



Proximity switch, inductive, 1N/O, Sn=18mm, 4L, 6-48VDC, NPN, PNP, M18, metal

Part no. E59-M18C116D01-D1
Catalog No. 136219
Alternate Catalog No. E59-M18C116D01-D1
EL-Nummer (Norway) 0004315383

Delivery program

Basic function			Inductive Sensors
Product range			iProx Series
Connection			3-wire
Design (outer dimensions)		mm	M18 x 1
Rated operational voltage	U_e		6 - 48 V DC
Rated switching distance	S_n	mm	18
Type of mounting			Non-flush
Switching type			NPN PNP
For connection of:			Plug-in connection M12 x 1
Contacts			
N/O = Normally open			1 N/O
Material			Stainless steel
Degree of Protection			IP67, IP69

Technical data

General

Standards			IEC/EN 60947-5-2
Ambient temperature			-40 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP67, IP69

Characteristics

Rated switching distance			
Rated switching distance	S_n	mm	18
Repetition accuracy of S_n		%	3
Temperature drift of S_n		%	10
Switching hysteresis of S_n		%	15
Rated operational voltage	U_e		6 - 48 V DC
Maximum load current	I_e	mA	< 300
Operating current in the switched state at 24 V DC	I_b	mA	15
Voltage drop at I_e	U_d	V	2.5
Switching Frequency		Hz	150
Min. load current	I_e	mA	1
Residual current through the load in the blocked state at 230 V AC and 24 V DC	I_r	mA	0.15
Switching state display		LED	Red
Operating voltage display		LED	Green
Protective functions			Short-circuit protective device Protection against polarity reversal Protection against wire breakage
Connection			3-wire
Contacts			
N/O = Normally open			1 N/O
Style			
Design (outer dimensions)		mm	M18 x 1

For connection of:		Plug-in connection M12 x 1
Material		Stainless steel

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-40
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 (ecI@ss10.0.1-27-27-01-01 [AGZ376015])			
Width sensor		mm	0
Height of sensor		mm	0
Length of sensor		mm	69
Diameter sensor		mm	18
Mechanical mounting condition for sensor			Not flat
Switching distance		mm	18
Suitable for safety functions			No
Type of switch function			Normally open contact
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			Cylinder, screw-thread
Coating housing			Other
Cascadable			No
Category according to EN 954-1			B
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	150
With monitoring function downstream switching devices			No
Material housing			Metal
Compression-resistant			No
Explosion safety category for gas			None
Explosion safety category for dust			None
Interference resistance to magnetic fields			

Approvals

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

