

Electrical Position Indicator with microswitches

Construction

The GEMÜ 1201 electrical position indicator has one or two mechanical microswitches. The corrosion resistant plastic unit is designed for actuator strokes up to 70 mm.

The position actuating spindle has a positive direct connection with the valve actuator without axial play. The electrical connection is via cable gland.

Features

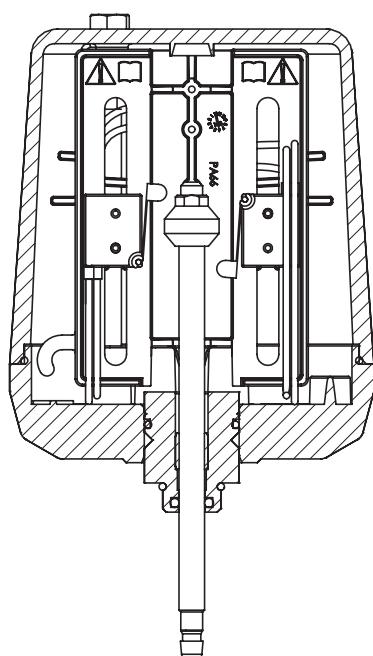
- Both microswitches can be continuously and precisely adjusted, independently of each other, via threaded spindles
- Indicator can be rotated through 360°
- Customer specified connectors available as an option

Advantages

- Simple mounting and retrofitting to GEMÜ linear actuators
- Mounting to other valve makes possible
- Compact design in a stable housing
- 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

Electrical data

Switch type	Open / Close switch Crouzet 83.181
Rated voltage	250 V AC 24 V DC
Rated current	100 mA - 8 A AC 5 mA - 5 A DC
Service life, mechanical:	approx. 3 million operations
Service life, electrical:	appr. 1.5 million operations at 1.5 A ohmic and 12 V DC appr. 50.000 operations at 8 A ohmic and 250V AC

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

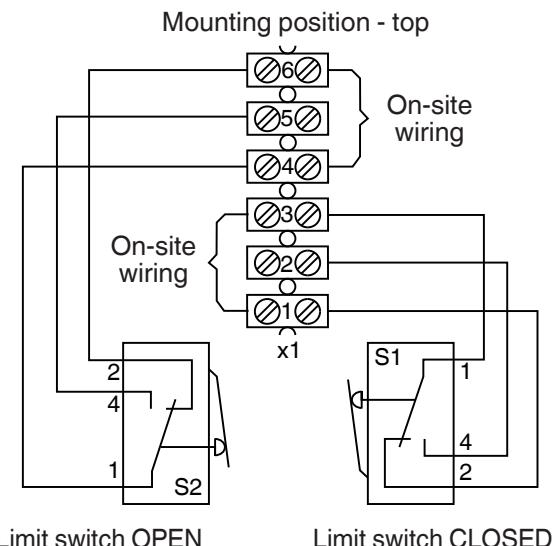
PG 13.5 cable gland	1 x available 1 x prepared
Cable diameter	6.5 to 12 mm
Recommended cross section of wire	0.75 mm ²

Availability table

	Function	Electrical connection	Connection diagram
Standard	OPEN/CLOSED (Code A00)	PG 13.5 cable gland (Code 3001)	Code 104
	OPEN (Code A01)	Skintop union (Code 3003)	
	CLOSED (Code A02)	M16 cable gland (Code 3102)	
	OPEN/CLOSED (Code A00)	Hirschmann plug + socket N6RFFS11 (Code 3013)	Code 106
	OPEN (Code A01)	CLOSED (Code A02)	Code 107
	OPEN/CLOSED (Code A00)	Harting plug HAN 7D + socket (Code 3014)	Code 109
	OPEN/CLOSED (Code A00)	Harting plug HAN 7D + socket (Code 3014)	

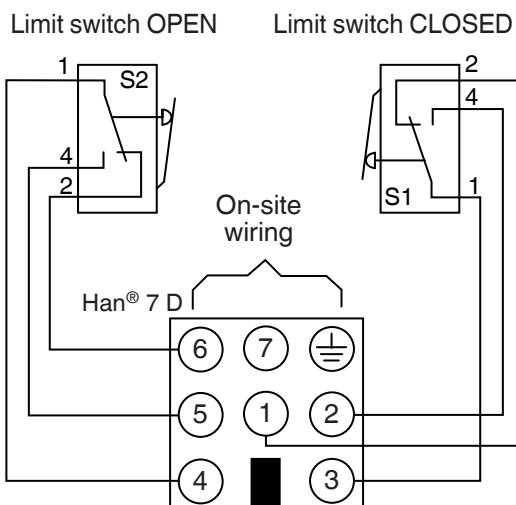
Connection diagrams

Terminals (Code 104)



Harting socket HAN 7D (Code 107)

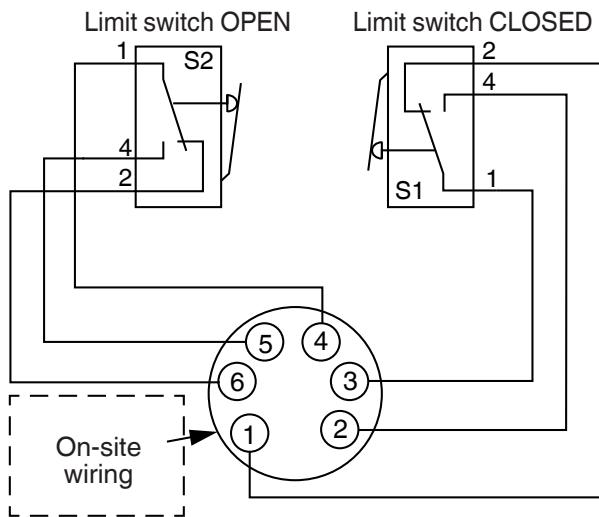
with Harting socket HAN 7D



Connection diagrams

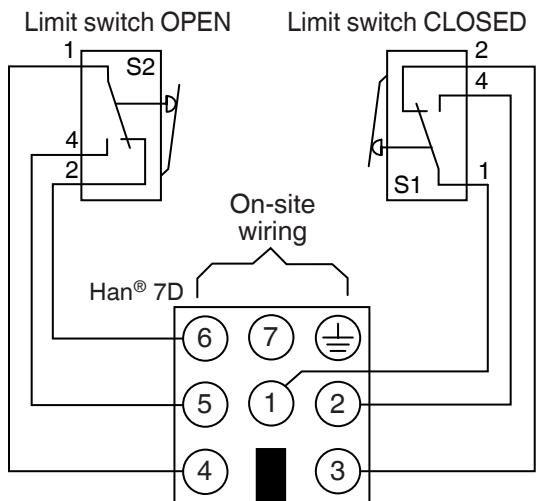
Hirschmann socket N6RFFS11 (Code 106)

with Hirschmann socket N6RFFS11

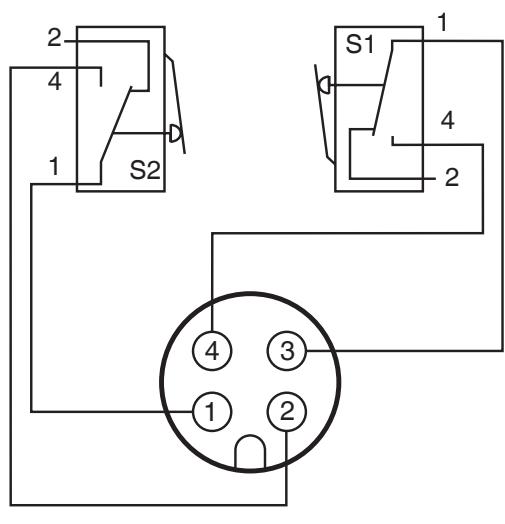


Harting socket HAN 7D (Code 109)

with Harting socket HAN 7D



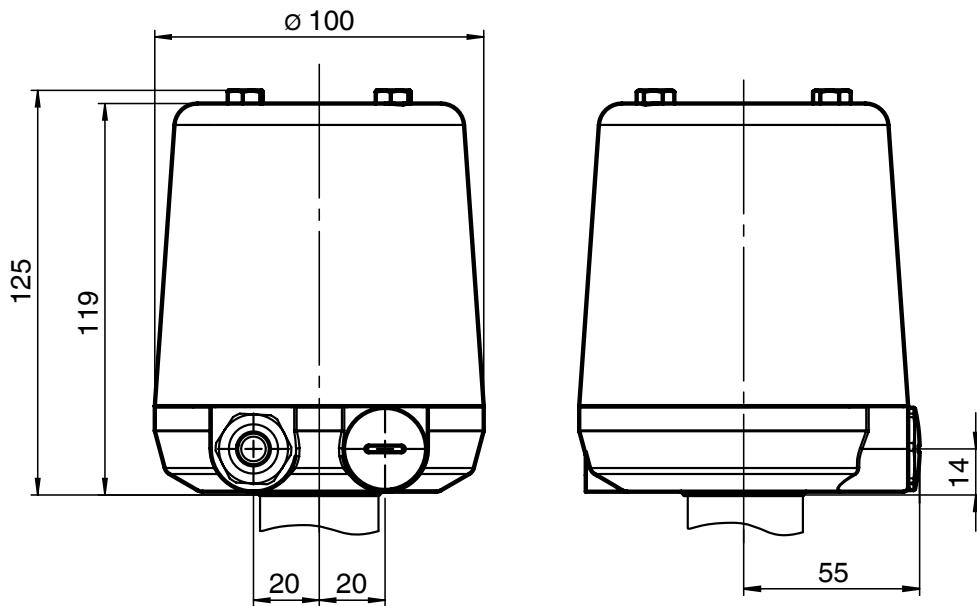
Limit switch OPEN



Limit switch CLOSED

On-site wiring

Dimensions [mm]



Order data

Fieldbus	Code
Without	000

Function	Code
Open / Close	A00
Open	A01
Close	A02

Switch	Code
Open / Close switch Crouzet 83.181	109
Further switches on request.	

Electrical connection	Code
PG 13.5 cable gland	3001
Skintop union	3003
Hirschmann plug + socket N6RFFS11	3013
Harting plug HAN 7D + socket	3014
M16 cable gland	3102

Connection diagram	Code
Terminals	104
Hirschmann socket N6RFFS11	106
Harting socket HAN 7D	107
Harting socket HAN 7D	109
For respective connection diagrams see page 3.	

Order example	1201	000	Z	A00	109	3001	104
Type	1201						
Fieldbus (Code)		000					
Accessory			Z				
Function (Code)				A00			
Switch (Code)					109		
Electrical connection (Code)						3001	
Connection diagram (Code)							104

Please order mounting kit 1201S01Z... separately with reference to the particular valve type.

When ordering please specify the complete valve type key, e. g. Type 1201 000 Z A00 109 3001 104 for mounting to GEMÜ valve 690/20 D 0114-1

For possible combinations see table of availability in the section Technical data.

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 1230 - Position indicator with microswitch



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

GEMÜ 1211 and 1231 Position indicators with proximity switch acc. to ATEX



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. GEMÜ 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 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.