



**DTI LED**

*Direct to Indirect*



**FAGERHULT**

## The freedom to choose

The combination of direct and indirect light is one of the hallmarks of Fagerhult. In our research and product development we have always emphasised the importance of using the right light in the right context. Direct light makes it easier to see and work, while indirect light defines the room, providing positive energy and helps makes us feel good. The combination is ideal but not always possible. DTI, Direct to Indirect, is our universal solution for flexible lighting planning, offering a consistent visual style with different distributions for the most varied of applications.

DTI LED is a refinement of this principle, bringing all the benefits of LED technology into a surface mounted or suspended direct/ indirect luminaire, available in numerous sizes and lumen packages, we've given you the options, you make the choices.







## The entire spectrum

DTI LED is a complete luminaire family that provides freedom in full-scale lighting projects for offices, schools and other work environments. Choose from “Type 1” ceiling luminaire with only direct light and “Type 2” pendant luminaire with direct and indirect light, with the option for continuous installation with a range of different lumen packages from 1000 lm to 6400 lm.

## Most efficient in the class

DTI LED is equipped with Fagerhult’s innovative Beta louvre with Opti technology. A louvre with optimal lighting control which directs the flow out of the luminaire with high precision. The result is an efficiency of over 130 lm/W and a service life of 100,000 hours providing a very attractive pay-back period in refurbishment projects.

## Effective installation

DTI LED is available in the lengths 1200 mm and 600 mm. The connection is performed quickly and smoothly on the short side by angling the end-plate down. Pendant luminaires are equipped with a friction lock that simplifies installation and adjustment of the wire suspension.

## Superior lighting comfort

DTI LED has been developed with lighting comfort at the core of its design. Our Beta louvre with Opti technology provides very exceptional anti-glare properties and type 2 luminaire gives the user the option to control their lighting environment themselves. The luminaire's functions are intuitive and easily identifiable via the graphical detail in the end-plate.









## Beta with Opti technology

Ever since LED's were introduced, the lighting industry has struggled with a difficult equation; how to optimise the efficiency while still providing fantastic lighting comfort. Through a bottom up re-design of a traditional approach, Fagerhult have developed Beta Opti, embracing all the benefits of LED without compromising on comfort.

The solution is based on a classic, "batwing" shaped wide beamed light distribution that spreads the light out

the sides. The advantages are simpler light planning and better uniformity where the light fills out between the luminaire rows without creating a luminance that is too high directly underneath the luminaire.

Our ambition has been to create a sustainable and future-proof louvre technology that places people and the environment at the centre. No compromises, no excuses. Just technical perfection.



## Optimal control

Beta Opti provides complete control of the luminous flux. The reflectors control the light with precision so that it is distributed downwards and out of the luminaire. All the light is put to use without producing glare.

## Optimal efficiency

Beta Opti takes efficiency to a new level. The optical efficiency ranges from the traditional 70 lm/W (T5) to over 130 lm/W. Luminaires equipped with Beta Opti offer a very attractive pay-back time.

## Optimal comfort

Beta Opti meets peoples' need for a glare-free and contrast-rich light in pleasant and productive work environments. By distributing the luminance from the LED modules, we have created world-class light comfort.



*Beta Opti concentrates its efforts on the louvre's side reflectors to create a controlled light pattern with optimal efficiency and light comfort.*



*By distributing the luminance from the LED modules, we have created a luminous surface that is comfortable to the eye and eliminates glare.*



*Beta Opti is a new generation of louvre based on our existing T5 R5 louvre technology. The cross blades work in tandem with efficient side reflectors. The solution is supplemented with a unique film which provides extra precision in the light control.*



# DTI LED type 1

## Beta Opti



### Installation

Surface mounted.

### Connection

Connections are made at the end of the luminaire and are concealed by the end-cap, with the option of cable entry in the end caps and the middle of the luminaire. 5-way, snap-in terminal block in each end cap with the option of 1-phase through-wiring (excluding e-Sense).

### Design

Luminaire body in sheet steel, white enamelled (RAL 9016) end-caps in polypropylene plastic.

### Louvre

*Beta Opti* – double parabolic reflector louvre with satin matt metallised aluminium side and cross-blades with an integrated opal film that minimises the risk of uncomfortable glare from the diodes.

### Dimming

Most models can be equipped with other ballasts for lighting control.

### Miscellaneous

Service life driver: up to 50.000 h/10 % (maximum failure rate).

Luminaire										
W	Length	K	lm	lm/W	Ra (CRI)	Life	SDCM	kg	White	
8	600	3000	1000	104	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29460	■
8	600	4000	1000	106	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29465	■
17	1200	3000	2000	117	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29461	■
17	1200	4000	2000	119	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29466	■
25	1200	3000	2900	116	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29462	■
25	1200	4000	2900	118	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29467	■
40	1200	3000	4200	105	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29463	▼
40	1200	4000	4200	107	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29468	▼
51	1200	3000	5200	102	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29464	■ ● ▼
51	1200	4000	5200	103	≥ 80	L <sub>30</sub> , B <sub>10</sub> 50.000 h	3	2.8	29469	■ ● ▼

For current information, please refer to our website.

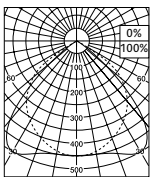
### Suffix code

■ -402 DALI/Phase-pulse control

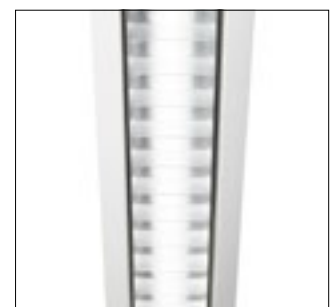
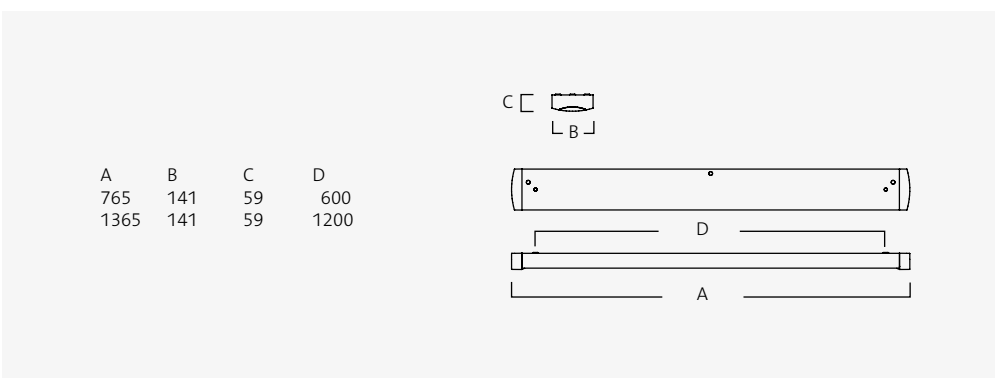
● -459 e-Sense ActiLume master luminaire

▼ -219 e-Sense smartSWITCH on/off

Add suffix code to the end of the luminaire part number to indicate required function. Only one suffix can be added.



All versions



The Beta Opti louvre directs the flow out of the luminaire with high precision.



# DTI LED type 2

## Beta Opti



### Installation

Wire suspension via friction locks on the luminaire. Wire suspension ordered separately, see Accessories.

### Connection

**Single** – Connections are made at the end of the luminaire and are concealed by the end-cap. 5-way snap-in terminal block at one end.  
**Continuous installation** – 5-way snap-in terminal block at each end and through-wiring cable 3 × 1.5 mm<sup>2</sup> as standard. With dimming, 5-way snap-in terminal block, 1-phase through-wiring possible.

### Design

Luminaire body in sheet steel, white enamelled (RAL 9016) end-caps in polypropylene plastic. When continuous installation is required the luminaire is supplemented with continuous couplers and end-caps, see accessories.

### Louvre

**Beta Opti** – double parabolic reflector louvre with satin matt metallised aluminium side and cross-blades with an integrated opal film that minimises the risk of uncomfortable glare from the diodes.

### Accessories

Installation accessories.

### Dimming

Most models can be equipped with other ballasts for lighting control.

### Miscellaneous

Service life driver: up to 50.000 h/10 % (maximum failure rate).

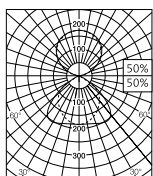
Luminaire										
W	Length	K	lm	lm/W	Ra (CRI)	Life	SDCM	kg	White	
<b>Single</b>										
23	1200	3000	3100	137	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29470	■ ● ▲ ●
23	1200	4000	3100	140	≥ 80	L <sub>90</sub> , B <sub>50</sub> 65.000 h	3	3.0	29474	■ ● ▲ ●
36	1200	3000	4800	134	≥ 80	L <sub>90</sub> , B <sub>50</sub> 50.000 h	3	3.0	29471	■ ● ▲ ●
36	1200	4000	4800	137	≥ 80	L <sub>90</sub> , B <sub>50</sub> 50.000 h	3	3.0	29475	■ ● ▲ ●
42	1200	3000	5600	132	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29472	■ ● ▼ ▲ ●
42	1200	4000	5600	135	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29476	■ ● ▼ ▲ ●
49	1200	3000	6400	130	≥ 80	L <sub>90</sub> , B <sub>50</sub> 65.000 h	3	3.0	29473	■ ● ▼ ●
49	1200	4000	6400	133	≥ 80	L <sub>90</sub> , B <sub>50</sub> 65.000 h	3	3.0	29477	■ ● ▼ ●
<b>Continuous</b>										
23	1200	3000	3100	137	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29480	■
23	1200	4000	3100	140	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29484	■
36	1200	3000	4700	134	≥ 80	L <sub>90</sub> , B <sub>50</sub> 50.000 h	3	3.0	29481	■
36	1200	4000	4700	137	≥ 80	L <sub>90</sub> , B <sub>50</sub> 50.000 h	3	3.0	29485	■
42	1200	3000	5600	132	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29482	■
42	1200	4000	5600	135	≥ 80	L <sub>90</sub> , B <sub>10</sub> 50.000 h	3	3.0	29486	■
49	1200	3000	6500	130	≥ 80	L <sub>90</sub> , B <sub>50</sub> 50.000 h	3	3.0	29483	■
49	1200	4000	6500	133	≥ 80	L <sub>90</sub> , B <sub>50</sub> 50.000 h	3	3.0	29487	■

For current information, please refer to our website.

### Suffix code

- -402 DALI/Phase-pulse control
- -448 e-Sense ActiLume with single luminaire pull dim-cord
- -449 DALI/Phase-pulse control, 1 pull dim-cord
- -219 e-Sense smartSWITCH on/off
- ▼ -457 e-Sense Connect with sensor
- ▼ -458 e-Sense Connect
- ▼ -459 e-Sense ActiLume master luminaire
- ▲ -16 1 pull dim-cord

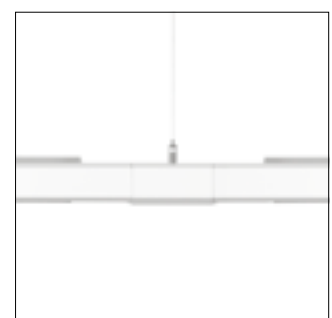
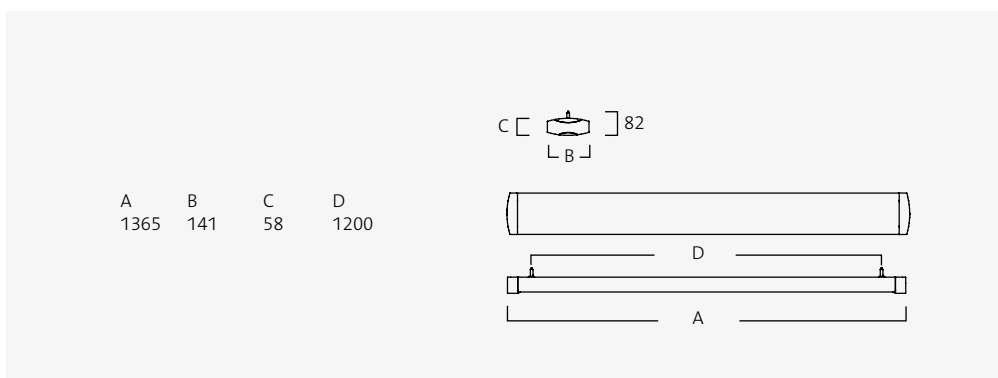
Add suffix code to the end of the luminaire part number to indicate required function. Only one suffix can be added.



All versions



The mark at the end cap specifies the luminaire's light distribution.



Continuous coupler is available as an accessory.

Fagerhult develops, manufactures and markets professional lighting systems for public environments. Our operations are run with a constant focus on design, function, flexibility and energy saving solutions.

Fagerhult is part of the Fagerhult Group, one of Europe's leading lighting groups with operations in more than 15 different countries. AB Fagerhult is listed on the NASDAQ OMX Nordic Exchange in Stockholm.

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