

# Electrical Position Indicator

## Description

With the GEMÜ type 1230 electrical position indicator two respective positions; open and/or closed, can be signalled.

## Construction and Function

The GEMÜ type 1230 electrical position indicator is designed so that it can be retrofitted to GEMÜ valves by means of the threaded rod which is provided, without the need for any modifications. The switch rod can be rigidly connected to the valve spindle so that there is no lost motion in the axial direction.

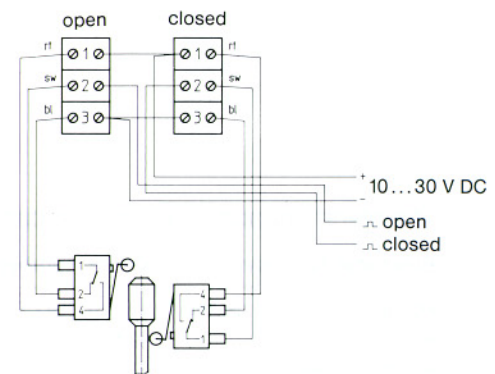
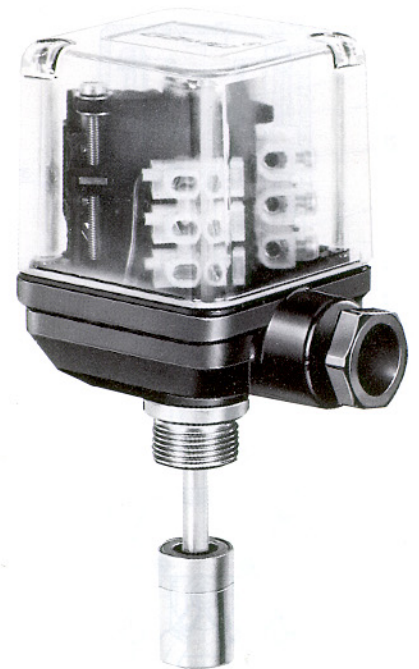
The switching units consist of two micro-switches with roller arms operating snap action contact mechanisms which are robustly designed for up to  $30 \times 10^6$  switching operations and having gold plated silver contacts. Each of the switches is mounted on a carrier so that they are continuously adjustable. Separate threaded spindles enable them to be independently set for a maximum valve stroke of 20 mm. The operating cam is arranged so that over-travel cannot cause any damage to the switches.

Switches, switch rod and terminal block are mounted together on a plastic base plate which can be rotated through  $360^\circ$ . The complete assembly is enclosed under a transparent hood which fits on to the base plate and permits the setting of the switches with respect to the operating cam to be observed. Electrical connections are taken through one PG 9 cable gland to the incorporated terminal block. The micro-switches are supplied fully wired to the terminal block, as standard.

The degree of mechanical protection of the GEMÜ type 1230 position indicator corresponds to protection class IP 65. The position indicator can be used in ambient temperatures from  $-20^\circ$  to  $+60^\circ\text{C}$ .

## Technical Data

- Voltages:** 10–30 V d.c. other voltages on request  
**Rated working current:** 4 A at 24 V d.c.  
**Power consumption of the unit itself:** 10 mA at 10 V d.c.  
 35 mA at 30 V d.c.  
**Protection class:** IP 65  
 LED indicators only integrated in special design



# Type 1230

## Installation instructions

### 1. Mounting the position indicator:

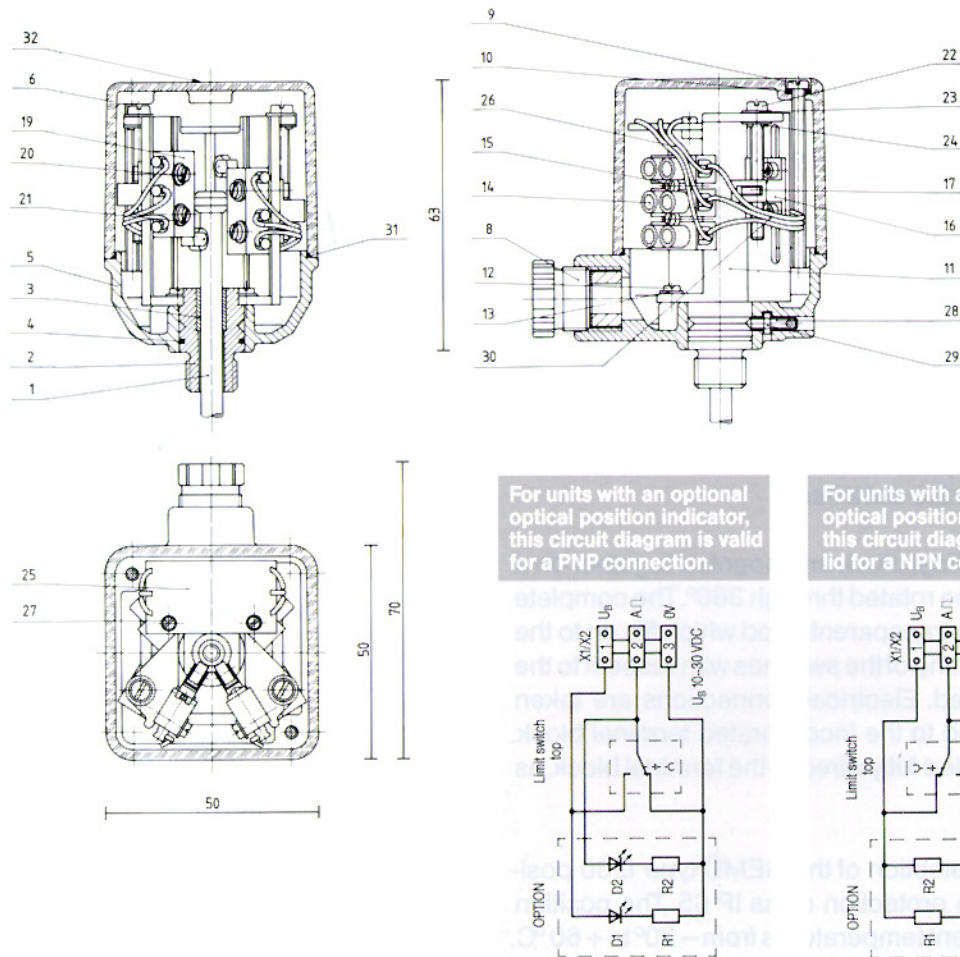
The operating spindle (1) is screwed into the threaded part of the valve spindle and the guide bush (2) is screwed into the thread in the actuator. The complete indicator assembly is then fitted over the guide bush and secured by means of the set screw (28). Before rigidly fixing the position indicator, it should be rotated to the most convenient position, either with respect to the visibility of the optical indicators, or the direction of the cable entry. The position indicator can be rotated through 360°. Then draw the connection cable through the PG gland and connect up in accordance with the circuit diagram.

### 2. Fitting a position indicator to a different type of valve:

The position indicator can be connected to valves having the same ordering number series without the need for any modifications. To change to a valve having a different ordering number series it is merely necessary to replace the mounting spindle (1).

### 3. Adjusting to the valve stroke:

Slacken the clamping screws (20) and adjust the height of the limit switches (19) by means of the lead screws (22) to obtain the correct switching positions. Lock the limit switches in their set positions by retightening the clamping screws (20). The circuit state is indicated by light emitting diode.



Item	Part
1	Operating spindle
2	Guide bush
3	Bearing insert
4	O-ring
5	Base plate
6	Hood
8	Cable entry
9	Hood fastening bolt
10	O-ring
11	Mounting plate
12	Screw
13	Washer
14	Terminal block
15	Terminal block fixing screw
16	Switch mounting bracket
17	Traverse nut
19	Switch
20	Clamping screw
21	Washer
22	Lead screw
23	Washer
24	Retention clip
25	Wiring plate
26	Wiring
27	Fastener screw
28	Set screw
29	Captive nut
30	Wiring
31	Sealing ring
32	Name plate

**Recommended cross section  
dimension of cable: 0.75  $\nabla$**

The electrical position indicator can be supplied in the following forms:

Electrical Function	Order Number
Position open and closed	1230/000/Z 00
Position open	1230/000/Z 01
Position closed	1230/000/Z 02

**When ordering the position indicator please specify the full ordering reference number of the respective valve type.**

e. g. Type 1230/000/Z 00 for use with valve type 690/20 D 0114-1

**DIN / ISO  
9001  
certified**

**GEMÜ® VALVES, ACTUATORS  
AND CONTROL SYSTEMS**