



Fibre-optic Compact amplifier

Series CLS-K-6_

- **Analogue output** 0.1- 5 VDC
- **Switching frequency** ≤ 4 kHz
- **Response time** ≤ 120 µs
- **Analogue display**

■ **The most powerful fibre optic sensor for industrial automation and quality assurance**

Description:

- Sensing range reflective type up to **200 mm***
through beam up to **2 m***
* depends on the fibre-optic
- Supply **10-30 VDC**
reverse supply and short circuit protected
- Analogue output **0-10 VDC**
(Offset compensation and spreading of the analogue signal is available)
- Current output **0-20 mA**
or 4-20 mA
(version CLS-K-60/65)
- Response time **120 µs**
- Switching frequency **4 kHz**
- NPN output
- Control of the transmitting power
- **CE**

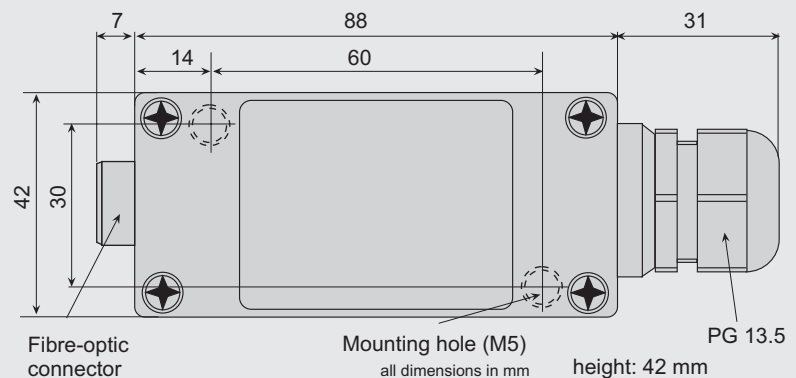
Applications:

- Measuring and checking tasks
- Length and diameter control
- Supervision of production via analogue output and display
- Assembly control

Advantages:

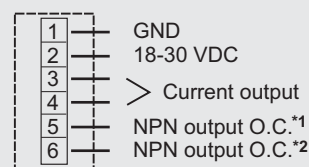
- Precise and reliable detection of objects
- Low drift by control of transmitter therefore suitable for measuring tasks
- High speed recognition
- System control by use of the analogue output

Dimensions

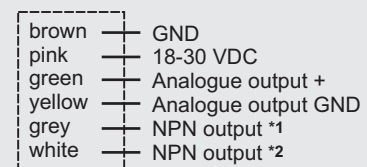


Wiring connections

CLS-K-60/65



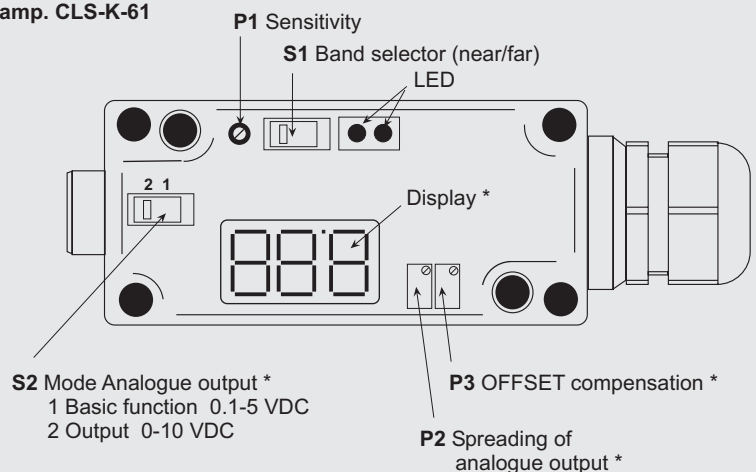
CLS-K-61



*1 dark ON
*2 light ON

Operating and display elements

Examp. CLS-K-61

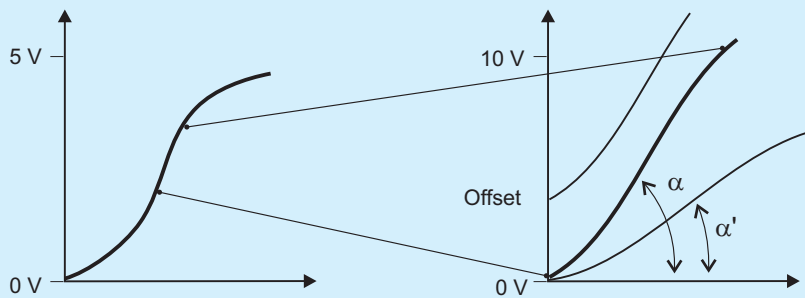


* Not available for type CLS-K-60/65

Technical data

Type CLS-K-	60	65	61	Type CLS-K-	60	65	61
Part No.	10030032	10040036	10030033	Sensitivity	coarse: switch near/far fine: adjustable via 10-gear potentiometer		
Operating voltage	18-30 VDC			Status indication	LED-display red/green		
Max. residual ripple	≤ 10 %			Operating mode	light/dark switching output		
Current consumption	~ 70 mA			Degree of protection	IP 65 (with mounted fibre-optic)		
Switch-on suppression	≤ 500 ms			Supply and output	reverse supply and short circuit protected		
Switching freq.	≤ 4 kHz			Operating temp. range	0 to 50°C		
Response time	≤ 120 μs			Storage temp. range	25 to 70°C		
Temp. drift	≤ 0.5 % /K			Wiring connection	terminal screws	cable 2m	
Repeatability	≥ 1% at $\Delta\theta \hat{=} 2K$			Case material	macrolon 8030 / UL94V1		
Hysteresis	≤ 10 %			Weight	approx. 100 g		
Analogue output	0-20 mA	4-20 mA	0-10 VDC				
Current output	working resist. ≤ 600 Ω						
Output	transistor 2 x NPN O.C.						
Turn-on voltage	30 VDC						
Switching current	5-100 mA						

Functions



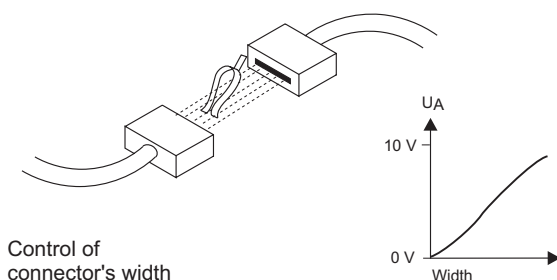
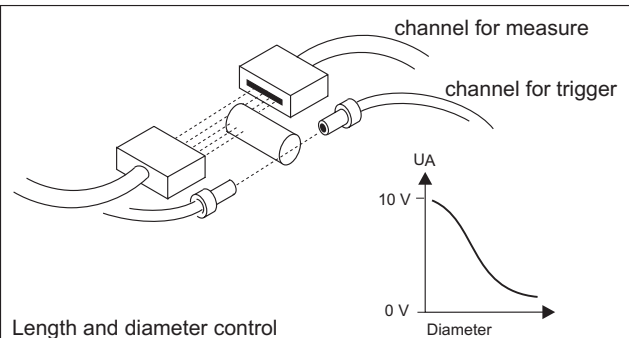
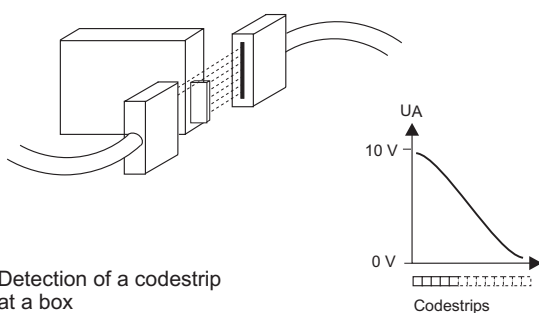
Analogue output
switch S2 in position »1«

Analogue output
switch S2 in position »2«

The amplifier CLS-K-61 offers the opportunity to spread a signal range, which can be important for the solution of the task, to the complete analogue range.

α = upgrade

Applications



Presented by: