



# MACHINE VISION

## MBF-5400 / MDF 5400

### MACHINE VISION LIGHTING



Brightfield and darkfield lighting systems for machine vision cameras

#### ADVANTAGES

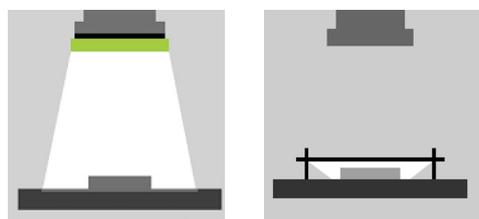
- Lighting uniformity
- Strong light intensity
- Highly precise light
- Ultra-compact design

Dedicated to machine vision and the measurement of very small samples, MBF-5400 and MDF-5400 lighting systems provide an unrivalled precision and light uniformity for a light ring with such a small diameter. The very compact design of the systems makes it easy to integrate to any type of machine vision.

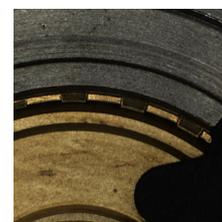
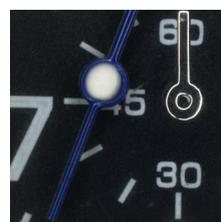
The combination of both lighting systems MBF and MDF allows to quickly obtain two types of images (brightfield and darkfield illuminations) for a thorough inspection of the samples under a single camera. The lighting systems are easily and comfortably managed via a software allowing to control parameter from a distance.

L.E.S.S. light combines high uniformity and high directionality in a unique way. These properties allow for an unprecedented inspection comfort offering high contrast images and reduced stray light reflections. No heat is dissipated from the light source, ensuring comfort and security.

L.E.S.S. lighting systems exhibit the same optical properties (colour temperature, uniformity, directionality), regardless of the product line it belongs to (microscopy, machine vision or workbench lighting). The light quality remains constant throughout the system longevity. This consistency gives a stable benchmark at two different levels: over time as well as on the whole assembly line. This allows overall standardisation and time-saving operations.



#### SAMPLES UNDER A CAMERA



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Brightfield and darkfield lighting systems for machine vision cameras

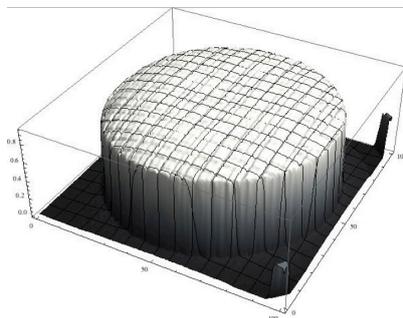
## TECHNICAL DATA (SUBJECT TO CHANGES)



Reference	MBF-5400 (Brightfield) MDF-5400 (DARKFIELD)
Product line	Machine Vision lighting
Colour temperature	5400 K
Working distance	MBF : 50 - 150 mm MDF : 0 - 20 mm
Inner diameter	20 mm
External dimension	34 x 45 mm
Cable	Flexible - length on demand
Lifetime	> 20 000 hours <sup>1</sup>
Electronic control unit	Built-in
Dimension of the control unit	130 x 50 x 40 mm
Control through USB plug	Optional (software)
Power control	On/Off switch
Ambient operating temperature	0 - 40 °C
Light intensity control	0 -100%
Operating temperature	0 - 40 °C
External power supply	DC12 V
Dimension ext. power supply	174 x 78 x 21.5 mm

<sup>1</sup>Lifetime is defined for the lighting values in a normal use. Results may vary with environmental factors and customer specific use.

Ultra uniform light intensity  
profile



## ACCESSORIES

- Set of screws and nuts.

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