



MACH LED PLUS linear LED machine lights are available in various lengths



# MACH LED PLUS. forty

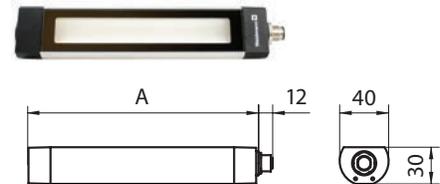
## 40 MM LINEAR LED MACHINE LIGHT

### FEATURES:

- Four lengths: 7.5" (190 mm), 14.4" (365 mm), 21.3" (540 mm), 28.2" (715 mm)
- Beam angle options: 40° or 90°
- Rugged anodized aluminum housing and 4 mm thick safety glass
- Various bracket options for simple installation
- Able to withstand extreme ambient heat up to 122°F (50°C)
- 60,000 hours of maintenance-free operation
- Vibration resistant > 55 Hz (amplitude 0.35 mm); Shock resistant > .11 lb
- Protection rating IP67
- Easy connection via M12 connector w/ cable assembly (included)
- Designed for use with coolants and lubricants

### SPECIFICATIONS:

Voltage	20–28 VDC
Lamping	LED
Color Temperature	5000 K
Color Rendering Index (CRI)	85
Beam Angles	40° or 90°
Luminaire Material	anodized aluminum
Lens Material	borosilicate safety glass
Dimension	4 lengths, 1.6" (40 mm) diameter
Max Temperature Rating	122°F (50°C)
Connection	M12 connector w/ 16' cable assembly included
Protection Rating	IP67
Certification	ETL/cETL, CE
Mounting and accessories	See page 66



See chart for individual lengths (A)  
Measurements in millimeters

Waldmann has combined the positive attributes of MACH LED PLUS.seventy with the small form factor of the very popular MACH LED to develop MACH LED PLUS.forty – 1.6" in diameter with light output extending the full length of the fixture. It is available with a choice of beam angle, four different lengths, and 60,000 hours of maintenance-free operation. MACH LED PLUS.forty utilizes state-of-the-art technology to enable optimum lighting in the machining area: the latest LED technology, specially developed optics system and the most modern and robust housing concept in the industry.



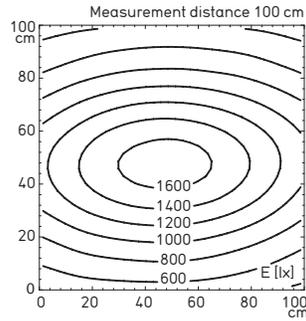
(Above) Thru-wire MACH LED PLUS.forty



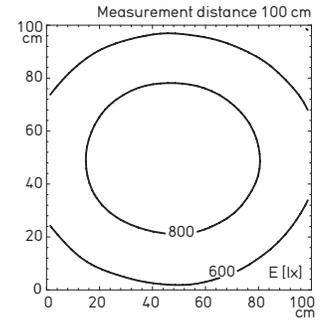
MACH LED PLUS.forty with 40° angle of illumination



MACH LED PLUS.forty with 90° angle of illumination



Illuminance taking MLAL 57 S with 40° optics as an example



Illuminance taking MLAL 57 S with 90° reflector as an example

**ORDERING INFORMATION** (No operating device included, which is only required for 120-240 VAC operation)

Version	Wattage	Length (A)	Lumens	Model	Part #
<b>20–28 VDC Versions</b>					
90° beam angle	5 W	7.5" (190 mm)	480	MLAL 12 S	113161000-00662575
40° beam angle	5 W	7.5" (190 mm)	490	MLAL 12 S	113161000-00660033
90° beam, thru-wire	5 W	7.5" (190 mm)	480	MLAL 12 SD	113161000-00662600
90° beam angle	10.5 W	14.4" (365 mm)	1080	MLAL 27 S	113162000-00662685
40° beam angle	10.5 W	14.4" (365 mm)	1120	MLAL 27 S	113162000-00660681
90° beam, thru-wire	10.5 W	14.4" (365 mm)	1080	MLAL 27 SD	113162000-00662706
90° beam angle	16 W	21.3" (540 mm)	1680	MLAL 42 S	113163000-00662717
40° beam angle	16 W	21.3" (540 mm)	1720	MLAL 42 S	113163000-00660684
90° beam, thru-wire	16 W	21.3" (540 mm)	1680	MLAL 42 SD	113163000-00662735
90° beam angle	21.5 W	28.2" (715 mm)	2280	MLAL 57 S	113164000-00662806
40° beam angle	21.5 W	28.2" (715 mm)	2330	MLAL 57 S	113164000-00660687
90° beam, thru-wire	21.5 W	28.2" (715 mm)	2280	MLAL 57 SD	113164000-00662833

External Operating Devices	Max. Wattage	Input	Output	Part #
Required for 100-277 VAC	20 W	100-277 VAC, 50/60 Hz	24 VDC	209585029
	50 W	120 VAC, 50/60 Hz	24 VDC	209585030
	96 W	100-277 VAC, 50/60 Hz	24 VDC	209585032

Mounting Options	Item	Unit	Part #
	End bracket set, adjustable, stainless steel +/- 90°	Sold as set	408001403-00671626
	Clip bracket, adjustable, aluminum +/- 20°	Sold individually	408001402-00671623

Accessories	Item	Type	Voltage	Part #
	M12 connector w/ 16' cable assembly (included) straight	A-coded	24 VDC	US0009001
	M12 connector w/ 16' cable assembly, angled	A-coded	24 VDC	US0009011