GEMÜ 1231

Electrical position indicator

Features

- Position feedback via 2-wire proximity switch (NAMUR)
- Adjustable switch point tolerances via threaded spindle
- Can be fitted to GEMÜ valves or third-party actuators
- 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 to 20 mm .

Technical specifications

- **Ambient temperature:** -20 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 I M12 plug
- **Switch types:** 2-wire proximity switch (NAMUR)
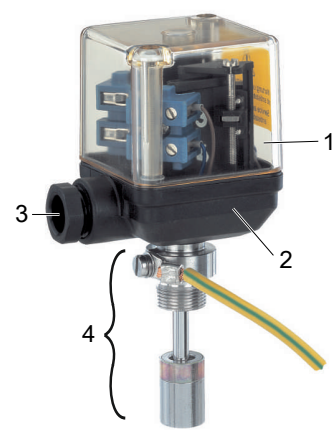- **Conformities:** ATEX I IECEx

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.
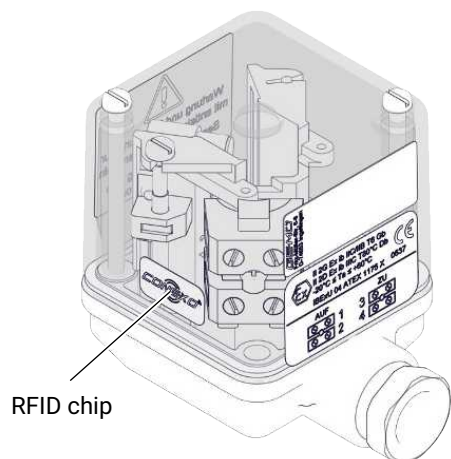
For further information on GEMÜ CONEXO please visit:

www.gemu-group.com/conexo

Ordering

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

Installing the RFID chip

RFID chip

Availabilities

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

 www.gemu-group.com

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
Electrical position indicator ATEX	1231

2 Fieldbus	Code
Without	000

3 Accessory	Code
Accessory	Z

4 Device version	Code
Open/Closed	A00
Open	A01
Closed	A02

5 Switch	Code
Proximity switch, 2-wire, NAMUR P+F, NJ1,5-6,5-15-N-Y180094	207

6 Electrical connection	Code
M16 cable gland	1101
M16 Skintop cable gland	1103
M12 plug connector, 4-pin	1110

7 Connection diagram	Code
Terminals, NAMUR	202
M12 plug, 4-pin	203

8 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	C

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⟩ Ex ib IIC T6 Gb
Dust: ⟨Ex⟩ 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

Electrical connection type: M12 plug, 4-pin (code 1110)

M16x1.5 cable gland for cable dia. 4.5 to 7 mm, recommended wire cross section 0.75 mm² (code 1101)

M16x1.5 Skintop cable gland for cable dia. 4 to 10 mm, recommended wire cross section 0.75 mm² (code 1103)
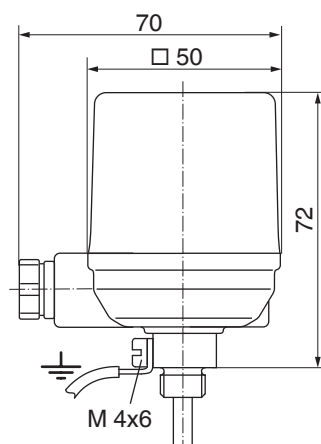
2-wire proximity switch

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

Supply voltage: 8 V DC

Current consumption: ≤ 0.1 mA (damped)
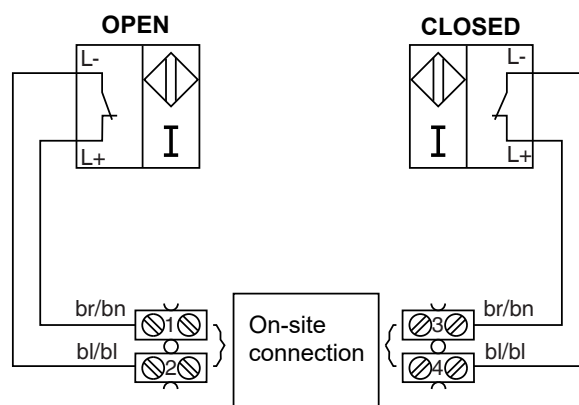≥ 3 mA (undamped)

Max. switching frequency: 1 kHz

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.