

Proximity switch, inductive, 1N/O+1N/C, Sn=70mm, 4L, 6-48VDC, NPN,
PNP, cubic 170mm, M12

Part no. E56CDL100UAD01

136237

EL Number
(Norway)

4315390

General specifications		
Product name		Eaton E56 pancake inductive proximity sensor
Part no.		E56CDL100UAD01
EAN		4015081330300
Product Length/Depth		171.45 millimetre
Product height		120.65 millimetre
Product width		222.25 millimetre
Product weight		2.73 kilogram
Certifications		IEC/EN 60947-5-2 UL Category Control No.: NRKH, NRKH7 UL File No.: E166051 CE CSA File No.: UL report applies to both US and Canada CSA-C22.2 No. 14 Certified by UL for use in Canada UL 508 UL
Product Tradename		E56
Product Type		Pancake inductive proximity sensor
Product Sub Type		Eaton E56 pancake inductive proximity sensor
Public Consumption		Yes
Product Family Description		ES-ICD-Eaton E56 pancake inductive proximity sensors
Globally Marketable		Yes
Product Specification Details		
Actuation type		Metallic Target
Ambient operating temperature - max		70 °C
Ambient operating temperature - min		-25 °C
Category (EN 954-1)		B
Connection type		Plug-in connection M12 x 1 4-wire
Degree of protection		IP67 NEMA 4X, 6, 13
Diameter sensor		0 mm
EL number		4315390
Electric connection type		Plug-in connection
Enclosure material		Plastic
Enclosure material finishing		Other
Enclosure type		Cuboid
Explosion safety category for dust		None
Explosion safety category for gas		None
Functions		Short-circuit protection Protection against polarity reversal
Installation type		Not flat
Interface type		None
LED indicator		Status indication of Operating voltage: Green LED Status indication of Switching state: Red LED
Load current		1 - 300 mA (Ie)
Material		Insulated material
Mounting method		Non-flush mounting
Number of contact energized outputs with signalling function		0
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		1

Number of outputs (protected contact energized)		0
Number of outputs (protected semiconductor)		0
Number of outputs (semiconductor with signaling function)		1
Operational current (Ib) in the switched state at 24 V DC		25 A
Output current at protected output - max		0 mA
Product category		E56 Pancake Series
Rated control supply voltage (Us) at AC, 50 Hz - max		0 V
Rated control supply voltage (Us) at AC, 50 Hz - min		0 V
Rated control supply voltage (Us) at AC, 60 Hz - max		0 V
Rated control supply voltage (Us) at AC, 60 Hz - min		0 V
Rated control supply voltage (Us) at DC - max		48 V
Rated control supply voltage (Us) at DC - min		6 V
Rated switching distance (Sn) - max		100 mm
Repeatability		2 %
Residual current		0.15 mA (through the load in the blocked state at 230 V AC and 24 V DC)
Safety performance level (EN ISO 13849-1)		None
Sensor height		67.4 mm
Sensor length		171.5 mm
SIL (IEC 61508)		None
Supply voltage - max		48 V
Supply voltage - min		6 V
Surface finishing		PPS
Switch function type		Anticoincidence
Switching frequency		20 Hz
Switching hysteresis of Sn		15 %
Switching output type		PNP/NPN
Temperature drift of sn		10 %
Type		Inductive sensor
Voltage drop (Ud)		2.5 V
Voltage rating - max		48 V
Voltage type		DC
Width sensor		171.5 mm

Technical data ETIM 9.0

Sensors (EG000026) / Inductive proximity switch (EC002714)

Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Safety-related inductive sensor / Safety-related inductive proximity switch (ec|@ss13-27-27-41-01 [AKE630019])

Width sensor	mm	171.5
Height of sensor	mm	67.4
Length of sensor	mm	171.5
Diameter sensor	mm	0
Mechanical mounting condition for sensor		Not flat
Switching distance	mm	100
Suitable for safety functions		No
Type of switch function		Anticoincidence
Type of switching output		PNP/NPN
Type of electric connection		Plug-in connection
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
SIL according to IEC 61508		None
Performance level according to EN ISO 13849-1		None
Max. output current at protected output	mA	0
Supply voltage	V	6 - 48
Rated control supply voltage AC 50 Hz	V	0 - 0
Rated control supply voltage AC 60 Hz	V	0 - 0
Rated control supply voltage DC	V	6 - 48
Voltage type		DC
Switching frequency	Hz	20
With monitoring function downstream switching devices		No
Housing material		Plastic
Compression-resistant		No
Explosion safety category for gas		None
Explosion safety category for dust		None
Interference resistance to magnetic fields		
Degree of protection (NEMA)		4X, 6, 13