GEMÜ 4231
Travel sensor for quarter turn actuators

Features

- Simple mounting and retrofitting to quarter turn actuators
- Compact, solid housing
- Durable
- Can be retrofitted to GEMÜ valves or third-party actuators
- Technically advanced and proven construction

Description

The GEMÜ 4231 travel sensor is intended for the attachment to valves with quarter turn actuators with 90° travel and is used to determine the valve position. It is used as a travel sensor for the GEMÜ 1435 ePos, GEMÜ 1436 cPos, GEMÜ 1436 eco cPos and GEMÜ 1441 cPos X intelligent positioners, which can be connected using either the open cable ends or an M12 cable connector (depending on the design and/or selection of the controller).

Technical specifications

- Ambient temperature: -40 to 80 °C
- Detection range: 0 to 100° angle of rotation
- Protection class: IP 65

Product description
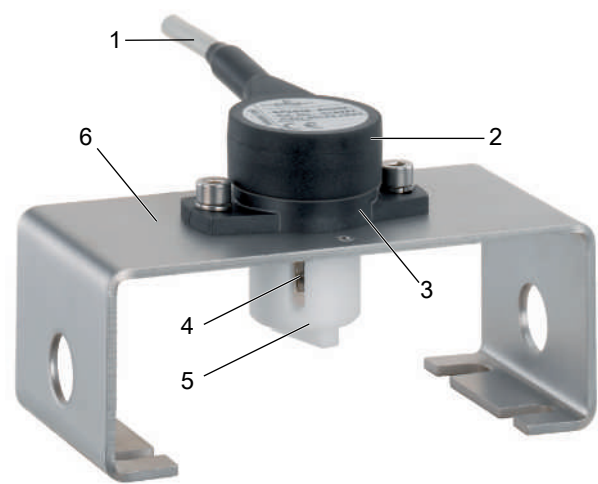
Item	Name	Materials
1	Connection cable	LIYY
2	Protective grommet	NBR
3	Housing	PAI (high-quality, temperature resistant plastic)
4	Shaft	Stainless steel
5*	Shaft adapter	POM
6*	Mounting bracket	Stainless steel 1.4301

* in the mounting kit GEMÜ 4231PTAZ..., separately available

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Note: A valve specific mounting kit is required for assembly. For designing the mounting kit, the valve type, nominal size, control function and actuator size must be stated.

Order codes

1 Type	Code
Rotary travel sensor	4231

2 Fieldbus	Code
Without	000

3 Accessory	Code
Accessory	Z

4 Housing material	Code
PAI, polyamidimide	XF

5 Travel length	Code
90° travel	090

6 Cable length	Code
2 m cable, 3-pin	02M0
5 m cable, 3-pin	05M0

7 Cable connection	Code
Open wires with multicore cable ends	0000
M12 cable plug A-coded, straight, 5-pin, plastic	4001

8 Special version	Code
Without	

Order example

Ordering option	Code	Description
1 Type	4231	Rotary travel sensor
2 Fieldbus	000	Without
3 Accessory	Z	Accessory
4 Housing material	XF	PAI, polyamidimide
5 Travel length	090	90° travel
6 Cable length	05M0	5 m cable, 3-pin
7 Cable connection	4001	M12 cable plug A-coded, straight, 5-pin, plastic
8 Special version		Without

Technical data

Temperature

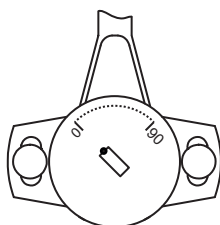|	
Ambient temperature:	Cable or cable outlet firmly laid/fixed: -40 — 80 °C
	Cable or cable outlet **not** firmly laid/fixed: -5 — 70 °C
Storage temperature:	0 — 40 °C

Mechanical data

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Protection class:	IP 65 acc. to EN 60529
Service life:	50 x 10^6 operations
Installation position:	Optional
Positioning range:	rotatable 360°
Operating range:	

The operating range is located on the side of the cable exit.
The shaft is provided with a marking, which must be within the shown 90° rotation range.

Electrical data

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Electrical connection:	Open wires with multicore cable ends (code 0000)
	M12 cable plug A-coded, straight, 5-pin, plastic (code 4001)
Supply voltage Uv:	max. 42 V DC
	The travel sensor is supplied by the connected positioners (GEMÜ 1434, 1435 or 1436).
Resistance:	3 kΩ ±20 %
Defined electrical range:	0-100° ±2°
Repeatability:	≤ 0.06°
Linearity:	≤ ±1% of full flow

Electrical data

Dimensions

GEMÜ 4231 travel sensor
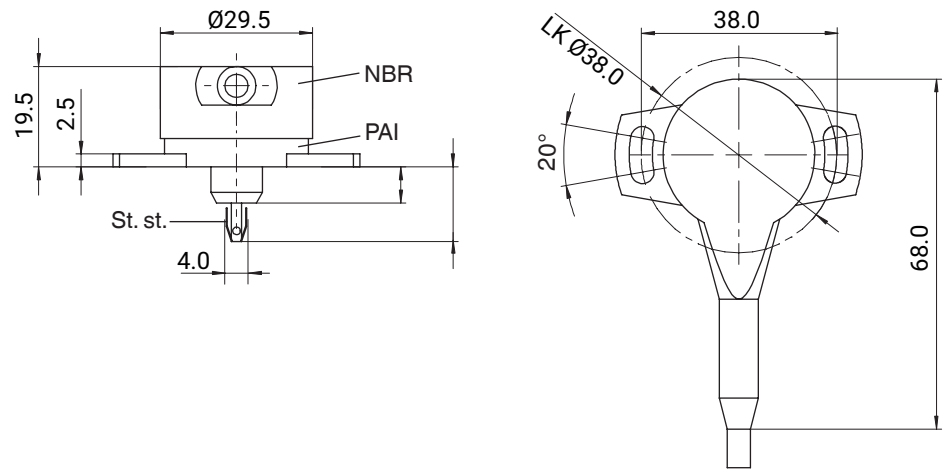
Dimensions in mm

GEMÜ 4231 travel sensor with mounting bracket
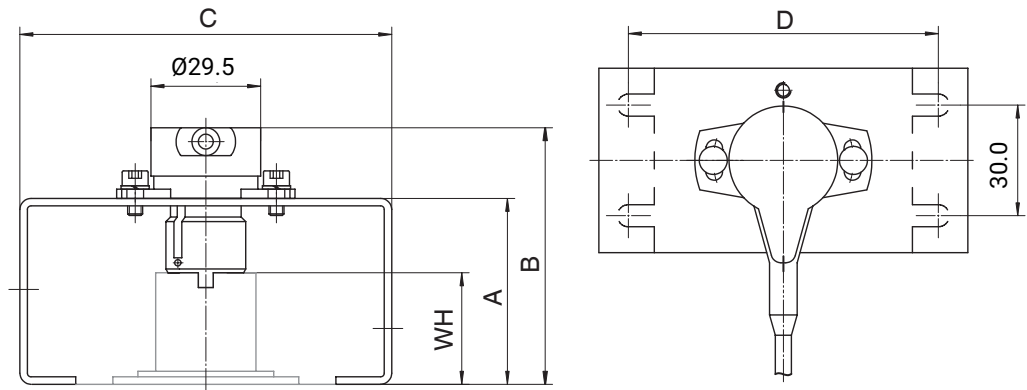
| WH Shaft height	D Hole spacing	A	B	C
20.0	80.0	40.0	59.0	100.0
30.0	80.0	50.0	69.0	100.0
50.0	130.0	70.0	89.0	150.0

Dimensions in mm

Electrical connection

Design with open wires with multicore cable ends (code 0000)
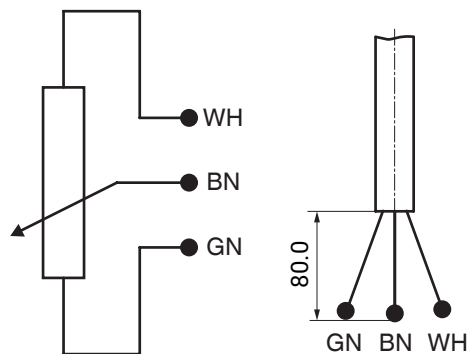
This design is suitable for connecting to the GEMÜ 1435 positioner (except the GEMÜ 1435 design with M12 cable connector).

Design with M12 cable connector (code 4001)

M12 cable connector
A-coded, straight, 5-pin, plastic
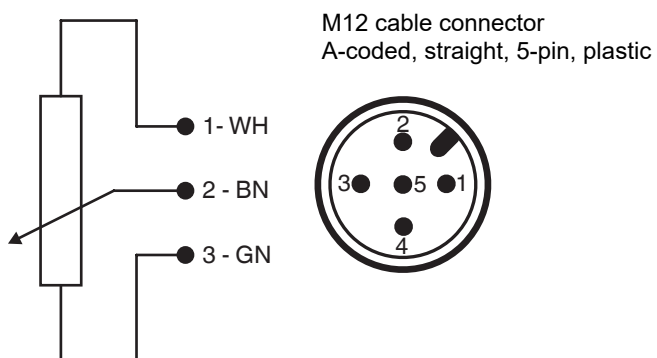
This design is suitable for connecting to the GEMÜ 1434, 1436 or 1435 positioner with the M12 cable connector design.

Subject to alteration | 02.2024 | 88280590