

# GEMÜ 1231

## Electrical position indicator



### Features

- Wear-free position feedback via 2-wire proximity switch (NAMUR)
- Adjustable switch point tolerances via threaded spindle
- Explosion protection for zone 1 and 21

### Description

The GEMÜ 1231 electrical position indicator is suitable for mounting to pneumatically operated linear actuators. The position of the valve spindle is reliably detected electronically and fed back via proximity switches through play-free and non-positive mounting. GEMÜ 1231 has been designed specially for valves with a stroke of 2 Up to 20 mm .

### Technical specifications

- **Ambient temperature:** -20 Up to 60 °C
- **Linear measuring range:** 2 to 20 mm
- **Supply voltages:** 8 V NAMUR
- **Protection class:** IP 65
- **Electrical connection type:** M16 cable gland | M12 plug
- **Switch types:** 2-wire proximity switch (NAMUR)
- **Conformities:** ATEX | IECEx

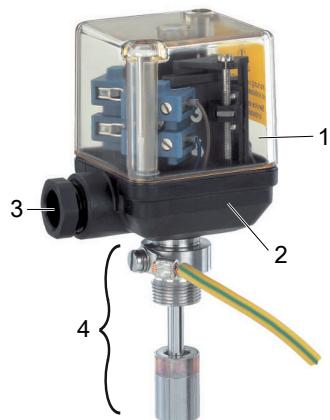
Technical data depends on the respective configuration



further information  
webcode: GW-1231



## Product description



Item	Name	Materials
1	Housing cover	PSU
2	Housing base	PP
3	Electrical connection	PP
4	Mounting kit, valve specific (must be ordered separately)	SS
	Seals	NBR

## GEMÜ CONEXO

The interaction of valve components that are equipped with RFID chips and an associated IT infrastructure actively increase process reliability.



Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process all data.

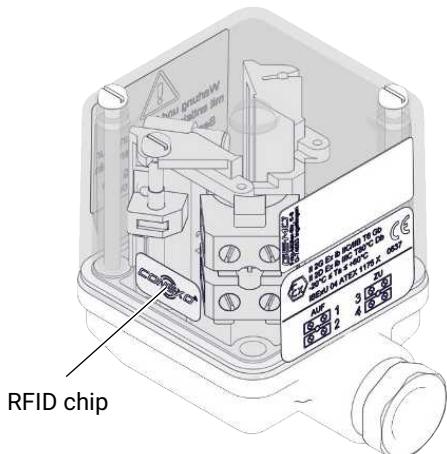
**For further information on GEMÜ CONEXO please visit:**

[www.gemu-group.com/conexo](http://www.gemu-group.com/conexo)

### Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

### Installing the RFID chip



## Availabilities

	Function	Switch	Electrical connection	Connection dia-gram
NAMUR	OPEN/CLOSED (code A00)	2-wire NAMUR (code 207)	M16 cable gland (code 1101)	Code 202
	OPEN (code A01)		M16 Skintop cable gland (code 1103)	
	CLOSED (code A02)		M12 plug, 4-pin (code 1110)	Code 203

## Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Note: Mounting kit 1231 S01 Z...dependent on valve type. Please order separately. Data required on valve type, DN, control function and actuator size.

For possible combinations see availability table.

## Order codes

1 Type	Code	6 Electrical connection	Code
Electrical position indicator ATEX	1231	M16 cable gland	1101
2 Fieldbus	Code	M16 Skintop cable gland	1103
Without	000	M12 plug connector, 4-pin	1110
3 Accessory	Code	7 Connection diagram	Code
Accessory	Z	Terminals, NAMUR	202
8 CONEXO		M12 plug, 4-pin	203
4 Device version	Code	Without	
Open/Closed	A00	Integrated RFID chip for electronic identification and traceability	C
Open	A01		
Closed	A02		
5 Switch	Code		
Proximity switch, 2-wire, NAMUR P+F, NJ1,5-6,5-15-N-Y180094	207		

## Order example

Ordering option	Code	Description
1 Type	1231	Electrical position indicator ATEX
2 Fieldbus	000	Without
3 Accessory	Z	Accessory
4 Device version	A00	Open/Closed
5 Switch	207	Proximity switch, 2-wire, NAMUR P+F, NJ1,5-6,5-15-N-Y180094
6 Electrical connection	1101	M16 cable gland
7 Connection diagram	202	Terminals, NAMUR
8 CONEXO		Without

## Technical data

### Temperature

**Ambient temperature:** -20 – 60 °C

**Storage temperature:** 0 – 40 °C

### Product conformity

**EMC Directive:** 2014/30/EU

**Explosion protection:** ATEX (2014/34/EU)  
IECEx

**ATEX marking:** ATEX:  
Gas: Ex II 2G Ex ib IIC T6 Gb  
Dust: Ex II 2D Ex ib IIIB T80°C Db  
EU type examination certificate: IBExU04ATEX1175 X  
Notified body: IBExU, No. 0637

**IECEx marking:** Gas: Ex ib IIC T6 Gb  
Dust: Ex IIIB T80°C Db  
Certificate: IECEx IBE 21.0030 X

### Mechanical data

**Installation position:** Optional

**Weight:** 420 g

**Protection class:** IP 65

**Travel sensor:** 2 – 20 mm

## Electrical data

<b>Electrical connection type:</b>	M12 plug, 4-pin (code 1110)
	M16x1.5 cable gland for cable dia. 4.5 to 7 mm, recommended wire cross section 0.75 mm <sup>2</sup> (code 1101)
	M16x1.5 Skintop cable gland for cable dia. 7 to 9 mm, recommended wire cross section 0.75 mm <sup>2</sup> (code 1103)

### 2-wire proximity switch

**Switch type:** 2-wire, NAMUR, switch (code 207)

**Supply voltage:** 8 V DC

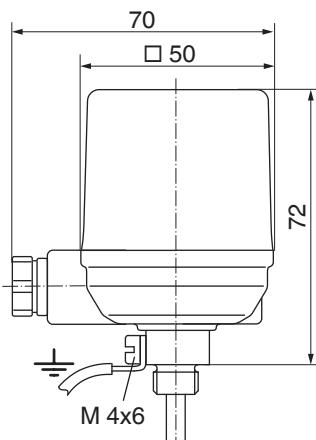
**Current consumption:**  
≤ 0.95 mA (damped)  
≥ 2.2 mA (undamped)

**Max. switching frequency:** 1 kHz

### Proximity switch intrinsically safe characteristic values

**Proximity switch:**  
Ui = 16 V  
Ii = 52 mA  
Pi = 169 mW  
Li = 50 µH  
Ci = 30 nF

## Dimensions

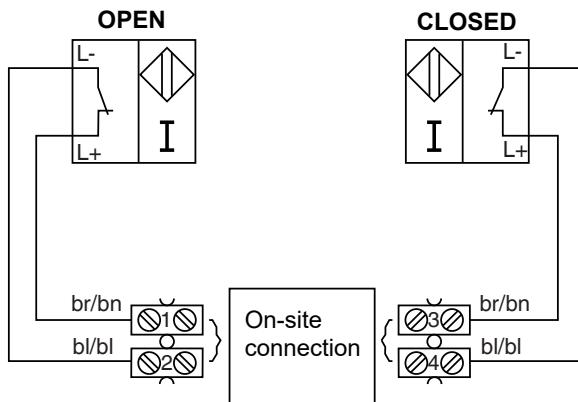


Dimensions in mm

## Electrical connection

**M16 cable gland (code 1101) or M16 Skintop cable gland (code 1103)**

**Connection diagram, NAMUR (code 202)**



**Electrical connection with M12 plug (code 1110)**

**Connection diagram (code 203)**



Pin	Signal name
1	L+, OPEN switch
2	L-, OPEN switch
3	L+, CLOSED switch
4	L-, CLOSED switch
5	n.c. *

\*Pin 5 is not connected.



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