

# UE403-A0930

UE403

**SWITCHING AMPLIFIERS FOR SAFETY LIGHT-BEAM SENSORS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
UE403-A0930	1026287

Other models and accessories → [www.sick.com/UE403](http://www.sick.com/UE403)



### Detailed technical data

#### Features

<b>Application</b>	Muting switching amplifier
<b>Description</b>	UE403 muting switching amplifier
<b>Compatible sensor types</b>	M4000 Advanced multiple light beam safety devices

#### Safety-related parameters

<b>Type</b>	Type 4 (IEC 61496-1)
<b>Safety integrity level</b>	SIL 3 (IEC 61508)
<b>Category</b>	Category 4 (EN ISO 13849)
<b>Performance level</b>	PL e (EN ISO 13849)
<b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b>	$1.0 \times 10^{-8}$ (EN ISO 13849) <sup>1)</sup>
<b>T<sub>M</sub> (mission time)</b>	20 years (EN ISO 13849) <sup>1)</sup>

<sup>1)</sup> Only in conjunction with M4000 Advanced, M4000 Advanced A/P and M4000 Advanced Curtain.

#### Functions

<b>Concurrency monitoring</b>	✓
<b>Monitoring of total muting time</b>	✓
<b>Sensor gap monitoring</b>	✓
<b>Belt stop</b>	✓
<b>Muting with override</b>	✓
<b>Exit monitoring</b>	✓
<b>End of muting by ESPE</b>	✓

#### Interfaces

<b>Connection type</b>	Female connector M12, 5-pin
Permitted cable length	≤ 10 m
<b>Diagnostic display</b>	LEDs

## Electronics

<b>Protection class</b>	III (IEC 61140)
<b>Supply voltage <math>V_s</math></b>	24 V DC (19.2 V DC ... 28.8 V DC) <sup>1)</sup>
<b>Power consumption</b>	≤ 2 A
<b>Inputs: override, reset, C1, belt stop, muting sensors</b>	
ON state, switching voltage HIGH	24 V DC (11 V DC ... 30 V DC)
OFF state, switching voltage LOW	0 V DC (–30 V DC ... 5 V DC)
Input current HIGH	6 mA ... 15 mA
Input current LOW	–0.5 mA ... 1.5 mA
<b>Outputs: voltage supply for reset, override, C1</b>	
Supply voltage	24 V DC (15 V DC ... 28.8 V DC)
Output current	≤ 400 mA <sup>2)</sup>
<b>Outputs: muting sensors</b>	
Supply voltage	24 V DC (15 V DC ... 28.8 V DC)
Output current	≤ 500 mA <sup>2)</sup>
<b>Muting lamp</b>	
Output current HIGH (monitored)	20 mA ... 400 mA <sup>3)</sup>
Output current HIGH (not monitored)	0 mA ... 400 mA <sup>3)</sup>

<sup>1)</sup> Via connected ESPE.

<sup>2)</sup> Total of all supply currents from the connections RES/OVR, A1, A2, B1 and B2 (pin 1 in each case): max. 1000 mA.

<sup>3)</sup> At max. 5 W power consumption.

## Mechanics

<b>Mounting</b>	Flexible mounting on the M4000 Advanced or directly in the system
<b>Dimensions (W x H x D)</b>	76.5 mm x 225.2 mm x 40 mm
<b>Housing material</b>	Aluminum die cast, powder coated
<b>Material, connector strip</b>	Polyamide
<b>Weight</b>	600 g

## Ambient data

<b>Enclosure rating</b>	IP65 (IEC 60529)
<b>Ambient operating temperature</b>	–30 °C ... +55 °C
<b>Storage temperature</b>	–30 °C ... +70 °C
<b>Air humidity</b>	15 % ... 95 %, Non-condensing
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
<b>Shock resistance</b>	10 g, 16 ms (IEC 60068-2-29)

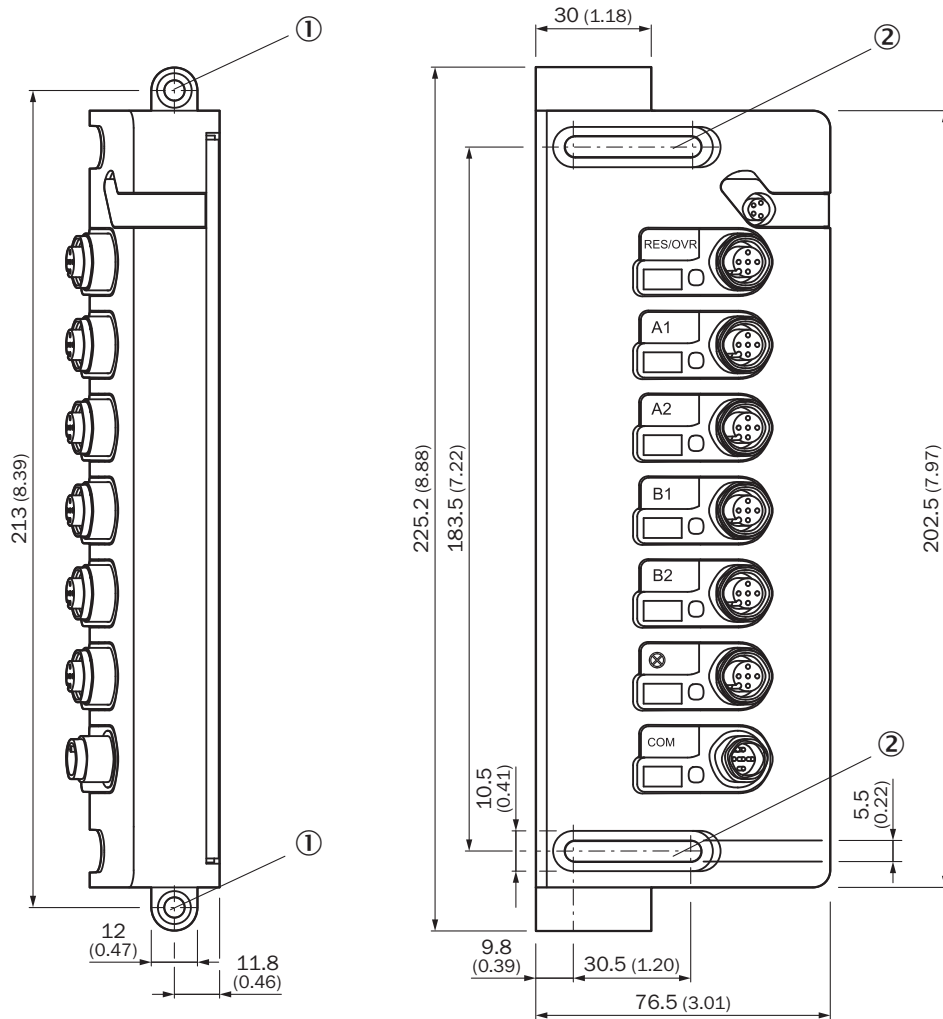
## Classifications

<b>ECLASS 5.0</b>	27272790
<b>ECLASS 5.1.4</b>	27272790
<b>ECLASS 6.0</b>	27272790
<b>ECLASS 6.2</b>	27272790
<b>ECLASS 7.0</b>	27272790

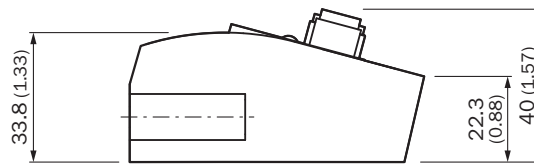
<b>ECLASS 8.0</b>	27272790
<b>ECLASS 8.1</b>	27272790
<b>ECLASS 9.0</b>	27272792
<b>ECLASS 10.0</b>	27272792
<b>ECLASS 11.0</b>	27272792
<b>ECLASS 12.0</b>	27272792
<b>ETIM 5.0</b>	EC011349
<b>ETIM 6.0</b>	EC011349
<b>ETIM 7.0</b>	EC011349
<b>ETIM 8.0</b>	EC011349
<b>UNSPSC 16.0901</b>	41113704

**Dimensional drawing** (Dimensions in mm (inch))

UE403 muting switching amplifier



**Note:**  
The fixing holes ① and slots ② are suitable for cheese head screws M5 x 30 as per DIN EN ISO 4762.



## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

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