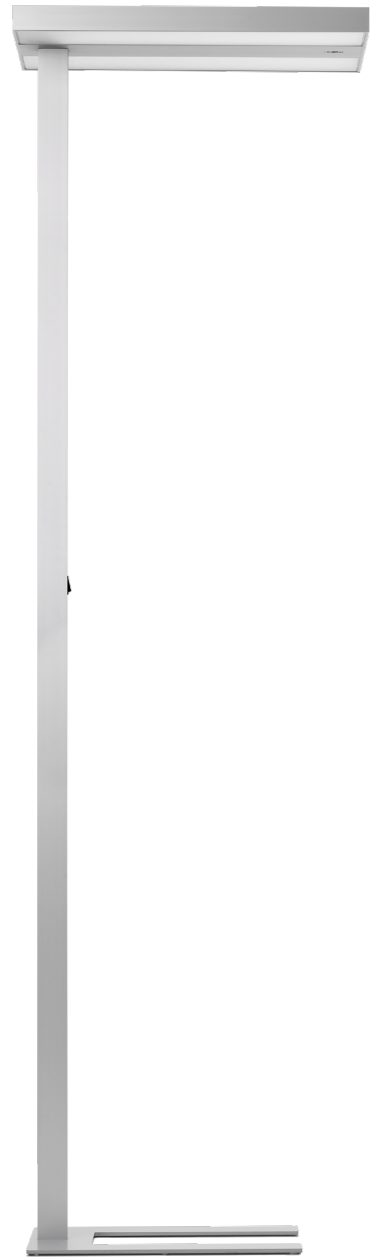




ECO E



ECO E

Stylish

The ECO E has an unobtrusive and timeless design, with high-quality materials – matted and plain anodised aluminium – underpinning the luxury look. The linear and angular shape gives the luminaire a stylish feel. The stand tube is available in either a square design with a recessed C14 connector plug or in a round version with a fixed cable.

Batwing

The ECO E light distribution casts a similar shadow to that of a bat in flight and is therefore known as batwing. The wide beam angle shines an even, broad beam onto your work surface while a large portion of the ceiling is illuminated, thus avoiding bright spots (fig. 1).

Sensonic Base or TouchDim – catered to your needs

The ECO E is the beginner model in the ECO family of floor luminaires and is either available with the Sensonic Basic or TouchDim control system.

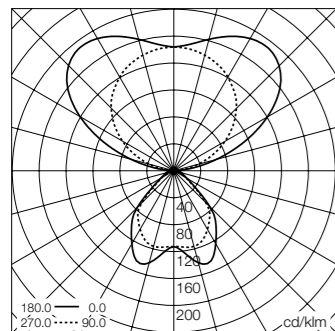
The Sensonic Basic version jointly controls the direct and indirect area via a daylight sensor and presence detector. The sensors are positioned directly on the front of the luminaire head for optimum light and movement detection. They are controlled either by a button on the stand tube or by an optional remote control function.

If movement is detected, this is indicated by means of a green status LED and ongoing configuration of the luminaire, while a red status LED indicates incoming remote control signals.

The optional remote control function enables the user to configure and store lighting scenes as well as a holiday mode, which temporarily switches off presence detection.

The default shut-off time is set to 15 minutes ex works. As with many of the other settings, this can easily be adjusted to the user's specific needs thanks to the optional Master Remote (for remote configuration).

Fig. 1



Sensonic Basic

Diverse

With parameters suited to standard office environments, the Sensonic Basic is ideally configured for fully automatic operation ex works. The target brightness value can be automatically calibrated to make it easier to configure a large number of luminaires. Pressing and holding the button on the sensor starts the calibration, which then continues fully automatically (measuring the daylight and defining the target brightness value accordingly).

The user can make manual adjustments or store individual target values by double-clicking the button on the stand tube at any time (this can be deactivated by means of the Master Remote for remote configuration).

Remote control

As an optional extra, the Sensonic Basic can be controlled remotely from your workplace via an infrared interface integrated into the sensor. It also offers users a simple yet functional remote control that allows them to regulate the brightness and access stored light conditions.

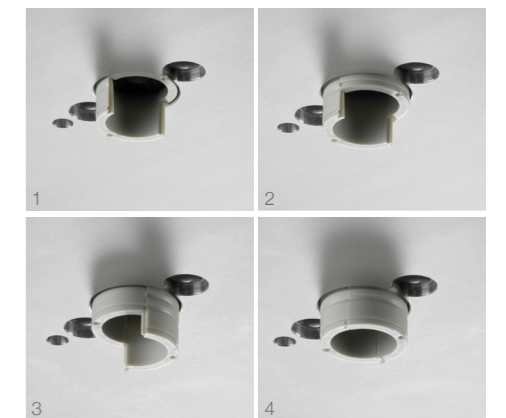
The upgraded Master Remote (for remote configuration) allows users to adjust the control behaviour to cater to all of their individual needs. Shut-off time, dimming level, standby behaviour, fade time, etc. can all be adjusted individually.

Presence detection

Two retractable and revolving panels help restrict the presence detection area to suit users' specific needs in order to prevent the luminaire from switching on when it is not needed (e.g. shading from corridor lights).

TouchDim – controlled at the touch of a button

In the TouchDim version, you can still control the luminaire without the Sensonic system. A short press of the button switches the luminaire on or off. If the button is pressed and held, the luminaire alternates between dimming up and down. If the button is pressed twice in a row, the brightness value is stored as a reference value (see manual).





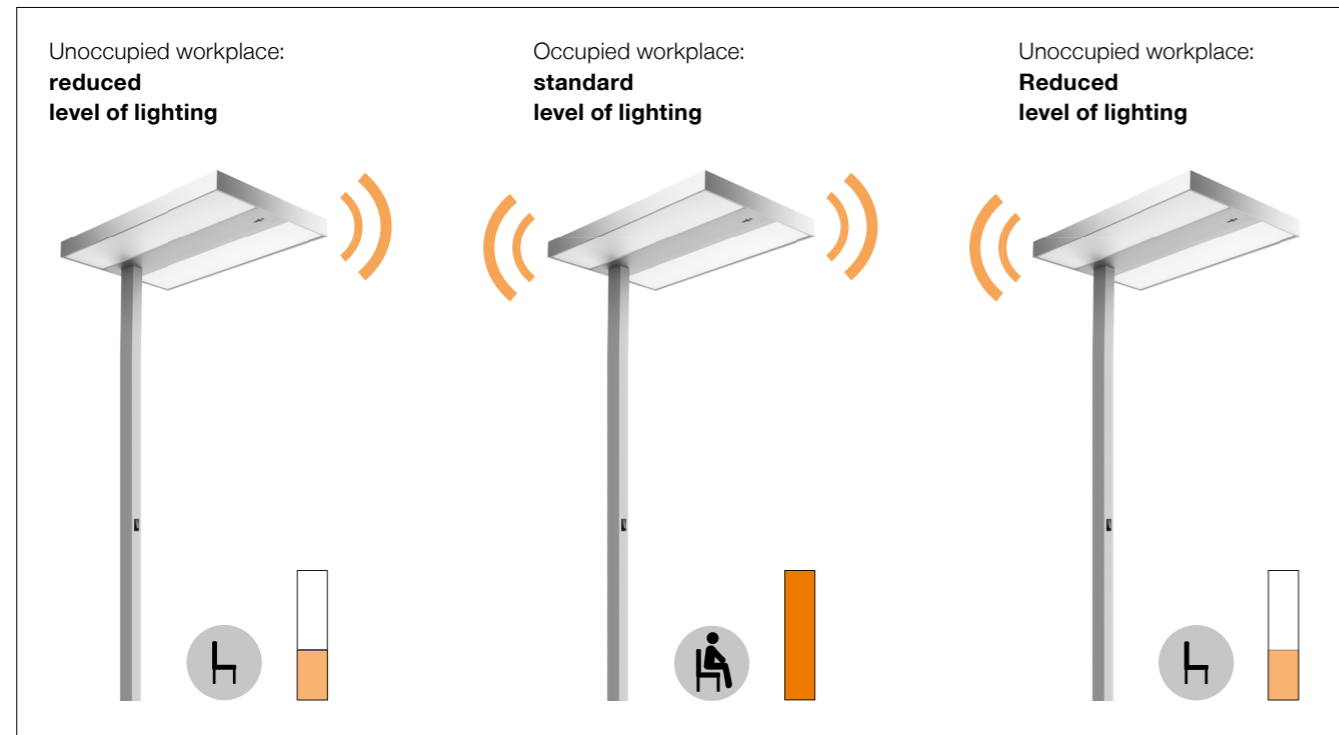
Sensonic Basic Swarm

The Sensonic Basic Swarm upgrade kit is an expansion to the Sensonic Basic control system with a simple yet intelligent wireless swarm function. The upgrade kit is available as an optional expansion accessory for the ECO E but can also be retrofitted very easily afterwards (from ECO E light index *.C). The swarm function allows the level of lighting from the surrounding luminaires to be adjusted precisely to the relevant user situation automatically. Luminaires then switch on automatically to guarantee a pleasant level of basic lighting and to avoid islands of light from forming. This means the light not only targets the occupied workplace but also bathes the desired surroundings in subtle and pleasant lighting. The Sensonic Basic Swarm upgrade kit is the perfect solution for modern, flexible workplaces in large office spaces with desk sharing and ensure individually lit workplaces with optimum ergonomic lighting.

Functional principle

The upgrade kit controls the luminaires at an occupied workplace to achieve the standard level of lighting, and automatically switches on the surrounding luminaires in the same zone and grouping at a reduced level too (fig. 2). The level of lighting can be individually adjusted with the optional Sensonic Basic Master Remote remote control.

Fig. 2



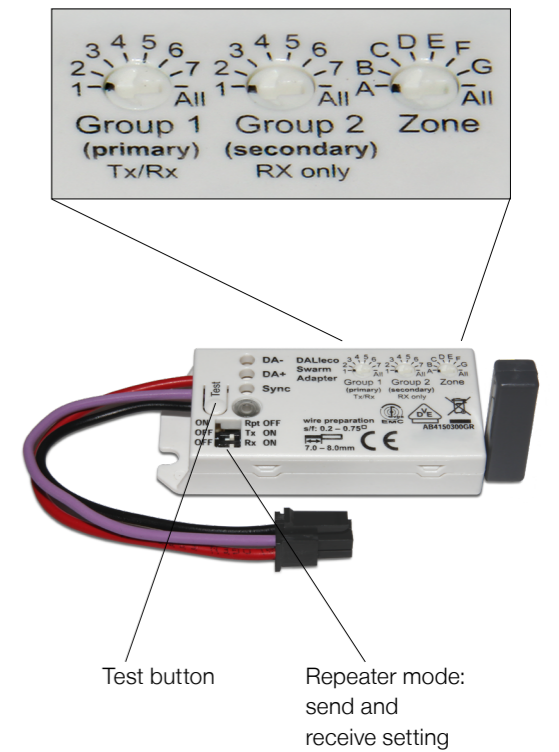
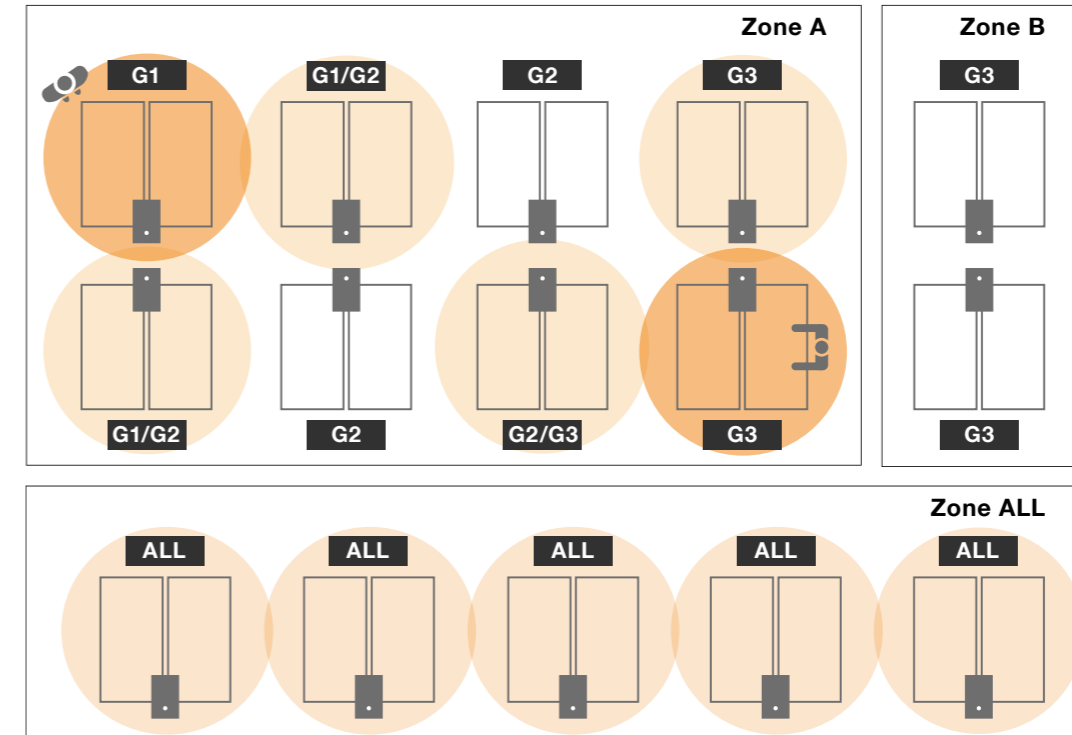
Groupings

The Sensonic Swarm upgrade kit can be allocated to seven zones (A to G) and seven groups each (1 to 7) by a rotary coded switch without any need for programming, or to all groups or zones by means of the "ALL" setting. A maximum of eight and upgrade kits can be allocated per group and 28 per zone.

Two separate group selector switches allow you to allocate overlapping groups; in repeater mode, the transmission distance can also be doubled (only one luminaire permitted per zone) and you can also set it either only to send, only receive or send and receive. The test button on the upgrade kit allows you to check that the settings and reception are correct (fig. 3).

Since the upgrade kit can be retrofitted as an accessory, the settings can be preconfigured very easily before you even install the luminaire, allowing you to get the product up and running quickly and easily and reduce the installation costs on site. The upgrade kit can be installed via a magnet attachment and connecting cable with a contact plug with ease.

Fig. 3





Did you know?

Surfaces

A variety of colour options are available on request. For example, the floor luminaire can be ordered entirely in your company's specific colours for a consistent corporate design.

In addition to colour options in coating powder or paint, the surfaces can be refined with a colour anodised or chrome-plated finish.

ESD electrostatic discharge

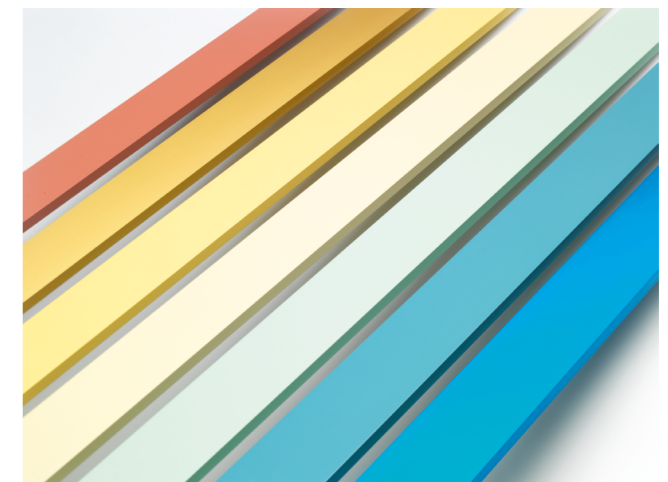
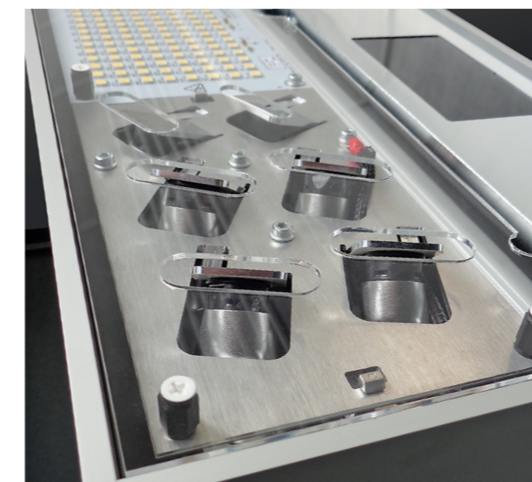
A PMMA protective cover is fitted in the indirect area to avoid the highly sensitive LEDs in our panels getting damaged. This prevents contact with the LED and makes it significantly easier to clean and maintain (fig. 4).

Table adapter

Our universal table adapter with a clamping area between 0 and 75mm wide gives you the option of attaching our luminaires to all kinds of desktops. The universal table adaptor continues the classic, timeless design of the luminaire (see fig. left).

Our range also includes devices for connecting to the standard USM Haller table (page 32). Other table connectors are available on request.

Fig. 4



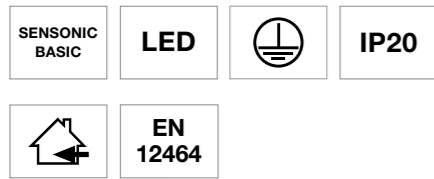
ECO E Floor luminaire

For two workplaces, Sensonic Basic, square stand tube



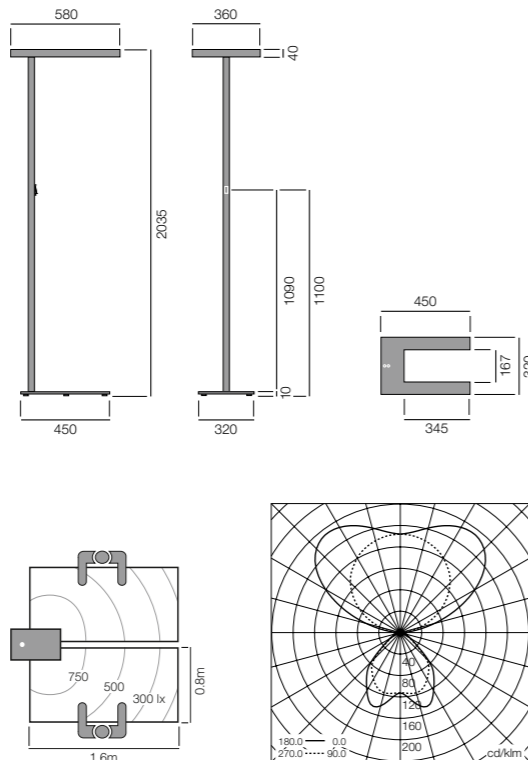
	CCT	Stand tube	P [W]	CRI	φ Nd [lm]	φ Ni [lm]	φ Ng [lm]	ε Ng [lm/W]
L22 48X4.C	4000K	matt, button	80	≥80 (82)	6795	2623	9418	118
L23 48X4.C	3000K	matt, button	80	≥80 (82)	6496	2508	9004	113

Explanation: X = 1 for connecting cable with type 12 plug-connector, 2 for connecting cable with Schuko plug-connector. The Sensonic Basic Swarm upgrade kit with the swarm function is available as an optional extra accessory.



- Stand tube 50x30mm
- Stand tube positioned at one end of the longitudinal luminaire axis
- U-shaped stand base
- 2x direct and 2x indirect light exit
- Colour temperature direct 3000K or 4000K
- Light density $\gamma = 65^\circ < 3000 \text{ cd/m}^2$

Luminaire head with chemically matted and plain anodised aluminium support frame. Form-lock-fitted cone microprismatic (CDP) inlays for first-class glare control. Diffuser foil included to ensure the illuminated surfaces are perfectly uniform. Opal UV-resistant PMMA protective cover on the indirect light protects the LED panels and makes it significantly easier to clean and maintain the luminaire. Halogen-free internal wiring. Aluminium stand tube, chemically matted and plain anodised with black button, steel stand base with six silver powder-coated base pads. 3x1 mm² black power cable, length 3000mm.

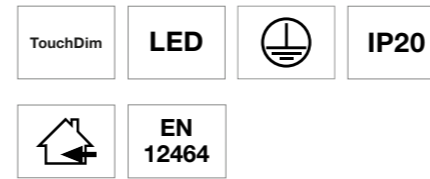


For two workplaces, TouchDim, square stand tube



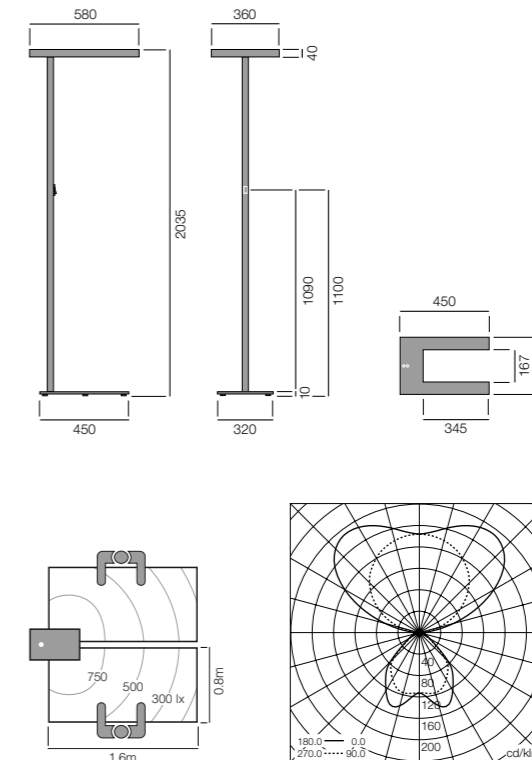
	CCT	Stand tube	P [W]	CRI	φ Nd [lm]	φ Ni [lm]	φ Ng [lm]	ε Ng [lm/W]
L22 48X3.C	4000K	matt, button	80	≥80 (82)	6795	2623	9418	118
L23 48X3.C	3000K	matt, button	80	≥80 (82)	6496	2508	9004	113

Explanation: X = 1 for connecting cable with type 12 plug-connector, 2 for connecting cable with Schuko plug-connector. Swarm function not available.



- Stand tube 50x30mm
- Stand tube positioned at one end of the longitudinal luminaire axis
- U-shaped stand base
- 2x direct and 2x indirect light exit
- Colour temperature direct 3000K or 4000K
- Light density $\gamma = 65^\circ < 3000 \text{ cd/m}^2$

Luminaire head with chemically matted and plain anodised aluminium support frame. Form-lock-fitted cone microprismatic (CDP) inlays for first-class glare control. Diffuser foil included to ensure the illuminated surfaces are perfectly uniform. Opal UV-resistant PMMA protective cover on the indirect light protects the LED panels and makes it significantly easier to clean and maintain the luminaire. Halogen-free internal wiring. Aluminium stand tube, chemically matted and plain anodised with black button, steel stand base with six silver powder-coated base pads. 3x1 mm² black power cable, length 3000mm.



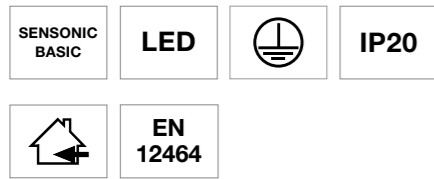
ECO E Floor luminaire

For two workplaces, Sensonic Basic, round stand tube



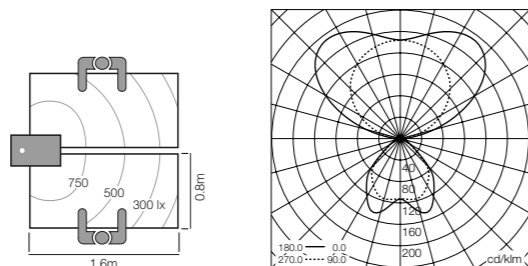
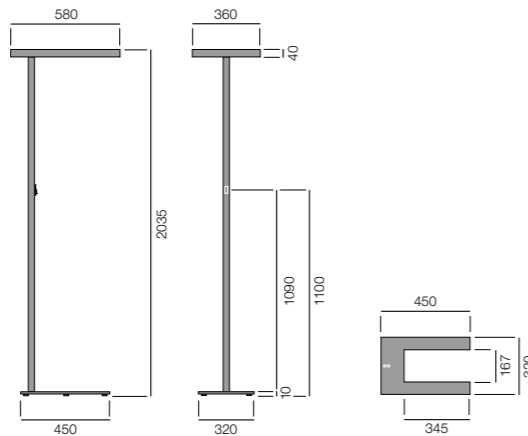
	CCT	Stand tube	P [W]	CRI	φ Nd [lm]	φ Ni [lm]	φ Ng [lm]	ε Ng [lm/W]
L22 46X4.C	4000K	matt, button	80	≥80 (82)	6795	2623	9418	118
L23 46X4.C	3000K	matt, button	80	≥80 (82)	6496	2508	9004	113

Explanation: X = 1 for connecting cable with type 12 plug-connector, 2 for connecting cable with Schuko plug-connector. The Sensonic Basic Swarm upgrade kit with the swarm function is available as an optional extra accessory.

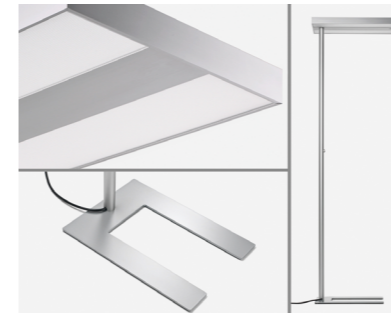


- Stand tube Ø 34 mm
- Stand tube positioned at one end of the longitudinal luminaire axis
- U-shaped stand base
- 2x direct and 2x indirect light exit
- Colour temperature direct 3000K or 4000K
- Light density $\gamma = 65^\circ < 3000 \text{ cd/m}^2$

Luminaire head with chemically matted and plain anodised aluminium support frame. Form-lock-fitted cone microprismatic (CDP) inlays for first-class glare control. Diffuser foil included to ensure the illuminated surfaces are perfectly uniform. Opal UV-resistant PMMA protective cover on the indirect light protects the LED panels and makes it significantly easier to clean and maintain the luminaire. Halogen-free internal wiring. Chemically matted and plain anodised aluminium stand tube with black button, steel stand base with six silver powder-coated base pads. 3x1 mm² black power cable, length 3000 mm.

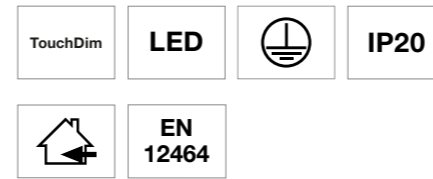


For two workplaces, TouchDim, round stand tube



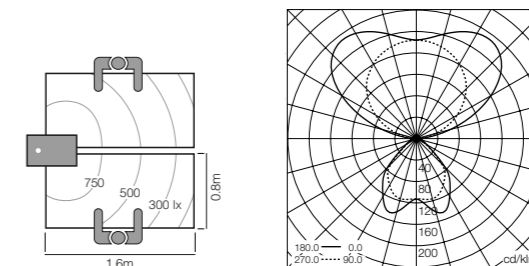
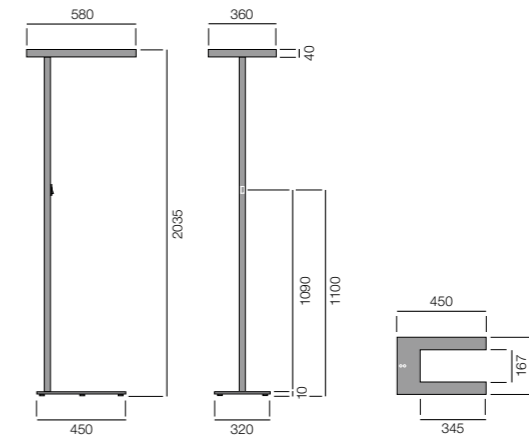
	CCT	Stand tube	P [W]	CRI	φ Nd [lm]	φ Ni [lm]	φ Ng [lm]	ε Ng [lm/W]
L22 46X3.C	4000K	matt	80	≥80 (82)	6795	2623	9418	118
L23 46X3.C	3000K	matt	80	≥80 (82)	6496	2508	9004	113

Explanation: X = 1 for connecting cable with type 12 plug-connector, 2 for connecting cable with Schuko plug-connector. Swarm function not available.



- Stand tube Ø 34 mm
- Stand tube positioned at one end of the longitudinal luminaire axis
- U-shaped stand base
- 2x direct and 2x indirect light exit
- Colour temperature direct 3000K or 4000K
- Light density $\gamma = 65^\circ < 3000 \text{ cd/m}^2$

Luminaire head with chemically matted and plain anodised aluminium support frame. Form-lock-fitted cone microprismatic (CDP) inlays for first-class glare control. Diffuser foil included to ensure the illuminated surfaces are perfectly uniform. Opal UV-resistant PMMA protective cover on the indirect light protects the LED panels and makes it significantly easier to clean and maintain the luminaire. Halogen-free internal wiring. Chemically matted and plain anodised aluminium stand tube with black button, steel stand base with six silver powder-coated base pads. 3x1 mm² black power cable, length 3000 mm.





Sensonic Basic User Remote (ECO E)

Operate the luminaire from the comfort of your own chair. Current lighting scenes can be stored on up to four storage buttons so that you can access them later at any point. The holiday function lets you temporarily deactivate the presence detector, for example while you are away on holiday. There are also 16 protected channels for configuring the User Remote to certain luminaires and to allow you to operate multiple luminaires separately.

Z00 0002	Sensonic Basic User Remote for remote user control
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Sensonic Basic Master Remote (ECO E)

Comprehensive, customer-specific settings can be individually defined and adjusted via the Master Remote (e.g. manual on/auto off, shut-off time, standby level, deactivating daylight control/presence detection, etc.).

Z00 0001	Sensonic Basic Master Remote for remote configuration
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Sensonic Basic Swarm upgrade kit

Upgrade kit compatible with the Sensonic Basic control system for wireless communication between multiple luminaires to allow you to adjust the level of brightness at your workplace to suit your needs without creating islands of light. Simple grouping (group 1-7) and zone definition (zone A-G) thanks to a rotary coded switch (max. eight per group and max. 28 per zone). The two separate group selector switches let you define overlapping groups. In repeater mode, the transmission distance can also be doubled (only one luminaire permitted per zone) and you can also set it either only to send, only receive or send and receive. Simple and quick installation thanks to a magnet attachment and connecting cable with a contact plug. Compatible with ECO E floor luminaires (from index *.C)

Z00 0040	Sensonic Basic Swarm upgrade kit
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General information

We reserve the right to make technical and design changes to our products owing to new technical developments. The images and descriptions reflect the products as they were when this luminaire brochure went to print. Errors excepted. We would be happy to provide you with current documents on request.

The colours and surfaces of our products are supplied in accordance with the product descriptions. Unless otherwise mentioned, these colours are as follows:

- White (similar to RAL 9016)
- Black (similar to RAL 9005)
- Silver (similar to RAL 9006)

All dimensions are given in millimetres.

Where available, the photometric data can be found in the corresponding light distribution curves.

Symbols and acronyms

- Products comply with European Union Directives.
- IP20** Protection against the ingress of solid foreign bodies measuring more than 12 mm in diameter.
- Only for use indoors.
- Luminaires in protective class I – with protective earth terminal
- ON/OFF** Can be turned on/off
- Dimmable ballast in accordance with the DALI standard
- SENSONIC BASIC** Control system with basic functionality
- TouchDim** Button-controlled light operation without sensors
- LED** LED lamps can be replaced at the factory.
- 0 Hz SAFETY** DC operation possible, product suitable for emergency power (see operating device label)
- EN 12464** Meets the requirements for office workspaces in accordance with the relevant standard

Light technology

- ϕ Ni [lm] Net indirect luminous flux
- ϕ Nd [lm] Net direct luminous flux
- ϕ Ng [lm] Total net luminous flux
- CCT Colour temperature (in Kelvin)
- CRI Colour rendering index
Example:
≥80 (82)
↳ Measured value
↳ Minimum value
- UGR glare rating (unified glare rating)
X=4H, Y=8H, S=0.25H
Reflectances 70/50/20
Reference value in accordance with EN12464-1
- Isolux diagram:
Room height 2.5 m
Table size 1.6x0.8 m
Working plane 0.75 m
Ceiling reflectance $\rho = 0.7$

W = power (watts) / V = voltage (volts) / lm = luminous flux (lumen) / AK = outer edge / DA = ceiling section / T = installation depth / h = hours
i.L. = mount cut-out / L = length / mm = millimetres / lfm = linear metre / Ø = diameter / □ = square dimensions

