



More Precision

opto**CONTROL** CLS1000 // Fiber optic sensor for industrial applications



Controller with current output optoCONTROL CLS1000-AI



Freely scalable analog output current
from 0 ... 20 or 4 ... 20 mA

Analog output as intensity
output

Analog output and switching output

Model	CLS1000-AI-NPN	CLS1000-AI-PNP	CLS1000-AI-PP	CLS1000-AI-NPN-T	CLS1000-AI-PNP-T	CLS1000-AI-PP-T
Article number	10085121	10085122	10085123	10085124	10085125	10085126
Operating range	max. 2000 mm (depending on transmission sensor)					
Detection range	max. 1200 mm (depending on reflex sensor)					
Response time	100 μ s					
Switching frequency	2.5 kHz (depending on pulse/pause ratio)					
Frequency response (-3dB)	10 kHz					
Temperature stability	$\leq 0.1\%$ FSO / K					
Light source	infrared LED 870 nm					
Permissible ambient light	50,000 lx					
Supply voltage ¹⁾	12 ... 30 VDC					
Max. current consumption	50 mA					
Analog output	switchable 0 ... 20 mA or 4 ... 20 mA					
Switching output	NPN	PNP	PP	NPN	PNP	PP
Switching	light/dark switching (switchable)					
Signal input	-			Trigger In		
Connection	Optical	FA socket M18x1 for screwable optical fiber (length 0.3 m ... 15 m, min. bending radius 18 mm)				
	Electrical	4-pin M12 socket for power supply and signals (connection cable see accessories)			5-pin socket M12 for power supply and signals (connection cable see accessories)	
Mounting	DIN rail, DIN rail mounting (see accessories), mounting holes					
Temperature range	Storage	-10 ... +70°C				
	Operation	-5 ... +55°C				
Shock (DIN EN 60068-2-27)	20 g / 11 ms in 3 axes, two directions and 1000 shocks each					
Vibration (DIN EN 60068-2-6)	15 g / 10 ... 1000 Hz in 3 axes, 10 cycles each					
Protection class (DIN EN 60529)	IP67					
Material	Plastic housing (polycarbonate)					
Weight	200 g					
Compatibility	with all CFS sensors (FAR, FAD, FAZ and FAS)					
Control and indicator elements	Parameterization/operation via membrane keypad and OLED display on controller; LED for power on					
Special features	up to 9 teach-in modes; adjustable switching output functions on-delay and off-delay as well as pulse output adjustable hysteresis 2 ... 25%			up to 9 teach-in modes; adjustable switching output functions on-delay and off-delay as well as pulse output adjustable hysteresis 2 ... 25%; variety of trigger types		

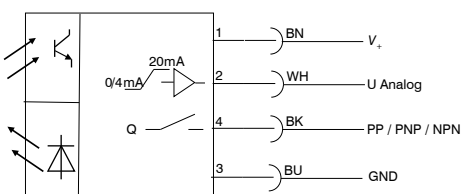
FSO = Full Scale Output

The specified data apply for a consistent room temperature of 22 °C, sensor is continuously in operation, open signal outputs.

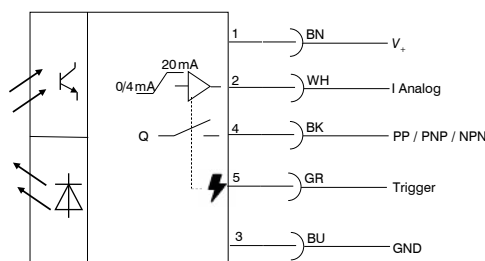
¹⁾ Residual ripple $\leq 10\%$

Connection diagram

CLS1000-AI-xx



CLS1000-AI-xx-T



Accessories

optoCONTROL CLS1000

Art. no.	Model	Description
11245551	PC1000-2-T	Signal / supply cable, 2 m, 5-pin unshielded
11245300	PC1000-5-T	Signal / supply cable, 5 m, 5-pin unshielded
11245301	PC1000-10-T	Signal / supply cable, 10 m, 5-pin unshielded
11245302	PC1000-2	Signal / supply cable, 2 m, 4-pin unshielded
11245303	PC1000-5	Signal / supply cable, 5 m, 4-pin unshielded
11245304	PC1000-10	Signal / supply cable, 10 m, 4-pole unshielded
11245305	PC1000/90-2	Signal / supply cable, 2 m, 4-pole unshielded, 90° outlet
11245306	PC1000/90-5	Signal / supply cable, 5 m, 4-pin unshielded, 90° outlet
2420096	PS2031	Plug-in power supply universal 100 ... 240 V / 24 V / 1 A
2420062	PS2020	PS2020 Power supply unit 24 V
10811916		Pressure-tight feedthrough for vacuum