

MINO 60 direct / indirect mid lumen ceiling /

suspended system
046-5015618Z



Project / Type

Notes

Count / Date



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 black 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 4000 K; binning initial MacAdam ≤ 3 SDCM; CRI ≥ 80 ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; micro prismatic PMMA diffuser incl. diffuser film for homogeneous illumination and reduced luminance; UGR ≤ 19 ; 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;



General

Ceiling | Suspended

black | RAL 9005 ¹

IP20

indirect 1640 lm | direct 2440 lm

total 4080 lm

2790 lm/m

LED

4000 K

CRI ≥ 80

L90 / 50000 h

initial MacAdam ≤ 3 SDCM

MR 0.72 | MDER 0.65

Optical

Microprismatic | microprismatic

UGR ≤ 19

Electrical

non DIM

PC1 | 220-240 V

system 29.1 W

system 140 lm/W ²

20 W/m

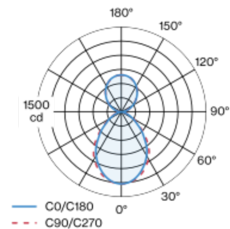
Physical

length 1464 mm | width 60 mm | height 80 mm

3.8 kg

¹ RAL code
² incl. consideration of optical losses, internal control unit losses & operating device efficiency

Light distribution



Product drawing



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 ^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 | 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 |



[046-5015618Z] 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 | ARTICLE NUMBER(S) |
|-----------|-------------------|
| 10 pieces | 004-90003 |
| 10 pieces | 004-90005 |



Electrical accessories

CANOPY / FEEDER CABLE

| COLOUR | L-W-H (MM) | ARTICLE NUMBER(S) |
|---------------|------------|-------------------|
| traffic white | 90-90-22 | 005-2212317 |
| jet black | 90-90-22 | 005-2212318 |
| pure white | 90-90-22 | 005-2212417 |
| jet black | 90-90-22 | 005-2212418 |

