

GEMÜ 1230

Electrical position indicator



Features

- Position feedback via microswitch, option with LED indication of end position
- Adjustable switch point tolerances via threaded spindle
- Can be fitted to GEMÜ valves or third-party actuators
- UL approval available

Description

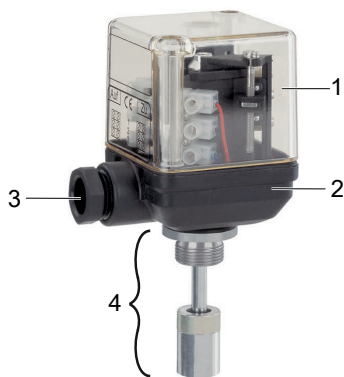
The GEMÜ 1230 electrical position indicator is suitable for mounting to pneumatically operated linear actuators. The position of the valve spindle is reliably electronically detected and reported via microswitches through play-free and non-positive mounting. The GEMÜ 1230 has been specially designed 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:** 10 - 30 V DC | 250 V AC
 - **Protection class:** IP 65
 - **Electrical connection type:** M16 cable gland | M12 plug
 - **Switch types:** Microswitch
 - **Conformities:** CSA | EAC | UL Recognized
- Technical data depends on the respective configuration

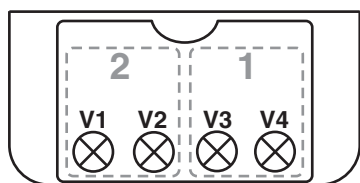


Product description



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

Status LEDs



1 - not available for function code A11, A21

2 - not available for function code A12, A22

LED	Assignment	Limit switches	LED colour
V1	Operating voltage	OPEN	Yellow
V2	OPEN position	OPEN	Green
V3	CLOSED position	CLOSED	Red
V4	Operating voltage	CLOSED	Yellow

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.

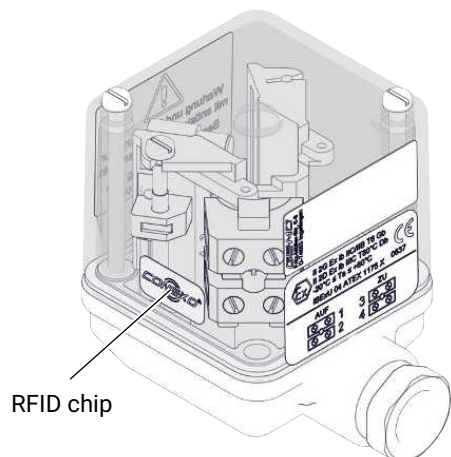
For further information on GEMÜ CONEXO please visit:

www.gemu-group.com/conexo

Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO" (see order data).

Installing the RFID chip



Availabilities

	Function	Electrical connection	Connection diagram
Standard (without LED display)	OPEN/CLOSED (code A00) OPEN (code A01) CLOSED (code A02)	M16 cable gland (code 1101)	Code 101, 103
		M16 Skintop cable gland (code 1103)	
		M12 plug, 4-pin (code 1110)	Code 102
		M12 plug, 4-pin, with female angled connector, without cable (code 1111)	
With LED display	OPEN/CLOSED, PNP (code A10) OPEN, PNP (code A11) CLOSED, PNP (code A12)	M16 cable gland (code 1101)	Code 101
		M16 Skintop cable gland (code 1103)	
		M12 plug, 4-pin (code 1110)	Code 110
		M12 plug, 4-pin, with female angled connector, without cable (code 1111)	
	OPEN/CLOSED, NPN (code A20) OPEN, NPN (code A21) CLOSED, NPN (code A22)	M16 cable gland (code 1101)	Code 103
		M16 Skintop cable gland (code 1103)	
		M12 plug, 4-pin (code 1110)	Code 112
		M12 plug, 4-pin, with female angled connector, without cable (code 1111)	
UL approval	OPEN/CLOSED, standard (code A00) OPEN/CLOSED, PNP with LED display (code A10)	M16 cable gland (code 1101)	Code 101

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 1230 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	1230

2 Fieldbus	Code
Without	000

3 Accessory	Code
Accessory	Z

4 Device version	Code
Open/Closed	A00
Open	A01
Closed	A02
Open/Closed, LED, PNP	A10
Open, LED, PNP	A11
Closed, LED, PNP	A12
Open/Closed, LED, NPN	A20
Open, LED, NPN	A21
Closed, LED, NPN	A22

5 Switch	Code
Change-over contact, microswitch Schmersal, M 610-11-21-1E	103

6 Electrical connection	Code
M16 cable gland	1101
M16 Skintop cable gland	1103
M12 plug, 4-pin	1110
M12 plug, 4-pin with female angled connector, without cable	1111

7 Connection diagram	Code
Terminals, PNP, option with LED	101
M12 plug, PNP	102
Terminals, NPN	103
M12 plug, 4-pin, PNP, option with LED	110
M12 plug, 4-pin, NPN	112

8 Special version	Code
Without	
UL approval	U

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

Order example

Ordering option	Code	Description
1 Type	1230	Electrical position indicator
2 Fieldbus	000	Without
3 Accessory	Z	Accessory
4 Device version	A00	Open/Closed
5 Switch	103	Change-over contact, microswitch Schmersal, M 610-11-21-1E
6 Electrical connection	1101	M16 cable gland
7 Connection diagram	101	Terminals, PNP, option with LED
8 Special version		Without
9 CONEXO		Without

Technical data

Temperature

Ambient temperature: -20 – 60 °C

Storage temperature: 0 – 40 °C

Product conformity

EMC Directive: 2014/30/EU

Approvals: UL approval, UR (recognized) UL 508
CSA approval, C22.2, No. 14-M91

Mechanical data

Installation position: Optional

Weight: 420 g

Protection class: IP 65

Range of limit switch: 2 – 20 mm

Service life: 10 x 10⁶ operations

Electrical data

Electrical connection type: M12 plug, 4-pin (code 1110)
M12 plug, 4-pin, with female angled connector, without cable (code 1111)
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)

Microswitch

Switch type: SPDT, switch (code 103)

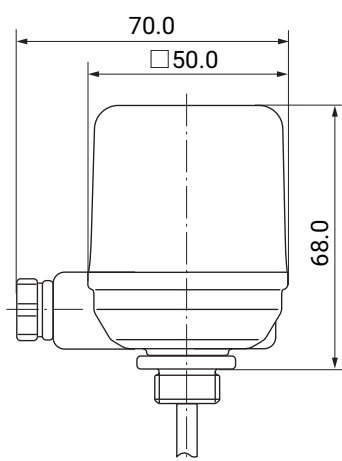
Supply voltage:	Standard	UL approval	Option with LED
	250 V DC	10 – 30 V DC	10 – 30 V DC

Current consumption:	Standard	UL approval	Option with LED
	4 A (24 V DC) 2.5 A (230 V AC)	3 A -	4 A (24 V DC) -

Intrinsic power consumption:	Standard	UL approval	Option with LED
	-	-	40 mA (24 V DC)

Application category:	Standard	UL approval	Option with LED
	AC - 15	-	-

Dimensions

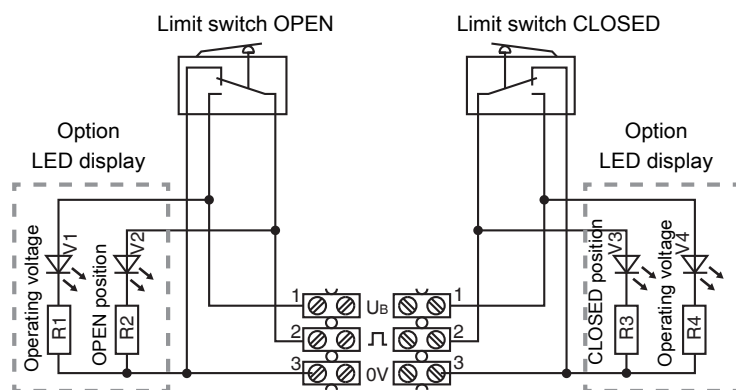


Dimensions in mm

Electrical connection

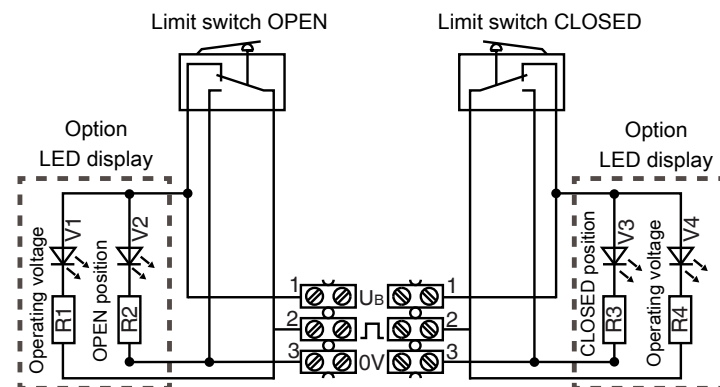
M16 cable gland (code 1101) or M16 Skintop cable gland (code 1103)

Connection diagram PNP - option with LED (code 101)



U_B = operating voltage
 \sqcup = signal output
 0 V = GND, 0 V

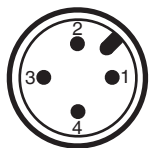
Connection diagram NPN - option with LED (code 103)



U_B = operating voltage
 \sqcup = signal output
 0 V = GND, 0 V

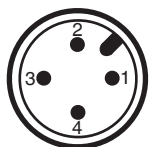
M12 plug, 4-pin (code 1110) or M12 plug, 4-pin, with female angled connector, without cable (code 1111)

Connection diagram - Standard (code 102)



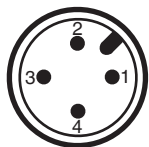
Pin	Signal name
1	L1/L+, supply voltage
2	Signal output CLOSED
3	N / L-, supply voltage
4	Signal output OPEN

Connection diagram NPN with LED display (code 112)



Pin	Signal name
1	L+, supply voltage
2	Signal output CLOSED
3	L-, supply voltage
4	Signal output OPEN

Connection diagram PNP with LED display (code 110)



Pin	Signal name
1	L+, supply voltage
2	Signal output CLOSED
3	L-, supply voltage
4	Signal output OPEN



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