# inspired by light

lichtwerk

### lichtwerk

### - inspired by light

lichtwerk GmbH is a subsidiary of Regiolux GmbH, and has established itself in the area of architectural lighting as an expert partner for sophisticated lighting tasks. In addition to standard luminaires, the portfolio of lichtwerk GmbH includes individual project luminaires featuring future-fit technology for innovative lighting solutions.

### **Flexible**

The all-round inclusive package is our standard when it comes to defining our range of services. Lichtwerk reacts flexibly to individual customer requirements. Everything begins with the consultations in the planning phase. Requirements are defined, framework conditions are determined and a selection is made.

### **Emotional**

The effect that was planned is only achieved if everything is perfectly coordinated. Light creates emotions and only when these satisfy the client's requirements does the lighting achieve the enthusiasm, which we set as our goal.

lichtwerk deals with the theme of light in a very emotional manner and treats customer relations the same way.

### Creativ

Together, we develop your individual project solution so that the lighting achieves a result that satisfies the architecture, lighting requirement and user alike. Due to the heterogeneous customer structure and changing challenges, lichtwerk is accustomed to always thinking new, innovatively and creatively.



## Symbol key

	Colour code/Colour		Definition of measurement table variables
	traffic white (RAL 9016)	L	Length
wa	white-aluminium also sg (RAL 9006)	□L	Length/Width for square luminaires
	aluminium natural anodized	L2	Additional length
	stainless steel	В	Width
cr	chrome	Н	Height
si	silver	ØD	Diameter
sg	silver-grey also wa (RAL 9006)	KE	Cable infeed
al	aluminium	KL	Length of luminaire head or ballast box
tc	translucent	КВ	Width of luminaire head or ballast box
cl	clear	КН	Height of luminaire head or ballast box
gr	grey	A1	Fixing distance in case of single mounting
	black	A2	Fixing distance for the middle luminaires or between the luminaires in case of light
	red		run mounting
	green	X	Distance from centre of the luminaire to the electrical feed in
	bue		(X direction = length)
	Control gear	Υ	Distance from centre of the luminaire to the electrical feed in
Eb	Electronic ballast		(Y direction = width)
dim	Dimmable	☐ / SL	Length of cut for recessed luminaires
1-10V	Analoge Standard Signal	☐ / SB	Width of cut for recessed luminaires
DALI	Digital Adressable Lighting Interface	√ SD	Diameter of cut for recessed luminaires
ET	Electronic Driver	e	Minimum necessary depth for luminaire mounting
NL-B	Emergency light single battery	DS min/max	Min./Max. ceiling thickness in case of
multi	Multiwatt	D3 min/max	suspended ceiling
muiti	Multiwatt	ML	Modul (axis) Length
	Ceiling systems	MB	Modul (axis) Width
	Ceilings with visible T-rails		
	For recessed ceilings		

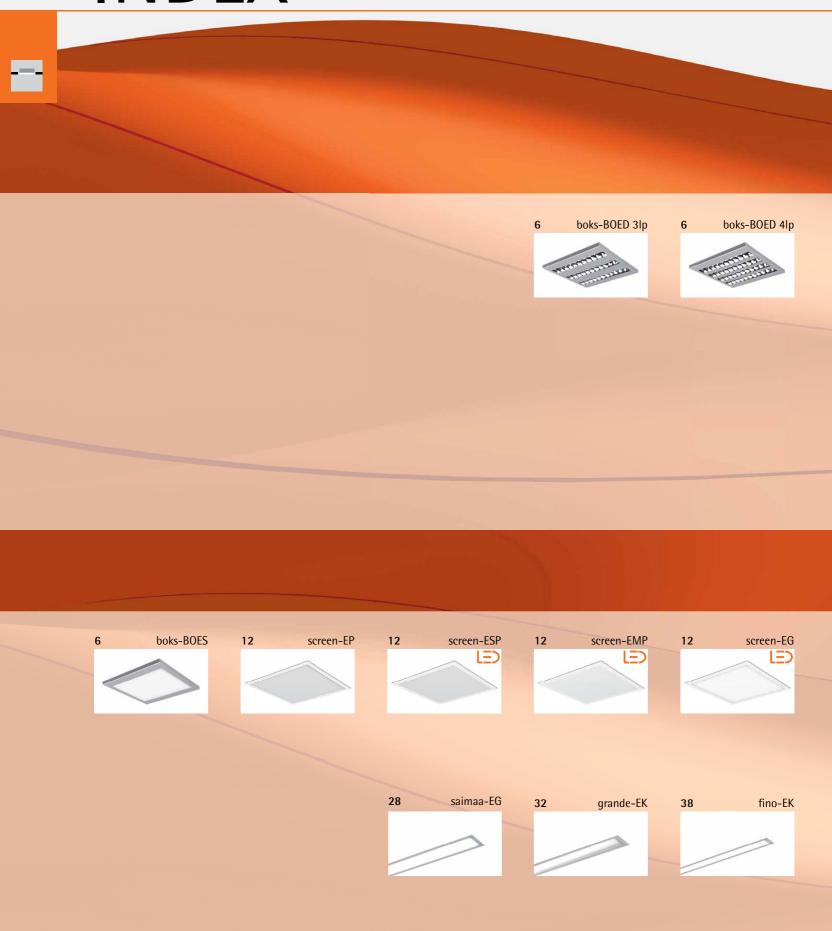
LED-luminaires

## INDEX



Recessed luminaires	E	2	-
Pendant luminaires	Ð	48	F
		40	
Surface mounted luminaires	Ð	116	Ī
Recessed downlights	LEO	162	_^
Lightfields		196	
Wall luminaires	E	216	1
Train failinianes		2.0	_
Lighting systems		244	E
Secondary reflector systems		312	
		220	
Glass luminaires		330	
Higher degrees of protection	Ð	368	7
Information		382	E

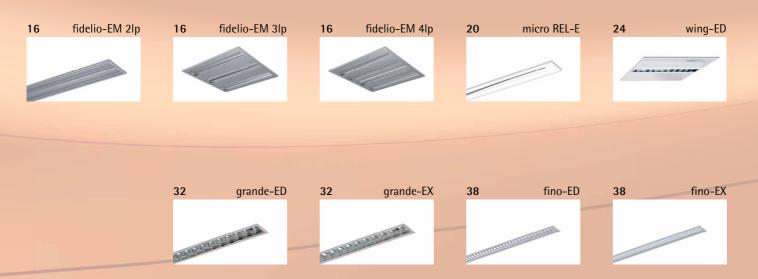




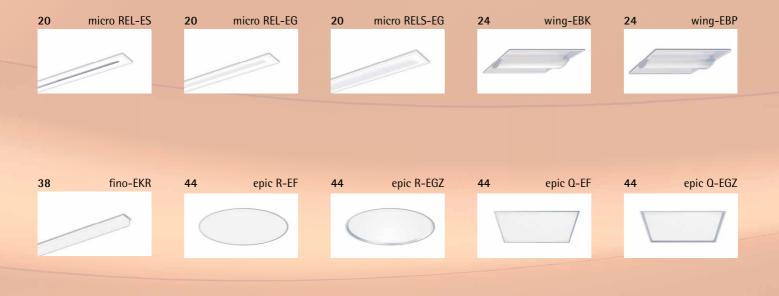
### **Recessed luminaires**



### Louvre

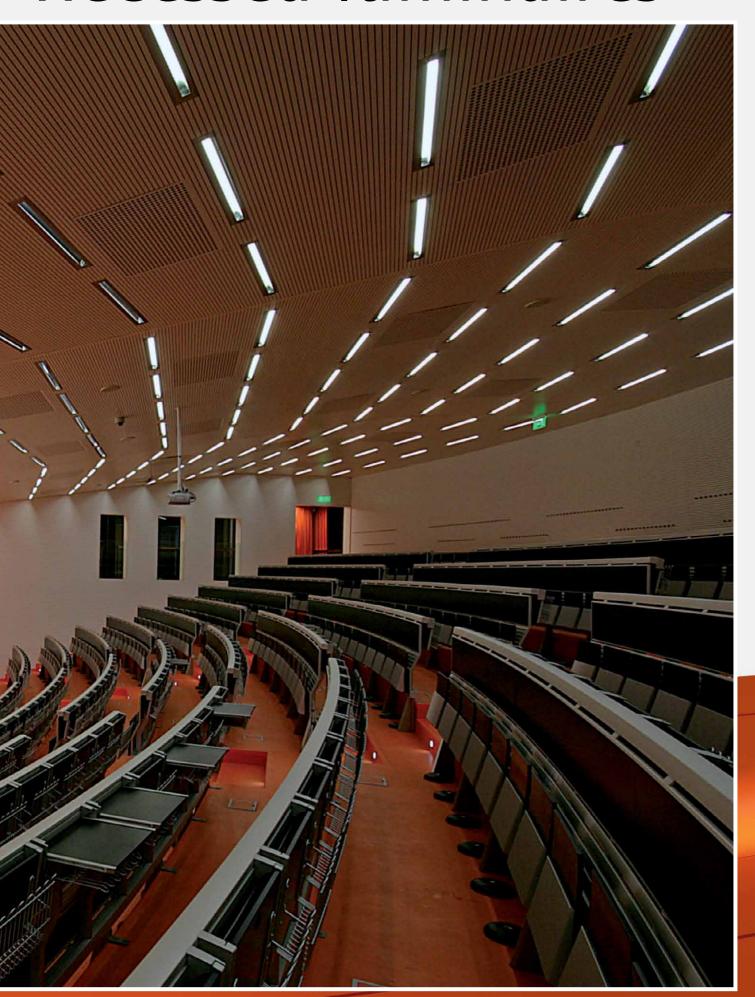


### Diffuser





# Recessed luminaires







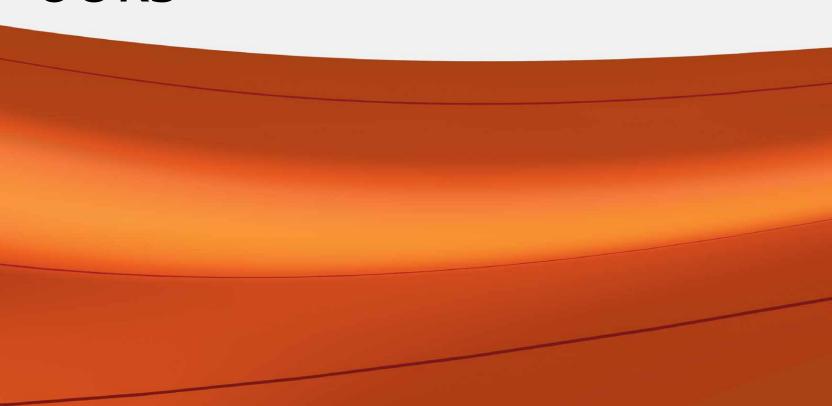








# boks



## boks

Housing and louvre frame of sheet steel; for recessed ceilings or ceilings with visible T-rails; structured louvre frame, white aluminium powder-coated.

#### Miscellaneous

Electrical connection via 3-pole (with dimmable luminaires: 5-pole) plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

BOE mounting stirrup for max. 24 mm wide and 38 mm high mounting rails included in scope of delivery.

#### Lighting technology BOED

Direct distribution.

Aluminum parabolic louvre, high gloss with darklight mirror optics. 65°<1000 cd/m<sup>2</sup> acc. to DIN EN 12464-1.

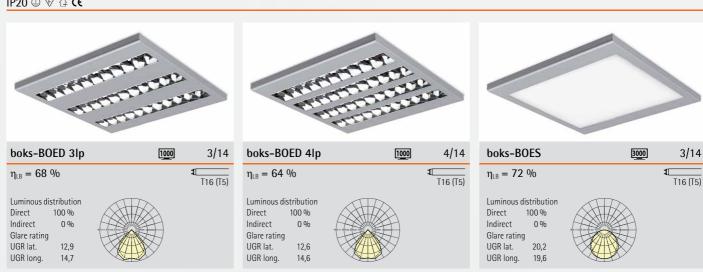
#### Lighting technology BOES

Direct distribution.

Glare elimination through white, satin PMMA lens for general diffused Lightning.

Variant 3/14 65°<3000 cd/m<sup>2</sup> acc. to DIN EN 12464-1.

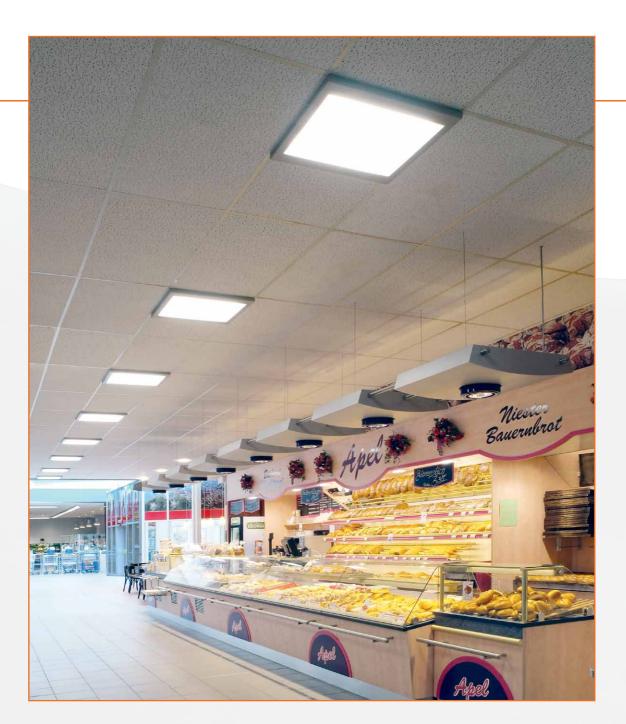
#### IP20 ⊕ ♥ ⊈ **(€**

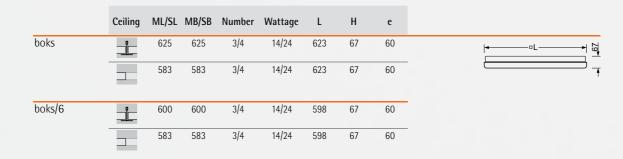


Туре	Colour	Wattage	Eb	Eb dim 1-10V	Eb dim DALI	e kg
boks-BOED	wa	3/14	542 3144 170			5,7
	wa	3/24	542 3244 170			5,7
	wa	4/14	542 4144 170	542 4145 170	542 4146 670	5,4
boks-BOED/6	wa	3/14	542 3144 171			5,7
	wa	3/24	542 3244 171			5,7
	wa	4/14	542 4144 171	542 4145 171	542 4146 671	5,4
boks-BOES	wa	3/14	542 3144 180			5,0
	wa	3/24	542 3244 180			5,0
	wa	4/14	542 4144 180	542 4145 180	542 4146 680	5,0
boks-BOES/6	wa	3/14	542 3144 181			5,0
	wa	3/24	542 3244 181			5,0
	wa	4/14	542 4144 181	542 4145 181	542 4146 681	5,0

Туре	Colour	Wattage	Eb multi dim 1-10V	Eb multi dim DALI	요 kg
boks-BOED	wa	3/14/24	542 3925 170	542 3926 670	5,7
boks-BOED/6	wa	3/14/24	542 3925 171	542 3926 671	5,7
boks-BOES	wa	3/14/24	542 3925 180	542 3926 680	5,0
boks-BOES/6	wa	3/14/24	542 3925 181	542 3926 681	5,0

lichtwerk www.lichtwerk.de







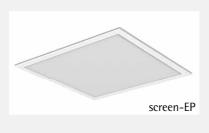


















## screen



### screen

#### Housing

Sheet steel housing with surrounding edge for ceilings with visible T-rails, concealed symmetrical rail constructions or recessed ceilings; painted traffic white.

### Lighting technology EP

Direct distribution.

Diffusor frame with conical glare elimination by means of high efficiency micro prismatic pane and high gloss top mirrors. 65°<1500 acc. to DIN EN 12464-1.

### Lighting technology EG LED

Direct distribution.

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

### Lighting technology ESP LED

Direct distribution.

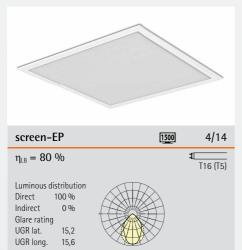
Standard prismatic panel with high transmission.

#### Lighting technology EMP LED

Direct distribution.

Microprismatic panel with high transmission. 65°<3000 acc. to DIN EN 12464-1.

#### IP20 ⊕ ♥ ₲ **(€**







Туре	Colour	Wattage	Еь	Eb dim 1-10V	Eb dim DALI	kg
screen-EP		4/14	714 4144 190	714 4145 190	714 4146 690	6,5
screen-EP/6		4/14	714 4144 191	714 4145 191	714 4146 691	6.5

Туре	Colour	LED Specification	ET	ET dim DALI	G kg
screen EG LED		1x46W 6000lm 840	713 0014 180	713 0016 680	3,3
		1x46W 5500lm 830	713 0024 180	713 0026 680	3,3
screen EG/6 LED		1x46W 6000lm 840	713 0014 181	713 0016 681	3,3
		1x46W 5500lm 830	713 0024 181	713 0026 681	3,3
screen ESP LED		1x46W 6000lm 840	713 0014 190	713 0016 690	3,3
		1x46W 5500lm 830	713 0024 190	713 0026 690	3,3
screen ESP/6 LED		1x46W 6000lm 840	713 0014 191	713 0016 691	3,3
·		1x46W 5500lm 830	713 0024 191	713 0026 691	3,3
screen EMP LED		1x46W 6000lm 840	713 0014 150	713 0016 650	3,4
		1x46W 5500lm 830	713 0024 150	713 0026 650	3,4
screen EMP/6 LED		1x46W 6000lm 840	713 0014 151	713 0016 651	3,4
·		1x46W 5500lm 830	713 0024 151	713 0026 651	3,4

Accessories		Туре	Colour	Material	Details	ltem-number	g kg
C	Mounting	UBB-X		St	for screen	723 9000 100	0,2
1,9	Tool	SH 30		Polymer	Vacuum lifting pad for screen-E disc frame	903 0030 100	0,1

lichtwerk www.lichtwerk.de

### ---

### Miscellaneous

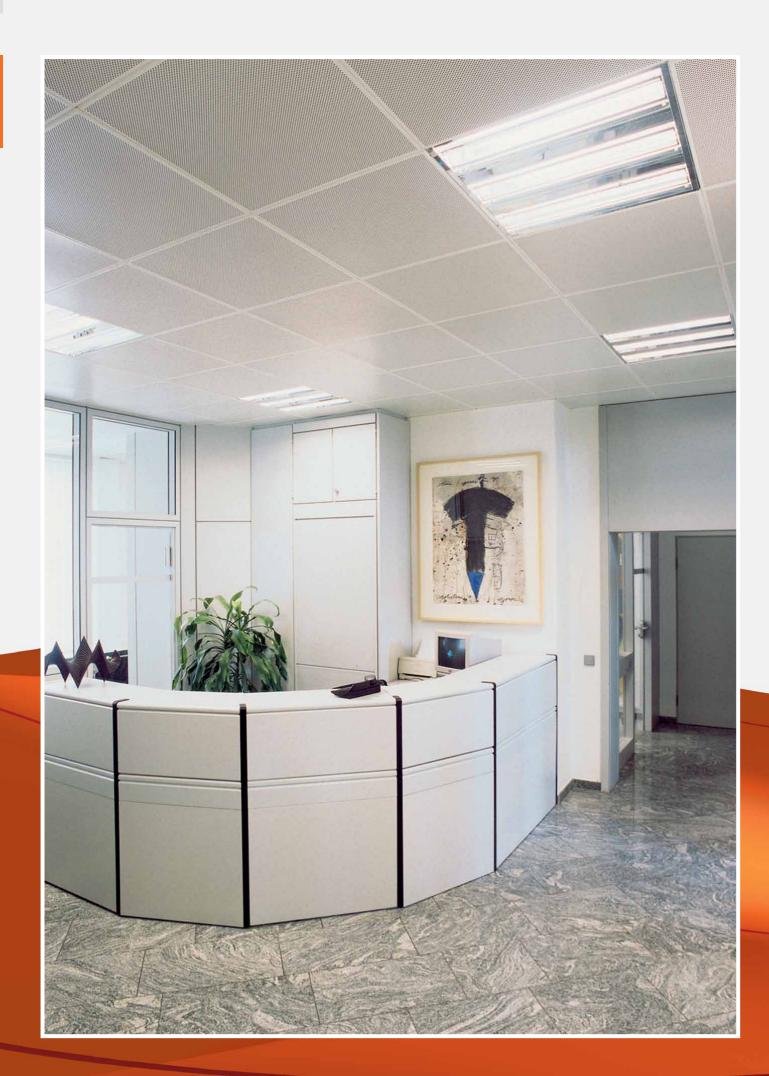
Electrical connection via 3-pole (with dimmable luminaires: 5-pole) plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

cables up to 2.5mm².
Universal mounting stirrups UBB-X for use in concealed symmetrical rail constructions or recessed ceilings, to be ordered separately.

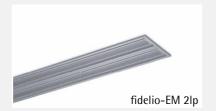


	Ceiling	ML/SL	MB/SB	Number	Wattage	L	Н	e
screen T5	i	625	625	4	14	622	64	200
		610	610	4	14	622	64	120
screen/6 T5	i	600	600	4	14	597	64	200
		585	585	4	14	597	64	120

	Ceiling	ML/SL	MB/SB	LED Specification	L	Н	e
screen LED	i	625	625	1x46W	622	116	200
		610	610	1x46W	622	116	120
screen/6 LED	عأد	600	600	1x46W	597	116	200
		585	585	1x46W	597	116	120











# fidelio



## fidelio

Aluminium housing of matt interference-free reflector sheet with slit louvre. For ceilings with visible T-rails, axis dimension 600 x 600 mm. Variant 625 x 625 mm also for recessed ceilings.

#### Lighting technology EM

Direct distribution.

Homogenous light distribution through slit louvre technology. 65°<1500-3000 cd/m<sup>2</sup> acc. to DIN EN 12464-1.

#### Miscellaneous

Electrical connection via 3-pole (with dimmable luminaires: 5-pole) plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

3000

4/14

T16 (T5)

3,7

4,1

523 4146 661

#### IP20 ⊕ ♥ ⊈ **(€**



3/24

4/14

Туре	Colour	Wattage	Eb	Eb dim 1-10V	Eb dim DALI	e kg
fidelio-EM	al	2/24	523 2244 160			3,3
	al	2/28	523 2284 160			3,5
	al	2/54	523 2544 160			3,5
	al	2/35	523 2354 160			3,5
	al	2/49	523 2494 160			3,5
	al	3/14	523 3144 160			3,7
	al	3/24	523 3244 160			3,7
	al	4/14	523 4144 160	523 4145 160	523 4146 660	4,1
fidelio-EM/6	al	3/14	523 3144 161			3,7

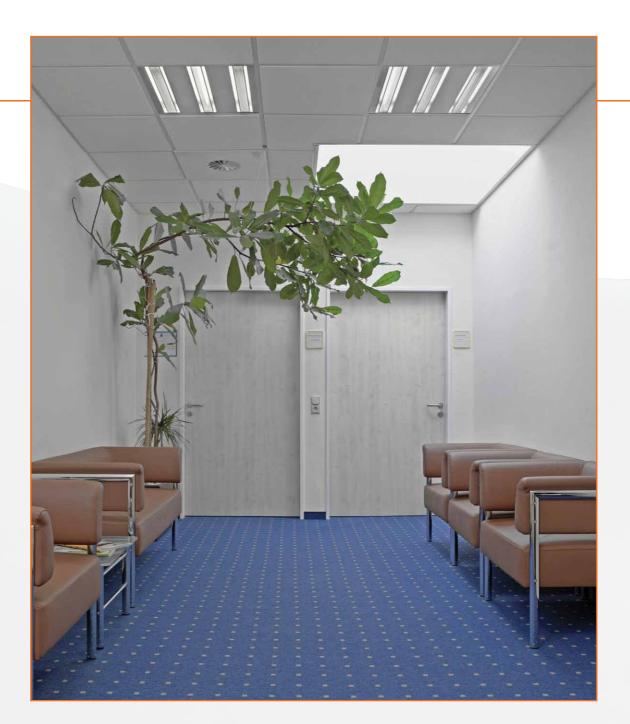
Туре	Colour	Wattage	Eb multi dim 1-10V	Eb multi dim DALI	kg
fidelio-EM	al	2/28/54	523 2945 160	523 2946 660	3,4
	al	2/35/49	523 2965 160	523 2966 660	3,5
	al	3/14/24	523 3925 160	523 3926 660	3,7
fidelio-EM/6	al	3/14/24	523 3925 161	523 3926 661	3,7

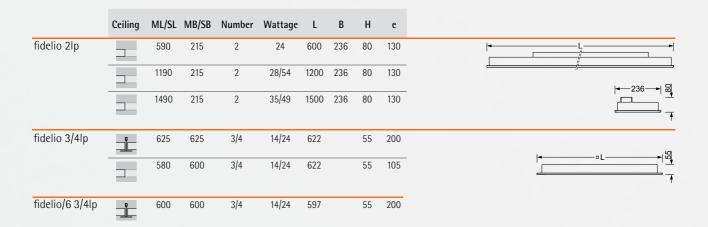
523 4145 161

523 3244 161

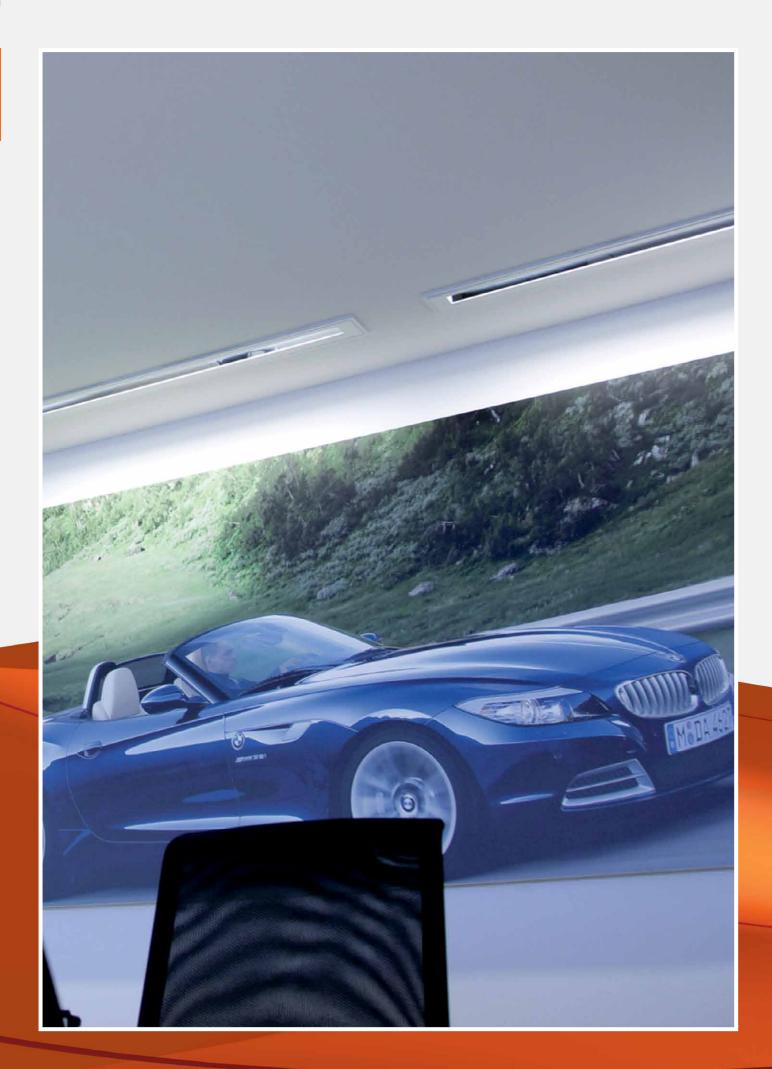
523 4144 161

lichtwerk www.lichtwerk.de



















# micro REL



## micro REL



Two-part sheet steel housing with hinges and magnetic catch for rapid relamping; 1/28/54 version also for ceilings with visible T-rails; individually coated traffic white. Also in white aluminium or other RAL colours on request.

#### Lighting technology REL-E

Direct distribution.

Involute mirror aluminium high gloss anodized for wallwasher characteristic with glare protection.

#### Lighting technology REL-ES

As variant E, with integrated transparent diffusor.

#### Lighting technology REL-EG

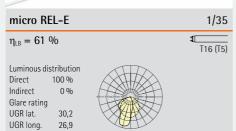
As variant E, with integrated PMMA diffusor, frosted.

### **Lighting technology REL-ET**

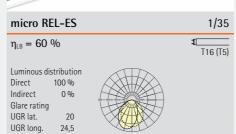
As variant E, for ceilings with visible T-rails, ceiling axis dimension 1200. Painted traffic white.

#### IP20 ⊕ ♥ ₲ **(€**

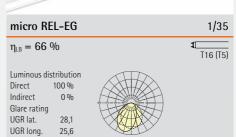












Туре	Colour	Wattage	Eb multi	Eb multi dim 1-10V	Eb multi dim DALI	kg
micro REL-E		1/14/24	701 1924 190	701 1925 190	701 1926 690	2,0
		1/21/39	701 1934 190	701 1935 190	701 1936 690	2,5
		1/28/54	701 1944 190	701 1945 190	701 1946 690	3,0
		1/35/49/80	701 1954 190	701 1955 190	701 1956 690	3,5
micro REL-ES		1/14/24	704 1924 180	704 1925 180	704 1926 680	2,1
		1/21/39	704 1934 180	704 1935 180	704 1936 680	2,6
		1/28/54	704 1944 180	704 1945 180	704 1946 680	3,1
		1/35/49/80	704 1954 180	704 1955 180	704 1956 680	3,6
micro REL-EG		1/14/24	704 1924 190	704 1925 190	704 1926 690	2,1
		1/21/39	704 1934 190	704 1935 190	704 1936 690	2,6
		1/28/54	704 1944 190	704 1945 190	704 1946 690	3,1
		1/35/49/80	704 1954 190	704 1955 190	704 1956 690	3,6
micro REL-ET/3		1/28/54	702 1944 190	702 1945 190	702 1946 690	3,0
micro RELS-EG		1/14/24	712 1924 190	712 1925 190	712 1926 690	2,7
		1/21/39	712 1934 190	712 1935 190	712 1936 690	3,0
		1/28/54	712 1944 190	712 1945 190	712 1946 690	3,4
		1/35/49/80	712 1954 190	712 1955 190	712 1956 690	3,5

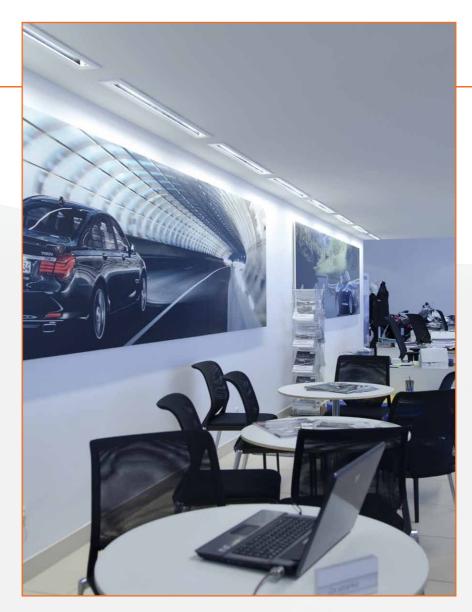
Accessories		Туре	Colour	Material	Details	Item-number	kg
S	Tool	SH 30		Polymer	Vacuum lifting pad for micro REL-ES and -EG panel	903 0030 100	0,1

lichtwerk www.lichtwerk.de

**Lighting technology RELS-EG**Direct distribution.
High gloss anodized mirror with symmetrical light distribution.
With integrated PMMA diffusor, frosted.
Miscellaneous

Electrical connection via 3-pole (with dimmable luminaires: 5-pole) plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.





	Ceiling	ML/SL	MB/SB	Number	Wattage	L	В	Н	e
micro REL		110	630	1	14/24	648	125	60	65-70
		110	930	1	21/39	948	125	60	65-70
		110	1230	1	28/54	1248	125	60	65-70
		110	1530	1	35/49/80	1548	125	60	65-70
micro REL-ET/3	-1-	600	1200	1	28/54	1198	125	40	100
micro RELS		135	630	1	14/24	648	152	65	70-75
		135	930	1	21/39	948	152	65	70-75
		135	1230	1	28/54	1248	152	65	70-75
		135	1530	1	35/49/80	1548	152	65	70-75

lichtwerk www.lichtwerk.de















# wing



# wing

#### Housing

Sheet steel housing with uniformly wide fringe and 7mm folded-up edge for stability, for ceilings with visible T-rail constructions  $600 \times 600$ ,  $625 \times 625$ . Version EBK and EBP  $625 \times 625$  also for cut-out ceilings including mounting stirrup.

#### Miscellaneous

Electrical connection via 3-pole (with dimmable luminaires: 5-pole) plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

#### Lighting technology ED

Direct distribution.

Rounded secondary reflector with matt white surface and reflector flush with ceiling, of perforated sheet steel and centrical darklight high-specular optic.

65°<3000 cd/m<sup>2</sup> acc. to DIN EN 12464-1.

#### Lighting technology EBK

Direct distribution.

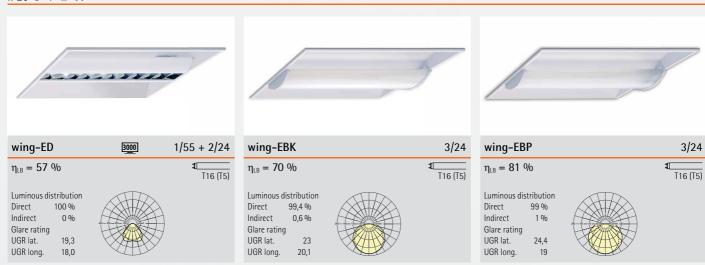
Rounded secondary reflector with matt white surface and projecting deflector of white opal acrylic, convex, with inner longitudinal prisms.

#### Lighting technology EBP

Direct distribution.

Rounded secondary reflector with matt white surface and projecting deflector of transparent acrylic, convex, with inner longitudinal prisms.

#### IP20 ⊕ ♥ 🗗 **(€**

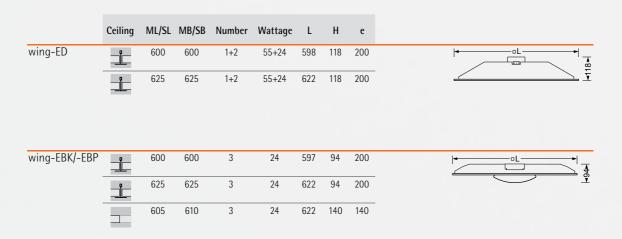


Туре	Colour	Wattage	Eb multi	Eb multi dim 1-10V	Eb multi dim DALI	e kg
wing-ED		1/55+2/24	509 1554 170	509 1555 170	509 1556 670	6,0
wing-ED/6		1/55+2/24	509 1554 171	509 1555 171	509 1556 671	6,0

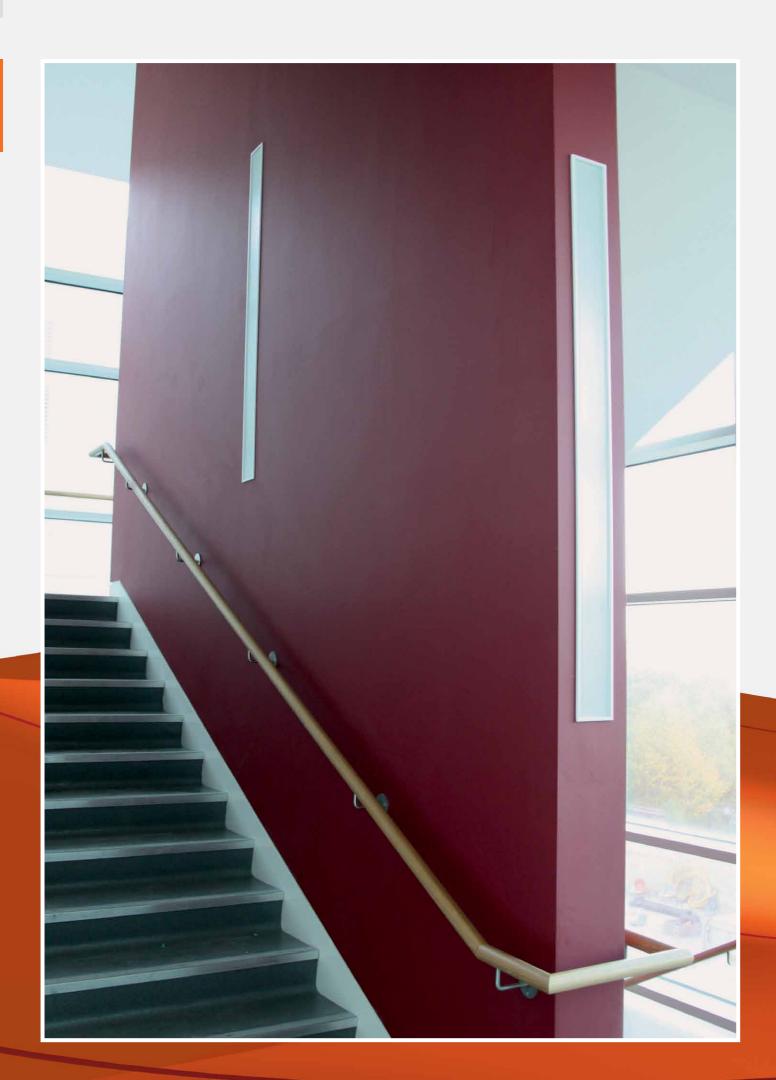
Туре	Colour	Wattage	Еь	Eb dim 1-10V	Eb dim DALI	kg
wing-EBK		3/24	507 3244 180	507 3245 180	507 3246 680	5,6
wing-EBP		3/24	507 3244 190	507 3245 190	507 3246 690	5,6
wing-EBK/6		3/24	508 3244 180	508 3245 180	508 3246 680	5,4
wing-EBP/6		3/24	508 3244 190	508 3245 190	508 3246 690	5,4

lichtwerk www.lichtwerk.de













# saimaa

## saimaa



#### Housing

Sheet steel housing, white or white aluminium for cut-out walls and ceilings. Peripheral fringe without folded-up edge, giving minimally protruding housing edge.

#### Lighting technology EG

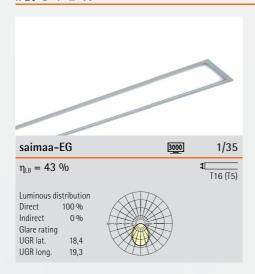
Direct distribution.

White-opal frosted, extruded polycarbonate profile with white reflector. 1lp Versions  $65^{\circ}$ <3000 cd/m² acc. to DIN EN 12464-1.

#### Miscellaneous

Electrical connection via 3-pole (with dimmable luminaires: 5-pole) plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

### IP20 ⊕ ♥ ⊈ **(€**



Туре	Colour	Wattage	Eb	Eb dim 1-10V	Eb dim DALI	kg
saimaa-EG		1/28/54	404 1944 185	404 1945 185	404 1946 685	4,5
	wa		404 1944 186	404 1945 186	404 1946 686	4,5
		1/35/49	404 1964 185	404 1965 185	404 1966 685	4,5
	wa		404 1964 186	404 1965 186	404 1966 686	4,5
		2/28/54	404 2944 185	404 2945 185	404 2946 685	4,8
	wa		404 2944 186	404 2945 186	404 2946 686	4,8
		2/35/49	404 2964 185	404 2965 185	404 2966 685	4,8
	wa		404 2964 186	404 2965 186	404 2966 686	4,8

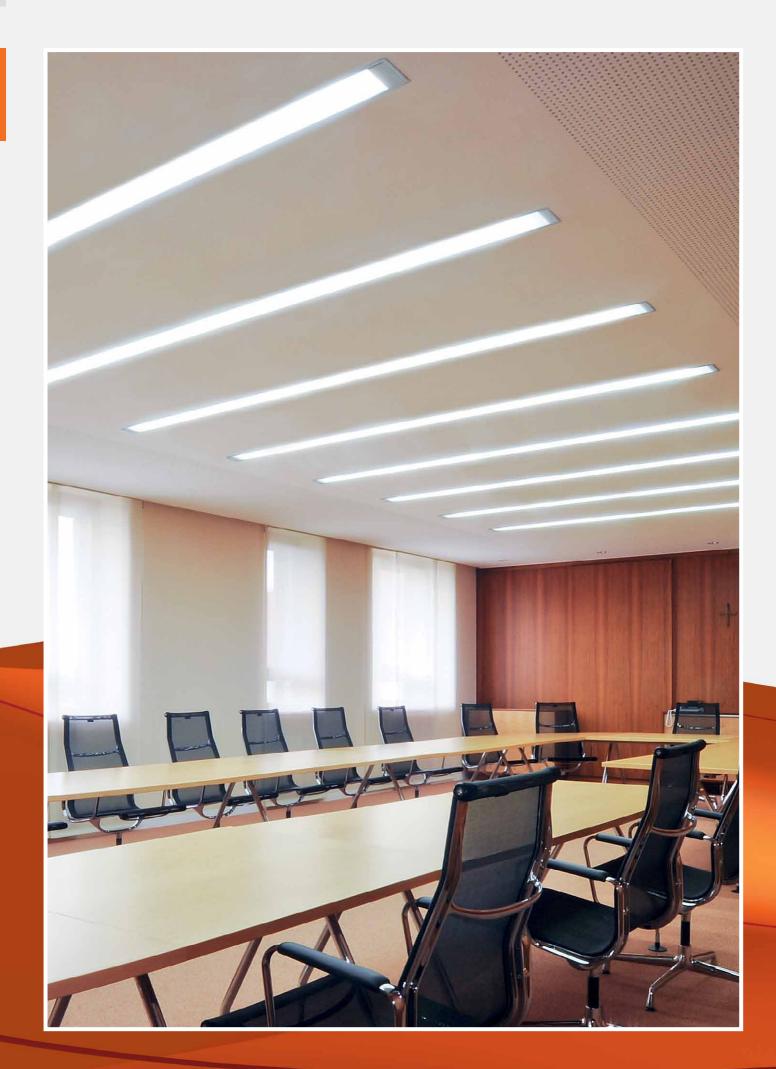
Accessories		Туре	Colour	Material	Details	ltem-number	R kg
S	Tool	SH 30	-	Polymer	Vacuum lifting pad for saimaa-EG panel	903 0030 100	0,1

lichtwerk www.lichtwerk.de

















# grande

# grande

#### Housing

Extruded aluminium profile, natural anodised, for cutout ceilings. Fixing via swivel bracket.

#### Lighting technology ED

Direct distribution.

Highly specular parabolic louvre for VDU workstations,  $65^{\circ}$  <  $1000 \text{ cd/m}^2$  omnidirectional glare control in accordance with current DIN EN 12464-1 standard.

#### Lighting technology EX

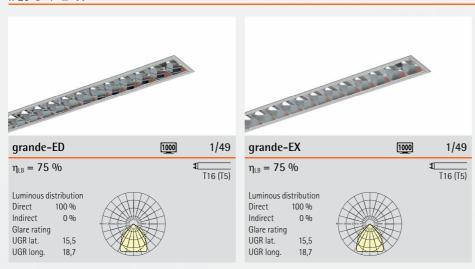
Direct distribution.

Satin matt parabolic louvre, for VDU workstations,  $65^{\circ}$  < 1000 cd/m² omnidirectional glare control in accordance with current DIN EN 12464-1 standard.

#### Miscellaneous

Electrical connection via 5-pole plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

#### IP20 ⊕ ♥ ₲ **(€**



Туре	Colour	Wattage	Eb	Eb multi dim 1-10V	Eb multi dim DALI	₽ kg
grande-ED		1/35	133 1354 170			5,0
		1/49	133 1494 170			5,0
		1/54	133 1544 170			4,2
		1/28/54		133 1945 170	133 1946 670	4,4
		1/35/49		133 1965 170	133 1966 670	5,1
		2/35	133 2354 170			5,0
		2/49	133 2494 170			5,0
		2/54	133 2544 170			4,2
		2/28/54		133 2945 170	133 2946 670	4,4
		2/35/49		133 2965 170	133 2966 670	5,2
grande-ED/II		1/35	134 2354 170			9,5
		1/49	134 2494 170			9,7
		1/54	134 2544 170			8,0
		1/28/54		134 2945 170	134 2946 670	8,3
		1/35/49		134 2965 170	134 2966 670	9,8
		2/35	134 4354 170			9,7
		2/49	134 4494 170			9,7
		2/54	134 4544 170			8,3
		2/28/54		134 4945 170	134 4946 670	8,3
		2/35/49		134 4965 170	134 4966 670	9,9



	Ceiling	Number	Wattage	SL	SB	e	L	В	Н
grande		1/2	28/54	1191	105	135	1201	115	130
		1/2	35/49	1491	105	135	1501	115	130
		2/4	28/54	2368	105	135	2378	115	130
		2/4	35/40	2068	105	125	2079	115	120



Туре	Colour	Wattage	Eb	Eb multi dim 1-10V	Eb multi dim DALI	e kg
grande-EX		1/35	133 1354 160			5,0
		1/49	133 1494 160			5,0
		1/54	133 1544 160			4,2
		1/28/54		133 1945 160	133 1946 660	4,4
		1/35/49		133 1965 160	133 1966 660	5,1
		2/35	133 2354 160			5,0
		2/49	133 2494 160			5,0
		2/54	133 2544 160			4,2
		2/28/54		133 2945 160	133 2946 660	4,4
		2/35/49		133 2965 160	133 2966 660	5,2
grande-EX/II		1/35	134 2354 160		133 2946 660 133 2966 660	9,5
		1/49	134 2494 160			9,7
		1/54	134 2544 160			8,0
		1/28/54		134 2945 160	134 2946 660	8,3
		1/35/49		134 2965 160	134 2966 660	9,8
		2/35	134 4354 160			9,7
		2/49	134 4494 160			9,7
		2/54	134 4544 160			8,3
		2/28/54		134 4945 160	134 4946 660	8,3
		2/35/49		134 4965 160	134 4966 660	9,9

Accessories		Туре	Colour	Material	Details	ltem-number	e kg
55	Wire suspension/Pair	grande-ETS		Mix	d=1mm, l=2000mm	133 0080 105	0,1



# grande



#### Housing

Extruded aluminium profile, natural anodised, for cutout ceilings. Fixing via swivel bracket.

#### Lighting technology EK

Direct distribution.

White-opal frosted, extruded polycarbonate profile with white reflector.

#### Miscellaneous

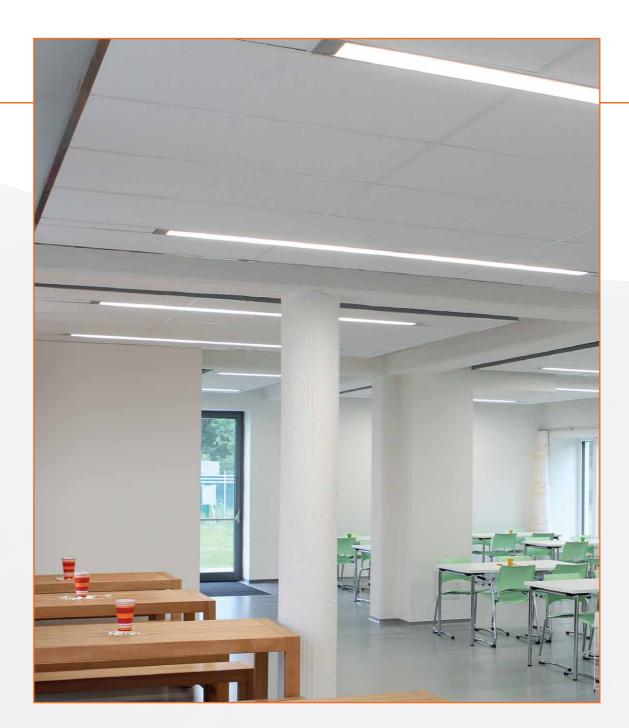
Electrical connection via 5-pole plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm².

#### IP20 ⊕ ♥ ⊈ **(€**



Туре	Colour	Wattage	Ев	Eb dim 1-10V	Eb dim DALI	kg
grande-EK		2/28	133 2284 180	133 2285 180	133 2286 680	5,3
		2/35	133 2354 180	133 2355 180	133 2356 680	6,3
grande-EK/II		2/28	134 4284 180	134 4285 180	134 4286 680	10,7
		2/35	134 4354 180	134 4355 180	134 4356 680	12,7

Accessories		Туре	Colour	Material	Details	ltem-number	kg
K)	Wire suspension/Pair Tool	grande-ETS SH 55		Mix Polymer	d=1mm, l=2000mm Vacuum lifting pad for grande-EK panel	133 0080 105 903 0055 100	0,1 0,1



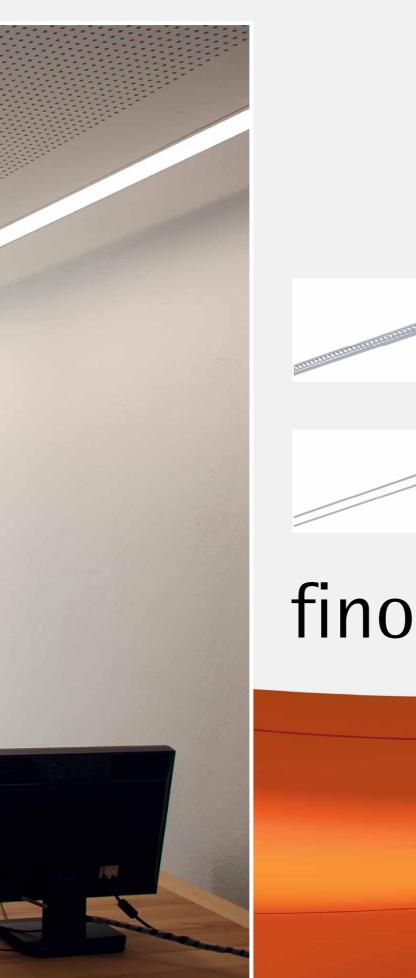
	Ceiling	Number	Wattage	SL	SB	e	L	В	Н
grande		1/2	28/54	1191	105	135	1201	115	130
		1/2	35/49	1491	105	135	1501	115	130
		2/4	28/54	2468	105	135	2478	115	130
		2/4	35/49	3068	105	135	3078	115	130





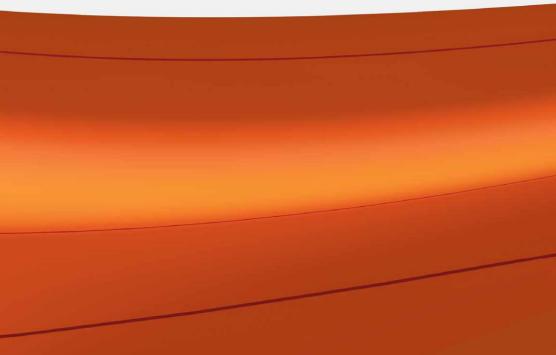












## fino

Extruded aluminium profile, anodised, for cutout ceilings. Fixing via swivel bracket.

#### Lighting technology ED

Direct distribution.

Highly specular parabolic louvre for VDU workstations, 65° < 1000 cd/m<sup>2</sup> omnidirectional glare control in accordance with current DIN EN 12464-1 standard.

#### Lighting technology EX

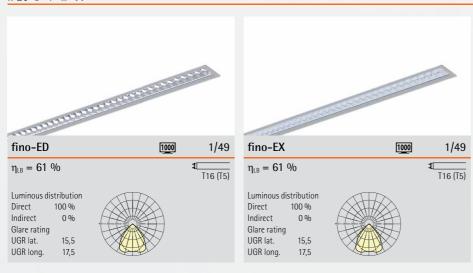
Direct distribution.

Satin matt parabolic louvre, for VDU workstations, 65° < 1000 cd/m<sup>2</sup> omnidirectional glare control in accordance with current DIN EN 12464-1 standard.

#### Miscellaneous

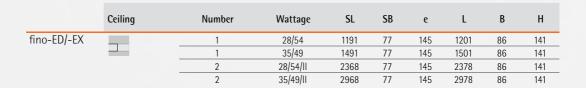
Electrical connection via 5-pole plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

#### IP20 $\oplus$ $\triangledown$ $\circlearrowleft$ (€



Туре	Colour	Wattage	Eb	Eb multi dim 1-10V	Eb multi dim DALI	kg
fino-ED		1/35	135 1354 170			5,1
		1/49	135 1494 170			5,1
		1/54	135 1544 170			4,1
		1/28/54		135 1945 170	135 1946 670	4,2
		1/35/49		135 1965 170	135 1966 670	5,2
fino-ED/II		1/35	135 2354 170			10,2
		1/49	135 2494 170			10,2
		1/54	135 2544 170			8,1
		1/28/54		135 2945 170	135 2946 670	8,3
		1/35/49		135 2965 170	135 2966 670	10,3
fino-EX		1/35	135 1354 160			5,1
		1/49	135 1494 160			5,1
		1/54	135 1544 160			4,1
		1/28/54		135 1945 160	135 1946 660	4,2
		1/35/49		135 1965 160	135 1966 660	5,2
fino-EX/II		1/35	135 2354 160			10,2
		1/49	135 2494 160			10,2
		1/54	135 2544 160			8,1
		1/28/54		135 2945 160	135 2946 660	8,3
		1/35/49		135 2965 160	135 2966 660	10,3











## fino

#### Housi

Extruded aluminium profile, anodised, for cutout ceilings. Fixing via swivel bracket.

#### Lighting technology EK

Direct distribution.

White-opal frosted, extruded polycarbonate profile with white reflector.

#### Lighting technology EKR

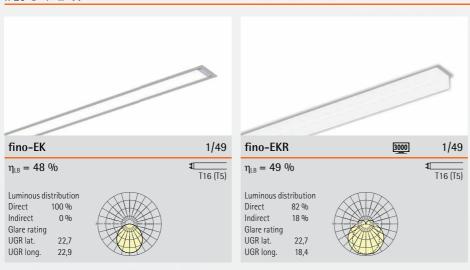
Direct distribution.

White-opal frosted, raised polycarbonate profile with white reflector. Versions 1/28W und 1/35W for VDU workstations,  $65^{\circ} < 1000 \text{ cd/m}^2$  omnidirectional glare control in accordance with current DIN EN 12464–1 standard.

#### Miscellaneous

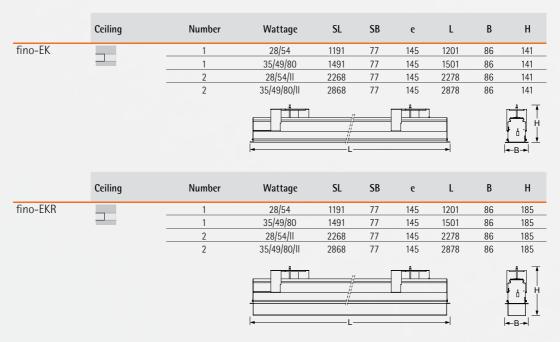
Electrical connection via 5-pole plug-in connection terminal; with integrated earth conductor connection and unlocking button, suitable for rigid and flexible cables up to 2.5mm<sup>2</sup>.

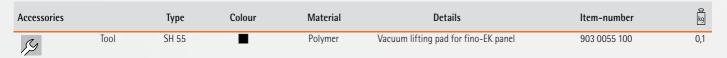
#### IP20 ⊕ ♥ ₲ **(€**



Туре	Colour	Wattage	Eb	Eb multi dim 1-10V	Eb multi dim DALI	R kg
fino-EK		1/28	135 1284 180			3,8
		1/35	135 1354 180			5,2
		1/49	135 1494 180			5,2
		1/54	135 1544 180			3,8
		1/80	135 1804 180			5,2
		1/28/54		135 1945 180	135 1946 680	4,0
		1/35/49/80		135 1955 180	135 1956 680	5,3
fino-EK/II		1/28	135 2284 180			7,6
		1/35	135 2354 180			10,2
		1/49	135 2494 180			10,2
		1/54	135 2544 180			7,6
		1/80	135 2804 180			10,2
		1/28/54		135 2945 180	135 2946 680	7,8
		1/35/49/80		135 2955 180	135 2956 680	10,4
fino-EKR		1/28	135 1284 182			4,8
		1/35	135 1354 182			5,9
		1/49	135 1494 182			5,9
		1/54	135 1544 182			4,8
		1/80	135 1804 182			5,9
		1/28/54		135 1945 182	135 1946 682	4,9
		1/35/49/80		135 1955 182	135 1956 682	6,0
fino-EKR/II		1/28	135 2284 182			9,4
		1/35	135 2354 182			11,8
		1/49	135 2494 182			11,8
		1/54	135 2544 182			5,9
		1/80	135 2804 182			11,8
		1/28/54		135 2945 182	135 2946 682	9,5
		1/35/49/80		135 2955 182	135 2956 682	11,9























# epic

# epic

#### Housing R

Rounded sectional aluminium, anodised. Circumferential shadow gap between the housing and film / plate profile with an integrated plastic lip. Baseplate sheet steel, white.

For variants 650 and 950, the mounting takes place via pre-assembled sheet metal clamp with adjustable height compensation. Optional mounting on the bare ceiling using fastening set epic Q/R-E, order separately. For variants 1280 and 1560, mounting takes place on site or using accessories Epic Q/R-E, order separately.

#### Lighting technology R-EF

Direct distribution.

Aluminium profile set flush in the ceiling with translucent foil for a homogenous illumination appearance. Suited for VDU workstations 65°<3000cd/m² omnidirectional glare reduction according to DIN EN 12464-1.

#### Lighting technology R-EGZ

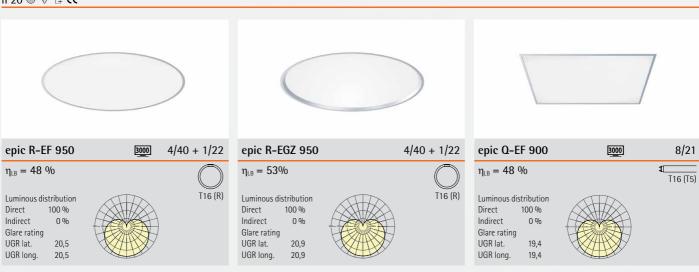
Direct distribution.

Aluminium profile set flush in the ceiling with a recessed, brushed special acrylic pane with high transmittance. Variant R-EGZ 650 suited for VDU workstations 65°<3000cd/m² omnidirectional glare reduction according to DIN EN 12464-1.

#### Housing Q

Aluminium profile in a square design, anodised. Circumferential shadow gap between the housing and film / plate profile with an integrated plastic lip. Baseplate sheet steel, white. For variants 600 and 900, the mounting takes place via pre-assembled sheet metal clamp with adjustable height compensation. Optional mounting on the bare ceiling using fastening set epic Q/R-E, order separately. For variants 1200 and 1500, mounting takes place on site or using accessories Epic Q/R-E, order separately.

#### IP20 ⊕ ♥ 🗗 **(€**



Туре	Colour	Number x Wattage	Eb	Eb dim DALI	kg
epic R-EF 650		3 x 22	631 0654 155	631 0656 655	10
epic R-EF 950		4 x 40 + 1 x 22	631 0954 155	631 0956 655	16
epic R-EF 1280		2 x 14/24 + 2 x 21/39 + 4 x 28/54	631 1284 155	631 1286 655	24
epic R-EF 1560		2 x 14/24 + 2 x 21/39 + 2 x 28/54 + 4 x 35/49	631 1564 155	631 1566 655	30
epic R-EGZ 650		3 x 22	631 0654 165	631 0656 665	10,3
epic R-EGZ 950		4 x 40 + 1 x 22	631 0954 165	631 0956 665	16,5
epic Q-EF 600		6 x 14/24	630 0604 155	630 0606 655	12
epic Q-EF 900		8 x 21/39	630 0904 155	630 0906 655	20
epic Q-EF 1200		10 x 28/54	630 1204 155	630 1206 655	28
epic Q-EF 1500		12 x 35/49	630 1504 155	630 1506 655	37
epic Q-EGZ 600		6 x 14/24	630 0604 165	630 0606 665	12,5
enic 0-FG7 900		8 x 21/39	630 0904 165	630 0906 665	20.6

Accessories		Туре	Colour	Material	Details	Item-number	R kg
B	Mounting kit	epic Q/R-E		St-BI	Mounting kit for epic Q-E 1200, 1500 and epic R-E 1280, 1580	630 0000 100	

## ---

#### Lighting technology Q-EF

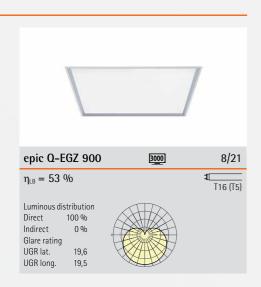
Direct distribution.

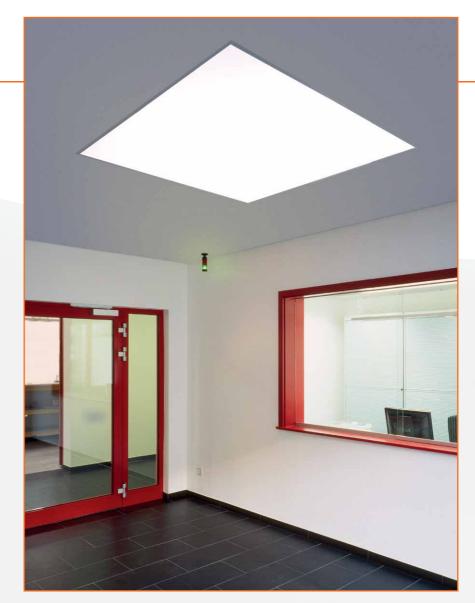
Aluminium profile set flush in the ceiling with translucent foil for a homogenous illumination appearance. FH types (14W, 21W, 28W, 35W) suited for VDU workstations 65°<3000cd/m² omnidirectional glare reduction according to DIN EN 12464-1.

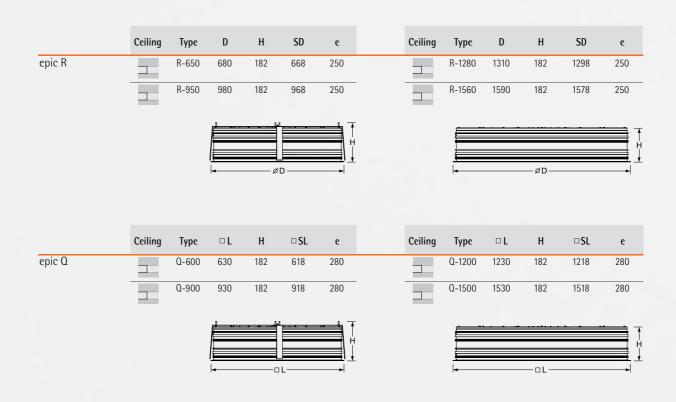
#### Lighting technology Q-EGZ

Direct distribution.

Aluminium profile set flush in the ceiling with a recessed, brushed special acrylic pane with high transmittance. Variant Q-EGZ 600 6x14W, Q-EGZ 900 8x21W suited for VDU workstations 65°<3000cd/m² omnidirectional glare reduction according to DIN EN 12464-1.







## lichtwerk

#### 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.

 Conclusion of the contract and scope of services
 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 rate 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  $\epsilon$ 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  $\epsilon$ 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 or 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 bancruptcy 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 obligations4.1 The delivery period begins with the date of written agreement about the order between Orderer

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 de-lay 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 intend 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 detoriation of the purchased gods 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 purchasor 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 purchasor 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.

7.1 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

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 subse-

quent 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

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.

According to § 33 of the German Data Protection Act, we point out that the Orderer's personal data is stored and processed by computer for the purpose of a proper business transaction.

#### 10. 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 HaBfurt 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 GIC 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.

### **Contacts**

#### Sales Germany

T +49 9525 9827 0 info@lichtwerk.de

#### **Technical Service**

T +49 9525 9827 1 lichtplanung@lichtwerk.de

#### German sales force

Tilo Todt
Waltersdorfer Straße 12
08468 Reichenbach OT Friesen
T +49 3765 14084
F +49 3765 14083
M +49 172 8670062
tilo.todt@lichtwerk.de

Michael Vorbeck Lange Straße 18 63803 Haibach T +49 6021 66856 F +49 6021 632394 M +49 172 8670048 info@lb-vorbeck.de

Klaus Rauscher Maintalstraße 19 96149 Breitengüßbach T +49 9544 983131 F +49 9544 983132 klaus.rauscher@lichtwerk.de Steffen Bulling
Fritz-Hollweg-Ring 30
01665 Klipphausen
T +49 35204 791417
F +49 35204 791418
steffen.bulling@lichtwerk.de

Reinhard Froeschke Edelsteinstraße 14 23566 Lübeck T +49 451 6091115 F +49 451 6091116 M +49 170 2089020 Froeschke-licht@freenet.de Heiner Siedenberg Hauptstraße 50 38855 Wernigerode/Minsleben T +49 3943 500115 F +49 3943 22882 iv.siedenberg@t-online.de

Jens Schlothauer Bischofferöder Straße 4a 37345 Holungen T +49 36077 933587 F +49 36077 933588 jens.schlothauer@lichtwerk.de Peter Gröger Buchenweg 9 97440 Werneck T +49 9722 944826 F +49 9722 944827 peter.groeger@lichtwerk.de

Bernhard Zirkelbach Franz-Bayer-Straße 7 97539 Wonfurt/Dampfbach T +49 9528 950103 F +49 9528 950163 bernhard.zirkelbach@lichtwerk.de

#### Sales international / Sales Manager

Ingeborg Schmidt T +49 9525 89287 F +49 9525 89444 M +49 172 8670043 ingeborg.schmidt@lichtwerk.de

Austria, Belgium, Czech Republic, France, Greece, Italy, Luxembourg, Maghreb, Middle East, Netherlands, Portugal, South Korea, Switzerland, Spain Torsten Kießlich-Köcher T +49 9525 89450 F +49 9525 89444 M +49 172 8682620 torsten.kiesslich@lichtwerk.de

Albania, Australia, Canada, Croatia, Estonia, Finland, GUS, India, Ireland, Latvia, Lithuania, New Zealand, Romania, Slovenia, Ukraina, United Kingdom, USA Stefan Nestmann T +49 9525 89438 F +49 9525 89444 M +49 172 8670054 stefan.nestmann@lichtwerk.de

Bulgaria, Denmark, Hungary, Iceland, Italy/Alto Adige, Italy/Trentino, Norway, Poland, Slovakian Republic, 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 230 V 50 Hz 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.





## www.lichtwerk.de

lichtwerk GmbH - Hellinger Straße 3 - D 97486 Königsberg