#### LUMINESCENCE SENSORS

# LD46

#### **COLATACO**



#### LUMINESCENCE SENSOR LINE IN STANDARD METAL HOUSING

- UV high power LED emission
- High sensitivity on fluorescent marks
- 10 50 mm detection distance
- 2 kHz switching frequency
- NPN/PNP and 0-5 V analog outputs

#### **APPLICATIONS**

- Packaging and labeling machinery
- Food, Cosmetic and Pharmaceutical
- Ceramic tiles selection and sorting



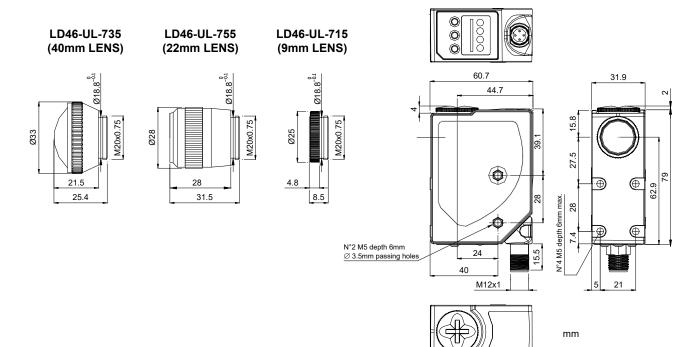
\_\_\_\_\_(\*) ATEX II 3DG

	LD46		
		1020 mm (LD46-UL-715)	
Luminescence sensor		2040 mm (LD46-UL-755)	
		3050 mm (LD46-UL-735)	
Spot dimension		2x8 mm at 10 mm	
		3x11 mm at 24 mm	
		4x15 mm at 50 mm	
Switching frequency		2 kHz	
Response Time		250 µs	
Light emission		UV-HP LED	
Setting		push buttons	
	Vdc	1530 V	
Power supply	Vac		
	Vac/dc		
	PNP		
	NPN		
Output	NPN/PNP	•	
	relay		
	other	05 V Analog output	
	cable		
Connection	connector	•	
	pig-tail		
Approximate dimensions (mm)		31x81x58	
Housing material		aluminium	
Mechanical protection		IP67	

#### TECHNICAL DATA

Power supply	15 30 Vdc (limit values)		
Ripple	2 Vpp max.		
Consumption (output current excluded)	50 mA max. at 24 Vdc		
Light emission	UV LED 375 nm		
Setting	SET push-buttons		
	yellow OUTPUT LED		
le dia stano	green READY LED		
ndicators	orange DELAY LED and KEYLOCK LED		
	5-segment bargraph		
Dutput	PNP/NPN; analog output		
Dutput current	100 mA max.		
Saturation voltage	2 V max.		
Response time	250 μs		
Switching frequency	2 kHz		
Connection	M12 5-pole connector		
Dielectric strength	500 Vac, 1 min between electronics and housing		
Insulating resistance	>20 MΩ, 500 Vdc between electronics and housing		
Electrical protection	class 2, double insulation		
Mechanical protection	IP67		
Ambient light rejection	according to EN 60947-5-2		
Vibrations	0,5 mm amplitude, 10 55 Hz frequency, for every axis (EN60068-2-6)		
Shock resistance	11 ms (30 G) 6 shock for every axis (EN60068-2-27)		
	2 x 8 mm at 10 mm (mod. LD46-UL-715)		
Minimum spot dimension	3x11 mm at 24 mm (mod. LD46-UL-755)		
	4x15 mm at 50 mm (mod. LD46-UL-735)		
Housing material	aluminium		
Lens material	glass		
Operating temperature	-10 55 °C		
Storage temperature	-20 70 °C		
Weight	180 g max.		

#### DIMENSIONS



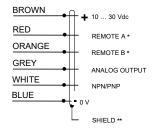
#### INDICATORS AND SETTINGS



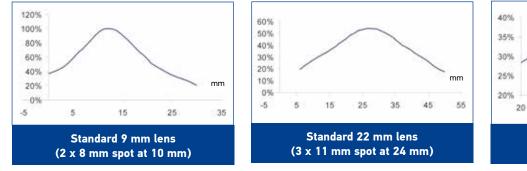
- F +/- push-buttons
  - G SET push-button

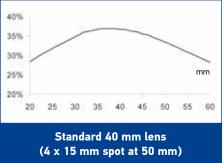
## CONNECTIONS

#### M12 CONNECTOR



#### DETECTION DIAGRAMS





### MODEL SELECTION AND ORDER INFORMATION

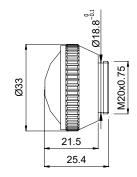
OPTIC FUNCTION	EMISSION	CONNECTION		MODEL	ORDER No.
	10-20 mm Vertical spot			LD46-UL-715	955201000
Luminescence sensor	20-40 mm Vertical spot	M12 Connector	NPN/PNP	LD46-UL-755	955201010
	30-50 mm Vertical spot			LD46-UL-735	955201020

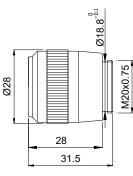
### **ACCESSORIES**

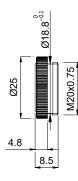
40 mm LENS (LD46-UL-735)

22 mm LENS (LD46-UL-755)

9 mm LENS (LD46-UL-715)







MODEL		ORDER No.
Lens No.9	glass lens with 9 mm focus	95ACC2670
Lens No.22	glass lens with 22 mm focus	95ACC1100
Lens No.40	glass lens with 40 mm focus	95ACC2740

## CABLES

	DESCRIPTION	LENGTH	MODEL	ORDER No.
Axial M12 Connector	5-pole, grey, P.V.C.	3 m	CS-A1-03-G-03	95ACC2110
		5 m	CS-A1-03-G-05	95ACC2120
		10 m	CS-A1-03-G-10	95ACC2140
	E polo III – block DVC	3 m	CS-A1-03-U-03	95ASE1170
		5 m	CS-A1-03-U-05	95ASE1180
		10 m	CS-A1-03-U-10	95ASE1190
	5-pole, U.L., black, P.V.C	15 m	CS-A1-03-U-15	95ASE1200
		25 m CS-A1-03-U-25	95ASE1210	
		50 m	CS-A1-03-U-50	95A252700

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