

**A bright future for the efficiency of your systems**  
**Our intelligent combination of lighting and power**  
Let's connect.

FieldPower® Wind Energy



**Weidmüller** 

**Our system solution**  
**Benefit from the advantages of a system solution from a single source**  
*Let's connect.*



**Dear readers,**

Your aspiration is to achieve maximum system efficiency for minimum acquisition and overall operating costs. At the same time, your customers demand reliable and sustainable cost-effective solutions. At Weidmüller, we have been involved in the wind power sector right from the start and know your requirements inside out.

Based on our proven FieldPower® series we have developed a complete lighting and power system specifically for wind power installations, which you can integrate into any application-specific system: FieldPower® Wind Energy.

FieldPower® Wind Energy will allow you to unlock new potential for achieving increased efficiency, overall cost reductions and quality assurance. And the best part: you get all the components from a single source. This does away with time-consuming arrangements with different component suppliers – and saves a lot of hassle.

Let's connect.

- 4** **You want to be successful in the wind energy sector**  
*You can count on our experience*
- 6** **Take advantage of an up to 100% customised system design**  
*Thanks to our proven FieldPower® concept*
- 8** **The future of your lighting systems is in LED technology**  
*We have enlightening arguments to back up our claim*
- 10** **Your systems require a reliable power supply**  
*With our connectivity solutions you are permanently supplied*
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- 30** **Our expertise for your requirements**  
*Service connects – worldwide*
- 32** **Online support and downloads**  
*Exactly the right help and information on our solutions and products*



## You increase the market success of your systems We support you with an integrated design

As a supplier of wind power systems you are under ever-increasing pressure from your competitors. This is why you need to design your latest wind turbines to deliver as much success as possible. The aim is to achieve maximum system efficiency for minimum acquisition and overall operating costs. At the same time, your customers demand reliable and sustainable cost-effective solutions.

At Weidmüller we have been involved in the wind power sector right from the start and know your requirements inside out. Based on our proven FieldPower® series we have developed a complete lighting and power system specifically for wind power installations, which you can integrate into any application-specific system: FieldPower® Wind Energy. FieldPower® Wind Energy will allow you to unlock new potential for achieving increased efficiency, overall cost reductions and quality assurance. And the best part: you get all the components from a single source. This does away with time-consuming arrangements with different component suppliers – and saves a lot of hassle.

**Let's connect.**

## High system efficiency – low operating costs Our unique system for lighting and power

### FieldPower® Wind Energy – all the benefits of a system solution

#### Advanced LED lighting

- High energy efficiency
- Long service life
- Easy handling
- Reliable even at low temperatures

#### Pre-installable components

- Shorter installation times
- Savings in materials and costs through smaller cable cross-sections

#### Practical remote monitoring

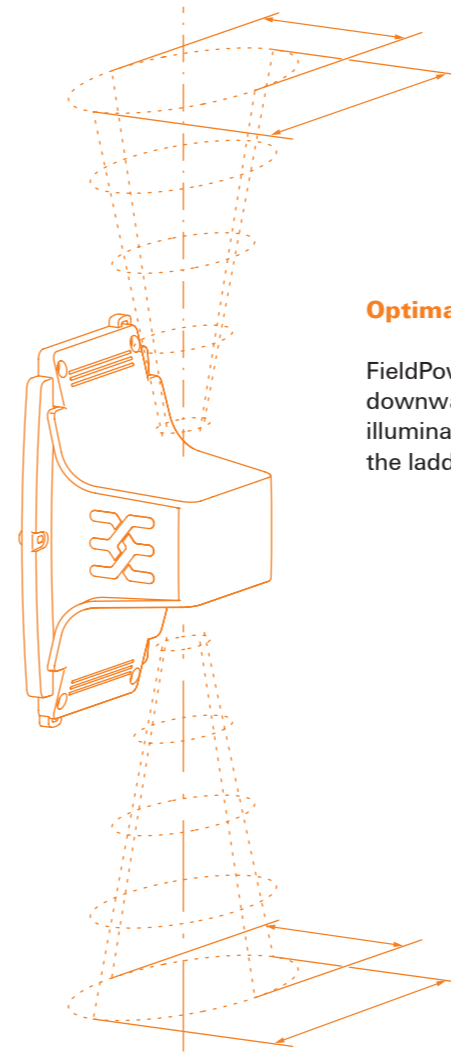
- Detailed system status messages
- Reduced maintenance costs
- Integrates into existing system

#### Complete power supply system

- Industry-standard switched-mode power supplies
- Cost-effective UPS integration
- Precisely tailored components

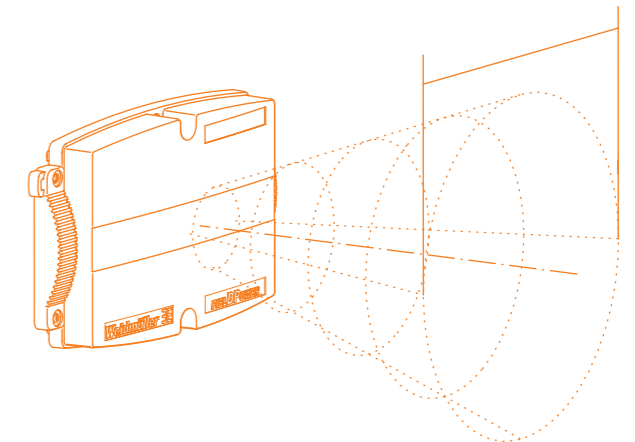
With FieldPower® Wind Energy we have harnessed all the benefits of our proven FieldPower® power bus systems especially for wind turbines. For you, this means high economic efficiency and practical usage – with a complete system that can be tailored to your exact needs.

## Take advantage of an up to 100% customised system design Thanks to our proven FieldPower® concept



### Optimal lighting in the tower

FieldPower® Duo LED with upwards and downwards facing directional light. Ideal for illuminating wall sections, such as in and around the ladders in the tower.

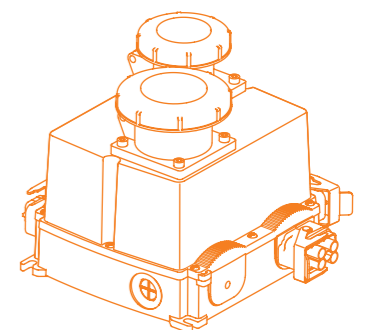


### Optimal lighting in the hub and nacelle

FieldPower® Mono LED K with collimators for directional lighting. Ideal for illuminating work areas requiring high levels of lighting in a small space.

### Optimum power supply

Individual positioning of compact power outlets. For quick access to power in all sections and levels of the turbine.



# The future of your lighting systems is in LED technology

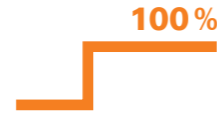
We have enlightening arguments to back up our claim

LED lamps currently provide the most advanced and long-term cost-effective lighting concept on the market. They are much more efficient, compact, robust and durable than conventional strip lights – and far easier to handle.



### Temperature-insensitive

LED lamps are considerably less sensitive to extreme temperatures and temperature fluctuations than conventional forms of lighting.



### 100% Full power in an instant

LED lamps achieve full luminosity the moment they are switched on – even in emergency mode. Their fast response behaviour means that visual warning and error messages are also an option.



### Well protected

Enclosures with enhanced IP protection classes make FieldPower® LED lamps impervious to the ingress of dirt and moisture.



### DC input

A wide input range of 24 V DC to 120 V DC makes LED lamps suitable in all sections of a wind turbine.



### Vibration-resistant

LED lamps continue to work reliably for long periods even when subjected to strong vibrations. This allows them to be used in all locations and reduces the cost of maintenance and replacements.



### Exceptional energy efficiency

The high energy efficiency of LED lights make them economical to use over the long term in all areas of wind turbine applications.



### Shock-resistant

Even severe shocks have hardly any impact on LED lamps. This makes them easy to transport and also reduces downtimes for installation and replacements.



### Cost-effective installation

Voltages from 24 V DC to 120 V DC enable conductors with small cross sections to be used. This significantly reduces materials and investment costs.



## Your systems require a reliable power supply

With our connectivity solutions you are permanently supplied



The choice of device connection technology often has a significant bearing on the economics of the system. To ensure you are permanently connected, we provide you with a power supply solution that is precisely tailored to all the relevant requirements and environmental conditions. This includes everything from the most suitable power supply unit thorough to a central UPS with battery and any additional modules that may be required.

### Power supplies

Switched-mode power supplies from the PROmax series are the robust and high-performance connectivity solution for the wind energy sector. Even continuous overloads or short-term peak loads of 300 percent hardly have an impact on them. We provide you with suitable uninterrupted power supplies and electronic fuses. A multitude of approvals mean that our PROmax switched-mode power supplies can be used around the world.



### UPS and battery modules

The UPS control units are adapted to the SMPS and, in conjunction with the associated battery modules, form a complete DC-UPS system. The system permits backup times ranging from minutes to hours and has been optimised for long battery life. Multiple status relays provide comprehensive condition monitoring.



### Control Unit

The remote monitoring system provides status messages on the condition of the lighting and power supply system. This enables maintenance work to be scheduled well in advance, leading to a significant reduction in system maintenance costs.

Remote monitoring can be easily integrated into existing systems. The remote monitoring system also provides optional support for existing warning systems, such as the control of a visual alarm system in the tower.



**You want to know if the investment is worth your while**  
**We will show you – by way of direct comparison**

Plant size and type, location, environmental conditions, country-specific standards and regulations: a multitude of factors influence the individual planning of a wind turbine system. For this reason, we want to make sure that our lighting and power concept meets each and every one of your requirements. In a detailed simulation, we will show you how our system can be integrated in your wind turbines – as well as explaining exactly how you will benefit. The service is free and without obligation.

**Totally secure: our project support**



**Gathering of project data**

We will help you work out the exact requirements for your wind turbines and prepare your data for import into our simulation software.



**Realistic simulation of your project**

Based on your project data, our specialists will simulate the structure of your lighting and power system with all the additional components you have requested.



**Active planning support**

Once we have determined all the necessary components, we will guide you through the application-specific planning and implementation of your customised lighting and power supply concept.

## You benefit from the advantages of a system solution

We supply you with everything from a single source

FieldPower® Wind Energy has everything you need to light up the interior of your wind turbines and supply them with power. In keeping with the Weidmüller FieldPower® series, which has proven its worth many times over, the innovative system solution cuts an impressive figure with its high efficiency and practical handling.

### Individual outlets

The FieldPower® system enables customised use of compact power outlets at all levels and in all locations. This means that service staff, for instance, always have perfect access to power and thus save valuable time.

### FieldPower® Mono LED FieldPower® Mono LED K

Non-directional lighting for illuminating entire rooms and larger areas. Provides optimum working conditions in the nacelle, hub and on the platforms.



### FieldPower® Duo LED

Lights facing both upwards and downwards for lighting up the wall area. Ideal for illuminating the ladders in the tower.



### Pre-assembled cables

On request, we can supply power cables assembled according to your individual requirements. They are ready to install and equipped with our proven plug-in connectors.

### Feed-In Box

For 48V DC feed-in to our Fieldpower LED tower lighting. In the event of power loss, continued operation is ensured for 60 minutes.



### Complete power supply system

We provide you with a power supply solution that is precisely tailored to specific requirements and environmental conditions. This includes everything from the power supply unit through to a UPS with central battery and any suitable add-on modules.

### Control Unit

The remote monitoring system provides status messages on the condition of the lighting system and can be easily integrated into existing wind farm systems. It also provides an option for controlling a visual alarm system in the tower as a perfect complement to existing monitoring systems.





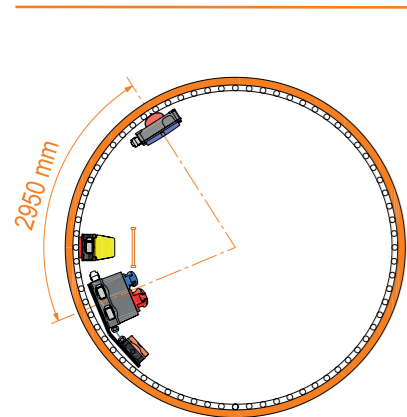
# LED customized solution

That's how your tower solution could look like

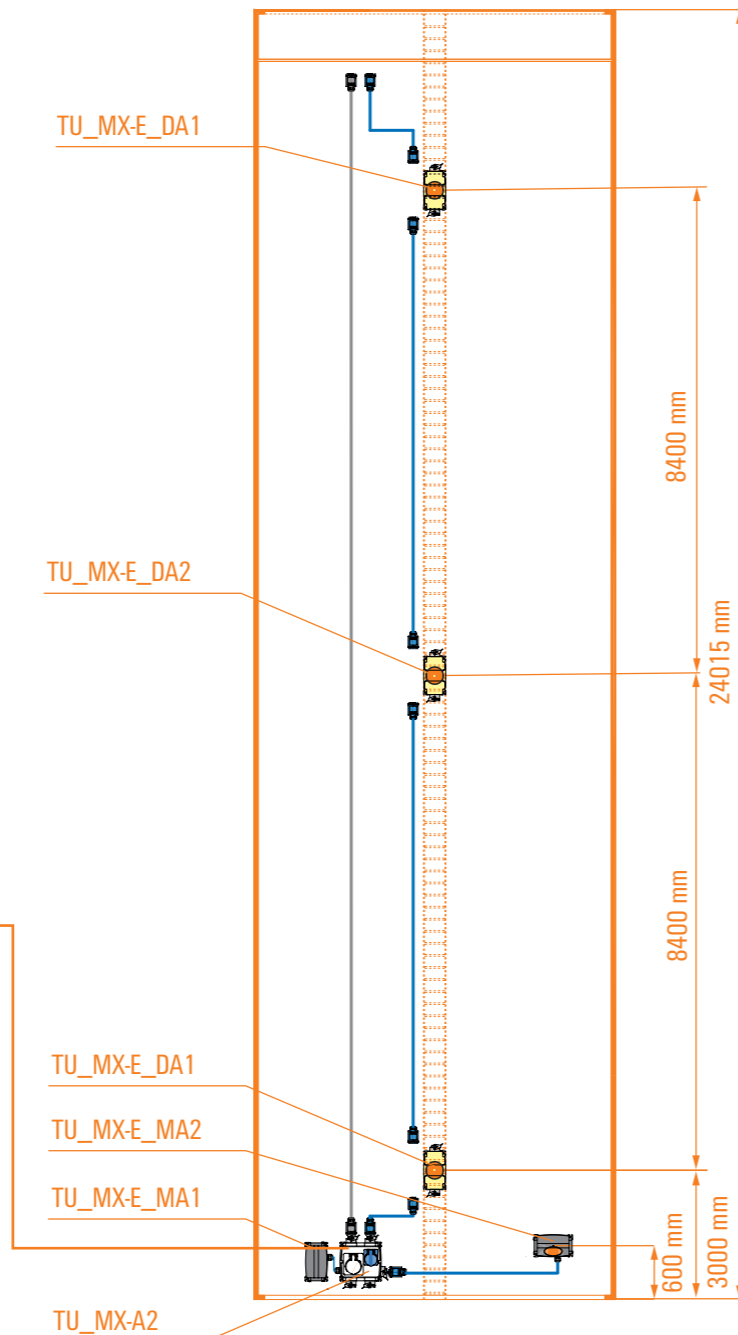
## Pre-assembled system acc.to customers demands for wind turbine generators

- Non-directional lighting for illuminating entire rooms and larger areas. Provides optimum working conditions in the nacelle, hub and on the platforms.
- Easy fixing along cable channel or with magnets
- Fixing plates of LEDs and Outlet boxes up to 100% customised acc. to customer needs
- Pluggable segment to segment
- Reduced cable sizes
- Defined labeling of all components acc. to E-Plan and installation manual
- Individual, easy fitting packages of all components

Tested LED strings → reduced test procedure @ tower manufacturer  
Easy expansion, platform concept



## Exemplary technical drawing of one tower segment



## Feed-in Box

- Power supply PRO MAX
- Fuse protection device
- Control Unit WCU for inspection and alert
- Test mode battery
- 230 V Schuko, 230 V CEE, 400 V CEE
- Cooling fan/ Heating (option)
- On / Off Switch, Status LEDs
- Multiplug feed-in (Harting or compatibel)
- Supply LED strings AC/DC
- Supply Outlets 230 V / 400 V
- Details acc. to customers Specs



# Directional lighting for illuminating the tower

## FP Duo LED DC HQ8



## FP Duo LED DC SA



### Technical data

#### Rated data to EN 60598-1

Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)
<b>General data</b>	
Overvoltage category pollution degree	II/2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Klasse 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	intern
Light colour (CCT)	Cool White, 6.000 K
Light current	496 lm (both directions in total)
Efficiency class (to EU Ordinance No. 874/2012)	A+

#### EMC

Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547

#### Connection data

Type of connection	Plug-in connector with fixed number of poles, HQ 4/2
Line type	
Wire cross-section (connecting line)	0.5 mm <sup>2</sup> ...2.5 mm <sup>2</sup> (HQ 2.5)

#### Approvals

Standard	UL 1598 / GL / CSA
Fire specification to UL 94	V0

### Ordering data

Type	Qty	Order No.
FP Duo LED DC HQ8	1	1488480000

### Accessories

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)
<b>General data</b>	
Overvoltage category pollution degree	II/2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Klasse 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	intern
Light colour (CCT)	Cool White, 6.000 K
Light current	496 lm (both directions in total)
Efficiency class (to EU Ordinance No. 874/2012)	A+

Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547

Type of connection	Plug-in connector with fixed number of poles, HQ 4/2
Line type	
Wire cross-section (connecting line)	0.5 mm <sup>2</sup> ...2.5 mm <sup>2</sup> (HQ 2.5)

Standard	UL 1598 / GL / CSA
Fire specification to UL 94	V0

Type	Qty	Order No.
FP Duo LED DC SA	1	1488500000

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)
<b>General data</b>	
Overvoltage category pollution degree	II/2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54 / IP 65*
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 Std.
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Klasse 3M3
Amplitude deflection	1,5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0,5 G) (bei 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Klasse 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	intern
Light colour (CCT)	Cool White, 6.000 K
Light current	496 lm (both directions in total)
Efficiency class (to EU Ordinance No. 874/2012)	A+

Noise emission	nach EN 55015
Noise immunity tests	nach EN 61547

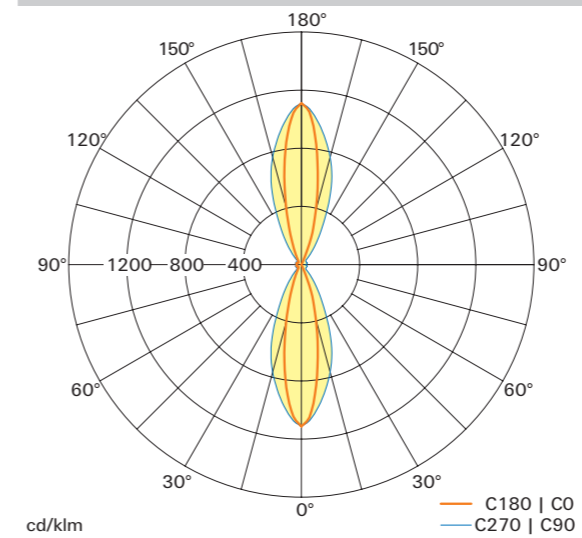
Type of connection	open conductor end / length 2 m
Line type	Heluwind WK 103w-Torsion 2 x 2,5 mm <sup>2</sup>

Standard	UL 1598 / GL / CSA
Fire specification to UL 94	V0

Type	Qty	Order No.
FP Duo LED DC SA	1	1488500000

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

## FP DUO LED DC HQ8



## FP DUO LED DC HQ8

Mounting height	Average illuminance	Beam Diameter
1 m	413 lux	0.41 m
2 m	103 lux	0.82 m
3 m	46 lux	1.24 m
4 m	26 lux	1.65 m
5 m	17 lux	2.06 m

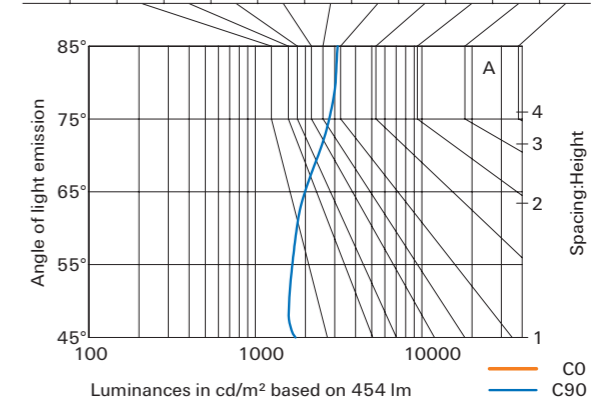
496 lm Half beam angle 23° η = 100%

### Technical Description

Designation	FP DUO L_ED DC HQ8
Manufacturers	Weidmueller
Catalogue numbe	1488480000
Light exit	Cuboid 0.148 x 0.100 x 0.010 m
Lamps	1 x LED 5 W
Nominal luminous flux	496 lm
Nominal power	4.9 W
LOR	100 %

## Söllner

CIE	DIN	Nominal Illuminance (lx)							
A	A	2000	1000	750	500	300			
B	1	2000	1500	1000	750	500	300		
C				2000	1000	500	300		
D	2				2000	1000	500	300	
E	3					2000	1000	500	300



## Glare Evaluation

X = 4 H, Y = 8 H	S = 0.25 H
Reflection factors	70/50/20
UGR transversal	14.9
UGR axial	16.6

## Classification

LITG	C63
EN	
BZ	
UTE	0.50 B + 0.50 T
CIE Flux Codes	79 86 93 50 100

# Optima surface illumination in DC environments

## FP Mono LED K DC HQ8



## FP Mono LED K DC SA



### Technical data

#### Rated data to EN 60598-1

Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)

#### General data

Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Light colour (CCT)	Cool White, 6.000 K
Light current	454 lm
Efficiency class (to EU Ordinance No. 874/2012)	A

#### EMC

Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547

#### Connection data

Type of connection	Plug-in connector with fixed number of poles, HQ 4/2
Line type	
Wire cross-section (connecting line)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

#### Approvals

Standard	UL 1598 / GL / CSA
Fire specification to UL 94	VO

### Ordering data

Type	Qty	Order No.
FP MONO LED K DC HQ8	1	1507050000

### Accessories

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)

Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Light colour (CCT)	Cool White, 6.000 K
Light current	454 lm
Efficiency class (to EU Ordinance No. 874/2012)	A

Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547

Type of connection	Plug-in connector with fixed number of poles, HQ 4/2
Line type	
Wire cross-section (connecting line)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

Standard	UL 1598 / GL / CSA
Fire specification to UL 94	VO

Type	Qty	Order No.
FP MONO LED K DC HQ8	1	1507050000

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)

Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54 / IP 65*
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Light colour (CCT)	Cool White, 6.000 K
Light current	454 lm
Efficiency class (to EU Ordinance No. 874/2012)	A

Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547

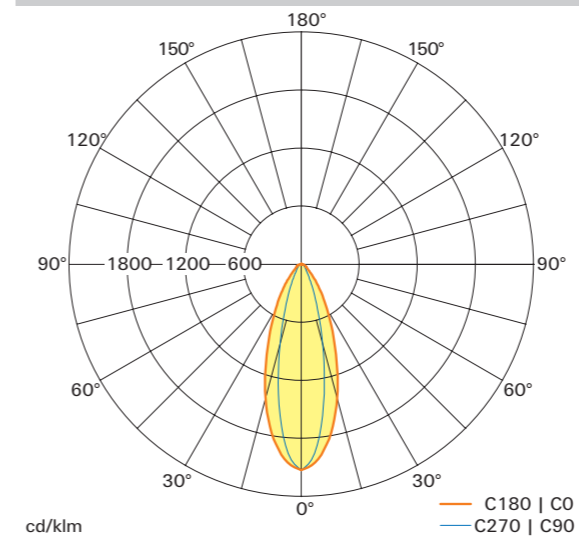
Type of connection	open conductor end / length 2 m
Line type	Heluwind WK 103w-Torsion 2 x 2.5 mm <sup>2</sup>

Standard	UL 1598 / GL / CSA
Fire specification to UL 94	VO

Type	Qty	Order No.
FP MONO LED K DC SA	1	1507040000

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

## FP MONO LED K DC HQ8



## FP MONO LED K DC HQ8

Mounting height	Average illuminance	Beam Diameter
1 m	518 lux	0.73 m
2 m	129 lux	1.46 m
3 m	58 lux	2.19 m
4 m	32 lux	2.92 m
5 m	21 lux	3.65 m

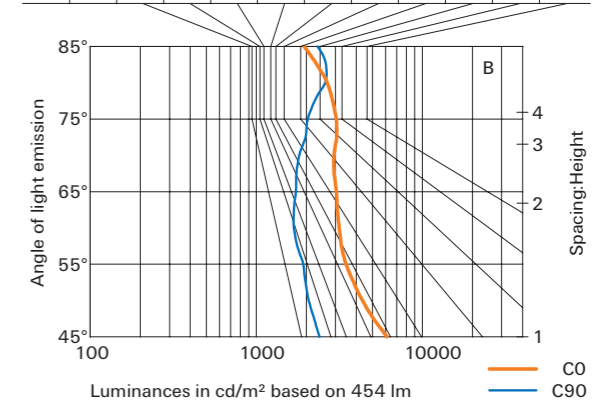
φ=454 mm      Half beam angle=2x20°      LOR=100%

### Technical Description

Designation	FP MONO LED K DC HQ8
Manufacturers	Weidmueller
Catalogue numbe	1507050000
Light exit	Cuboid 0.148 x 0.100 x 0.010 m
Lamps	1 x LED 5 W
Nominal luminous flux	454 lm
Nominal power	4.4 W
LOR	100 %

## Söllner

CIE	DIN	Nominal Illuminance (lx)								
A	A	2000	1000	750	500	300				
B	1		2000	1500	1000	750	500	300		
C				2000		1000	500	300		
D	2					2000	1000	500	300	
E	3						2000	1000	500	300



## Glare Evaluation

X = 4 H, Y = 8 H	S = 0.25 H
Reflection factors	70/50/20
UGR transversal	17.7
UGR axial	15.1

## Classification

LITG	A71
EN	
BZ	
UTE	0.99 A + 0.01 T
CIE Flux Codes	83 93 98 99 100

# Optimum surface illumination for AC and DC environments

## FP Mono LED DC HQ8



## FP Mono LED DC SA



## BG GHDE LED TL M4 PT6



## BG GHDE LED TL PT6



### Technical data

Rated data to EN 60598-1	
Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)
General data	
Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm
Efficiency class (to EU Ordinance No. 874/2012)	A
EMC	
Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547
Connection data	
Type of connection	Plug-in connector with fixed number of poles, HQ 4/2
Line type	
Wire cross-section (connecting line)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Approvals	
Standard	UL 1598 / GL / CSA
Fire specification to UL 94	VO

### Ordering data

Type	Qty	Order No.
FP MONO LED DC HQ8	1	1488530000

### Accessories

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

Rated data to EN 60598-1	
Rated voltage	24...120 V DC
Variable-voltage input	21,6 V...144 V DC / reverse polarity protected
Power rating / power loss	5 W
Inrush current	0.2 A (24 V DC)
General data	
Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 54 / IP 65*
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm
Efficiency class (to EU Ordinance No. 874/2012)	A
EMC	
Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547
Connection data	
Type of connection	open conductor end / length 2 m
Line type	Heluwind WK 103w-Torsion 2 x 2.5 mm <sup>2</sup>
Approvals	
Standard	UL 1598 / GL / CSA
Fire specification to UL 94	VO

Type	Qty	Order No.
FP MONO LED DC SA	1	1488520000

Markers (self-adhesive)	Type	Qty	Order No.
	THM MT30x 38/17	Reel	1011610000

### Technical data

Rated data to EN 60598-1	
Rated voltage	265 V
Variable-voltage input	100...265 V DC + AC (45...65 Hz)
Power rating / power loss	7 W / < 2 W
Inrush current	0.5 A / 0.1 ms
General data	
Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 65 when mounted
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Circuit breaker	< 10 A
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm
EMC	
Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547
Connection data	
Type of connection	open conductor end / length 2 m
Line type	Heluwind WK 103w-T 3G1.5 (AD 8 mm)
Note	
Mounting: direct mounting on a stainless steel mounting plate with four metric M4 screws. Conductor gasket: cable gland M16 order separately. Note the maximum thread lengths of the glands.	
Approvals	
Standard	UL 1598
Fire specification to UL 94	VO
Rated voltage	120 VAC

### Ordering data

Type	Qty	Order No.
BG GHDE LED TL M4 PT6	1	1390870000

Markers (self-adhesive)	Type	Qty	Order No.
	BG GHDE LED TL PT6	1	1390850000

Rated data to EN 60598-1	
Rated voltage	265 V
Variable-voltage input	100...265 V DC + AC (45...65 Hz)
Power rating / power loss	7 W / < 2 W
Inrush current	0.5 A / 0.1 ms
General data	
Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 65 when mounted
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Circuit breaker	< 10 A
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm
EMC	
Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547
Connection data	
Type of connection	open conductor end / length 2 m
Line type	Heluwind WK 103w-T 3G1.5 (AD 8 mm)
Note	
On housing base without (1070140000) or with cutout (1272210000) or with cable gland (...0000). Enclosure seals RKDG... must be ordered separately.	
Approvals	
Standard	UL 1598
Fire specification to UL 94	VO
Rated voltage	120 VAC

Type	Qty	Order No.
BG GHDE LED TL PT6	1	1390850000

Markers (self-adhesive)	Type	Qty	Order No.
	BG GHDE LED TL PT6	1	1390850000

Rated data to EN 60598-1	
Rated voltage	265 V
Variable-voltage input	100...265 V DC + AC (45...65 Hz)
Power rating / power loss	7 W / < 2 W
Inrush current	0.5 A / 0.1 ms
General data	
Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing / PE)
Mounting position	any
Protection class to IEC 60529	IP 65 when mounted
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free / silicone-free	no (PVC conductor) / yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Circuit breaker	< 10 A
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm
EMC	
Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547
Connection data	
Type of connection	open conductor end / length 2 m
Line type	Heluwind WK 103w-T 3G1.5 (AD 8 mm)
Note	
On housing base without (1070140000) or with cutout (1272210000) or with cable gland (...0000). Enclosure seals RKDG... must be ordered separately.	
Approvals	
Standard	UL 1598
Fire specification to UL 94	VO
Rated voltage	120 VAC

Type	Qty	Order No.
BG GHDE LED TL PT6	1	1390850000

Markers (self-adhesive)	Type	Qty	Order No.
	BG GHDE LED TL PT6	1	1390850000

## BG GHDE LED TL PT6



### Technical data

#### Rated data to EN 60598-1

Rated voltage	265 V
Variable-voltage input	100...265 V DC + AC (45...65 Hz)
Power rating/power loss	7 W / < 2 W
Inrush current	0.5 A / 0.1 ms

#### General data

Overvoltage category/pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing/PE)
Mounting position	any
Protection class to IEC 60529	IP 65 when mounted
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free/silicone-free	no (PVC conductor)/yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s <sup>2</sup> (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s <sup>2</sup> (7 G)
Short-circuit protection	internal
Circuit breaker	< 10 A
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm

#### EMC

Noise emission	Acc. to EN 55015
Noise immunity tests	Acc. to EN 61547

#### Connection data

Type of connection	open conductor end/length 2 m
Line type	Heluwind WK 103w-T 3G1.5 (AD 8 mm)

#### Note

On lower housing section GH PT6 (1070140000) with contact terminal PT6 (1957620000) RKDG... must be ordered separately.

#### Approvals

Standard	UL 1598
Fire specification to UL 94	V0
Rated voltage	120 VAC

### Ordering data

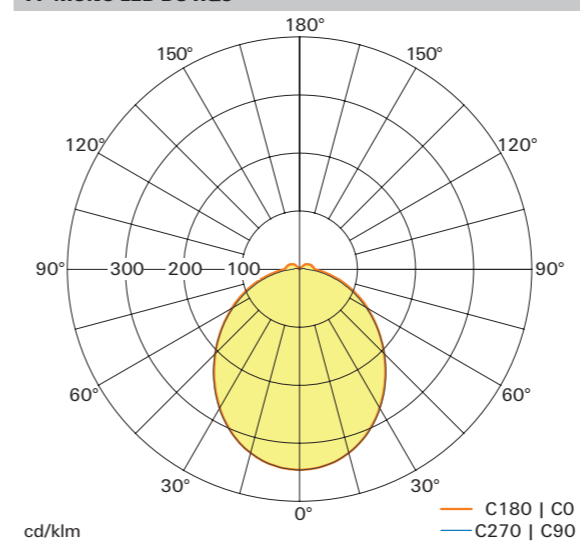
Type	Qty	Order No.
BG GHDE LED TL PTS 4	1	1390880000

#### Mounting options

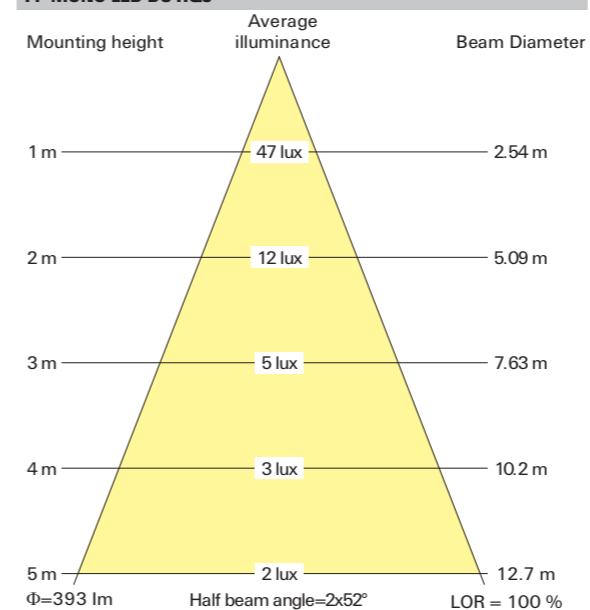
LED module installed on bottom housing section GH PT6 (1070140000), with contact terminal PT6 (1957620000).



### FP MONO LED DC HQ8



### FP MONO LED DC HQ8

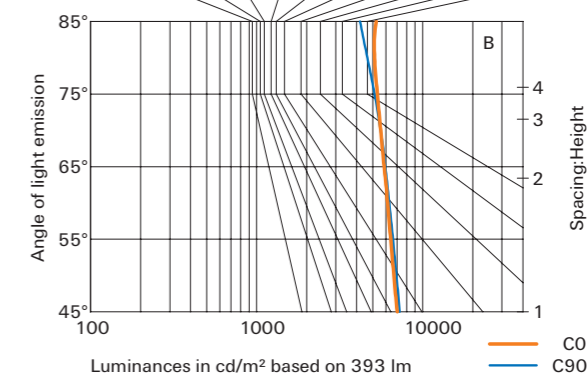


#### Technical Description

Designation	FP MONO LED DC HQ8
Manufacturers	Weidmueller
Catalogue number	1488530000
Light exit	Cuboid 0.148 x 0.100 x 0.010 m
Lamps	1 x LED 5 W
Nominal luminous flux	393 lm
Nominal power	4.8 W
LOR	100 %

### Söllner

CIE	DIN	Nominal Illuminance (lx)						
A	A	2000	1000	750	500	300		
B	1		2000	1500	1000	750	500	300
C				2000		1000	500	300
D	2					2000	1000	500
E	3						2000	1000



#### Glare Evaluation

X = 4 H, Y = 8 H	S = 0.25 H
Reflection factors	70/50/20
UGR transversal	22.9
UGR axial	22.5

#### Classification

LITG	A41
EN	
BZ	
UTE	0.94 D + 0.06 T
CIE Flux Codes	47 77 93 94 100



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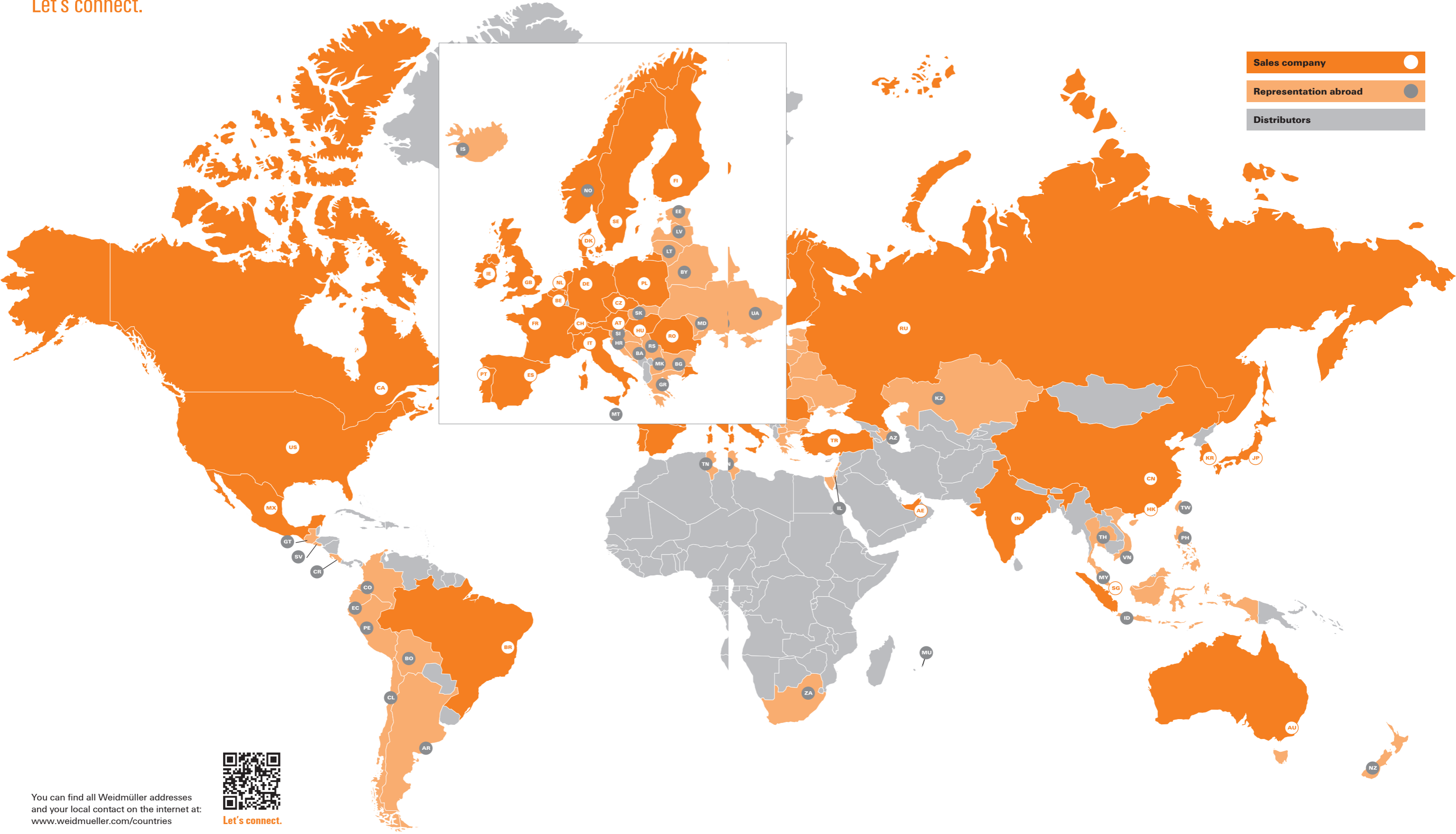
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