## Electrical Position Indicator

## Construction

The GEMÜ 1232 electrical position indicator is suitable for linear valves with actuator strokes up to 20 mm (actuating travel). It has a corrosion resistant plastic housing and one or two inductive proximity switches. Switching rod and actuating spindle have a positive connection without axial play. The electrical connection is via cable gland

## Features

- Both proximity switches can be continuously and precisely adjusted, independently of each other, via threaded spindles
- Device can be rotated through $360^{\circ}$
- Customer-specified connectors available as an option
- UL approval available as an option


## Advantages

- Simple mounting and retrofitting to GEMÜ linear actuators
- Mounting to other valve makes possible
- Compact design in a stable housing
- The switches are not subject to wear, contactless detection
- Protection class IP 65 to EN 60529


Operating conditions

| Setting range of limit switch | $2-20 \mathrm{~mm}$ continuous |
| :--- | :--- |
| Ambient temperature | $-20^{\circ} \ldots+60^{\circ} \mathrm{C}$ |
| Protection class | IP 65 EN 60529 |


| Materials |  |
| :--- | ---: |
| Housing cover, Polysulfone | PSU |
| Housing base, Polypropylene 30\% GF | PP |
| Operating spindle | 1.4104 |
| Operating spindle | 1.4104 |
| Damping piece | 1.4104 |

Electrical connection

| M 16 cable gland | $1 \times$ available |
| :--- | :--- |
| Cable diameter | $4.5 \ldots 7 \mathrm{~mm}$ |
| Recommended cross section of wire | $0.75 \mathrm{~mm}^{2}$ |

Option for field bus connection with
AS-Interface
Supply voltage
Operating voltage $\quad 26.5$ to 31.6V DC acc. to AS-Interface specification operation with yellow AS-Interface cable


Signal inputs end position

| "CLOSED" position | AS-Interface input | Port D1 |
| :--- | :--- | :--- |
| "OPEN" position | AS-Interface input | Port D0 |

## AS-Interface

Reverse battery protection Standard
AS-Interface profile S 3.F
I/O Code
ID-Code
AS-Interface certificate
3
22902

## Connection

(operation with yellow AS-Interface cable)
Connector
AS-Interface M12 plug

## Accessories

Recomm. mating connector GEMÜ 4180 AZ 010101
Recomm. AS-Interface cable GEMÜ 4170 AZ 01010100

| Approvals |  |
| :--- | :--- |
| UL, UR (recognized) | UL 508 |
| CSA, C22.2 | No. 14-M91 |
| For details see www. ul.com |  |


\left.| Swich |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 3-wire proximity switch PNP (code 305) |  |  |  | 2-wire NAMUR (code 207) |  |
|  |  |  |  |  |  |
| Standard |  |  |  |  |  | UL Approval $\right)$ Option with LED

Connection diagram, code 202
Connection diagram, code 303


Connection diagram M12 plug, 4-pin, code 304


| PIN | Standard | Option with LED |
| :---: | :--- | :--- |
| 1 | L1/L+, supply voltage | L+, supply voltage (Ub=10-30 V DC) |
| 2 | Us, signal end position CLOSED | Us, signal end position CLOSED |
| 3 | N/L-, supply voltage | L-, supply voltage (Ub=10-30 V DC) |
| 4 | Us, signal end position OPEN | Us, signal end position OPEN |

Connection diagram AS-Interface version, code 312


| Pin | Signal name |
| :---: | :--- |
| 1 | AS-Interface voltage + |
| 2 | n.c. |
| 3 | AS-Interface voltage - |
| 4 | n.c. |
| $(\perp)$ | PE, Protective earth conductor |

## Order data

| Field bus |  | Code |
| :---: | :---: | :---: |
| Without |  | 000 |
| AS-Interface |  | A1 |
| Function |  | Code |
| OPEN/CLOSED | NAMUR | A00 |
| OPEN | NAMUR | A01 |
| CLOSED | NAMUR | A02 |
| OPEN/CLOSED only in field bus | $\begin{aligned} & \text { PNP with LED } \\ & \text { sion } 000 \end{aligned}$ | A10 |
| OPEN only in field bus | $\begin{aligned} & \text { PNP with LED } \\ & \text { sion } 000 \end{aligned}$ | A11 |
| CLOSED only in field bus | PNP with LED <br> sion 000 | A12 |
| OPEN/CLOSED | PNP | A30 |
| OPEN | PNP | A31 |
| CLOSED | PNP | A32 |


| Switch | Code |
| :--- | :--- |
| 2-wire NAMUR (only connection diagram code 202) | 207 |
| 3-wire proximity switch PNP | 305 |
| Other switches on request |  |


| Electrical connection | Code |
| :--- | ---: |
| M16 cable gland | 1101 |
| M16 Skintop cable gland | 1103 |
| M12 plug, 4-pin | 1110 |
|  |  |
| Connection diagram | Code |
| Terminals | 303 |
| M12 plug, 4-pin; PNP (A3x) | 304 |
| AS-Interface version | 312 |

Approval Code
without
UL approval * U

* not for all versions

| Order example | $\mathbf{1 2 3 2}$ | $\mathbf{0 0 0}$ | Z | A30 | $\mathbf{3 0 5}$ | $\mathbf{1 1 0 1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Type | 1232 |  |  |  |  |  |
| Field bus (code) |  | 000 |  |  |  |  |
| Accessory |  |  | Z |  |  |  |
| Function (code) |  |  | A30 |  |  |  |
| Switch (code) |  |  |  | 305 |  |  |
| Electrical connection (code) |  |  |  |  | 1101 |  |
| Connection diagram (code) |  |  |  |  |  | 303 |
| Approval (Code) |  |  |  |  |  |  |

Please order mounting kit 1232 S01Z... (spindle + mounting parts) separately with reference to the particular valve type.

## Further electrical position indicators for valves with linear actuator <br> e.g. diaphragm and globe valves

GEMÜ 1215
Position indicator with microswitch
The GEMÜ 1215 single position
 indicator is suitable for linear actuated valves where it shows 'open' position only, or on GEMÜ type 667 where it shows 'closed' position only. The unit also has optical indication.

## GEMÜ 1205

Position indicator with microswitch acc. to ATEX


The GEMÜ 1205 electrical position indicator has one or two microswitches for end position feedback which are mechanically adjustable. The device is suitable for installation in Ex-proof applications acc. to ATEX. GEMÜ 1205 is suitable for mounting to linear actuators with a max. stroke of 70 mm .

GEMÜ 1201 and 1230 Position indicators with microswitch


The GEMÜ 1201 and 1230 electrical position indicators have one or two microswitches for end position feedback which are mechanically adjustable. GEMÜ 1201 is suitable for mounting to linear actuators with a max. stroke of 70 mm .
GEMÜ 1230 is suitable for mounting to linear actuators with a max. stroke of 20 mm .

## Further electrical position indicators for valves with

 quarter turn actuator, e.g. butterfly and ball valvesGEMÜ 1234 and 1235/1236 Self-learning position indicators


The GEMÜ 1234 and 1235/1236 electrical position indicators have an automated programme for setting open/closed.
In addition the operating voltage and the end positions are indicated by light emitting diodes.

## GEMÜ 1211 and 1231

Position indicators with proximity switch acc. to ATEX

GEMÜ 1225 - Position indicator with microswitch


The GEMÜ 1225 electrical position indicator is suitable for mounting to quarter turn actuators of GEMU butterfly valves DN $15-50 \mathrm{~mm}$ in PVC-U, brass and stainless steel. In addition to electrical indication of end positions via switches the device has an optical LED position indication as standard.

The GEMÜ 1211 and 1231 electrical
 position indicators have one or two proximity switches for end position feedback which are mechanically adjustable. The devices are suitable for installation in Ex-proof applications acc. to ATEX. GEMU 1211 is suitable for mounting to linear actuators with a max. stroke of 70 mm .
GEMÜ 1231 is suitable for mounting to linear actuators with a max. stroke of 20 mm .

## GEMÜ 1214

Position indicator with proximity switch


The GEMÜ 1214 electrical position indicator has one or two proximity switches for end position feedback which are mechanically adjustable. GEMÜ 1214 is suitable for mounting to linear actuators with a max. stroke of 70 mm .

For further electrical position indicators, accessories and other products please see our Product Range catalogue and Price List. Contact GEMÜ.

