Extended Range MetalHead™ Proximity Sensor



Note: The product images shown may change over time as products are updated.

Part Number ECS1-3016N-SZU4

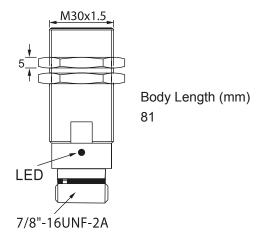
Features

Inductive Proximity Sensors are used in a wide variety of manufacturing operations where a metal target needs to be sensed. HTM Sensors inductive proximity sensors have a Lifetime Warranty, a CSA or UL approval, and a huge inventory for sameday shipping. For tougher applications where the sensors need more range to stay out of harm's way, or to withstand high temperatures, weld spatter, chemical exposure, oil or other rough environments, HTM Sensors has the widest range of proximity sensors on the market.

Connection



Dimensions



Tec	hni	cal	Data

Sensor Housing Material Stainless Steel SUS303 Sensor Face Material 1-Piece Stainless Steel Mounting Style Diameter 30 mm Threaded Sensing Range: 16 mm range Output Type: NPN Output Output Function NO/NC Switchable Output Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Max Current 200 mA Leakage Current -	Body Style	Cylindrical
Mounting Style Shielded Diameter 30 mm Threaded Sensing Range: 16 mm range Output Type: NPN Output Output Function NO/NC Switchable Output Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current -	Sensor Housing Material	Stainless Steel SUS303
Diameter 30 mm Threaded Sensing Range: 16 mm range Output Type: NPN Output Output Function NO/NC Switchable Output Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Max Current 200 mA Leakage Current <-0.01 mA Surge Current -	Sensor Face Material	1-Piece Stainless Steel
Sensing Range: 16 mm range Output Type: NPN Output Output Function NO/NC Switchable Output Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current -	Mounting Style	Shielded
Output Type: Output Function NO/NC Switchable Output Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current -	Diameter	30 mm Threaded
Output Function NO/NC Switchable Output Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Sensing Range:	16 mm range
Connection 4-Pin Connector Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Output Type:	NPN Output
Connector Type Mini Quick-Connect Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Output Function	NO/NC Switchable Output
Operating Voltage 10-30 VDC Switching Frequency 150 Hz Operating Temperature -25 °C - +70 °C Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Connection	4-Pin Connector
Switching Frequency Operating Temperature -25 °C - +70 °C Current Consumption IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current -	Connector Type	Mini Quick-Connect
Operating Temperature -25 °C - +70 °C Current Consumption IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current - - - - - - - - - - - - -	Operating Voltage	10-30 VDC
Current Consumption <10 mA IP Rating: IP68 EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Switching Frequency	150 Hz
IP Rating: EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current - Leakage Current -	Operating Temperature	-25 °C – +70 °C
EMC Rating RFI>3V/m / EFT>1kV / ESD>4Kv (contact) Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Current Consumption	<10 mA
Shock Rating: IEC 60497-5-2 Part 7.4.1&7.4.2 Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	IP Rating:	IP68
Short Circuit Protected Yes Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	EMC Rating	RFI>3V/m / EFT>1kV / ESD>4Kv (contact)
Reverse Polarity Protected Yes Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Shock Rating:	IEC 60497-5-2 Part 7.4.1&7.4.2
Max Current 200 mA Leakage Current <0.01 mA Surge Current -	Short Circuit Protected	Yes
Leakage Current <0.01 mA Surge Current -	Reverse Polarity Protected	Yes
Surge Current -	Max Current	200 mA
	Leakage Current	<0.01 mA
	Surge Current	-
Response Time 1 ms/1 ms	Response Time	1 ms/1 ms
Hysteresis <15%(Sr)	Hysteresis	<15%(Sr)
Overload Trip Point ≥220 mA	Overload Trip Point	≥220 mA
Weld Field Immune No	Weld Field Immune	No
Weld Spatter Resistant No	Weld Spatter Resistant	No
Body Length (mm) 81	Body Length (mm)	81