

lichtwerk
inspired by light

21
22

Table structure

The tabular structure enables an overview of the essential features.

Type

Designation of the luminaire

LED Specification

Luminous flux lumen (lm)
Colour rendering index RA
Colour temperature Kelvin (K)

NEW

Item-number → the last digit of the article number indicates the housing colour
543 3044 10... → ...1

Luminaire weight net
(without packaging)

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	Colour	kg
Sample luminaire	LED 2400lm 840 LB	20	ED	543 3044 10...	■ ...5	□ ...1	■ ...4	3
	LED 4500lm 840 LB	41	DALI	543 3144 10...	■ ...5	□ ...1	■ ...4	3

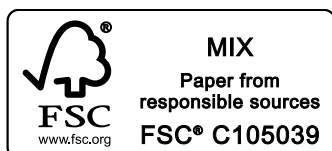
P_{sys} | Lighting system performance

Driver

- ED | Electronic Driver, non dimmable
- DALI | Electronic Driver, DALI, dimmable
- DALI DT8 | Electronic Driver, DALI, dimmable, adjustable light colour
- Tast dim | dimmable via push button
- NL-B | Emergency light battery powered

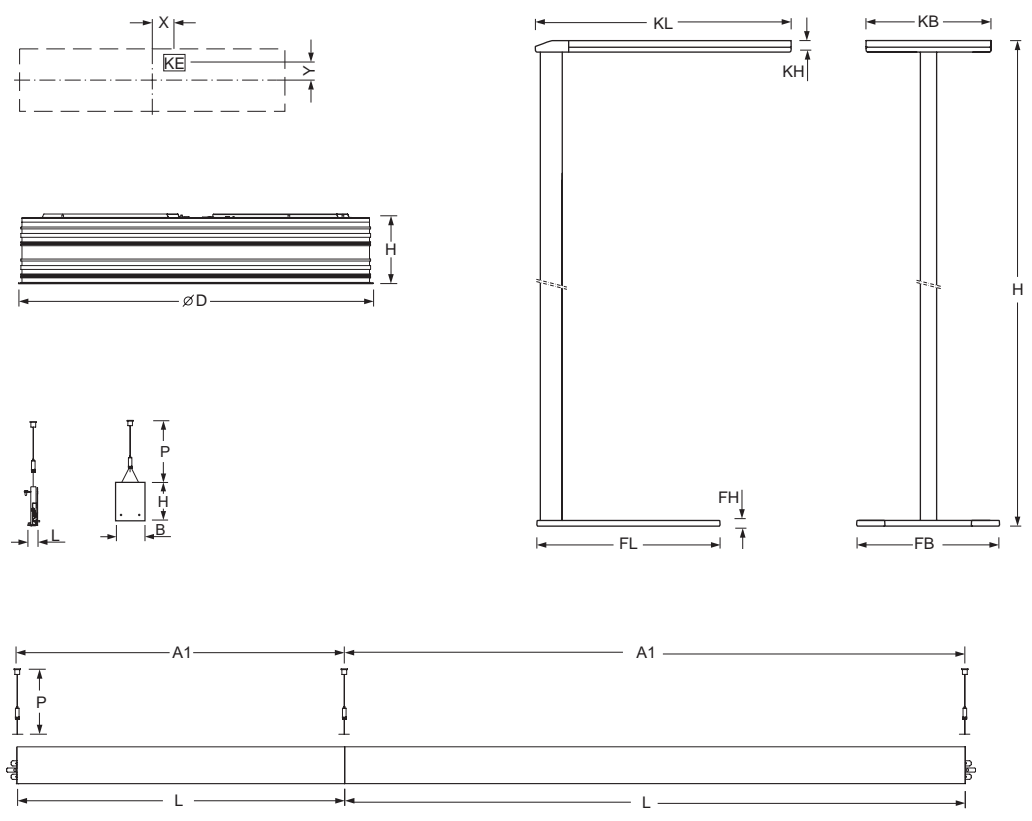
Colour code/colour

- | aluminium natural anodized
- | traffic white (similar RAL 9016)
- wa | withe-aluminium (similar RAL 9006)
- | deep black (similar RAL 9005)
- sg | silver grey
- | stainless steel
- cr | chrome
- si | silver
- tc | translucent
- cl | clear
- gr | grit grey



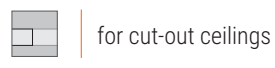
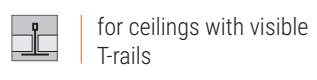
► Please refer to the current data for LED luminaires at www.lichtwerk.de

INDEX



Definition of measurement table variants

- L | Length
- L | Length/Width for square luminaires
- L2 | Additional length
- B | Width
- H | Height
- ∅D | Diameter
- FL | Length of luminaire base
- FB | Width of luminaire base
- FD | Diameter of luminaire base
- T | Depth
- KE | Cable infeed
- KL | Length of luminaire head or ballast box
- KB | Width of luminaire head or ballast box
- KH | Height of luminaire head or ballast box
- KD | Diameter of luminaire head or ballast box
- A1 | Fixing distance in case of single mounting
- A2 | Fixing distance between the luminaires in case of light run mounting
- X | Distance from centre of the luminaire to the electrical feed in (x direction = length)
- Y | Distance from centre of the luminaire to the electrical feed in (y direction = width)
- SL | Length of cut for recessed luminaires
- SB | Width of cut for recessed luminaires
- SD | Diameter of cut for recessed luminaires
- e | Minimum necessary depth for luminaire mounting
- ML | Modul (axis) Length
- MB | Modul (axis) Width
- P | Wire suspension
- P min/max | Min./Max. length wire suspension
- DS min/max | Min./Max. ceiling thickness in case of suspended ceiling



- Recessed luminaires
- Surface mounted luminaires
- Pendant luminaires
- Phase-track and luminaires
- Lighting systems
- Downlights
- Wall luminaires
Standing luminaires
- Light furniture
- Glass luminaires
- Control Information





SURFACE MOUNTED LUMINAIRES

Surface mounted luminaires



ciros-AG/ciros-AIG P. 74



ciros-AMP/ciros-AIMP P. 78



clip-it-OB P.80



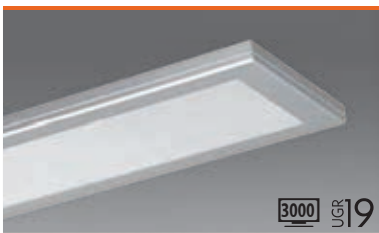
clip-on-OTB P. 96



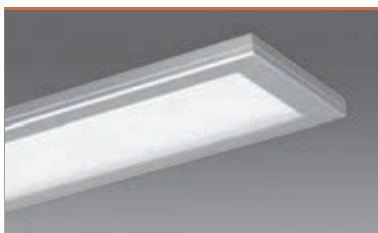
clip-on-OG P. 98



epic R-AF P. 102



rason-RSAIMP HCL P. 116



rason-RSAIG HCL P. 120



galant-pro-GPAK P. 124

Surface mounted
luminaires
from other chapters



Glass luminaires

INDEX



clip-it-OTB

P. 84



clip-it-OG

P. 88



clip-on-OB

P. 92



epic Q-AF

P. 106



fino-AMP

P. 108



fino-AK

P. 112



galant-pro-GPAKPC

P. 128



drop

P. 132



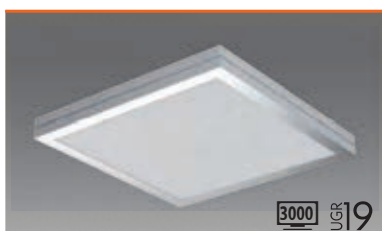
micro-AFA

P. 136



scala-AG

P. 142



linar image II-AMP

P. 146



linar image II-AG

P. 150



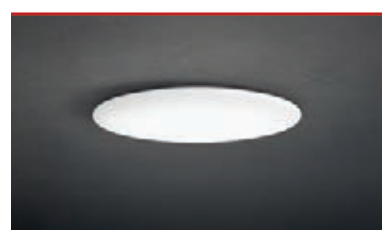
corona-A

P. 428



puck-A

P. 436



dyski-A

P. 444





ciros

Housing

Round aluminium profile in diameters of Ø 400, 600, 900 and 1200.

Housing colours

Textured paint

traffic white

white-aluminium

deep black



ciros-AIG/1200
ciros-AG/1200

Lighting technology

Surface mounted luminaires

multilayer
microprismatic

3000 ^{lm}/_W 19


ciros-AG/-AMP
with direct distribution only

ciros-AIG/-AIMP
with indirect distribution


white-opal satinised

NEW


The surface mounted luminaires ciros-AG und ciros-AIG are also suitable for wall mounting.



ciros-AIG/900
ciros-AG/900



ciros-AIG/600
ciros-AIG/600



ciros-AIG/400
ciros-AG/400

Lighting technology
Wall luminaires

white-opal satinised



ciros-AG/ciros-AIG

IP20

Housing

Round aluminium profile, texture painted white aluminium (similar to RAL 9006), traffic white (similar to RAL 9016) or deep black (similar to RAL 9005). Suitable for ceiling and wall mounting.



white aluminium



traffic white



deep black



Lighting technology -AG

Direct distribution.

Homogenous illumination by satinised special acrylic pane with high transmission. Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Tunable white on request.



Lighting technology -AIG

Direct/indirect distribution.

Homogenous illumination by satinised special acrylic pane with high transmission. Indirect ratio for a smooth ceiling illumination.

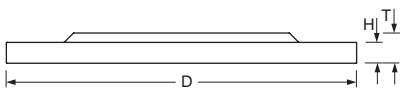
Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Tunable white on request.

Miscellaneous

Electrical connection via three-pole or for dimmable luminaires five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm². Easy mounting due to bayonet lock and plug & play connection.

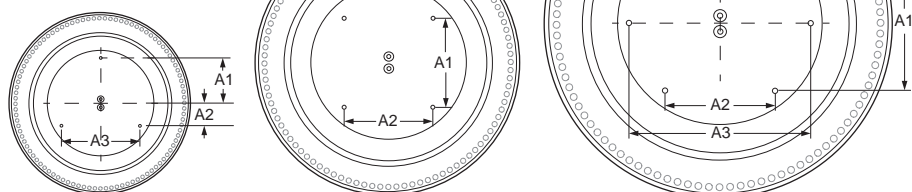
Type	D	H	T	A1	A2	A3
ciros/400	365	69	102	80	40	139
ciros/600	600	69	102	150	75	260
ciros/900	880	69	102	311	311	
ciros/1200	1160	69	102	546	315	630



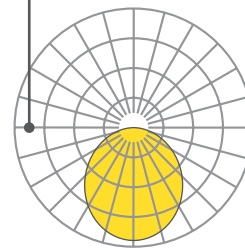
Attachment ciros/1200

Attachment ciros/900

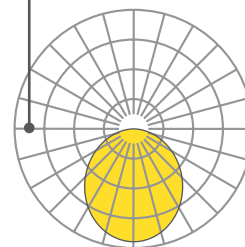
Attachment ciros/400 + ciros/600



ciros/900-AG	
14400lm 840	
η_{LB}	100 %
Direct	100 %
Indirect	0 %
UGR lat.	23,6
UGR long.	23,6



ciros/900-AIG	
14400lm 840	
η_{LB}	100 %
Direct	99 %
Indirect	1 %
UGR lat.	23,5
UGR long.	23,5



ciros-AG/ciros-AIG Suitable for ceiling and wall mounting



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	Colour	kg
ciros-AG/400	LED 2700lm 840	22	ED	468 4144 18...	wa ...6	□...0	■...4	3,3
ciros-AG/400	LED 2700lm 840	22	DALI	468 4146 68...	wa ...6	□...0	■...4	3,3
ciros-AG/600	LED 6300lm 840	46	ED	468 6144 18...	wa ...6	□...0	■...4	7,5
ciros-AG/600	LED 6300lm 840	46	DALI	468 6146 68...	wa ...6	□...0	■...4	7,5
ciros-AG/900	LED 14400lm 840	91	ED	468 9144 18...	wa ...6	□...0	■...4	14
ciros-AG/900	LED 14400lm 840	91	DALI	468 9146 68...	wa ...6	□...0	■...4	14
ciros-AG/1200	LED 26200lm 840	168	ED	468 1144 18...	wa ...6	□...0	■...4	25,6
ciros-AG/1200	LED 26200lm 840	168	DALI	468 1146 68...	wa ...6	□...0	■...4	25,6

▶ Please refer to the current data for LED luminaires at www.lichtwerk.de

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	Colour	kg
ciros-AIG/400	LED 2800lm 840	22	ED	467 4144 18...	wa ...6	□...0	■...4	3,3
ciros-AIG/400	LED 2800lm 840	22	DALI	467 4146 68...	wa ...6	□...0	■...4	3,3
ciros-AIG/600	LED 6400lm 840	46	ED	467 6144 18...	wa ...6	□...0	■...4	7,5
ciros-AIG/600	LED 6400lm 840	46	DALI	467 6146 68...	wa ...6	□...0	■...4	7,5
ciros-AIG/900	LED 14400lm 840	91	ED	467 9144 18...	wa ...6	□...0	■...4	14
ciros-AIG/900	LED 14400lm 840	91	DALI	467 9146 68...	wa ...6	□...0	■...4	14
ciros-AIG/1200	LED 26300lm 840	168	ED	467 1144 18...	wa ...6	□...0	■...4	25,6
ciros-AIG/1200	LED 26300lm 840	168	DALI	467 1146 68...	wa ...6	□...0	■...4	25,6

▶ Please refer to the current data for LED luminaires at www.lichtwerk.de







ciros-AMP/ciros-AIMP

IP20      

Housing

Round aluminium profile, texture painted white aluminium (similar to RAL 9006), traffic white (similar to RAL 9016) or deep black (similar to RAL 9005).



Lighting technology -AMP

Direct distribution.

Light distribution via microprismatic panel with conical glare elimination in multilayer technology. For VDU workstations $65^\circ < 3000\text{cd/m}^2$, $\text{UGR} \leq 19$ according to DIN EN 12464-1. Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Tunable white on request.

Lighting technology -AIMP

Direct/indirect distribution.

Light distribution via microprismatic panel with conical glare elimination in multilayer technology. For VDU workstations $65^\circ < 3000\text{cd/m}^2$, $\text{UGR} \leq 19$ according to DIN EN 12464-1. Indirect ratio for a smooth ceiling illumination.

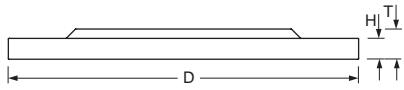
Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Tunable white on request.

Miscellaneous

Electrical connection via three-pole or for dimmable luminaires five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm². Easy mounting due to bayonet lock and plug & play connection.

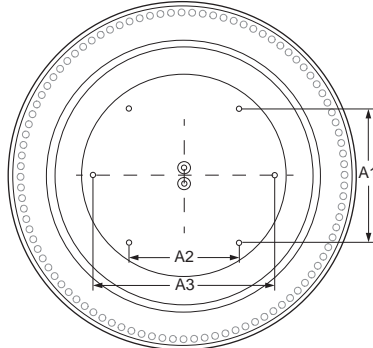
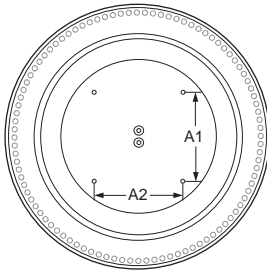
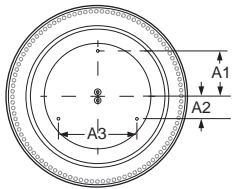
Type	D	H	T	A1	A2	A3
ciros/400	365	69	102	80	40	139
ciros/600	600	69	102	150	75	260
ciros/900	880	69	102	311	311	
ciros/1200	1160	69	102	546	315	630



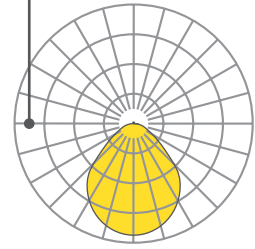
Attachment ciros/1200

Attachment ciros/900

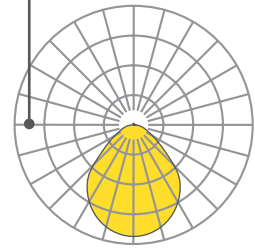
Attachment ciros/400 + ciros/600



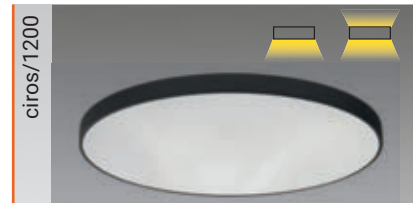
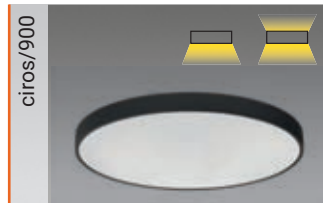
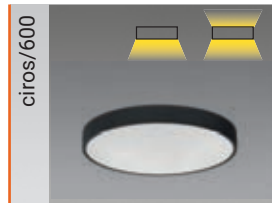
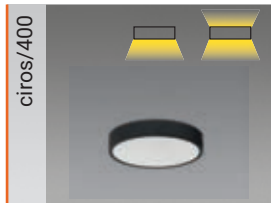
ciros/900-AMP	
8200lm 840	
η_{LB}	100 %
UGR 19	Direct 100 %
	Indirect 0 %
3000	UGR lat. 19,0
	UGR long. 19,0



ciros/900-AIMP	
8800lm 840	
η_{LB}	100 %
UGR 19	Direct 98 %
	Indirect 2 %
3000	UGR lat. 19,0
	UGR long. 19,0



ciros-AMP/ciros-AIMP Suitable for ceiling mounting



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	Colour	kg
ciros-AMP/400	LED 1300lm 840	9	ED	468 4044 15...	wa...6	□...0	■...4	3,3
ciros-AMP/400	LED 1300lm 840	9	DALI	468 4046 65...	wa...6	□...0	■...4	3,3
ciros-AMP/600	LED 3700lm 840	25	ED	468 6044 15...	wa...6	□...0	■...4	7,5
ciros-AMP/600	LED 3700lm 840	25	DALI	468 6046 65...	wa...6	□...0	■...4	7,5
ciros-AMP/900	LED 8200lm 840	54	ED	468 9044 15...	wa...6	□...0	■...4	14
ciros-AMP/900	LED 8200lm 840	54	DALI	468 9046 65...	wa...6	□...0	■...4	14
ciros-AMP/1200	LED 14800lm 840	99	ED	468 1044 15...	wa...6	□...0	■...4	25,6
ciros-AMP/1200	LED 14800lm 840	99	DALI	468 1046 65...	wa...6	□...0	■...4	25,6

▶ Please refer to the current data for LED luminaires at www.lichtwerk.de

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	Colour	kg
ciros-AIMP/400	LED 1300lm 840	9	ED	467 4044 15...	wa...6	□...0	■...4	3,3
ciros-AIMP/400	LED 1300lm 840	9	DALI	467 4046 65...	wa...6	□...0	■...4	3,3
ciros-AIMP/600	LED 3800lm 840	25	ED	467 6044 15...	wa...6	□...0	■...4	7,5
ciros-AIMP/600	LED 3800lm 840	25	DALI	467 6046 65...	wa...6	□...0	■...4	7,5
ciros-AIMP/900	LED 8800lm 840	57	ED	467 9044 15...	wa...6	□...0	■...4	14
ciros-AIMP/900	LED 8800lm 840	57	DALI	467 9046 65...	wa...6	□...0	■...4	14
ciros-AIMP/1200	LED 15200lm 840	99	ED	467 1044 15...	wa...6	□...0	■...4	25,6
ciros-AIMP/1200	LED 15200lm 840	99	DALI	467 1046 65...	wa...6	□...0	■...4	25,6

▶ Please refer to the current data for LED luminaires at www.lichtwerk.de



clip-it-OB

IP20    

Housing



Housing made of sheet steel traffic white (similar to RAL 9016), powder coated.
The luminaire is attached solely by clips for 24mm T-rail, included in delivery.
Variable mounting spacing.

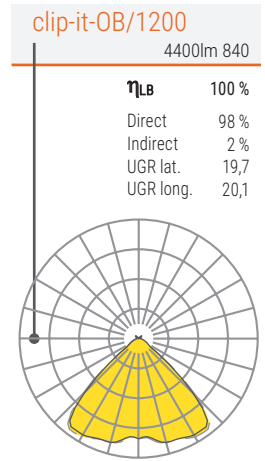
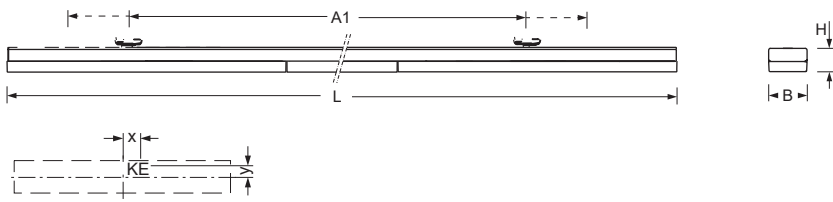
Lighting technology -OB

Direct wide light distribution.
Translucent lens optics made of acrylic with additional lateral transmission.
Rated life time = L80 B10 50.000h.
Light colour: 4000K. Optional: 3000K. Other light colours on request.


Miscellaneous

Electrical connection via pre-mounted 5-pole connection cable, 2m.

Type	Ceiling	L	B	H	A1	X	Y
clip-it-OB/1200		1220	55	30	756-1179	0	0
clip-it-OB/1500		1525	55	30	1062-1485	0	0



 any arrangement on ceilings with visible T-rail 24mm

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	 kg
clip-it-OB/1200	LED 4400lm 840	27	DALI	769 1446 600	<input type="checkbox"/>	2,2
clip-it-OB/1500	LED 5500lm 840	33	DALI	769 1546 600	<input type="checkbox"/>	2,8

► Please refer to the current data for LED luminaires at www.lichtwerk.de







clip-it-OTB

IP20     

Housing



Housing made of sheet steel traffic white (similar to RAL 9016), powder coated.
The luminaire is attached solely by clips for 24mm T-rail, included in delivery.
Variable mounting spacing.

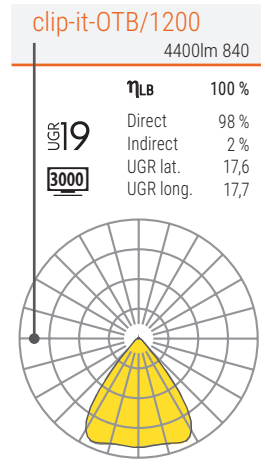
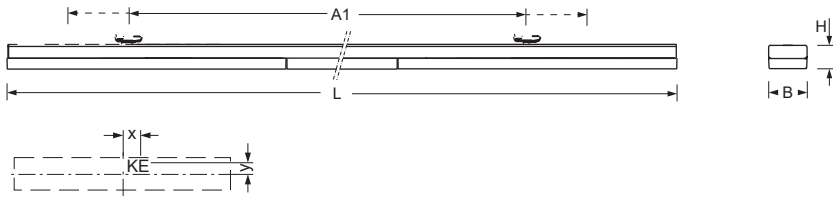
Lighting technology -OTB

Direct narrow-wide light distribution.
Translucent lens optics made of acrylic with additional lateral transmission.
For VDU workstations $65^\circ < 3000\text{cd/m}^2$, $\text{UGR} \leq 19$ according to DIN EN 12464-1.
Rated life time = L80 B10 50.000h.
Light colour: 4000K. Optional: 3000K. Other light colours on request.


Miscellaneous

Electrical connection via pre-mounted 5-pole connection cable, 2m.

Type	Ceiling	L	B	H	A1	X	Y
clip-it-OTB/1200		1220	55	30	756-1179	0	0
clip-it-OTB/1500		1525	55	30	1062-1485	0	0



 any arrangement on ceilings with visible T-rail 24mm

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
clip-it-OTB/1200	LED 4400lm 840	27	DALI	769 3446 600	<input type="checkbox"/>	2,2
clip-it-OTB/1500	LED 5500lm 840	33	DALI	769 3546 600	<input type="checkbox"/>	2,8

► Please refer to the current data for LED luminaires at www.lichtwerk.de







clip-it-OG

IP20    

Housing



Housing made of sheet steel traffic white (similar to RAL 9016), powder coated.
The luminaire is attached solely by clips for 24mm T-rail, included in delivery.
Variable mounting spacing.

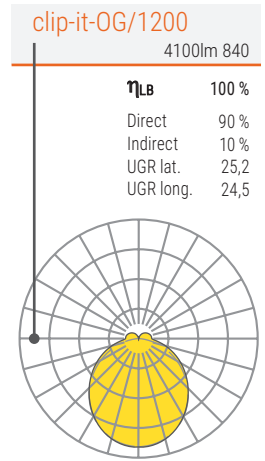
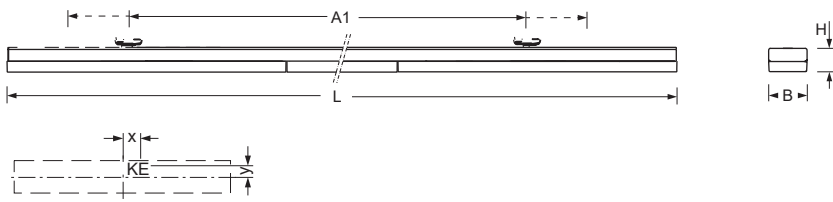
Lighting technology -OG

Direct diffuse light distribution.
Frosted lens optics made of acrylic with additional lateral distribution.
Rated life time = L80 B10 50.000h.
Light colour: 4000K. Optional: 3000K. Other light colours on request.


Miscellaneous

Electrical connection via pre-mounted 5-pole connection cable, 2m.

Type	ceiling	L	B	H	A1	X	Y
clip-it-OG/1200		1220	55	30	756-1179	0	0
clip-it-OG/1500		1525	55	30	1062-1485	0	0



 any arrangement on ceilings with visible T-rail 24mm

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
clip-it-OG/1200	LED 4100lm 840	27	DALI	769 7446 600	<input type="checkbox"/>	2,2
clip-it-OG/1500	LED 5200lm 840	33	DALI	769 7546 600	<input type="checkbox"/>	2,8

► Please refer to the current data for LED luminaires at www.lichtwerk.de







clip-on-OB

IP20    

Housing

Sheet steel, powder-coated traffic white (similar to RAL 9016) or painted white aluminium (similar to 9006). Arrangeable as optically continuous light-lines through easy removable end-caps.

Lighting technology -OB

Direct wide light distribution.

Translucent lens optics made of acrylic with additional lateral transmission.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

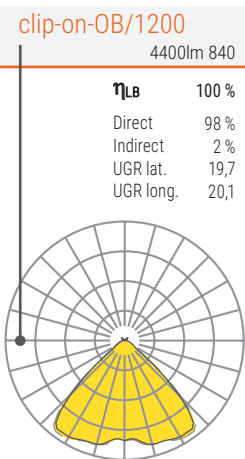
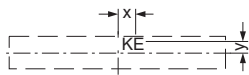
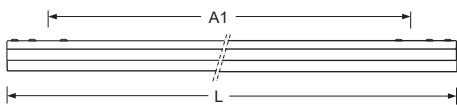
For surface mounting as continuous light-line one through-wiring clip-on-DV per joint is needed.

For pendant mounting as single luminaire one mounting kit clip-on-SAES is required.

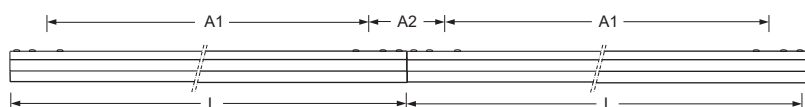
For pendant mounting as continuous light-line one mounting kit clip-on-SAES is needed. Additionally for each joint one suspension with mechanical connection clip-on-SAVS and one through-wiring clip-on-DV is necessary. Free height adjustment between 150 and 2000mm. Accessories have to be ordered separately.



Type	L	B	H	A1	A2	X	Y
clip-on-OB/1200	1222	55	44	1120	101	0	0
clip-on-OB/1500	1527	55	44	1425	101	0	0
clip-on-OB/1800	1832	55	44	1730	101	0	0



Light line mounting



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	
clip-on-OB/1200	LED 4400lm 840	27	ED	771 1444 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,1
	LED 4400lm 840	27	DALI	771 1446 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,1
clip-on-OB/1500	LED 5500lm 840	33	ED	771 1544 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,7
	LED 5500lm 840	33	DALI	771 1546 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,7
clip-on-OB/1800	LED 6600lm 840	40	ED	771 1644 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,3
	LED 6600lm 840	40	DALI	771 1646 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,3

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	Colour	
Through wiring	clip-on-DV	Through wiring set 5 x 1.5 for light-line assembly	771 9000 100	<input checked="" type="checkbox"/>	0,2
Suspension set	clip-on-SAES 3x0,75	Suspension set 2000/120 3x0,75 ED	771 0037 105	<input checked="" type="checkbox"/>	0,3
	clip-on-SAES 5x0,75	Suspension set 2000/120 5x0,75 DALI	771 0057 105	<input checked="" type="checkbox"/>	0,3
Mechanical connection	clip-on-SAVS	Wire suspension with mechanical connection 2000/120	771 0000 105	<input checked="" type="checkbox"/>	0,1







clip-on-OTB

IP20     

Housing

Sheet steel, powder-coated traffic white (similar to RAL 9016) or painted white aluminium (similar to 9006). Arrangeable as optically continuous light-lines through easy removable end-caps.

Lighting technology -OTB

Direct narrow-wide light distribution.

Translucent lens optics made of acrylic with additional lateral transmission.

For VDU workstations $65^\circ < 3000\text{cd/m}^2$, $\text{UGR} \leq 19$ according to DIN EN 12464-1.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

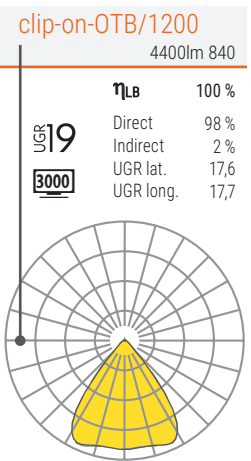
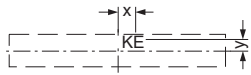
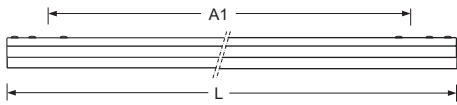
For surface mounting as continuous light-line one through-wiring clip-on-DV per joint is needed.

For pendant mounting as single luminaire one mounting kit clip-on-SAES is required.

For pendant mounting as continuous light-line one mounting kit clip-on-SAES is needed. Additionally for each joint one suspension with mechanical connection clip-on-SAVS and one through-wiring clip-on-DV is necessary. Free height adjustment between 150 and 2000mm. Accessories have to be ordered separately.



Type	L	B	H	A1	A2	X	Y
clip-on-OTB/1200	1222	55	44	1120	101	0	0
clip-on-OTB/1500	1527	55	44	1425	101	0	0
clip-on-OTB/1800	1832	55	44	1730	101	0	0



Light line mounting



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	
clip-on-OTB/1200	LED 4400lm 840	27	ED	771 3444 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,1
	LED 4400lm 840	27	DALI	771 3446 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,1
clip-on-OTB/1500	LED 5500lm 840	33	ED	771 3544 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,7
	LED 5500lm 840	33	DALI	771 3546 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,7
clip-on-OTB/1800	LED 6600lm 840	40	ED	771 3644 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,3
	LED 6600lm 840	40	DALI	771 3646 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,3

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	Colour	
Through wiring	clip-on-DV	Through wiring set 5 x 1.5 for light-line assembly	771 9000 100	<input checked="" type="checkbox"/>	0,2
Suspension set	clip-on-SAES 3x0,75	Suspension set 2000/120 3x0,75 ED	771 0037 105	<input checked="" type="checkbox"/>	0,3
	clip-on-SAES 5x0,75	Suspension set 2000/120 5x0,75 DALI	771 0057 105	<input checked="" type="checkbox"/>	0,3
Mechanical connection	clip-on-SAVS	Wire suspension with mechanical connection 2000/120	771 0000 105	<input checked="" type="checkbox"/>	0,1



clip-on-OG

IP20    

Housing

Sheet steel, powder-coated traffic white (similar to RAL 9016) or painted white aluminium (similar to 9006). Arrangeable as optically continuous light-lines through easy removable end-caps.

Lighting technology -OG

Direct diffuse light distribution.

Frosted lens optics made of acrylic with additional lateral distribution.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

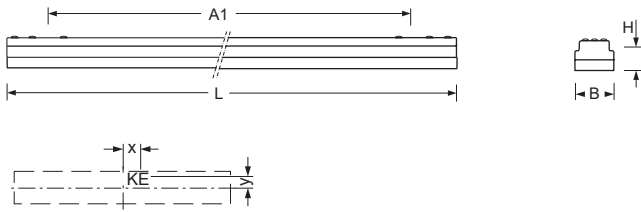
For surface mounting as continuous light-line one through-wiring clip-on-DV per joint is needed.

For pendant mounting as single luminaire one mounting kit clip-on-SAES is required.

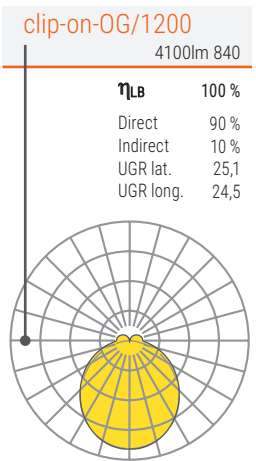
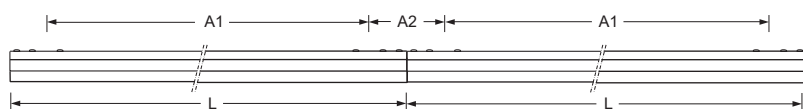
For pendant mounting as continuous light-line one mounting kit clip-on-SAES is needed. Additionally for each joint one suspension with mechanical connection clip-on-SAVS and one through-wiring clip-on-DV is necessary. Free height adjustment between 150 and 2000mm. Accessories have to be ordered separately.



Type	L	B	H	A1	A2	X	Y
clip-on-OG/1200	1222	55	44	1120	101	0	0
clip-on-OG/1500	1527	55	44	1425	101	0	0
clip-on-OG/1800	1832	55	44	1730	101	0	0



Light line mounting



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	
clip-on-OG/1200	LED 4100lm 840	27	ED	771 7444 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,1
	LED 4100lm 840	27	DALI	771 7446 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,1
clip-on-OG/1500	LED 5200lm 840	33	ED	771 7544 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,7
	LED 5200lm 840	33	DALI	771 7546 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,7
clip-on-OG/1800	LED 6200lm 840	40	ED	771 7644 10...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,3
	LED 6200lm 840	40	DALI	771 7646 60...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,3

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	Colour	
Through wiring	clip-on-DV	Through wiring set 5 x 1.5 for light-line assembly	771 9000 100	<input checked="" type="checkbox"/>	0,2
Suspension set	clip-on-SAES 3x0,75	Suspension set 2000/120 3x0,75 ED	771 0037 105	<input checked="" type="checkbox"/>	0,3
	clip-on-SAES 5x0,75	Suspension set 2000/120 5x0,75 DALI	771 0057 105	<input checked="" type="checkbox"/>	0,3
Mechanical connection	clip-on-SAVS	Wire suspension with mechanical connection 2000/120	771 0000 105	<input checked="" type="checkbox"/>	0,1



← Radiologie
← Fotolabor

Röntgen





epic R-AF

IP20    

Housing

Round aluminium profile, natural anodised.
Surrounding shadow joint between housing and flat inserted film frame.
Minimal dirt ingress via sealing lip between frame and housing.

Lighting technology -AF

Direct distribution.
Aluminium profile set flush in the housing with translucent film for a homogenous illumination appearance.
Light colour: 4000K. Optional: 3000K. Other light colours on request.

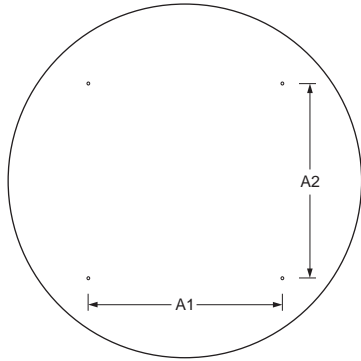
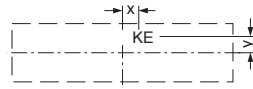
Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

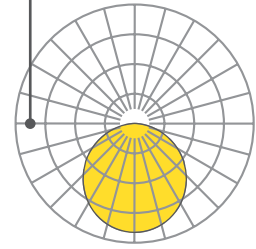
Extraction tool for releasing film frame must be ordered separately.








Type	D	H	A1	A2	X	Y
epic R 950	954	178	650	560	142	0
epic R 1280	1284	184	724	868	0	90
epic R 1560	1564	184	1010	900	0	95




epic R 950-AF
7800lm 840

η_{LB}	100 %
Direct	100 %
Indirect	0 %
UGR lat.	21,1
UGR long.	21,1



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	 kg
epic R 950-173-AF	LED 7800lm 840	111	ED	627 0954 154		20
	LED 7800lm 840	111	DALI	627 0956 154		20
epic R 1280-173-AF	LED 15200lm 840	218	ED	627 1284 154		35
	LED 15200lm 840	218	DALI	627 1286 154		35
epic R 1560-173-AF	LED 22000lm 840	314	ED	627 1564 154		46,5
	LED 22000lm 840	314	DALI	627 1566 154		46,5

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	 kg
Film frame extractor tool (Set)	epic R	Film frame extractor for epic R	630 0000 110	0,1

Raum
4.16
4.17
0.12

TGZ

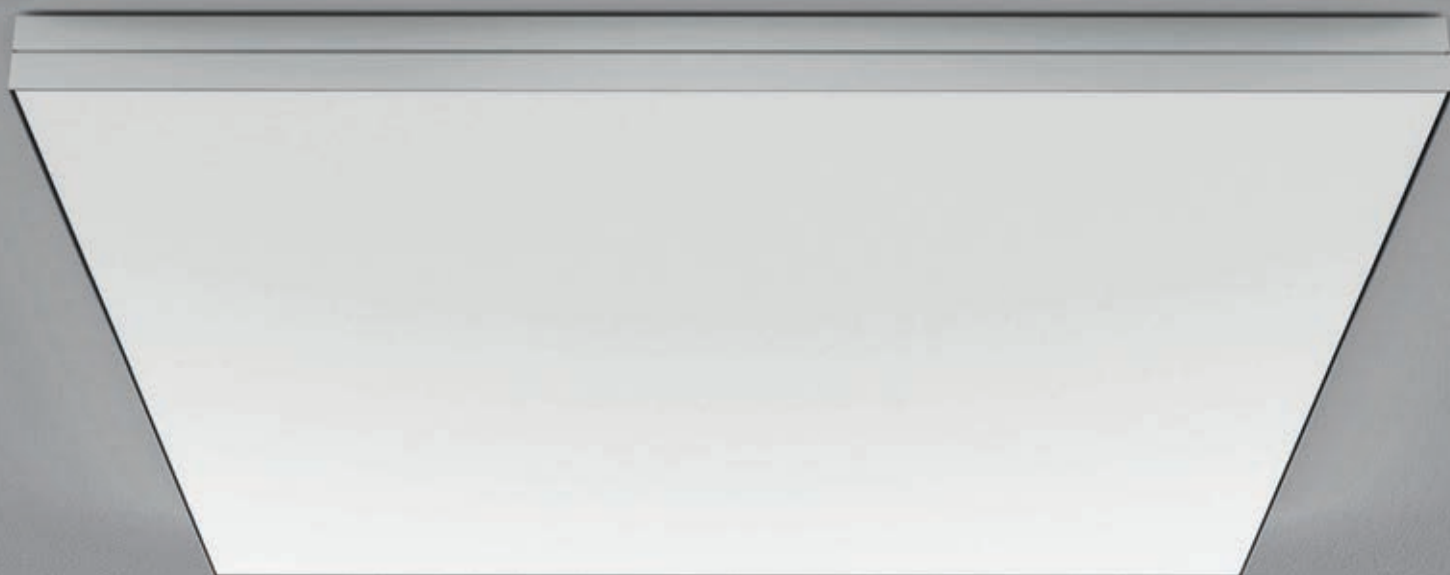
Technologie- und Gründerzentrum!

11:07



11:07





epic Q-AF

IP20    

Housing

Aluminium profile, natural anodised. Surrounding shadow joint between housing and flat inserted film frame. Minimal dirt ingress via sealing lip between frame and housing.

Lighting technology -AF

Direct distribution.

Aluminium profile set flush in the housing with translucent film for a homogenous illumination appearance.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

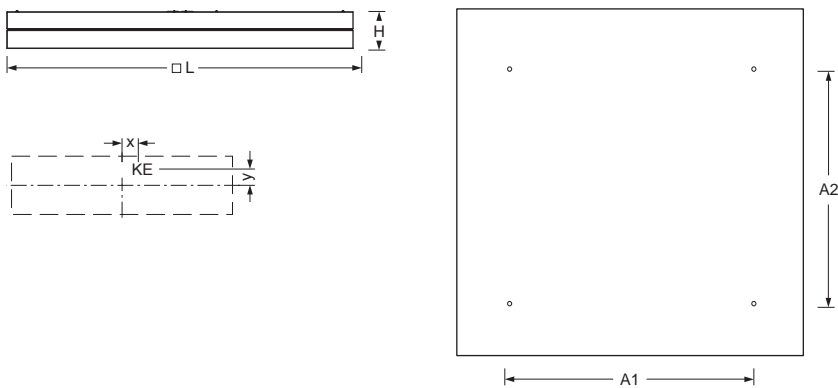
Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

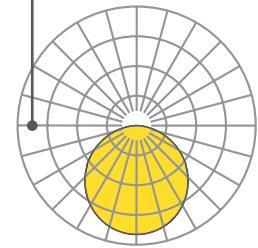
Accessories










Extraction tool for releasing film frame must be ordered separately.

Type	L	H	A1	A2	X	Y
epic Q 600	604	96	520	520	0	0
epic Q 900	904	96	700	840	0	0
epic Q 1200	1212	103	1120	900	0	568
epic Q 1500	1504	103	1400	1160	0	714




epic Q 1200-AF	
18400lm 840	
η_{LB}	100 %
Direct	100 %
Indirect	0 %
UGR lat.	21,3
UGR long.	21,3



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
epic Q 600-88-AF	LED 4800lm 840	47	ED	626 0604 164		11
	LED 4800lm 840	47	DALI	626 0606 164		11
epic Q 900-88-AF	LED 10700lm 840	105	ED	626 0904 164		19
	LED 10700lm 840	105	DALI	626 0906 164		19
epic Q 1200-88-AF	LED 18400lm 840	187	ED	626 1204 164		34
	LED 18400lm 840	187	DALI	626 1206 164		34
epic Q 1500-88-AF	LED 28800lm 840	292	ED	626 1504 164		43
	LED 28800lm 840	292	DALI	626 1506 164		43

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	
Film frame extractor tool (Set)	epic Q	Film frame extractor for epic Q	630 0000 110	0,1



fino-AMP

IP20    

Housing

Aluminium profile, natural anodised. Face ends sheet steel, painted white aluminium. Concealed sheet steel rail as ceiling mount, traffic white, for mounting the luminaire without tools. Also available in textured paint traffic white (similar to RAL 9016) or deep black (similar to RAL 9005).

Lighting technology -AMP

Direct distribution.

Transparent polycarbonate extruded profile with inserted micro-prismatic diffuser and white reflectors.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

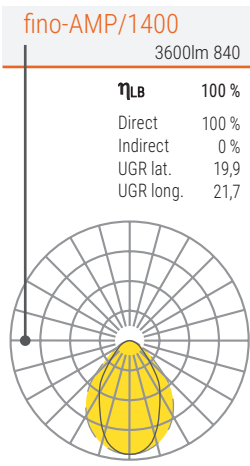
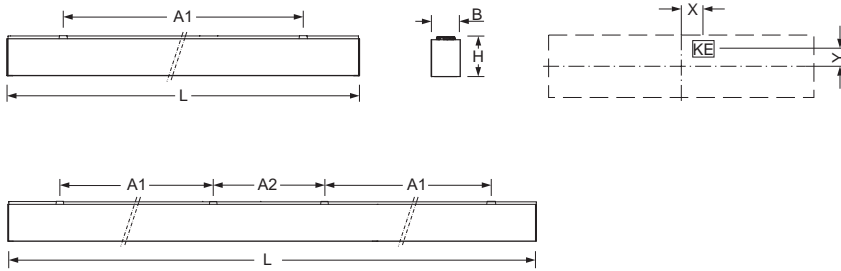
Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².










Accessories

Suction pad SH 55 for removing the diffuser must be ordered separately.




Type	L	B	H	A1	A2	X	Y
fino-AMP/1100	1143	72	102	850		0	0
fino-AMP/1400	1424	72	102	1130		170	0
fino-AMP/2200	2272	72	102	850	280	565	0
fino-AMP/2800	2834	72	102	1130	280	875	0



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
fino-AMP/1100	LED 2900lm 840	24	ED	435 4144 150		4,8
	LED 2900lm 840	24	DALI	435 4146 650		4,8
fino-AMP/1400	LED 3600lm 840	29	ED	435 5144 150		5,9
	LED 3600lm 840	29	DALI	435 5146 650		5,9
fino-AMP/2200	LED 5800lm 840	47	ED	435 8144 150		9,6
	LED 5800lm 840	47	DALI	435 8146 650		9,6
fino-AMP/2800	LED 7200lm 840	59	ED	435 0144 150		11,8
	LED 7200lm 840	59	DALI	435 0146 650		11,8

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	
Suction pad	SH 55	Suction pad for fino-AMP diffuser	903 0055 100	0,1







fino-AK

IP20    

Housing

Aluminium profile, natural anodised. Face ends sheet steel, painted white aluminium. Concealed sheet steel rail as ceiling mount, traffic white, for mounting the luminaire without tools. Also available in textured paint traffic white (similar to RAL 9016) or deep black (similar to RAL 9005).

Lighting technology -AK

Direct distribution.

White-opal satin-finished polycarbonate extruded profile with white reflectors.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

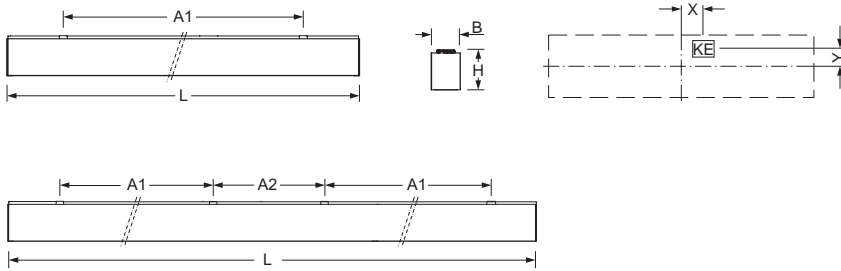
Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

Suction pad SH 55 for removing the diffuser must be ordered separately.












Type	L	B	H	A1	A2	X	Y
fino-AK/1100	1143	72	102	850		0	0
fino-AK/1400	1424	72	102	1130		170	0
fino-AK/2200	2272	72	102	850	280	565	0
fino-AK/2800	2834	72	102	1130	280	875	0




fino-AK/1400
3100lm 840

η_{LB}	100 %
Direct	100 %
Indirect	0 %
UGR lat.	23,9
UGR long.	24,3

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
fino-AK/1100	LED 2500lm 840	24	ED	435 4144 180		4,8
	LED 2500lm 840	24	DALI	435 4146 680		4,8
fino-AK/1400	LED 3100lm 840	29	ED	435 5144 180		5,9
	LED 3100lm 840	29	DALI	435 5146 680		5,9
fino-AK/2200	LED 5000lm 840	47	ED	435 8144 180		9,6
	LED 5000lm 840	47	DALI	435 8146 680		9,6
fino-AK/2800	LED 6300lm 840	59	ED	435 0144 180		11,8
	LED 6300lm 840	59	DALI	435 0146 680		11,8

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	
Suction pad	SH 55	Suction pad for fino-AK diffuser	903 0055 100	0,1



CENTOGENE
THE RARE DISEASE COMPANY







rason-RSAIMP

IP20       

Housing

Ultra-flat luminaire housing, aluminium profile, natural anodised, visible construction height 30mm; with continuous longitudinal groove, rounded towards the bottom of the luminaire.

Lighting technology -RSAIMP

Direct/indirect distribution.

Direct ratio by means of a microprismatic panel with conical glare elimination; homogeneous light emission through lateral LED light coupling and fitted aluminium reflector in a highly reflective white coating. With micro-perforation at upper side of the housing for a moderate ceiling illumination.

For VDU workstations $65^\circ < 3000\text{cd/m}^2$, $\text{UGR} \leq 19$ according to DIN EN 12464-1.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

HCL DALI DT8

Luminaire in tunable white technology for Human Centric Lighting.

927/warm white (2700K) - 965/daylight white (6500K) continuously adjustable. Suitable controls for tunable white technology on request.

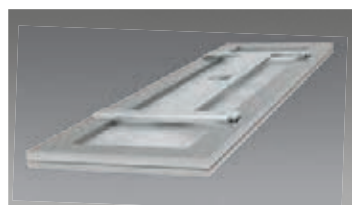
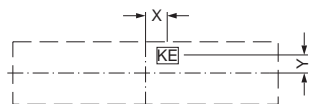
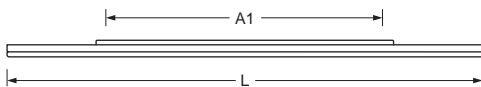
For VDU workstations $65^\circ < 3000\text{cd/m}^2$, $\text{UGR} \leq 19$ according to DIN EN 12464-1.

Rated life time = L80 B10 50.000h.

Miscellaneous

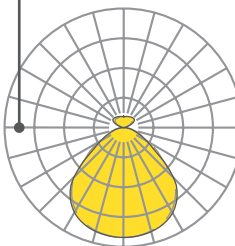
Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Type	L	B	H	A1	A2	X	Y
rason-RSAIMP/1200	1199	330	42	700	230	0	0
rason-RSAIMP/1500	1480	330	42	700	230	0	0

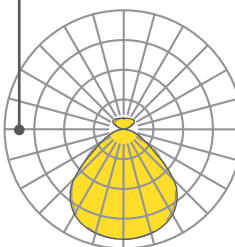









Micro-perforation housing top

rason-RSAIMP/1500	
6300lm 840	
η_{LB}	100 %
Direct	84 %
Indirect	16 %
UGR lat.	18,2
UGR long.	18,3



rason-RSAIMP/1500	
4700lm 927-965	
η_{LB}	100 %
Direct	84 %
Indirect	16 %
UGR lat.	17,1
UGR long.	17,3



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
rason-RSAIMP/1200	LED 4900lm 840	44	ED	442 1014 175		7,5
	LED 4900lm 840	44	DALI	442 1016 675		7,5
rason-RSAIMP/1500	LED 3700lm 927-965	45	DALI DT8	442 4016 975		7,5
	LED 6300lm 840	55	ED	445 1024 175		9,0
	LED 6300lm 840	55	DALI	445 1026 675		9,0
	LED 4700lm 927-965	55	DALI DT8	445 4026 975		9,0

► Please refer to the current data for LED luminaires at www.lichtwerk.de







rason-RSAIG/-RSWIG

IP20 ⊕ ∇ ↕ CE

Housing

Ultra-flat luminaire housing, aluminium profile, natural anodised, visible construction height 30mm; with continuous longitudinal groove, rounded towards the bottom of the luminaire.

Lighting technology -RSAIG/-RSWIG

Direct/indirect distribution.

Homogeneous illumination by satinised special acrylic panel, with high transmission and homogeneous light emission through lateral LED light coupling and fitted aluminium reflector in a highly reflective white coating.

With micro-perforation at upper side of the housing for a moderate ceiling illumination. Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

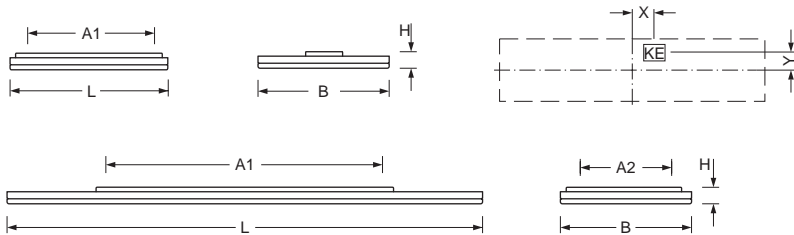
HCL DALI DT8

Luminaire in tunable white technology for Human Centric Lighting. 927/warm white (2700K) - 965/daylight white (6500K) continuously adjustable. Suitable controls for tunable white technology on request. Rated life time = L80 B10 50.000h.

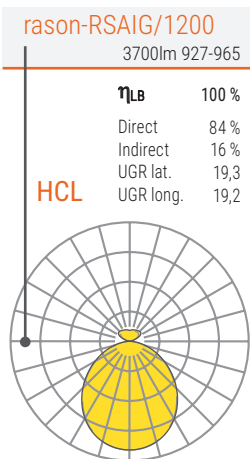
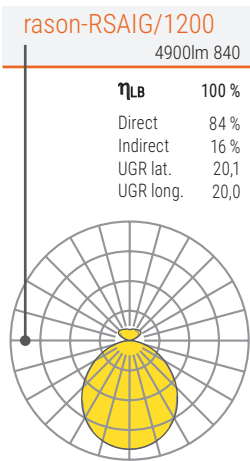
Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Type	L	B	H	A1	A2	X	Y
rason-RSWIG/355	355	330	42	265		0	0
rason-RSWIG/635	635	330	42	548		0	0
rason-RSAIG/1200	1199	330	42	700	230	0	0
rason-RSAIG/1500	1480	330	42	700	230	0	0



rason-RSWIG suitable for ceiling- and wall-mounting



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
rason-RSWIG/355	LED 1300lm 840	12	ED	460 1034 115		2,4
rason-RSWIG/635	LED 2600lm 840	24	ED	461 1044 115		4,2
	LED 2600lm 840	24	DALI	461 1046 615		4,2
rason-RSAIG/1200	LED 4900lm 840	44	ED	442 1014 115		7,5
	LED 4900lm 840	44	DALI	442 1016 615		7,5
	LED 3700lm 927-965	45	DALI DT8	442 4016 915		7,6
rason-RSAIG/1500	LED 6300lm 840	55	ED	445 1024 115		9,0
	LED 6300lm 840	55	DALI	445 1026 615		9,0
	LED 4700lm 927-965	55	DALI DT8	445 4026 915		9,1

► Please refer to the current data for LED luminaires at www.lichtwerk.de







galant-pro-GPAK

IP44   IK04  $0,50J$
 $5,00Nm$   

Housing

Extruded sheet steel trapezoid luminaire body, white polycarbonat end faces.
Cable entries near centre of luminaire. Diffuser fixing by engaging;
Housing colour traffic white (similar to RAL 9016).
Suitable for ceiling- or for wall-mounting.

Lighting technology -GPAK

Direct distribution.
Direct diffuse light distribution using diffuser profile made of white-opal acrylic glass, convex with inner longitudinal prisms, snap-fit white end faces made of UV-stabilised polycarbonate.
Rated life time = L80 B10 50.000h.
Light colour: 4000K. Optional: 3000K. Other light colours on request.

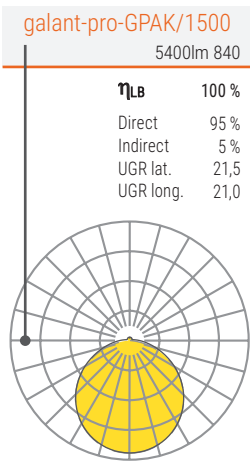
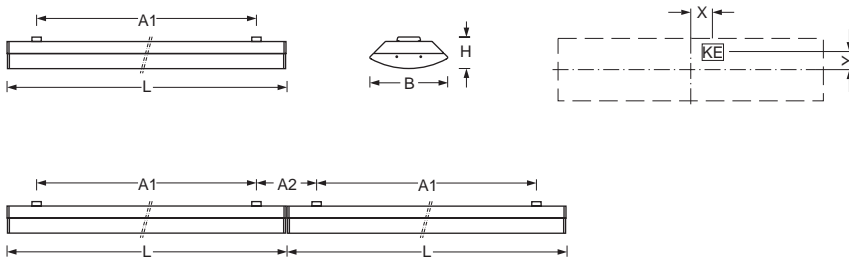
Miscellaneous


Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

Suspension set GPA-PS 1700mm must be ordered separately.

Type	L	B	H	A1	A2	X	Y
galant-pro-GPAK/0600	604	218	80	520	234	65	0
galant-pro-GPAK/1200	1204	218	80	900	454	0	0
galant-pro-GPAK/1500	1504	218	80	1100	554	0	0



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	 kg
galant-pro-GPAK/0600	LED 2300lm 840	19	ED	216 6214 180	<input type="checkbox"/>	2,1
	LED 2300lm 840	19	DALI	216 6216 680	<input type="checkbox"/>	2,1
galant-pro-GPAK/1200	LED 4300lm 840	36	ED	216 2214 180	<input type="checkbox"/>	2,8
	LED 4300lm 840	36	DALI	216 2216 680	<input type="checkbox"/>	2,8
galant-pro-GPAK/1500	LED 5400lm 840	45	ED	216 5214 180	<input type="checkbox"/>	3,3
	LED 5400lm 840	45	DALI	216 5216 680	<input type="checkbox"/>	3,3

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	 kg
Suspension set	GPA-PS 3x0,75	Suspension set ET 3x0,75	216 9003 100	0,6
	GPA-PS 5x0,75	Suspension set DALI 5x0,75	216 9005 100	0,7



Station 7

Röntgen





galant-pro-GPAKPC

IP44   IK06  $\frac{0,60J}{6,00Nm}$   

Housing

Extruded sheet steel trapezoid luminaire body, white polycarbonat end faces.
Cable entries near centre of luminaire. Diffuser fixing by engaging;
Housing colour traffic white (similar to RAL 9016).
Suitable for ceiling- or for wall-mounting.

Lighting technology -GPAKPC

Direct distribution.
Direct diffuse light distribution using white-opal diffuser profile made of polycarbonate, convex with inner longitudinal prisms, snap-fit white end faces made of UV-stabilised polycarbonate.
Rated life time = L80 B10 50.000h.
Light colour: 4000K. Optional: 3000K. Other light colours on request.

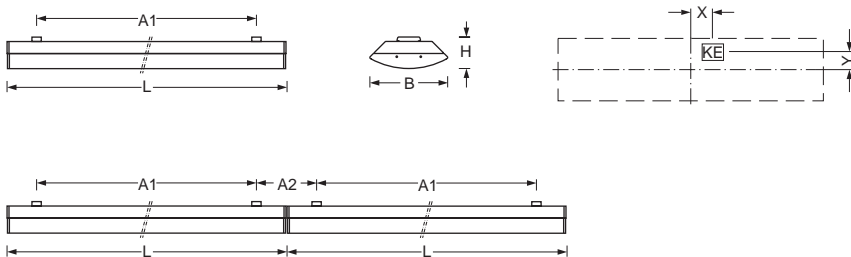
Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

Suspension set GPA-PS 1700mm must be ordered separately.

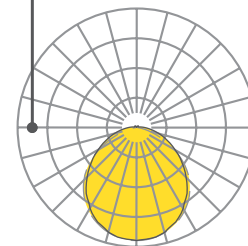
Type	L	B	H	A1	A2	X	Y
galant-pro-GPAKPC/0600	604	218	80	520	234	65	0
galant-pro-GPAKPC/1200	1204	218	80	900	454	0	0
galant-pro-GPAKPC/1500	1504	218	80	1100	554	0	0




galant-pro-GPAKPC/1500


5000lm 840

η_{LB}	100 %
Direct	95 %
Indirect	5 %
UGR lat.	21,4
UGR long.	20,7



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	
galant-pro-GPAKPC/0600	LED 2100lm 840	19	ED	216 6214 181	<input type="checkbox"/>	2,1
	LED 2100lm 840	19	DALI	216 6216 681	<input type="checkbox"/>	2,1
galant-pro-GPAKPC//1200	LED 4000lm 840	36	ED	216 2214 181	<input type="checkbox"/>	2,8
	LED 4000lm 840	36	DALI	216 2216 681	<input type="checkbox"/>	2,8
galant-pro-GPAKPC//1500	LED 5000lm 840	45	ED	216 5214 181	<input type="checkbox"/>	3,3
	LED 5000lm 840	45	DALI	216 5216 681	<input type="checkbox"/>	3,3

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	
Suspension set	GPA-PS 3x0,75	Suspension set ET 3x0,75	216 9003 100	0,6
	GPA-PS 5x0,75	Suspension set DALI 5x0,75	216 9005 100	0,7







drop

IP40   IK02     CE

Housing

Round luminaire housing of deep-drawn sheet steel.
Suitable for ceiling- and wall-mounting.

Lighting technology

Direct distribution.
Round, domed acrylic glass diffuser, with opal frosted, smooth surface.
Variant drop/300 + drop/500 (low) for VDU workstations according to
DIN EN 12464-1, 65° < 3000cd/m².
Rated life time = L80 B10 50.000h.
Light colour: 4000K. Optional: 3000K. Other light colours on request.

Version ED+S9

With integrated HF motion sensor. Range 1-8m, time setting 30sec -
30min. and brightness threshold value of 2 to 2000lx continuously
adjustable. Switching capacity max. 4 luminaires drop 400 or drop 500.

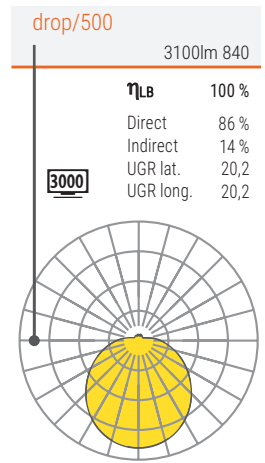
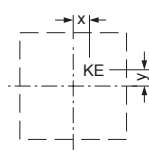
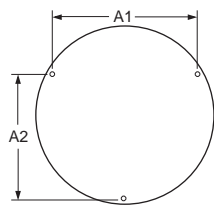
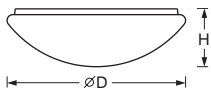
Miscellaneous

Electrical connection via 3-pole plug-in connection terminal. With integrated
earth conductor connection and unlocking button, suitable for rigid and
flexible cables up to 2,5 mm². On request luminaire with integrated
emergency inverter 3h.

Accessories

Decorative ring sheet steel, silver.

Type	D	H	A1	A2	X	Y
drop/300	302	105	208	180	0	60
drop/400	373	125	272	232	0	77
drop/500	477	150	360	312	0	103



drop with decorative ring drop-DR

Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	kg
drop/300	LED 1100lm 830	9	ED	231 0204 110	<input type="checkbox"/>	0,9
	LED 1200lm 840	9	ED	231 0214 110	<input type="checkbox"/>	0,9
drop/400	LED 2100lm 830	18	ED	231 0124 110	<input type="checkbox"/>	1,4
	LED 2100lm 830	18	ED + S9	234 0124 110	<input type="checkbox"/>	1,6
	LED 2300lm 840	18	ED	231 0134 110	<input type="checkbox"/>	1,4
	LED 2300lm 840	18	ED + S9	234 0134 110	<input type="checkbox"/>	1,6
drop/500	LED 2900lm 830	25	ED	231 0144 110	<input type="checkbox"/>	2,4
	LED 2900lm 830	25	ED + S9	234 0144 110	<input type="checkbox"/>	2,6
	LED 3100lm 840	25	ED	231 0154 110	<input type="checkbox"/>	2,4
	LED 3100lm 840	25	ED + S9	234 0154 110	<input type="checkbox"/>	2,6
	LED 4300lm 830	37	ED	231 0184 110	<input type="checkbox"/>	2,5
	LED 4300lm 830	37	ED + S9	234 0184 110	<input type="checkbox"/>	2,7
	LED 4600lm 840	37	ED	231 0194 110	<input type="checkbox"/>	2,5
	LED 4600lm 840	37	ED + S9	234 0194 110	<input type="checkbox"/>	2,7

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	Colour	kg
Decorative ring	drop-DR 300	d 318 mm, h 5mm for drop/300	231 1000 100	<input type="checkbox"/>	0,4
	drop-DR 400	d 388 mm, h 5mm for drop/400	231 2000 100	<input type="checkbox"/>	0,4
	drop-DR 500	d 492 mm, h 5mm for drop/500	231 3000 100	<input type="checkbox"/>	0,4





Keis
Dushgang



micro-AFA Wallwasher

IP20      

Housing

Housing of sheet steel, powder-coated traffic white (similar to RAL 9016) or painted white aluminium (similar to 9006). LED support unit made from aluminium profile, natural anodised finish, arrangeable as optically continuous light-lines, through easy removable end-caps.

Lighting technology -AFA

Direct asymmetrical distribution.

Distribution via Fresnel-lens made from acrylic.

Rated life time = L80 B10 50.000h.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

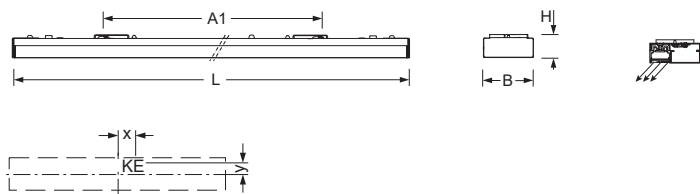
For surface mounting as continuous light-line one through-wiring micro-DV per joint is needed.

For pendant mounting as single luminaire one mounting kit micro-SAES is required.

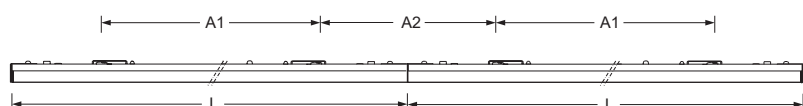
For pendant mounting as continuous light-line one mounting kit micro-SAES is needed. Additionally for each joint one suspension micro-SAVS and one through-wiring micro-DV is necessary. Free height adjustment between 150 and 2000mm. Accessories have to be ordered separately.



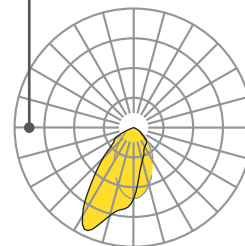
Type	L	B	H	A1	A2	X	Y
micro-AFA/800	850	82	32	700	148	95	10
micro-AFA/1100	1131	82	32	980	149	0	10
micro-AFA/1400	1412	82	32	1260	150	0	10



Light line mounting



micro-AFA/1400	
4800lm 840	
η_{LB}	100 %
Direct	100 %
Indirect	0 %
UGR lat.	24,3
UGR long.	26,7



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	kg
micro-AFA/800	LED 2900lm 840	25	ED	531 3144 19...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,0
	LED 2900lm 840	25	DALI	531 3146 69...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,0
micro-AFA/1100	LED 3800lm 840	34	ED	531 4144 19...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,4
	LED 3800lm 840	34	DALI	531 4146 69...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	2,4
micro-AFA/1400	LED 4800lm 840	42	ED	531 5144 19...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,0
	LED 4800lm 840	42	DALI	531 5146 69...	<input type="checkbox"/> ...0	<input checked="" type="checkbox"/> wa ...6	3,0

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	kg
Through wiring	micro-DV	Through wiring set 5 x 1.5 for light-line assembly	531 9000 100	0,2
Suspension set	micro-SAES 3x0,75	Suspension set 2000/120 3x0,75 ED	531 0037 105	0,2
	micro-SAES 5x0,75	Suspension set 2000/120 5x0,75 DALI	531 0057 105	0,3
Mechanical connection	micro-SAVS	Wire suspension with mechanical connection 2000/120	531 0000 105	0,1











scala-AG

IP20     

Housing

Housing made from sheet steel, powder coated traffic white (similar to RAL 9016), diffuser frame made from aluminium natural anodised or powder coated traffic white (similar to RAL 9016). Different RAL colours and combinations available on request.
Suitable for ceiling- and wall-mounting.

Lighting technology -AG

Direct distribution.
Homogeneous illumination by satinised special acrylic panel, with high transmission. Variant scala-AG LED 3500 for VDU workstations according to DIN EN 12464-1, $65^\circ < 3000\text{cd/m}^2$.
Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

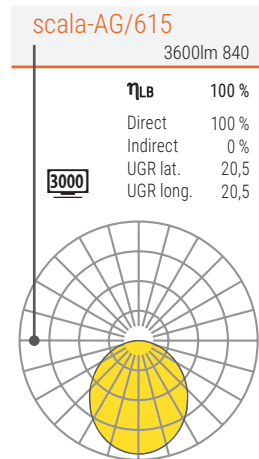
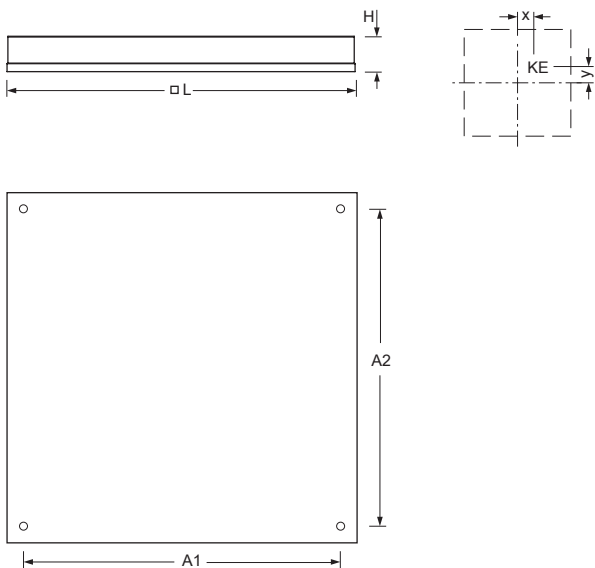
Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Accessories

Suction pad SH 55 for removing the pane must be ordered separately.



Type	□L	H	A1	A2	X	Y
scala-AG/380	380	63	260	315	45	157
scala-AG/450	450	63	410	410	40	206
scala-AG/615	615	63	570	570	0	



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	Colour	kg
scala-AG/380	LED 2800lm 840	25	ED	594 3154 18...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	3,1
	LED 2800lm 840	25	DALI	594 3156 68...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	3,1
scala-AG/450	LED 3900lm 840	41	ED	594 2324 18...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	3,8
	LED 3900lm 840	41	DALI	594 2326 68...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	3,8
scala-AG/615	LED 3600lm 840	25	ED	594 1114 18...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	6,5
	LED 3600lm 840	25	DALI	594 1116 68...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	6,5
	LED 5700lm 840	40	ED	594 1214 18...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	6,5
	LED 5700lm 840	40	DALI	594 1216 68...	<input type="checkbox"/> <input type="checkbox"/> ...0	<input type="checkbox"/> <input type="checkbox"/> ...5	6,5

► Please refer to the current data for LED luminaires at www.lichtwerk.de

Accessories	Type	Details	Item-number	kg
Suction pad	SH 55	Suction pad for scala-AG pane	903 0055 100	0,1





Modul III

Modul I



linar image II-AMP

IP20     

Housing

Aluminium profile, natural anodized. Corners with mitred cut.
Suitable for ceiling- and wall-mounting.

Lighting technology -AMP

Direct distribution.
Microprismatic panel with conical glare elimination.
Variant linar image II Q- and R/5400 for VDU workstations $65^\circ < 3000\text{cd/m}^2$,
UGR ≤ 19 according to DIN EN 12464-1.
Light colour: 4000K. Optional: 3000K. Other light colours on request.

Miscellaneous

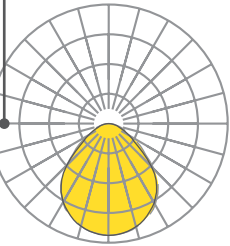
Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

Type	L	B	H	A1	A2	X	Y
linar image II Q-AMP/2700lm	425	425	85	310	310	0	160
linar image II Q-AMP/4400lm	520	520	85	400	400	0	210
linar image II Q-AMP/5400lm	683	683	85	560	560	0	290
linar image II R-AMP/5400lm	1225	412	85	1100	290	0	155

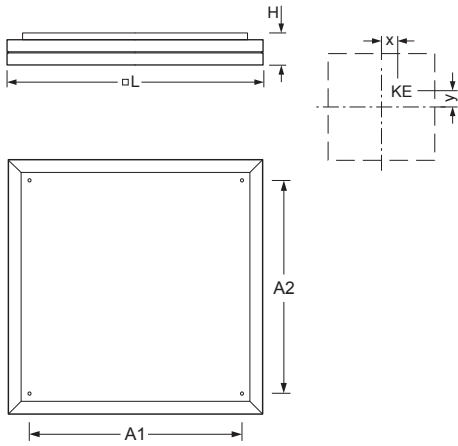
linar image II Q-AMP

5700lm 840

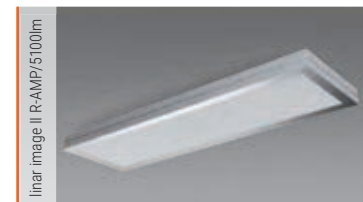
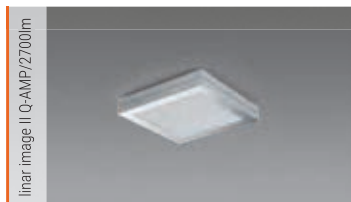
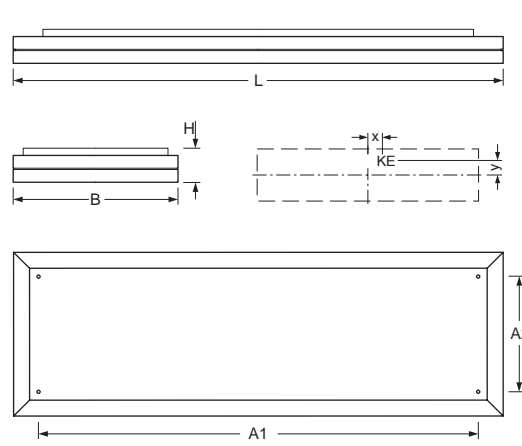
η_{LB}		100 %
Direct	100 %	
Indirect	0 %	
UGR lat.	18,9	
UGR long.	18,9	



linar image II Q-AMP



linar image II R-AMP



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	kg
linar image II Q-AMP	LED 2700lm 840	25	ED	510 1014 195	■	3,9
	LED 2700lm 840	25	DALI	510 1016 695	■	3,9
	LED 4400lm 840	41	ED	510 7094 195	■	4,7
	LED 4400lm 840	41	DALI	510 7096 695	■	4,7
	LED 5700lm 840	40	ED	510 2024 195	■	7,5
	LED 5700lm 840	40	DALI	510 2026 695	■	7,5
linar image II R-AMP	LED 5700lm 840	40	ED	510 3024 195	■	9,1
	LED 5700lm 840	40	DALI	510 3026 695	■	9,1

► Please refer to the current data for LED luminaires at www.lichtwerk.de







• linar image II-AG

IP20 ⊕ ∇ ⚡ CE

Housing

Aluminium profile, natural anodized. Corners with mitred cut.
Suitable for ceiling- and wall-mounting.

Lighting technology -AG

Direct distribution.

Homogeneous illumination by satinised special acrylic panel, with high transmission.

Light colour: 4000K. Optional: 3000K. Other light colours on request.

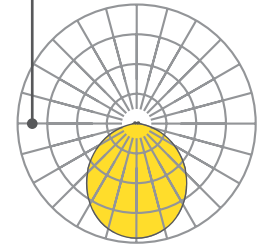
Miscellaneous

Electrical connection via three-pole or for dimmable luminaires, five-pole feed-in and connection terminal with plug-in technology, with integrated protective earth connection and unlocking button, suitable for rigid and flexible cables up to 2,5mm².

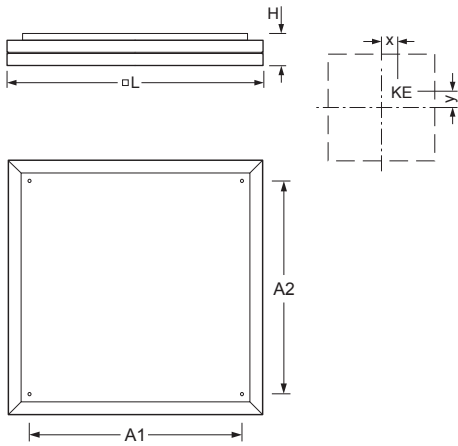
Type	L	B	H	A1	A2	X	Y
linar image II Q-AG/2200lm	425	425	85	310	310	0	160
linar image II Q-AG/3600lm	520	520	85	400	400	0	210
linar image II Q-AG/4200lm	683	683	85	560	560	0	290
linar image II R-AG/4200lm	1225	412	85	1100	290	0	155

linar image II Q-AG
4500lm 840

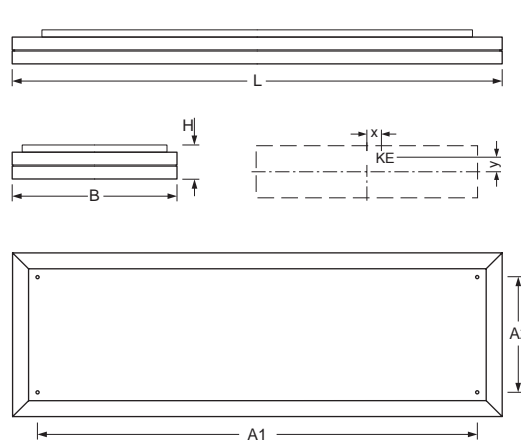
η_{LB}	100 %
Direct	100 %
Indirect	0 %
UGR lat.	21,6
UGR long.	21,6



linar image II Q-AG



linar image II R-AG



Type	LED Specification	P _{sys} (W)	Driver	Item-number	Colour	kg
linar image II Q-AG	LED 2200lm 840	21	ED	510 1014 185	■	3,9
	LED 2200lm 840	21	DALI	510 1016 685	■	3,9
	LED 3600lm 840	41	ED	510 7094 185	■	4,7
	LED 3600lm 840	41	DALI	510 7096 685	■	4,7
	LED 4500lm 840	40	ED	510 2024 185	■	7,5
linar image II R-AG	LED 4500lm 840	40	DALI	510 2026 685	■	7,5
	LED 4500lm 840	40	ED	510 3024 185	■	9,1
	LED 4500lm 840	40	DALI	510 3026 685	■	9,1

► Please refer to the current data for LED luminaires at www.lichtwerk.de





Photo index

Page	Photographer	Project
Cover	designed by almuttazza	Freepik.com
002 - 003	s.h.schroeder; Köln DE	World Conference Center; Bonn DE
008 - 009	lichtwerk GmbH; Königsberg DE	Gustav-Heinemann-Schule; Rastatt DE
012 - 013	lichtwerk GmbH; Königsberg DE	Harter Gebäudetechnik GmbH; Gerolzhofen DE
016 - 017	lichtwerk GmbH; Königsberg DE	Haßberg Kliniken; Haßfurt DE
020 - 021	Jake Campell, Kiel DE	Heinrich-Heine-Schule, Büdelsdorf DE
024 - 025	lichtwerk GmbH; Königsberg DE	Universität; Bayreuth DE
028 - 029	lichtwerk GmbH; Königsberg DE	Maria Ward Schule; Bamberg DE
032 - 033	lichtwerk GmbH; Königsberg DE	Maria Ward Schule; Bamberg DE
036 - 037	lichtwerk GmbH; Königsberg DE	Waldi Schuhfabrik, Haßfurt DE
040 - 041	lichtwerk GmbH; Königsberg DE	ZF Sachs; Schweinfurt DE
044 - 045	lichtwerk GmbH; Königsberg DE	Rendering
048 - 049	Jana Wenderoth; Kassel DE	Zahnarztpraxis Dr. Claar, Kassel DE
052 - 053	lichtwerk GmbH; Königsberg DE	Musikakademie, Hammelburg DE
056 - 057	lichtwerk GmbH; Königsberg DE	Realschule; Mellrichstadt DE
060 - 061	lichtwerk GmbH; Königsberg DE	Zahnarztpraxis Fronemann & Spitzl; Veitshöchheim DE
064 - 065	lichtwerk GmbH; Königsberg DE	Maria Ward Schule; Bamberg DE
066 - 067	lichtwerk GmbH; Königsberg DE	Musikakademie; Hammelburg DE
070 - 071	shutterstock; ImageFlow	Rendering lichtwerk GmbH; Königsberg DE
076 - 077	shutterstock; ImageFlow	Rendering lichtwerk GmbH; Königsberg DE
082 - 083	lichtwerk GmbH; Königsberg DE	BAUR Versand GmbH; Weismain DE
086 - 087	lichtwerk GmbH; Königsberg DE	BAUR Versand GmbH; Weismain DE
090 - 091	Jan-Eric Winkelmann; Rostock DE	Ernst-Moritz-Arndt Universität; Greifswald DE
094 - 095	Jana Wenderoth; Kassel DE	Werner-Wicker-Klinik; Reinhardshausen DE
100 - 101	Jana Wenderoth; Kassel DE	Werner-Wicker-Klinik; Reinhardshausen DE
104 - 105	Frank Freihofer; Kitzingen DE	Technologie und Gründerzentrum; Würzburg DE
110 - 111	uligraphics; Lichtenfels DE	Bodycare; Forchheim DE
114 - 115	Steffen Spitzner; Gera DE	Centogene; Rostock DE
118 - 119	Steffen Spitzner; Gera DE	Erwin-Fischer-Schule; Greifswald DE
122 - 124	Inga Paas; Köln DE	Goldener Ring; Düsseldorf DE
126 - 127	BSD Agentur; Mainz DE	Rendering
130 - 131	Gerhard Hagen; Bamberg DE	Fichtelgebirgsrealschule; Marktredwitz DE
134 - 135	lichtwerk GmbH; Königsberg DE	Schwimmbad; Königsberg DE
138 - 139	lichtwerk GmbH; Königsberg DE	Maria Ward Schule; Bamberg DE
140 - 141	lichtwerk GmbH; Königsberg DE	Maria Ward Schule; Bamberg DE
144 - 145	Steffen Spitzner; Gera DE	Erwin-Fischer-Schule; Greifswald DE
148 - 149	lichtwerk GmbH; Königsberg DE	Fränkische Rohrwerke; Königsberg DE
152 - 152	lichtwerk GmbH; Königsberg DE	Zahnarztpraxis Dr. Ambros; Knetzgau DE
153 - 153	lichtwerk GmbH; Königsberg DE	SRAM; Schweinfurt DE
160 - 161	shutterstock; ImageFlow	Rendering lichtwerk GmbH; Königsberg DE
172 - 173	lichtwerk GmbH; Königsberg DE	Rathaus; Knetzgau DE
182 - 183	istock; Peshkova	Rendering lichtwerk GmbH; Königsberg DE
186 - 187	lichtwerk GmbH; Königsberg DE	Musikakademie, Hammelburg DE
190 - 191	lichtwerk GmbH; Königsberg DE	Singer Ingenieur Consult GmbH; Bamberg DE
194 - 195	lichtwerk GmbH; Königsberg DE	Harter Gebäudetechnik GmbH; Gerolzhofen DE
198 - 199	lichtwerk GmbH; Königsberg DE	Harter Gebäudetechnik GmbH; Gerolzhofen DE
202 - 203	lichtwerk GmbH; Königsberg DE	AWT; Werneck DE
206 - 207	s.h.schroeder; Köln DE	World Conference Center; Bonn DE
210 - 211	lichtwerk GmbH; Königsberg DE	AUTARKIC; Eggolsheim DE
214 - 215	lichtwerk GmbH; Königsberg DE	Stadtwerke; Bad Kissingen DE
218 - 219	lichtwerk GmbH; Königsberg DE	Sanitätshaus Traub; Schweinfurt DE
222 - 223	lichtwerk GmbH; Königsberg DE	SRAM; Schweinfurt DE



Page	Photographer	Project
226 - 227	lichtwerk GmbH; Königsberg DE	Otto-Friedrich-Universität; Bamberg DE
230 - 231	lichtwerk GmbH; Königsberg DE	Otto-Friedrich-Universität; Bamberg DE
234 - 235	Oliver Kutzy; Lübeck DE	Stadtwerke; Neustadt DE
238 - 239	lichtwerk GmbH; Königsberg DE	Arztpraxis Dr. Schorb; Haßfurt DE
240 - 241	lichtwerk GmbH; Königsberg DE	Möbel Wolf; Schweinfurt DE
245 - 245	lichtwerk GmbH; Königsberg DE	Singer Ingenieur Consult GmbH; Bamberg DE
248 - 249	iStock; Explora_2005	Rendering lichtwerk GmbH; Königsberg DE
254 - 255	iStock; Explora_2005	Rendering lichtwerk GmbH; Königsberg DE
258 - 259	lichtwerk GmbH; Königsberg DE	Wolf Möbel; Schweinfurt DE
262 - 263	H. Kaufmann; Euro Unitech Wien AT	BRUCHA; Michelhausen DE
	lichtwerk GmbH; Königsberg DE	Möbel Wolf; Schweinfurt DE
268 - 269	lichtwerk GmbH; Königsberg DE	Singer Ingenieur Consult GmbH; Bamberg DE
272 - 273	Jens Arbogast; Graben-Neudorf DE	Pneu Matthy GmbH; Karlsruhe DE
276 - 277	lichtwerk GmbH; Königsberg DE	Möbel Wolf; Schweinfurt DE
278 - 279	lichtwerk GmbH; Königsberg DE	Göhring Innenarchitektur; Lichtenfels DE
284 - 285	lichtwerk GmbH; Königsberg DE	BAUR Versand GmbH; Weismain DE
286 - 287	lichtwerk GmbH; Königsberg DE	Musikakademie, Hammelburg DE
310 - 311	lichtwerk GmbH; Königsberg DE	AWT; Werneck DE
314 - 315	lichtwerk GmbH; Königsberg DE	Musikakademie, Hammelburg DE
326 - 327	lichtwerk GmbH; Königsberg DE	Die Energie, Veitshöchheim DE
328 - 329	lichtwerk GmbH; Königsberg DE	Musikakademie, Hammelburg DE
340 - 341	lichtwerk GmbH; Königsberg DE	Arztpraxis Dr. Schorb; Haßfurt DE
342 - 343	lichtwerk GmbH; Königsberg DE	Göhring Innenarchitektur; Lichtenfels DE
354 - 355	lichtwerk GmbH; Königsberg DE	SRAM; Schweinfurt DE
356 - 357	Inga Paas; Köln DE	Gemeindezentrum DIE ARCHE; Wüstenrot DE
364 - 365	Boris Golz; Arnsberg DE	IGS - Integrierte Gesamtschule; Nienburg DE
368 - 369	Jana Wenderoth; Kassel DE	Hürner Funken GmbH; Mücke DE
372 - 373	lichtwerk GmbH; Königsberg DE	Optik Demmler; Bamberg DE
376 - 377	Jörg Wenderoth; Baunatal DE	Vom Fass; Kassel DE
380 - 381	Jana Wenderoth; Kassel DE	Firmenzentrale medDV; Fernwald DE
384 - 385	lichtwerk GmbH; Königsberg DE	Zahnarztpraxis Dr. Wenzel; Ringheim DE
390 - 391	lichtwerk GmbH; Königsberg DE	AWT; Werneck DE
394 - 395	lichtwerk GmbH; Königsberg DE	Regiolux GmbH; Königsberg DE
398 - 399	lichtwerk GmbH; Königsberg DE	Rendering
400 - 401	Tom Reindel; Düsseldorf DE	Medienhafen; Düsseldorf DE
406 - 407	Tom Reindel; Düsseldorf DE	Medienhafen; Düsseldorf DE
410 - 411	Inga Paas; Köln DE	Wiehler Wasserwelt; Wiehl DE
414 - 415	Inga Paas; Köln DE	Wiehler Wasserwelt; Wiehl DE
416 - 417	Danny Gohlke; Rostock DE	DJH Prora; Rügen DE
422 - 423	Frank Freihofer; Kitzingen DE	Pfarrzentrum; Limbach DE
426 - 427	Frank Freihofer; Kitzingen DE	Pfarrzentrum; Limbach DE
430 - 431	S. Meyer Architekturfotografie; Berlin DE	Gemeindezentrum; Stammheim DE
434 - 435	lichtwerk GmbH; Königsberg DE	Straßenmeisterei; Forchheim DE
438 - 439	lichtwerk GmbH; Königsberg DE	Straßenmeisterei; Forchheim DE
442 - 443	S. Meyer Architekturfotografie; Berlin DE	Gemeindezentrum; Stammheim DE
446 - 447	Frank Freihofer; Kitzingen DE	Pfarrzentrum; Limbach DE
450 - 451	S. Meyer Architekturfotografie; Berlin DE	Gemeindezentrum; Stammheim DE
454 - 455	lichtwerk GmbH; Königsberg DE	Rathaus; Knetzgau DE
468 - 469	lichtwerk GmbH; Königsberg DE	Maria Ward Schule; Bamberg DE



GTC - Sales and delivery conditions

1. General

1.1 These conditions of sale apply exclusively to companies, legal persons under public law or public-law special assets in the sense of § 310 paragraph 1 BGB (German Civil Code). The following conditions of sale apply exclusively for all offers and contracts regarding the delivery of goods by lichtwerk GmbH. They also apply for all future transactions with the Orderer when dealing with legal transactions of the related kind. The Orderer recognises the conditions as binding for him for all of the business relations. Modifications and amendments must be in written form. Conflicting or deviating terms and conditions of the Orderer are not terms of the contract, even if we do not expressly object to them. This will only be content of the respective contract in cases where we expressly approve the conflicting or deviating terms and conditions in writing.

1.2 We reserve our own rights of ownership, copyright and other intellectual property rights for all cost estimates, drawings and documents that are handed over to the Orderer during the contract negotiations. They may only be disclosed to third parties with our prior written permission. If an order is not issued, all transferred documents shall be returned immediately at our request. The Orderer does not have the right to use, retain or disseminate these documents.

2. Conclusion of the contract and scope of services

2.1 Our offers are not-binding and without obligation. In terms of the nature and scope of delivery, they will first be binding upon our written order confirmation. If an order is to be regarded as an offer according to § 145 BGB, we can accept this within two weeks by sending an order confirmation.

2.2 Verbal agreements, in particular supplementary agreements and commitments made by our employees, require our written confirmation to be effective.

2.3 For the delivery, we reserve the right to deviations of goods compared to the documents belonging to the offers, such as catalogues, illustrations, descriptions, drawings as well as weight and dimension information, provided they are commercial and reasonable for the Orderer and in particular do not impair quality and function.

3. Prices, deliveries and terms of payment

3.1 Prices and delivery

3.1.1 The prices are calculated in Euro exclusive of the legal VAT, which is invoiced separately according to the valid rate. The prices are calculated according to the prices valid at date of contract conclusion; if the delivery is made more than 4 months after contract conclusion, the prices valid at date of delivery can be invoiced.

3.1.2 Principally, prices shall be ex works excluding VAT, packaging, freight costs and insurance.

3.1.3 For a net order value of €1,500.00 or more, we deliver to the delivery location free of charge within Germany, whereby we provide the goods at the delivery location ready for unloading. Starting at € 750.00, we charge half of the transportation charges for a delivery location within Germany. For a net order value below € 250.00, we charge an additional small-volume surcharge of €25.00.

3.2 Terms of payment

3.2.1 Our invoices are to be paid within 30 days from the date of the invoice. For payment within eight days from the invoice date, we grant a 2 % discount. A payment is considered effected if we are able to access the funds. In the case of payment by cheque, payment is only considered effected when the cheque is redeemed by us.

3.2.2 The acceptance of cheques shall only be accepted on account of performance.

3.2.3 The Orderer's right of retention, as far as it is not based on the same contractual relationship, and the offsetting with contested and not legally determined claims is excluded.

3.2.4 If the Orderer is in default of payment as a whole or a part, he is bound - notwithstanding all other rights of the supplier - to pay from that point of time on default interests to the amount of 8 % annually above the base lending rate.

3.2.5 If the Orderer ceases payments or if bankruptcy is filed or mature checks or bills of exchange are not redeemed, all claims made by the supplier are immediately due.

4. Delivery times and acceptance obligations

4.1 The delivery period begins with the date of written agreement about the order between Orderer and supplier.

4.2 Hindrances beyond our responsibility, in particular acts of God, war, insurrection, strikes, transport disruptions, business disruptions, lack of material, official orders and other inevitable events that delay the delivery in whole or in part automatically lengthen the delivery period by the duration of such conditions. In such cases the parties have the right to withdraw from the contract in whole or in part.

4.3 In the event of a delayed delivery for which we are responsible, the Orderer can only assert his rights arising from the delay if the grace period he granted us has passed without result. If the Orderer proves in this case that he has incurred damages caused by the delay, he can claim a delay compensation for each completed week of the delay in the amount of 0.5% for the entire duration of the delay, but not to exceed 5% of the value of the goods not delivered on time. The right of the Orderer for exercising the right of withdrawal shall remain unaffected. Further-reaching claims shall only apply in cases of intent or gross negligence where liability is mandatory.

4.4 We are entitled to make reasonable installment deliveries.

4.5 If the Orderer causes a delay of dispatch or delivery of the goods or if the Orderer is otherwise in default in accepting the delivery of goods or should the Orderer intentionally violate other obligations to co-operate, we then have the right to claim compensation for any incurred damages in this respect, including any possible additional expenditure. Rights remain reserved for more extensive claims. Insofar as such aforesaid conditions apply, the risk of accidental loss or accidental deterioration of the purchased goods passes over to the Orderer at the precise point of time in which he is in default of acceptance or payment.

5. Dispatch, transfer of risk, returns

5.1 The risk is passed on to the Orderer when the goods leave the factory or a warehouse. Shipping takes place uninsured at the Orderer's risk. This also applies even if free delivery is agreed and also for deliveries by our transport staff. If the shipment is delayed as a result of circumstances for which the Orderer is responsible, the risk is transferred with our notification of readiness for shipment. If the shipment is delayed at the Orderer's request or at the fault of the Orderer, then we will store the goods at the Orderer's expense. The Orderer is required to check without delay whether the goods have been damaged during transportation and to immediately inform the carrier and deliverer of any damage or loss. Shipping takes place on behalf of the Orderer.

5.2 If the supplier has no statutory obligation to accept returned goods, the Orderer may only return goods with our express written consent and provided that they are undamaged and returned in the original packaging. 30% of the invoiced amount will be deducted from the credit note to cover processing costs. All reprocessing, freight, insurance and packaging costs are charged to the Orderer. Principally, it is not possible to return custom-made products.

6. Retention of Title

6.1 The goods remain our property until the fulfilment of all our entitled claims against the Orderer (goods subject to retention of title), even if the individual goods have been paid for. A pledge or chattel mortgage of the reserved goods is not permissible.

6.2 In the case of the permissible resale of the reserved goods within the ordinary course of business, the Orderer assigns us already now, until payment of all our claims, as collateral for its future claims towards his customers resulting of such resale without requiring any specific further explanations. This assignment also covers balance claims resulting from existing current account relationships or at their termination of the Orderer with his customers. If the reserved goods are sold together with other goods without agreeing upon an individual price for the reserved goods, the Orderer assigns us the priority over the other claims for such part of the total price claimed which corresponds to the value invoiced by us. Until revoked, the Orderer is authorized to collect the assigned demands from the resale, he is not entitled to dispose of them otherwise, e.g. by assignment. Upon our request, the Orderer must inform his customer about the assignment and to furnish us the necessary documents for the assertion of his rights towards the customer, e.g. to deliver invoices and to provide the required details.

6.3 If the purchaser does not meet all or a part of his payment obligations within 10 days after due date, if he does not cash due checks or if an application for insolvency is filed, we have the right to withdraw from the contract and to require the return of the goods. The purchaser is obliged to procure us with the possession of the goods. The Orderer grants us or any of our authorized representatives the access to all business premises during business hours. We are entitled to use the reserved goods with the diligence of a prudent businessman and to satisfy ourselves with the offsetting of open claims with their proceeds.

6.4 As long as the ownership has not been transferred, the Orderer is to inform us in writing immediately if the supplied item is seized or is exposed to other interventions by third parties. If the third party is unable to indemnify us for the costs of legal or out-of-court costs of a claim according to par.

771 ZPO (German Code of Civil Procedure), the Orderer is liable for our amount outstanding.

7. Warranty

7.1 We are liable for the defects of the goods (in the first instance under the exclusion of the Orderer's rights to back out of the contract or to reduce the purchase price) through rectification of the defect or replacement delivery at our choice. The Orderer shall grant us a reasonable time period to provide the rectification. If the supplementary performance does not work, the Orderer may basically according to his choice demand a cut of the compensation (decrease) or a cancellation of the contract. The improvement is considered failed after the second unsuccessful attempt, provided further improvement attempts are not appropriate due to the subject matter of the contract and are not reasonable to the Orderer. In case of a minor breach of contract, especially minor defects, the Orderer, however, does not have a right of cancellation.

7.2 Warranty rights of the Orderer require that the Orderer's obligations to make inspection and give notice of defects according to par. 377 HGB (German Commercial Code) have been properly fulfilled.

7.3 The Orderer must notify us concerning obvious defects within a period of 10 days after receipt of goods, otherwise the assertion of the warranty claim is excluded. Non-obvious defects must be claimed immediately when they are discovered or determined, otherwise they are deemed to be approved. For all presuppositions for claims he full burden of proof forlies with the Orderer, especially for the deficit itself, for the time period of the determination of the defect, and for the timeliness of the notice of defect.

7.4 If the Orderer, due to a deficiency in title or a material defect after failed subsequent performance, chooses to cancel the contract, he shall not be entitled to additional claims for damages due to the defect.

7.5 The warranty period amounts to one year from date of delivery of our goods to the Orderer.

7.6 The warranty obligation is void if the goods have suffered from improper handling or storage or if improper changes were made to them without the supplier's approval. We are not liable for subsequent changes to the lights, their internal circuitry, equipment or the lamps.

7.7 The condition of the goods only the product description of the manufacturer applies as agreed upon. Additional public statements or advertisements of the manufacturer do not represent a contractual statement on the nature of the goods.

7.8 In the event that the article of sale cannot be used by the Orderer as stipulated in the contract of sale as a result of negligent violation of collateral contractual duties, especially with regard to operating and maintenance instructions, we shall also be liable in accordance with paragraph 7.6.

In case of consulting we can only be held responsible if special payment was agreed in writing.

7.9 Claims made by the Customer against the Supplier for installation and disassembly costs, unless they serve to detect errors, costs of disposal and costs for hoisting devices and scaffolding shall be excluded. The Customer shall bear the costs of the necessary recommissioning, software reinstallations or software updates. Where the Supplier meets its cost absorption obligation pursuant to Article 478 of the German Civil Code with respect to other expenses necessary for supplementary performance, the Supplier shall be entitled to pay such expenses by means of a credit note for goods. A right to compensation for damages to the goods themselves shall be excluded. This does not apply, as far as compelling liability is given in cases of intent, gross negligence, lack of guaranteed product properties or the Product Liability Act.

8. Limitation on Liability

8.1 As far as it is not expressly stipulated otherwise in these conditions, the claims against us, our legal representatives and any person employed by us in the performance of our obligation and any vicarious agent resulting from damages, including consequential damages, which occur to the Orderer or a third party, in particular such damages resulting from fault at contract conclusion, culpable breach of an obligation and negligent and impermissible actions are excluded.

8.2 The aforesaid limitations of liability shall not affect the Orderer's product liability claims. In addition, we are liable for loss of life, physical injury and damage to health (regardless of existing limitation of liability according to the statutory provisions) that are caused by a negligent or wilful breach of duty on our part, our legal representatives or our assistants. We are liable under statutory provisions for damages that are not covered by clause 1 and that are based on fraudulent intent by us, our legal representatives or our assistants.

8.3 The Orderer's claim for damages for defect becomes time-barred after one year from date of delivery of the goods to the Orderer. This shall not apply if we can be accused of malice. In these cases, the statutory provisions apply.

9. Applicable law, place of jurisdiction

For these business relationships and all legal relationships between us and the Orderer, - including export contracts - the governing law of the Federal Republic of Germany applies exclusively. The application of the UN jurisdiction, concerning sales and purchase procedure, is excluded. If legally permissible, the place of jurisdiction for all disputes directly or indirectly resulting from a contractual relationship is, by our choosing, either Haßfurt or the court responsible for the Orderer's registered office. The place of fulfilment for deliveries and payments is also Haßfurt. If individual conditions of the contract including these GTC are partially ineffective or will be, the validity of the other conditions are not affected by it. The whole or partial ineffective condition should be replaced by conditions, whose economic purpose comes as close as possible to the ineffective one.



Contact

HEAD OFFICE KOENIGSBERG

SALES

T +49 9525 9827 0
info@lichtwerk.de

TECHNICAL SERVICE

T +49 9525 9827 1
lichtplanung@lichtwerk.de

GERMAN SALES FORCE

01 **MECKLENBURG-VORPOMMERN**
Gritt Schlemminger
M +49 151 14733968
gritt.schlemminger@lichtwerk.de

02 **HAMBURG, SCHLESWIG-HOLSTEIN**
Michael Brott
M +49 160 7177747
michael.brott@lichtwerk.de

Reinhard Froeschke
M +49 170 2089020
r.froeschke@froeschke-licht.de

03 **HANNOVER**
Ralf Reichel
M +49 160 7177738
ralf.reichel@lichtwerk.de

04 **SACHSEN**
Jörg Irmisch
M +49 172 8670062
joerg.irmisch@lichtwerk.de

Jürgen Bergmann
M +49 172 8670049
juergen.bergmann@lichtwerk.de

05 **THÜRINGEN**
Jens Schlothauer
M +49 151 14733955
jens.schlothauer@lichtwerk.de

06 **HESSEN**
Jörg Wenderoth
Industrial representation
Kirchweg 1
DE- 34225 Baunatal
T +49 5601 9999040
info@wenderoth-iv.de

07 **DÜSSELDORF**
Daniel Pangritz
M +49 160 7177745
daniel.pangritz@lichtwerk.de

Dominic Pauli
M +49 160 7177737
dominic.pauli@lichtwerk.de

08 **KOBLENZ**
Bernd Oedekoven GmbH
Industrial representation
Rudolf-Diesel-Straße 11
DE- 56220 Urmitz
T +49 2630 96350
info@oedekovengmbh.de

09 **RHEIN-MAIN**
Markus Schimmer
M +49 151 14733980
markus.schimmer@lichtwerk.de

10 **NORDBAYERN**
Peter Gröger
M +49 172 8670045
peter.groeger@lichtwerk.de

Stephan Althaus
M +49 160 7177731
stephan.althaus@lichtwerk.de



11 **BAYERN-MITTE**
Bernhard Zirkelbach
M +49 172 8670047
bernhard.zirkelbach@lichtwerk.de

12 **SÜDBAYERN**
Andrea Fleischmann
M +49 160 7177739
andrea.fleischmann@lichtwerk.de

Dieter Beier
M +49 151 14733958
dieter.beier@lichtwerk.de

13 **NORDBADEN**
Steffen Leuschel
M +49 160 7177740
steffen.leuschel@lichtwerk.de

14 **STUTTART**
Frank Bossert
Industrial representation
Hofenerweg 17
DE- 71686 Remseck
T +49 711 57766960
info@bossert-weissinger.de

15 **SÜDBADEN**
Fred Abel GmbH
Industrial representation
Im Ebnet 1
DE- 79238 Ehrenkirchen
T +49 7633 95010
info@fredabel.de

SALES INTERNATIONAL / SALES MANAGER

Torsten Kießlich-Köcher
T +49 9525 89450
F +49 9525 89444
M +49 172 8682620
torsten.kiesslich@lichtwerk.de

Australia, Canada, Cyprus, Estonia,
Greece, India, Ireland, Latvia, Lithuania,
New Zealand, Portugal, Romania, Russian
Federation/CIS, Slovenia, Spain, Ukraine,
United Kingdom, USA

Stefan Nestmann
T +49 9525 89438
F +49 9525 89444
M +49 172 8670054
stefan.nestmann@lichtwerk.de

Bulgaria, Czech Republic, Denmark,
Hungary, Netherlands, Poland, Slovakia

Reinhold Pfister
T +49 9525 89451
F +49 9525 89444
M +49 172 8670050
reinhold.pfister@lichtwerk.de

Austria, Croatia, Iceland, Montenegro,
Norway, Serbia, Switzerland

Daniel Hau
T +49 9525 89657
F +49 9525 89444
M +49 160 7177734
daniel.hau@lichtwerk.de

Belgium, Finland, France, Israel, Italy,
Luxembourg, Middle East, Morocco,
Sweden, Turkey

EXCLUSION OF LIABILITY

Illustrations, dimensions and weights in our catalogues, price lists and quotations are non-binding. Subject to technical changes, errors and color deviations. All luminaires have been designed for 230V 50Hz mains connection and ambient conditions according to DIN EN 60598 unless otherwise stated, and are supplied without lamps unless otherwise stated. Most of the indications with regard to certifications are presented in our catalogue in a general form. Verification with regard to products can be easily carried out on our website.

Because of the dynamics in the technical development especially in the field of LED modules and their drivers, the information in this paper can only be a snapshot of the current state and are therefore legally not binding. Please refer to our web site for current product specifications.

We point out that the orderer recognises our delivery and payment conditions unless he/she objects in writing when sending his/her order.

Registration number: DE 40859830

lichtwerk GmbH
Hellinger Straße 3
D 97486 Königsberg



www.lichtwerk.de

9999 2061 221 1A 600 05/21 LI/SCHL. Subject to modifications.