



Automatización Eléctrica
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

LD μ SERIES

The **LD μ** luminescence sensors emit ultraviolet light and detect only visible light converted and reflected from fluorescent objects or marks, independent from the background's colour and surface.

A microprocessor controls and synchronises the emission, reception and output circuits offering a completely automatic setting. The **LD μ** sensors can reach a 75 mm operating distance and a 2 kHz switching frequency, thanks to the UV High-Power emission. Focusing lenses and special fibre-optics able to replace the lens are available as accessories.

The **LD μ** sensors are used in the pharmaceutical and cosmetic industries to identify labels on glass phials or bottles; in the wood and ceramic selection lines; in automatic packaging to detect paper and fluorescent glues; in the textile industry to identify cutting guides; in the mechanical industry to verify the presence of paints or fluorescent lubricants.

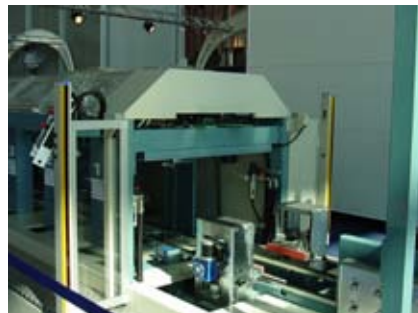


HIGHLIGHTS

- High-Power UV LED emission
- Microprocessor-based Teach-in setting
- High switching frequency at 2 kHz
- Fibre-optic accessories and high-resolution lenses

APPLICATIONS

Ceramics



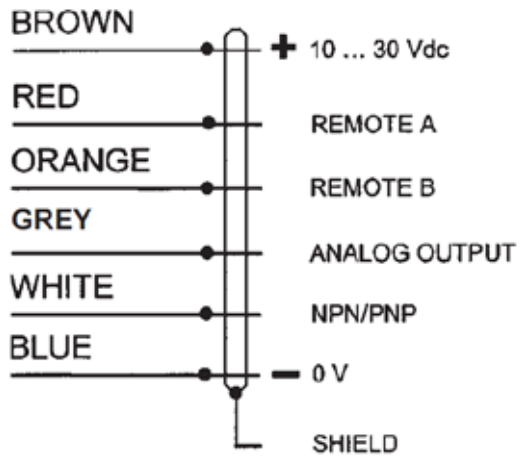
Beverage & Bottling



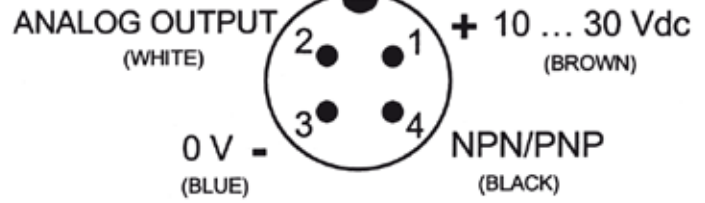
Packaging lines



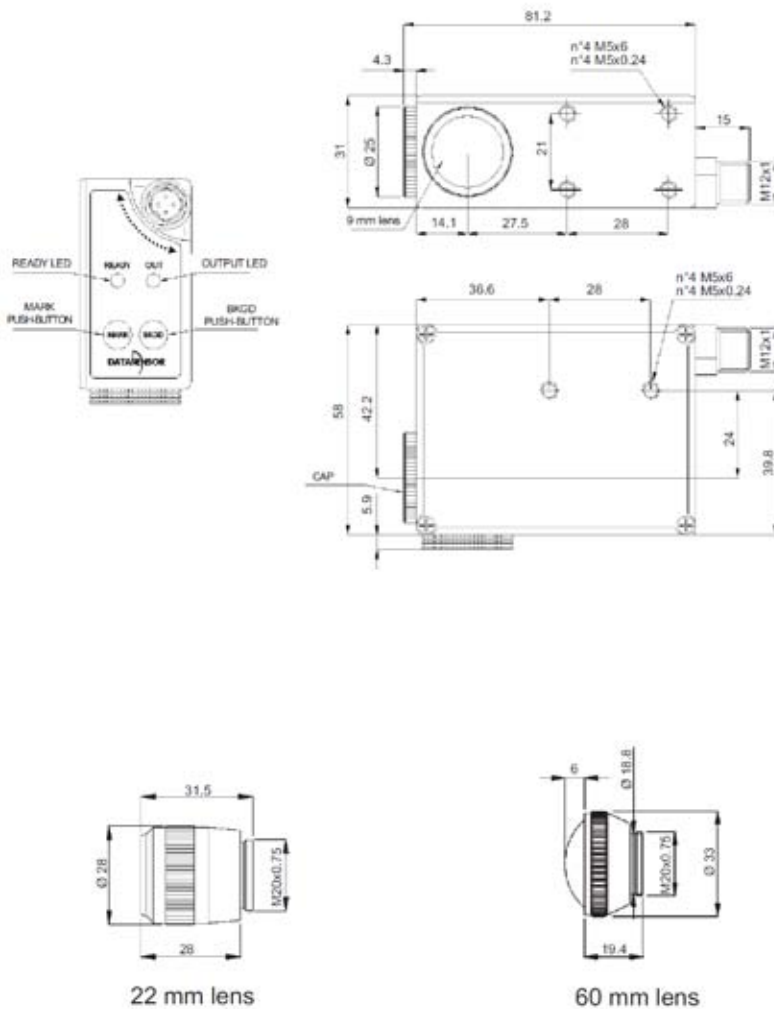
CONNECTIONS



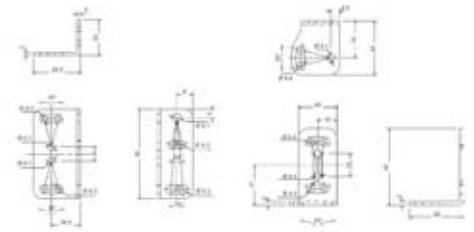
M12 CONNECTOR



DIMENSIONS

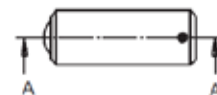
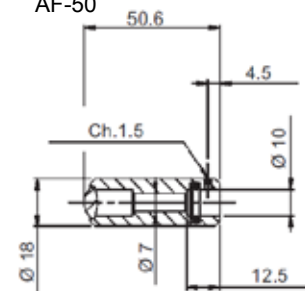


OF-50



Model	L
OF-50-5	50 cm
OF-50-10	100 cm

AF-50

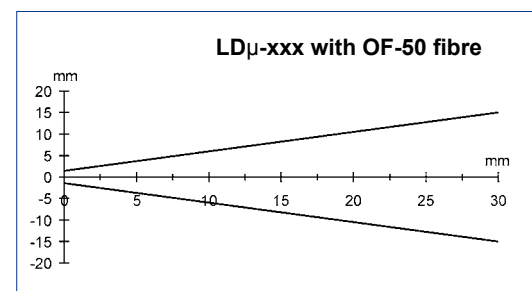
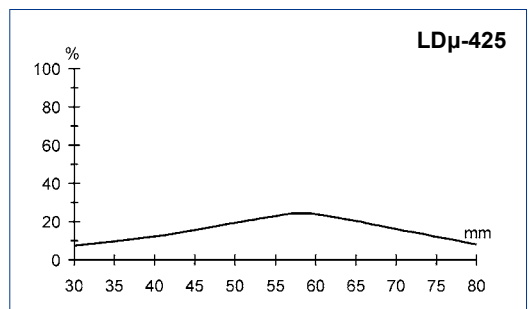
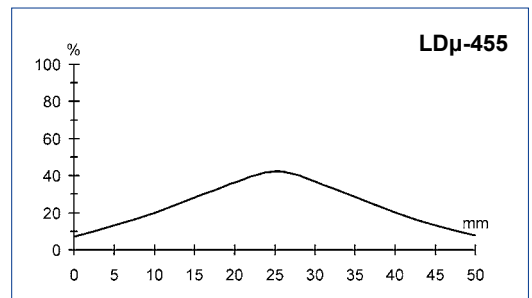
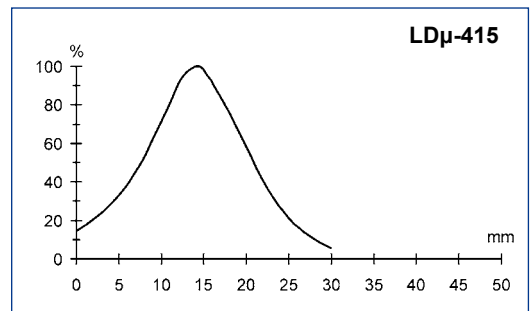


mm

TECHNICAL DATA

Power supply:	10 ... 30 Vdc, reverse polarity protection
Consumption:	80 mA max.
Light emission:	LED HP-UV 370 nm
Spot dimension:	circular Ø 5 mm max. on focal point
Diffuse proximity operating distance:	9 ... 18 mm (LDµ-415)
	20 ... 40 mm (LDµ-455)
	40 ... 75 mm (LDµ-425)
Operating distance with fibre-optics:	0 ... 30 mm
Setting:	Teach-in with 2 push-buttons
	Remote by cable
Indicators:	red OUTPUT LED
	green READY LED
Output type:	NPN or PNP, Rpull-down/up 10 kΩ
Saturation voltage:	1 V max. with NPN
	2 V max. with PNP
Output current:	200 mA max., short-circuit protection
Response time:	250 µs max.
Switching frequency:	2 kHz max.
Timing function:	20 ms minimum output ON
Analog output range:	0 ... 7 Vdc, 2.2 kΩ output resistance
Auxiliary functions:	deviator for setting block
Connection:	M12 4-pole connector
	3 m Ø 6.1 mm shielded cable
Electrical protection:	class 1
Mechanical protection:	IP67
Housing material:	ZAMA
Lens material:	glass
Weight:	310 g (connector vers.)
	450 g (cable vers.)
Operating temperature:	-10 ... +55°C
Storage temperature:	-20 ... +70°C
Reference standard:	EN 60947-5-2
Certifications:	CE
OF-50 fibre-optic data:	fibre in saline solution with PET sheath, operating temperature: -5 ... +60°C

DETECTION DIAGRAMS



The detection diagrams indicate the typical operating distance.

MODEL SELECTION AND ORDER INFORMATION

MODEL	OPTIC	CONNECTION	CODE N°
LD μ -415	9 - 18 mm (high sensitivity)	M12 connector	955151120
LD μ -425	40 - 75 mm (high sensitivity)	M12 connector	955151110
LD μ -455	20 - 40 mm (high sensitivity)	M12 connector	955151100

ACCESSORY SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	CODE N°
AF-50	focusing lens for OF-50 (\varnothing 5 mm spot at 15 mm)	95ACC1400
Lens No.22	lens with 22 mm focus	95ACC1100
Lens No.60	lens with 60 mm focus	95ACC2740
OF-50-5	fibre-optic L50 cm - proximity op. distance 30 mm	95A201130
OF-50-10	fibre-optic L100 cm - proximity op. distance 30 mm	95A201370

Please refer also to M12 connectors of the CS series



The company endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use, the company can guarantee only the data indicated in the instruction manual supplied with the products.

Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

Product	Code	Reference	Product link
LDu-455 30MM M12 CONN NPN	955151100	LDu-455	Buy on EAN
LDu-425 50MM CONNESS. A CAVO M12	955151110	LDu-425	Buy on EAN
LDu-415 9MM M12 CONN NPN	955151120	LDu-415	Buy on EAN
OF-50-5 LDu OPTIC FIBERCV 50CM	95A201130	OF-50-5	Buy on EAN
OF-50-10 Ldu/LD46 OPTIC FIBER CV 100CM	95A201370	OF-50-10	Buy on EAN
AF-50 FOCUSING LENS FOR FIBRE OF50	95ACC1400	AF-50	Buy on EAN