

GEMÜ C12A

Electrical position indicator



Features

- Simple installation
- Suitable for GEMÜ iComLine and CleanStar
- Compact design
- Open/Closed position indicator as standard
- Comes pre-assembled or as a retrofit kit

Description

The photoelectric sensor detects the position of the valve spindle without touching it. An electrical signal transmits the respective position of the valve (open/closed) to the plant control system. The connection is established using 24 V DC.

Technical specifications

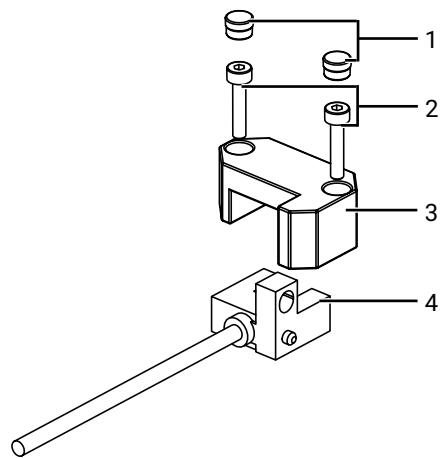
- **Ambient temperature:** -10 to 55 °C
- **Linear measuring range:** 3 to 6 mm
- **Supply voltages:** 5 - 24 V DC $\pm$ 10 %
- **Electrical connection type:** open cable ends
- **Protection class:** IP 64

Technical data depends on the respective configuration



Product description

Construction



Item	Name
1	Protective caps
2	Screws
3	Fixing piece
4	Sensor with cable

Order data

The order data provide an overview of standard configurations.

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

Order codes

1 Type	Code
Optoelectric position indicator kit IP64	C12A

2 Fieldbus	Code
Without	000

3 Accessory	Code
Accessory	Z

4 Sensor housing material	Code
PBT, polybutylene terephthalate	25

5 Housing configuration	Code
Type R, mounting hole on the right	R

6 Cable sheath material	Code
Standard	0

7 Length of connection cable	Code
1 m	01M0

8 Connection type	Code
Open cable end	0

9 Adaption for actuator	Code
C50, actuator size 0	I0
C50, actuator size 1	I1
C50, actuator size 2	I2
C50, actuator size 3	I3
C50, actuator size 4	I4
C60, actuator size 1	C1
C60, actuator size 2	C2
C60, actuator size 3	C3

10 Doping	Code
PNP	P

11 For design	Code
High Purity	HP

Order example

Ordering option	Code	Description
1 Type	C12A	Optoelectric position indicator kit IP64
2 Fieldbus	000	Without
3 Accessory	Z	Accessory
4 Sensor housing material	25	PBT, polybutylene terephthalate
5 Housing configuration	R	Type R, mounting hole on the right
6 Cable sheath material	0	Standard
7 Length of connection cable	01M0	1 m
8 Connection type	0	Open cable end
9 Adaption for actuator	I0	C50, actuator size 0
10 Doping	P	PNP
11 For design	HP	High Purity

Technical data

Temperature

Ambient temperature: -10 – 55 °C

Storage temperature: 0 – 40 °C

Product compliance

EMC Directive: Emission: EN 50081-2
Immunity: EN 50082-2

Mechanical data

Weight: 15 g (1 m cable)

Vibration resistance: 10 to 2000 Hz, amplitude of 1.5 mm
X, Y and Z direction (every 2 hours, not live)

Impact resistance: 15000 m/s² (approx. 1500 G)
X, Y and Z direction (every 2 hours, not live)

Protection class: IP 64

Material

Housing: PBT (polybutylene terephthalate)

Slot cover: PC (polycarbonate)

Measurements

Measuring range: 6 mm (fork width)

Hysteresis: Max. 0.05 mm

Repeatability: Max. 0.01 mm

Electrical data

Proof voltage: 1000 V AC
between connections and housing

Insulation resistance: Min. 20 MOhm at 250 V DC
between connections and housing

Inputs

Supply voltage U_v : 5 to 24 V DC $\pm$ 10%

Current consumption: Max. 15 mA

Outputs

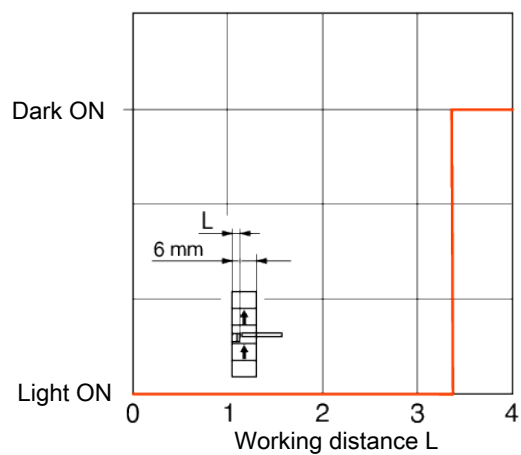
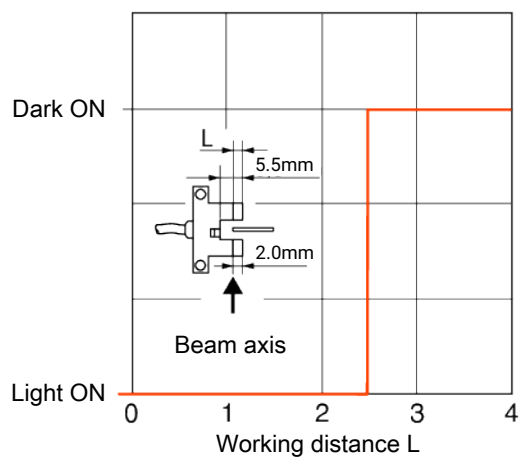
Function: Two separate outputs: Light ON and dark ON

Applied voltage: 30 V DC (between output and 0 V)

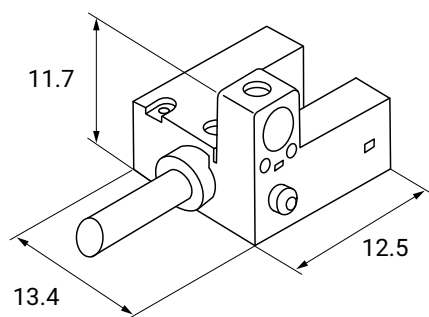
On-load current: Max. 50 mA

Residual voltage: Max. 2 V (at on-load current of 50 mA)
Max. 1 V (at on-load current of 16 mA)

Measurement characteristics



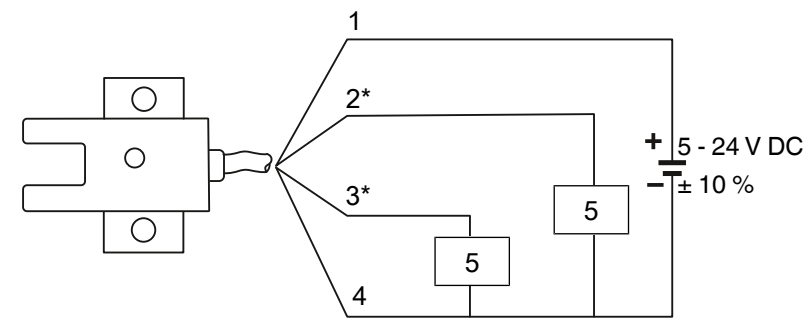
Dimensions



Dimensions in mm

Electrical connection

PNP



Number	Color
1	Brown
2	Black*
3	White*
4	Blue
5	Load

*Please isolate any unused cables

	Colour	Output
Output 1	Black	Light ON
Output 2	White	Dark ON

NPN version on request



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