## **DATASHEET - E56BDL70UAD01**



Proximity switch, inductive, 1N/O+1N/C, Sn=70mm, 4L, 6-48VDC, NPN, PNP, cubic 110mm, M12



Part no. E56BDL70UAD01

136236 Catalog No.

**Alternate Catalog** E56BDL70UAD01

No.

0004315389 **EL-Nummer** 

(Norway)

## **Delivery program**

- control / programm			
Basic function			Inductive Sensors
Product range			E56 Pancake Series
Connection			4-wire
Design (outer dimensions)		mm	109 x 110 x 41
Rated operational voltage	U <sub>e</sub>		10 – 42 V DC
Rated switching distance	$S_n$	mm	70
Type of mounting			Non-flush
Switching type			NPN PNP
For connection of:			Plug-in connection M12 x 1
Contacts			
N/C = Normally closed			1 NC
N/O = Normally open			1 N/0
Material			Insulated material
Degree of Protection			IP67

### **Technical data**

General			
Standards			IEC/EN 60947-5-2
Ambient temperature			-25 - +70
Degree of Protection			IP67
Characteristics			
Rated switching distance			
Rated switching distance	$S_n$	mm	70
Repetition accuracy of S <sub>n</sub>		%	2
Temperature drift of $S_n$		%	10
Switching hysteresis of $S_n$		%	15
Rated operational voltage	U <sub>e</sub>		10 – 42 V DC
Maximum load current	l <sub>e</sub>	mA	< 300
Operating current in the switched state at 24 V DC	Ib	mA	25
Voltage drop at I <sub>e</sub>	$U_{d}$	V	2.5
Switching Frequency		Hz	20
Min. load current	l <sub>e</sub>	mA	1
Residual current through the load in the blocked state at 230 V AC and 24 V DC $$	I <sub>r</sub>	mA	0.15
Switching state display		LED	Red
Operating voltage display		LED	Green
Protective functions			Short-circuit protective device Protection against polarity reversal
Connection			4-wire
Contacts			
N/C = Normally closed			1 NC
N/0 = Normally open			1 N/0
Style			
Design (outer dimensions)		mm	109 x 110 x 41
For connection of:			Plug-in connection M12 x 1

Material	Insulated material
Surface finish	PPS

# Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-25
Operating ambient temperature max.	°C	70

Technical data ETIM 7.0		
Sensors (EG000026) / Inductive proximity switch (EC002714)		
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecl@ss10.0.1-27-27-01-01 [AGZ376015])		
Width sensor	mm	110
Height of sensor	mm	41
Length of sensor	mm	110
Diameter sensor	mm	0
Mechanical mounting condition for sensor		Not flat
Switching distance	mm	70
Suitable for safety functions		No
Type of switch function		Anticoincidence
Type of switching output		PNP/NPN
Type of electric connection		Connector M12
Number of semiconductor outputs with signalling function		1
Number of contact energized outputs with signalling function		0
Number of protected semiconductor outputs		0
Number of protected contact energized outputs		0
Type of actuation		Metallic Target
Type of interface		None
Type of interface for safety communication		None
Construction type housing		Cuboid
Coating housing		Other
Cascadable		No
Category according to EN 954-1		В
SIL according to IEC 61508		None
Performance level acc. EN ISO 13849-1		None
Max. output current at protected output	mA	0
Supply voltage	V	6 - 48
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	6 - 48
Voltage type		DC
Switching frequency	Hz	20
With monitoring function downstream switching devices		No
Material housing		Plastic
Compression-resistant		No
Explosion safety category for gas		None
Explosion safety category for dust		None
Interference resistance to magnetic fields		

## Approvals

Approvato	
Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E166051
UL Category Control No.	NRKH, NRKH7
CSA File No.	UL report applies to both Canada and US
CSA Class No.	-

North America Certification	UL listed, certified by UL for use in Canada
Max. Voltage Rating	48 V DC
Degree of Protection	IEC: IP67, IP69K; UL/CSA Type: 4, 4x, 6, 6P, 12, 13

## **Dimensions**

