



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

LDμ SERIES

The **LDμ** 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 **LDμ** 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.

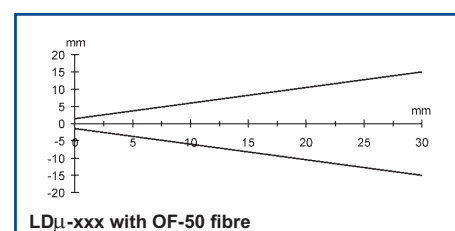
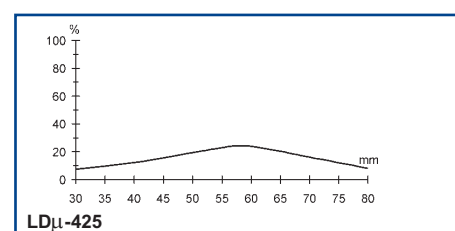
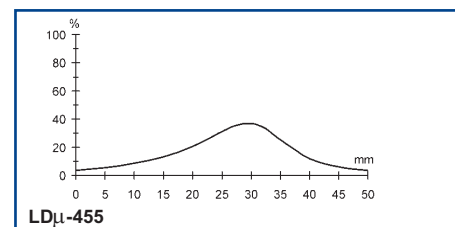
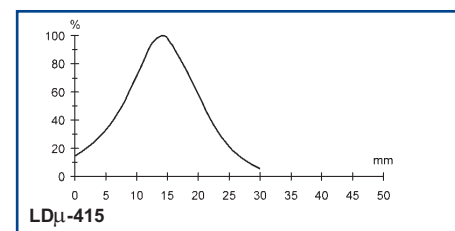
The **LDμ** sensors are used in the pharmaceutical and cosmetic industries to identify labels on glass phials or bottles; in the wood and ceramic selection lines; in automatic packaging to detect paper and fluorescent glues; in the textile industry to identify cutting guides; in the mechanical industry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

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 (LD μ -415) 20 ... 40 mm (LD μ -455) 40 ... 75 mm (LD μ -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 k Ω
Saturation voltage:	1 V max. with NPN 2 V max. with PNP
Output current:	200 mA max., short-circuit protection
Response time:	250 μ s max.
Switching frequency:	2 kHz max.
Timing function:	20 ms minimum output ON
Analog output range :	0 ... 7 Vdc, 2.2 k Ω 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  II 3D
OF-50 fibre-optic data:	fibre in saline solution with PET sheath, operating temperature: -5 ... +60°C

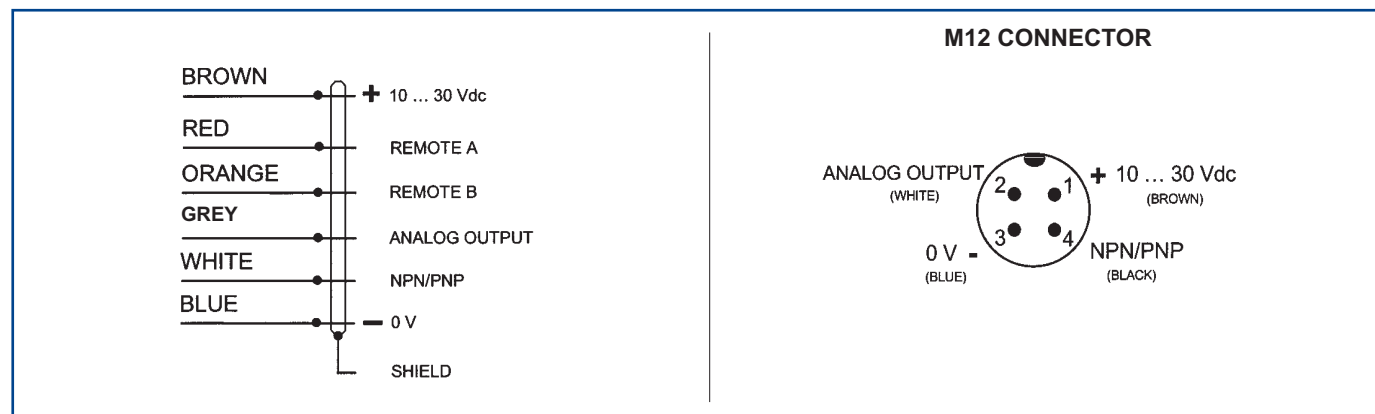
The operating distances indicate the typical detection distance.

DETECTION DIAGRAMS

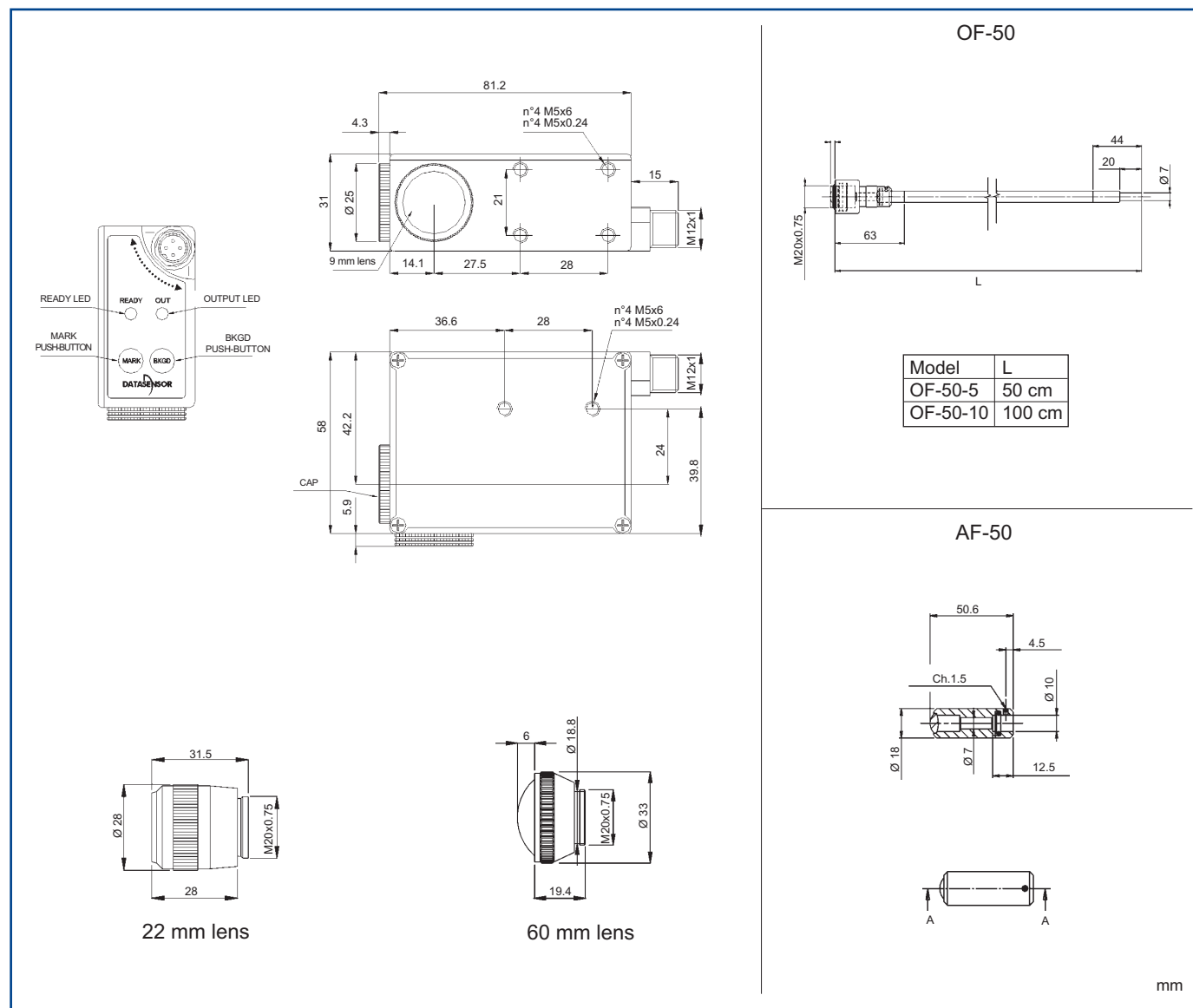


The detection diagrams indicate the typical operating distance.

CONNECTIONS



DIMENSIONS



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	95ACC1220
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

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HEADQUARTERS

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