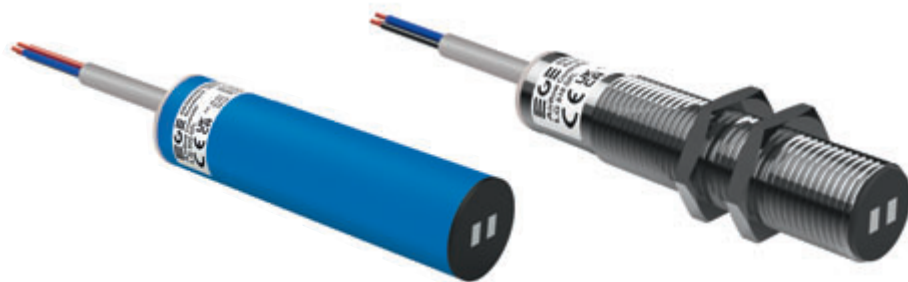


Product innovation

Air flow controller with IO-Link interface
LN 520/ LG 518 GPL

EGE

YOUR SENSOR SPECIALIST



Compact - Fast-reacting - Multifunctional

- For gaseous non-explosive media
- Temperature and flow value as process data
- Status display for flow switching point with 3-colour LED
- Diagnostic function

Application

The LN 520 GPL / LG 518 GPL is a thermal flow monitor and detects the air flow and temperature of non-explosive gaseous media.

The illuminated cable outlet signals the flow status to the user in various colours. The PNP switching output in SIO mode or the process data with measured values for flow and temperature in IO-Link mode are available for further processing. The dependence of the measured flow value on the air flow is non-linear.

Features

- Air flow measurement
- Temperature measurement in the flowing medium
- Storage of min. and max. values
- Flow status visualised by red/yellow/green colour display
- Fulfils current IO-Link specification V 1.1.3 (downward compatible)
- Operating parameters adjustable via IO-Link interface

Type

LG 518 GPL P11431 • M18x1 threaded sleeve
LN 520 GPL P11432 • Ø 20 mm smooth sleeve

Accessories LN 520 GPL

Flange Ø 20 mm
Z01106 (included in the scope of delivery)

IO-Link

IO-Link is a point-to-point communication interface, that enables setting of sensor and actuator parameters via a master module connected to a laptop or computer.

Installation

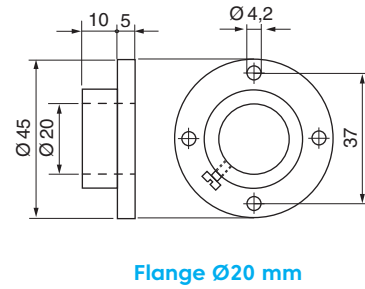
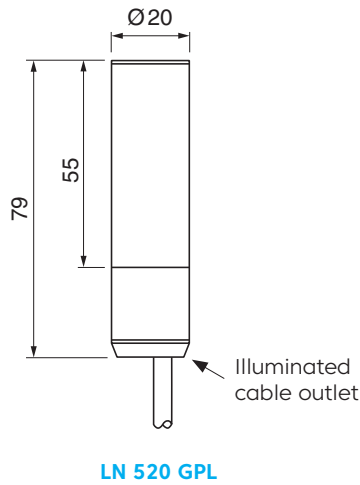
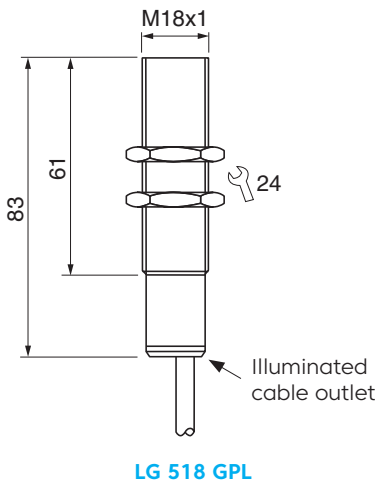
The installation is carried out with the measuring elements aligned in the direction of flow directly in the wall of the flow channel. If there is sufficient air flow in the edge area, the measuring surface can be flush with the inner wall of the duct. The version with the smooth housing can be mounted in the flange included in the scope of delivery. The version with threaded sleeve has two loosely premounted M18 nuts.



Operation and display

For operation in SIO mode the parameterisation of the sensor is carried out via the IO-Link interface. In the configuration tool, numerical values for the limit values can be entered or taught in by command.

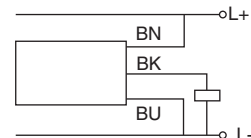
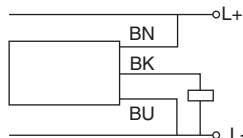
The illuminated cable outlet changes its colour from red to yellow when the set limit value is reached. A further increase in the flow rate is signalled by the colour green. If there is a connection to an IO-Link master, this is shown with the colour blue. Green light with an IO-Link-specific flashing frequency makes the sensor identifiable in a complex system after the locator function has been activated.



Technical data

Detection range air and non-explosive gaseous media

Air flow	[m/s]	0.5...15.0	0.5...15.0
Temperature	[°C]	-20.0...70.0 *	-20.0...70.0 *
ID-No.		P11431	P11432
Type		LG 518 GPL	LN 520 GPL
Output		PNP-NO/NC, IO-Link	PNP-NO/NC, IO-Link
Process data			
Air flow	[% x 0.1]	0...1000	0...1000
Temperature	[°C x 0.1]	-200...700	-200...700
Supply voltage	[VDC]	18...30	18...30
Current consumption	[mA]	≤ 40	≤ 40
Switching current	[mA]	≤ 150	≤ 150
Ambient temperature	[°C]	-20...70	-20...70
Start-up time	[s]	20...40	20...40
Reaction time (flow change)	[s]	2...20	2...20
Reaction time (temperature change)*	[s]	<15	<15
Housing materials		Ms-Ni, PBT, PSU	PBT, PSU
Display flow / IO-Link		4-colour LED (red, yellow, green, blue)	4-colour LED (red, yellow, green, blue)
Protection (EN 60529)		IP 67	IP 67
Connection		fixed cable 2 m PVC grey, 3x0.5 mm ²	fixed cable 2 m PVC grey, 3x0.5 mm ²



Programmable functions hysteresis function (limit value monitoring), on and off time delay, signal distance between yellow/green, logical linking of temperature and flow signal, NC/NO, minimum/maximum value memory for temperature, TAG identifications, locator

* To reduce the measuring error due to self-heating of the measuring element, a minimum air flow of 5 m/s is required.