

Electrical Position Indicator ATEX

Construction

The GEMÜ 1211 electrical position indicator is suitable for linear valves with actuator strokes up to 70 mm (actuating travel). It has a corrosion resistant plastic housing and one or two inductive proximity switches acc. to NAMUR EN 50227.

The electrical connection is via cable gland.

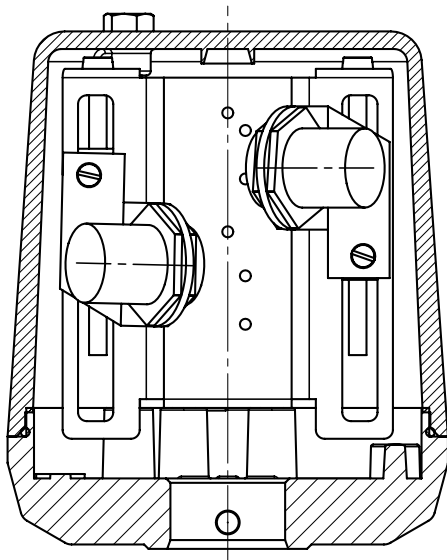
Features

- ATEX-marking:
 - $\text{Ex II 2G Ex ib IIC/IIB T6 Gb}$
 - $\text{Ex II 2D Ex ib IIIC T80°C Db}$
 - $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- Both proximity switches can be continuously and precisely adjusted, independently of each other, via threaded spindles
- Device can be rotated through 360°
- Customer-specified connectors 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

Sectional drawing



Technical data

Operating conditions

Setting range of limit switch	2 - 70 mm continuous
Ambient temperature	-20° to +60°C
Protection class	IP 65 EN 60529

Intended for use with process valves whose opening/ closing speed does not exceed 1 metre/second. Metallically isolated components have to be connected to the potential earth via charge eliminators by the user (see directive 1999/92/EC (ATEX 137) and national provisions).

Switch

Rated voltage	8 V Namur
Rated current, undamped	≥ 3 mA
Rated current, damped	< 1 mA
Max. switching frequency	500 Hz
Inductive proximity switch	P+F NCB5-18GM20 -NO -Y106294

Materials

Housing cover	Polysulfone	PSU
Housing base	Polyamide, 25% glass fiber	PA 6.6
Guide piece	1.4305	
Operating spindle	1.4104	
Damping piece	1.4104	

Electrical connection

PG 13.5 cable gland	1 x available 1 x prepared
Cable diameter	6.5 to 12 mm
Recommended cross section of wire	0.75 mm ²
Potential equalisation	stranded wire, yellow/green H 07 V-K 4.0

Explosion protection

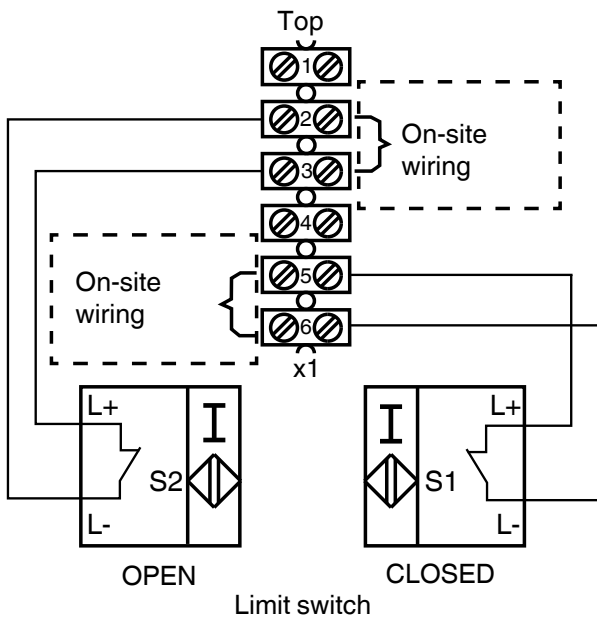
Explosion protection
Marking acc. to ATEX

⊕ II 2G Ex ib IIC/IIB T6 Gb
⊕ II 2D Ex ib IIIC T80°C Db
-20 °C ≤ Ta ≤ +60 °C

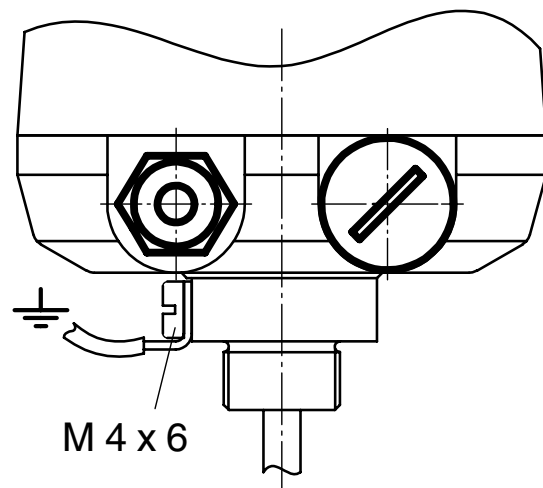
EC type examination certificate number

Note on index X: Operation in potentially explosive atmospheres only in conjunction with an ATEX complying isolator amplifier that is designed for the operation of NAMUR proximity switches, mechanical contacts or optocouplers and for which separate operating instructions apply.

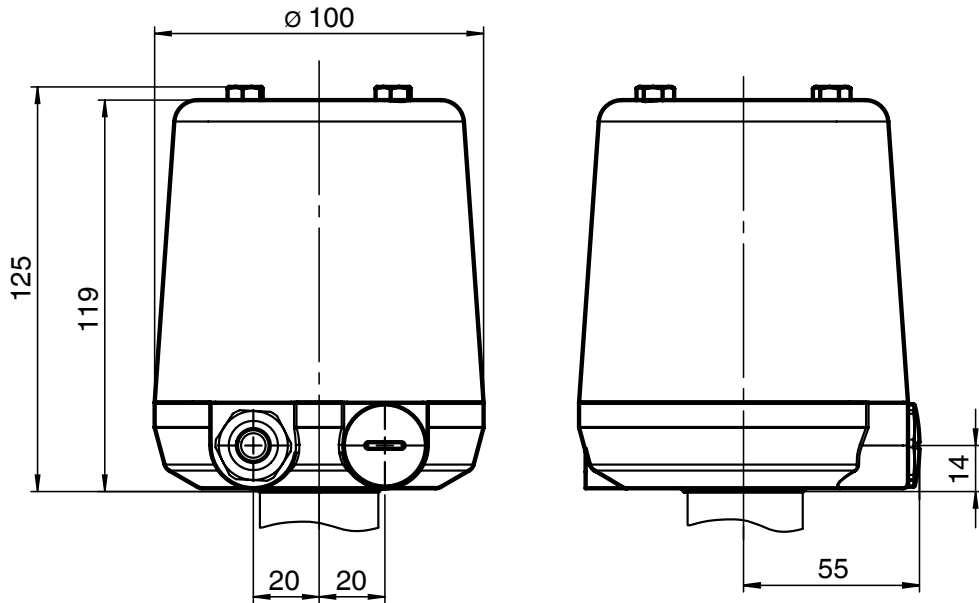
Connection diagram



Potential equalisation



Dimensions [mm]



Order data

Field bus	Code	Switch	Code
Without	000	2-wire Namur	203
Function	Code	Electrical connection	Code
OPEN/CLOSED	A00	PG 13.5 cable gland	3001
OPEN	A01		
CLOSED	A02		
		Connection diagram	Code
		Terminal block (see page 2)	201

Order example	1211	000	Z	A00	203	3001	201
Type	1211						
Field bus (Code)		000					
Accessory			Z				
Function (Code)				A00			
Switch (Code)					203		
Electrical connection (Code)						3001	
Connection diagram (Code)							201

Please order mounting kit 1211S01Z...AT separately with reference to the particular valve type!

When ordering please specify the complete valve type key, e. g. Type 1211 000 Z A00 203 3001 201 for mounting to GEMÜ valve 690/20 D 0114-1

Further electrical position indicators for valves with linear actuator 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 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 working voltage and the end positions are indicated by light emitting diodes.

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 1231 - Position indicator with proximity switch acc. to ATEX



The GEMÜ 1231 electrical position indicator has one or two proximity switches for end position feedback which are mechanically adjustable. The device is suitable for installation in Ex-proof applications acc. to ATEX. GEMÜ 1231 is suitable for mounting to linear actuators with a max. stroke of 20 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.

GEMÜ 1214 and 1232 - Position indicators with proximity switch



The GEMÜ 1214 and 1232 electrical position indicators have 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. GEMÜ 1232 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 valves

GEMÜ 1225 - Position indicator with microswitch



The GEMÜ 1225 electrical position indicator is suitable for mounting to quarter turn actuators of GEMÜ butterfly valves DN 15-50 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.

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

GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

