 1,5 mm<sup>2</sup>

5 x 1,5 mm<sup>2</sup>

#### COLOUR

traffic white

jet black

pure white

jet black

#### L-W-H (MM)

90-90-22

90-90-22

90-90-22

90-90-22

#### ARTICLE NUMBER(S)

005-2212317

005-2212318

005-2212417

005-2212418

