



# FTMG-ESD20AX0

FTMg

**FLOW SENSORS**

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
FTMG-ESD20AXO	1100215

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

### Detailed technical data

#### Features

<b>Measurement principle</b>	Calorimetric (flow, temperature), piezoresistive (pressure)
<b>Medium</b>	Compressed air (air quality ISO 8573-1:2010 [3:4:4]), helium, argon, nitrogen, carbon dioxide
<b>Nominal width measuring tube</b>	DN 20
<b>Measuring range</b>	9.4 l/min ... 1,884.9 l/min, standard measuring range <sup>1)</sup> 1,884.9 l/min ... 2,827.4 l/min, extended measuring range <sup>1)</sup>
<b>Process temperature</b>	-20 °C ... +60 °C
<b>Process pressure</b>	0 bar ... 16 bar
<b>Communication interface</b>	Ethernet TCP/IP
<b>Temperature measurement</b>	✓
<b>Pressure measurement</b>	✓
<b>Indication</b>	✓ 128 x 128 pixels, adjustable rotary OLED display (90° steps) and 4 pushbuttons

<sup>1)</sup> Reference conditions according to DIN 1343 (atmospheric pressure 1,013 mbar, compressed air temperature 0 °C).

#### Performance

<b>Minimum flow velocity</b>	≥ 0.5 m/s
<b>Maximum flow velocity</b>	≤ 150 m/s
<b>Accuracy of sensor element</b>	± 3 % From measured value + 0.3 % of the measuring range end value (standard measuring range) according to ISO 8573-1:2010 [3:4:4] ± 8 % From measured value + 1 % of the measuring range end value (extended measuring range)
<b>Reproducibility</b>	± 1.5 % From measured value
<b>Response time</b>	< 0.3 s
<b>Temperature measurement</b>	
Accuracy (temperature)	± 2 °C
Reproducibility (temperature)	± 0.5 °C
<b>Pressure measurement</b>	

Accuracy (pressure)	± 1.5 % from measuring range
Non-linearity (pressure)	± 0.5 % from measuring range
Reproducibility (pressure)	± 0.2 % from measuring range

### Electronics

<b>Power consumption</b>	< 5 W
<b>Initialization time</b>	≤ 10 s
<b>Protection class</b>	III
<b>Connection type</b>	1 x M12 round connector, 8-pin, x-coded
<b>Output signal</b>	Ethernet TCP/IP, OPC UA, MQTT, integrated web server
<b>Standard communication</b>	IEEE802.3 Clause 25 (100BaseTx); 100 Mbit/sec
<b>Standard supply</b>	Power over Ethernet according to IEEE802.3af
<b>Performance class</b>	Class 0; acc. IEEE802.3af Powered Device < 13 W
<b>Power supply mode</b>	Mode A and Mode B

### Mechanics

<b>Process connection</b>	G ¾ (according to DIN ISO 228-1)
<b>Wetted parts</b>	Stainless steel 1.4305, PA6, Viton <sup>®</sup> , aluminum
<b>Housing material</b>	PC+ABS, PA66+PA6I GF50, PC, TPE, stainless steel 1.4301
<b>Enclosure rating</b>	IP65/IP67 (according to IEC 60529)
<b>Weight</b>	Approx. 755 g

### Ambient data

<b>Ambient operating temperature</b>	-20 °C ... +60 °C
<b>Ambient storage temperature</b>	-40 °C ... +85 °C
<b>Max. rel. humidity (not condensing)</b>	90 %

### Classifications

<b>ECl@ss 5.0</b>	27200403
<b>ECl@ss 5.1.4</b>	27200403
<b>ECl@ss 6.0</b>	27200403
<b>ECl@ss 6.2</b>	27200403
<b>ECl@ss 7.0</b>	27200403
<b>ECl@ss 8.0</b>	27200403
<b>ECl@ss 8.1</b>	27200403
<b>ECl@ss 9.0</b>	27200403
<b>ECl@ss 10.0</b>	27200403
<b>ECl@ss 11.0</b>	27200403
<b>ETIM 5.0</b>	EC002580
<b>ETIM 6.0</b>	EC002580
<b>ETIM 7.0</b>	EC002580
<b>UNSPSC 16.0901</b>	41112501



## 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:

Contacts and other locations –[www.sick.com](http://www.sick.com)