

MICROSCOPY

DARKFIELD DF-5400

MICROSCOPY LIGHTING



Darkfield : low angle illumination for edge and print inspection



ADVANTAGES

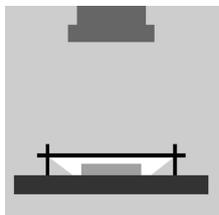
- Efficient observation, with naked eye or under a microscope
- Limited eye fatigue
- 2 in 1 system: from darkfield to low angle illumination
- Stable light quality over time
- Possibility to combine this system with a brightfield (BF-5400)

Dedicated to the inspection of prints and edges, the high lighting directionality of the DF-5400 enables an exceptional detection efficiency. Samples can be inspected with naked eyes in a standalone configuration or under a microscope for a more detailed observation. The working distance is adjustable as the lighting angle can vary from zero degree to low angles. This feature allows a better observation of concave or convex samples.

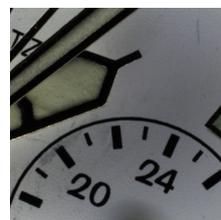
DF stands for «darkfield»: in this configuration, a sharp light surrounds the sample from the side. This low angle illumination provides a unique and extremely high image contrast emphasizing the edges and prints of the sample. It gives key information on the manufacturing quality of metallic, glass or plastic components and enables the optimal detection of material deposits.

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, reduced stray light reflections and therefore a lower eye fatigue. No heat is dissipated from the light source which enhances the comfort of the user.

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 MICROSCOPE



L.E.S.S. SA

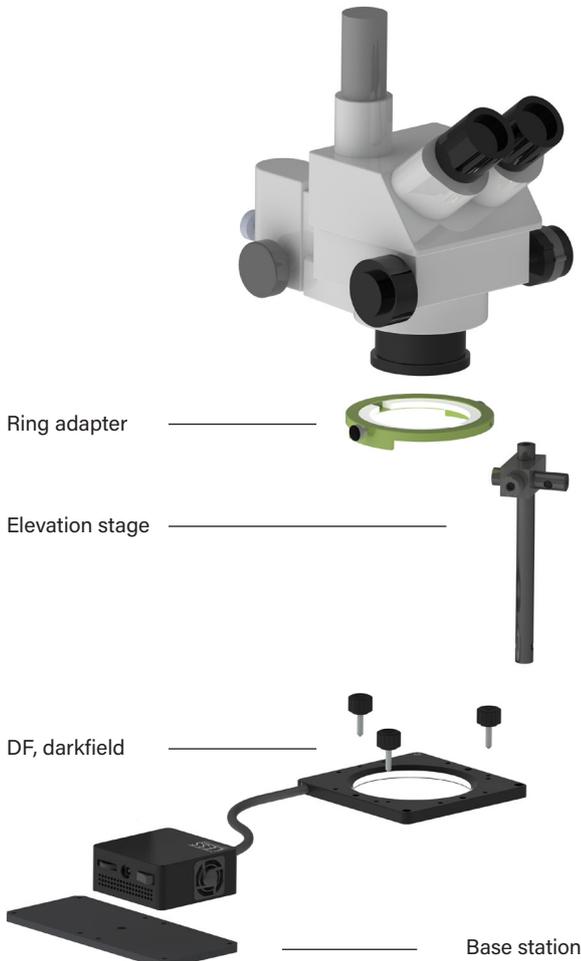
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TECHNICAL DATA



Ultra directional light intensity profile



Reference	DF-5400
Product line	Microscopy lighting
Color temperature	5400 K
Working distance	0 - 15 mm
Inner diameter	76 mm (3 inches)
External dimension	110 x 110 x 8 mm
Interface adapter	76 mm (3 inches)
Cable	Flexible - 500 mm
Lifetime	> 20 000 hours ¹
Electronic control unit	Built-in
Dimension of the control unit	70 x 70 x 31 mm
Power control	On/Off switch
Light intensity control	0 - 100%
Operating ambient temperature	0 - 40 °C
Diffuser/s	DC 12 V
Dimension ext. power supply	174 x 78 x 21.5 mm

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

ACCESSORIES

- Combo post: it consists of the ring adapter and the elevation stage, it allows to interface the system on the objectives of microscopes from a size of 50 to 80 mm and to adjust the light ring elevation to precisely observe samples at different heights ranging from 0 to 50 mm.

- Base system: it allows to fix the illumination control system in a compact manner either directly on the microscope or on its side.

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