

Electrical Position Indicator

Construction

The GEMÜ 1230 electrical position indicator is suitable for linear valves with actuator strokes up to 20 mm (actuating travel). It has a corrosion resistant housing and one or two microswitches.

Switching rod and actuating spindle have a positive connection without axial play. The electrical connection is via cable gland.

Features

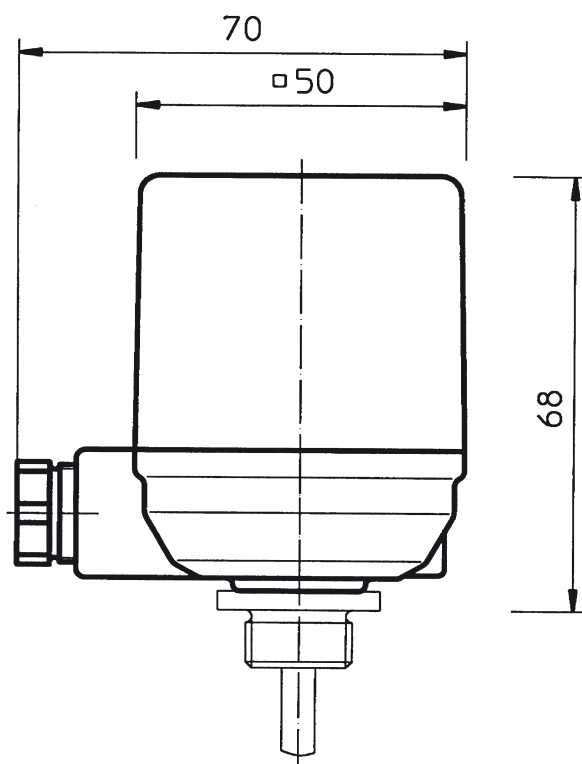
- Both microswitches can be continuously and precisely adjusted, independently of each other, via threaded spindles
- Device can be rotated through 360°
- Customer-specified connectors available as an option
- LEDs showing position indication are optional

Advantages

- Simple mounting and retrofitting to GEMÜ linear actuators
- Mounting to other makes upon possible
- Compact design in a stable housing
- Protection class IP 65 to EN 60529



Dimensions - GEMÜ 1230 [mm]



Technical Data

Operating conditions

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

Electrical connection

M 16 cable gland	1 x available
Cable diameter	4.5 ... 7 mm
Recommended cross section of wire	0.75 mm ²

Materials

Housing cover	Polysulfone	PSU
Housing base	Polypropylene 30% GF	PP
Bush	1.4305	
Operating spindle	1.4104	

Approvals

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

Switch

	Standard	Option with LED
Rated voltage U _B	250 V AC	10 - 30 V DC
On-load current	4 A (24 V DC) 2.5 A (230 V AC)	4 A (24 V DC) -
Intrinsic current consumption	-	40mA (24 V DC)
Service life	10 x 10 ⁶ cycle duties	10 x 10 ⁶ cycle duties
Application category	AC - 15	-

Option for field bus connection with AS-Interface

Supply voltage

Operating voltage acc. to AS-Interface specification operation with yellow AS-Interface cable		26.5 to 31.6 V DC
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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	3
ID-Code	F
AS-Interface certificate	22902

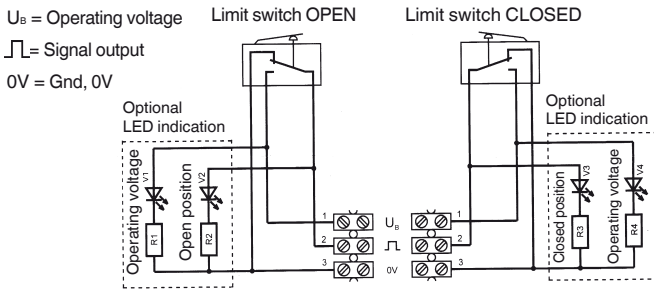
Connection

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

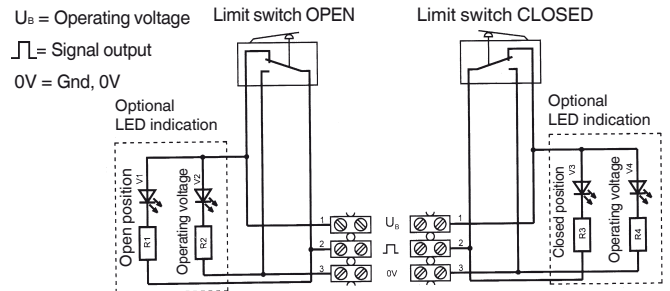
Accessories

Recomm. mating connector	GEMÜ 4180 AZ 01 01 01
Recomm. AS-Interface cable	GEMÜ 4170 AZ 01 01 01 00

Connection diagram 1230 PNP Code 101



Connection diagram 1230 NPN Code 103



Connection diagram M12 plug, 4-pin, Code 110/112

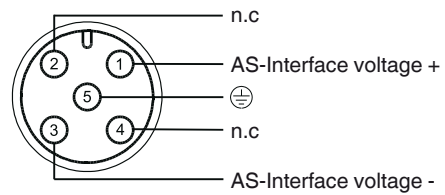


X1

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

Connection diagram AS-Interface version, Code 108

Pin assignment:



Order data

Field bus	Code
Without	000
AS-Interface	A1

Switch	Code
SPDT (Single Pole Double Throw) switch	103

Function	Code
OPEN/CLOSED Standard	A00
OPEN Standard	A01
CLOSED Standard	A02
OPEN/CLOSED With LED PNP only in field bus version 000	A10
OPEN With LED PNP only in field bus version 000	A11
CLOSED With LED PNP only in field bus version 000	A12
OPEN/CLOSED With LED NPN only in field bus version 000	A20
OPEN With LED NPN only in field bus version 000	A21
CLOSED With LED NPN only in field bus version 000	A22

Electrical connection	Code
M16 cable gland	1101
M12 plug, 4-pin	1110

Connection diagram	Code
PNP (see above)	101
NPN (see above)	103
AS-Interface Version (see above)	108
M12 plug; 4-pin; PNP (A1x) (see above)	110
M12 plug; 4-pin; NPN (A2x) (see above)	112

Order example	1230	000	Z	A00	103	1101	101
Type	1230						
Field bus (code)		000					
Accessory			Z				
Function (code)				A00			
Switch (code)					103		
Electrical connection (code)						1101	
Connection diagram (code)							101

Please order mounting kit 1230 S01 Z... (spindle + mounting parts) separately with reference to the particular valve type.

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 operating 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 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 1201 - Position indicator with microswitch



The GEMÜ 1201 electrical position indicator has 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 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