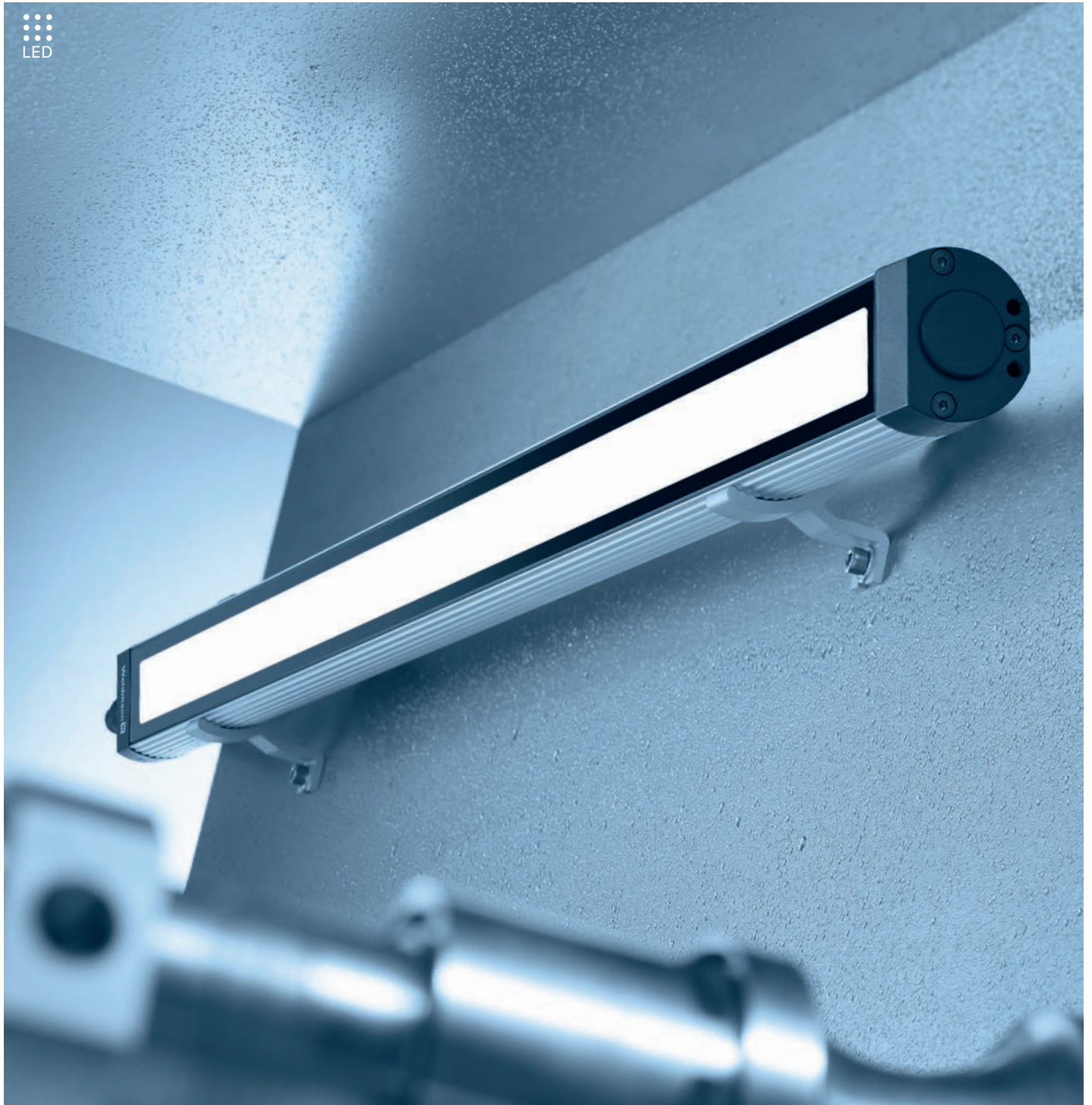


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**MACH LED PLUS.FORTY**

SURFACE-MOUNTED LUMINAIRE FOR AUTOMATED MANUFACTURING



# MACH LED PLUS.FORTY

## SIMPLY INTEGRATED FOR MACHINE AUTOMATION.



Highly efficient and maintenance-free LED technology, extremely robust housing and attractive design make MACH LED PLUS.forty the first choice for lighting engineering of machines and automation systems.

Different lengths and output levels meet the illumination standards for various machine automation applications. Also, the attached M12 connector along with optional cable accessories (sold separately) ensure a fast and easy integration.

If required, all important components can be replaced. This makes MACH LED PLUS.forty one of the most sustainable machine luminaires on the market.

- Ultra low-glare, uniform light with soft transitions
- Outer diameter 1.6" (40 mm), four lengths and output levels
- Aluminum housing and 4 mm thick safety glass

- Side parts designed with a maximum capacity and protected Viton® gasket for a high system of protection
- IP65 protection rating
- Resistant to high temperatures, shocks and vibrations
- Attached M12 connector
- Connects directly to 24V source
- Assembled in the USA

### Maximum light regardless of space

MACH LED PLUS.forty supports a variety of visual tasks, even when space is limited. With an outer diameter of 1.6" (40mm) and four lengths between 7.5" and 28.2", MACH LED PLUS.forty enables high illuminance even in the most restricted of spaces.

With a broad beam angle, these small fixtures spread softer, low-glare light over quite a large work area - ideal for the automated manufacturing industry.

### Modern light for modern processes

Automated cells are saving time and cost in today's manufacturing and assembly environments. Equipped with robots, they require reliable, high-intensity lighting to illuminate conveyer lines and vision inspection systems.

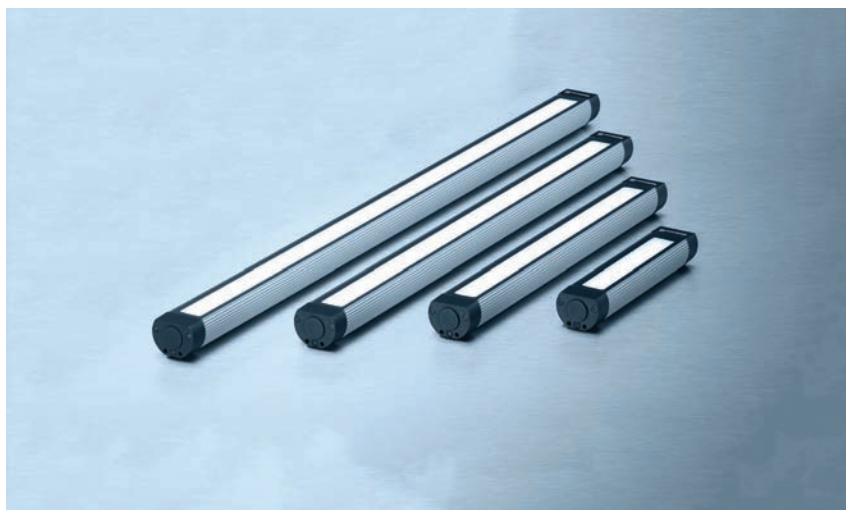
The MACH LED PLUS.forty reflects state-of-the-art technology that addresses these needs: the latest LED technology, specially developed optic systems and contemporary housing. MACH LED PLUS.forty: high-tech light for high-tech operations.

### Flexible bracket for easy mounting

Simple installation is key for lighting automated manufacturing processes as needs shift and lines are often rearranged. Special brackets (accessories) have been developed for simple mounting of the MACH LED PLUS.forty, allowing for flexible adjustment by the user for the most effective results.

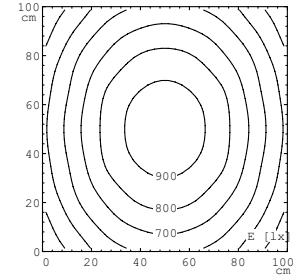
### Sophisticated accessories for unique applications

Both pre-assembled connection cables (sold separately) and included M12 connector socket are available for simple integration.





MACH LED PLUS.forty



## TECHNICAL DATA

### Features:

- Compact 1.6" (40mm) in diameter
- Color temperature 5000K
- Color rendering CRI > 70
- Anodized aluminum housing and 4 mm thick safety glass
- Strong stainless steel and aluminum mounting brackets available (see accessories)
- Maximum allowable ambient temperature Tamax 122°F
- LED service life > 60 000 hours (L 70)
- Vibration resistant from 10 to 55Hz (amplitude 0.35mm)  
Shock resistant up to 50g
- System of protection IP65
- Connection via M12 connector, A-coded

### ORDERING INFORMATION

Wattage	Width	Length (A)	$E_m / E_{max}^*$	Model	Part #
5 W	1.6" (40 mm)	7.5" (190 mm)	142/206 lx <sup>1</sup>	MFA 320/750/S	USM409000-00641600
11 W	1.6" (40 mm)	14.4 " (365 mm)	340/492 lx <sup>1</sup>	MFA 780/750/S	USM410000-00641603
17 W	1.6" (40 mm)	21.3" (540 mm)	524/741 lx <sup>1</sup>	MFA 1250/750/S	USM411000-00641606
23 W	1.6" (40 mm)	28.2" (715 mm)	686/956 lx <sup>1</sup>	MFA 1670/750/S	USM412000-00641609

\*  $E_m$  = medium illuminance;  $E_{max}$  = maximum illuminance; <sup>1</sup> Measuring field 100 cm x 100 cm/Measuring distance 100 cm

### ACCESSORIES



Item	Unit	Part #
Edge Mounting Bracket Set	Sold as pair	408 001 403 - 006 716 26



Item	Unit	Part #
Clip Mounting Bracket	Sold individually	408 001 402 - 006 716 23

Each luminaire requires at least two brackets.



Item	Type	Voltage	Part #
M12 Connector for thru-wire	4-pin A-coded	24V	336 884 M10



Item	Type	Voltage	Part #
M12 connector with 16' cord, straight	4-pin A-coded	24V DC	US0 009 001
M12 connector with 16' cord, straight	4-pin A-coded	24V DC	US0 009 011

### EXTERNAL OPERATING DEVICES (No operating device included, required for 120-277V operation)

Max. Wattage	Input	Output	Part #
20W	120-240V, 50/60Hz	24V DC	209 585 029
50W	120V, 50/60Hz	24V DC	209 585 030
96W	120-277V, 50/60Hz	24V DC	209 585 032

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