Product innovation

Air flow controller Series LC 521... GSP-EX22

Compact - Intuitive - Ready for use

- Flow monitoring of gaseous media in hazardous areas
- Installation in Zone 2 (gas) or Zone 22 (dust)
- On-site adjustment of setpoint
- Stainless steel housing
- G1/2-Screw-in thread

Application

The air flow monitors LC 521... GSP-EX22 detects air flows in exhaust and supply air lines in areas requiring sensors of Ex device category 3. A potentiometer is used to set the sensor to the limit value at a specified air flow. A 3-color illuminated dot signals the flow status, which is also output via the PNP switching output for further processing to a controller unit.

Features

- Use in ⟨Ex⟩-Zone 2 or ⟨Ex⟩-Zone 22
- Detection range 0.5...20 m/s
- Stainless steel housing
- Three-colour-illuminated dot
- Potentiometer for limit value setting
- PNP switching output 200 mA

Types

LC 521 GSP-EX22   P11405 • 32 mm • 0.5...20 m/s
LC 521/1 GSP-EX22   P11406 • 49 mm • 0.5...20 m/s
LC 521/2 GSP-EX22   P11407 • 101 mm • 0.5...20 m/s
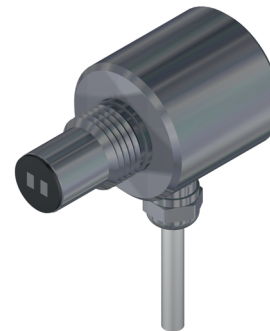LC 521/3 GSP-EX22   P11408 • 151 mm • 0.5...20 m/s

Accessories

Flat gasket AFM 34 G1/2 (part of delivery)
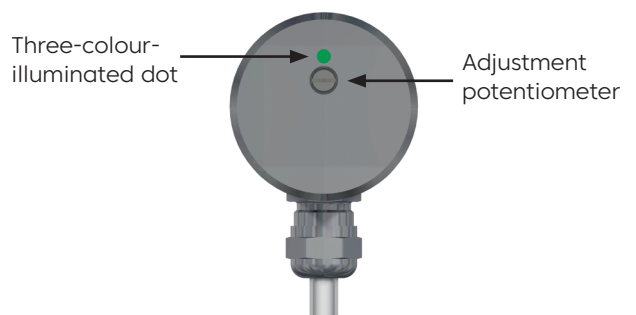
Use in hazardous areas

The air flow monitor can be used in areas subject to gas and dust explosion hazards, which require category 3. The permitted area of application must be checked against the device marking:

Gas Ex: ⟨Ex⟩ II 3 G Ex ic mc IIC T4...T3 Gc
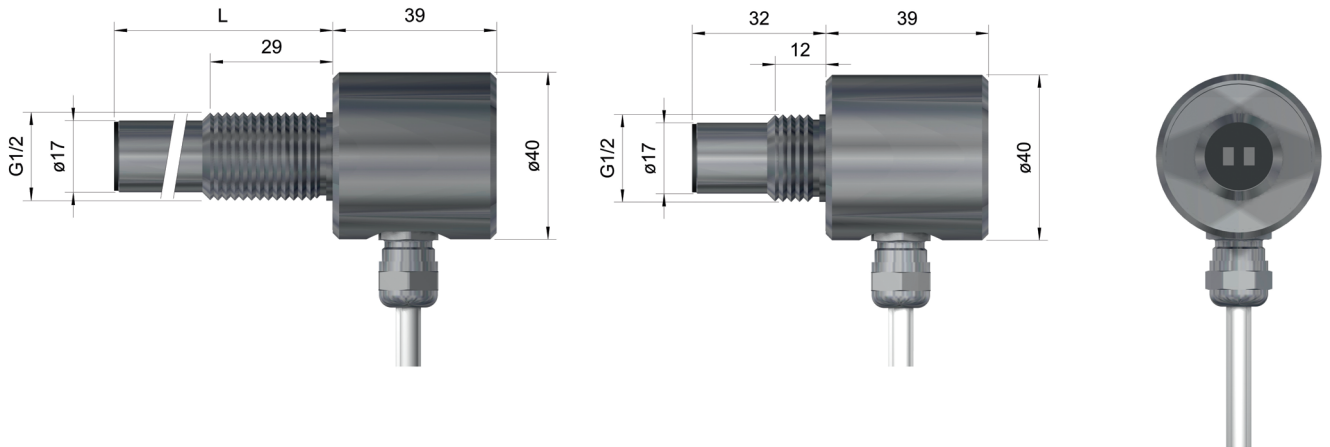Dust Ex: ⟨Ex⟩ II 3 D Ex ic mc IIIC T135 °C Dc

Installation

The sensor is mounted in a screw-in adapter with a G1/2 female thread. Alternatively, the sensor can be mounted directly in the wall of the ventilation duct using a fastening nut. If there is also sufficient air flow in the edge area, the measuring surface can be flush with the inner wall of the duct.

Three-colour-illuminated dot

Adjustment potentiometer

Operation and display

The adjustment of the sensor is done on site with the potentiometer on the front side during the operation in the ⟨Ex⟩-zone. When the limit value is reached, the illuminated dot changes its color from red to yellow, a further increase of the flow velocity is signaled with green.

Technical data

Detection range **gaseous media**	[m/s]	0.5...20			
Sensor length L	[mm]	32	49	101	151
ID-No.		P11405	P11406	P11407	P11408
Type		**LC 521 GSP-EX22**	**LC 521/1 GSP-EX22**	**LC 521/2 GSP-EX22**	**LC 521/3 GSP-EX22**

Ex area of use		Gas: Zone 2 / Dust: Zone 22
Certificate of conformity		EGE 20.0010 X
Ex marking		Gas Ex: ⟨Ex⟩ II 3 G Ex ic mc IIC T4...T3 Gc
		Dust Ex: ⟨Ex⟩ II 3 D Ex ic mc IIIC T135 °C Dc
Ambient temperature	[°C]	Gas Zone 2: T3, T4: $-10 \le Ta \le +60$
and medium temperature		Dust Zone 22: $-10 \le Ta \le +60$
Supply voltage	[VDC]	24 ±10%
Current consumption max.	[mA]	≤ 35
Output		PNP-NO short-circuit proof
Switching current	[mA]	≤ 200
Start-up time	[s]	20
Reaction time	[s]	< 5
Compressive strength	[bar]	1
Housing material		AISI 316 Ti, PBT-GF30, PUR, Ceramic AL_2O_3
Display flow		three-colour-illuminated dot red/yellow/green
Protection	[EN 60529]	IP 67
Connection		fixed cable 2 m PUR grey, 3x0.5 mm²
Notes		The Installation and startup must be performed by trained personnel with knowledge of explosion protection. The applicable regulations and rules for the use of devices in Ex device category 3 must be observed. These are contained in the EN 60079-14 standard, among others.