



More Precision

optoCONTROL CLS1000 // Fiber optic sensor for industrial applications



Controller with antivalence function opto**CONTROL** CLS1000-QN

Two antivalent switching outputs
Q and QN

Switchable NPN, PNP, PP

Wire breakage protection thanks
to antivalent switching output



Model	CLS1000-QN-NPN	CLS1000-QN-PNP	CLS1000-QN-PP	CLS1000-QN-NPN-T	CLS1000-QN-PNP-T	CLS1000-QN-PP-T	
Article number	10085101	10085102	10085103	10085104	10085105	10085106	
Operating range	max. 2000 mm (depending on transmission sensor)						
Detection range	max. 1200 mm (depending on reflex sensor)						
Response time	100 µs						
Switching frequency	2.5 kHz (depending on pulse/pause ratio)						
Temperature stability	≤ 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						
Switching output	switchable NPN; PNP; PP	2x NPN normally open/ normally closed (Q/QN; NO/NC)	2x PNP normally open/ normally closed (Q/QN; NO/NC)	2x PP normally open/ normally closed (Q/QN; NO/NC)	2x NPN normally open/ normally closed (Q/QN; NO/NC)	2x PNP normally open/ normally closed (Q/QN; NO/NC)	2x PP normally open/ normally closed (Q/QN; NO/NC)
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 mounting, mounting adapter, (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 LCD display on controller; LED for power on						
Special features	up to 7 teach-in modes; adjustable switching output functions on-delayed and off-delayed as well as pulse output; adjustable hysteresis 2 ... 25 %			up to 7 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			

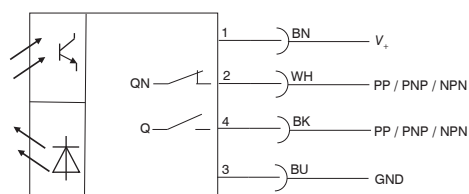
FSO = Full Scale Output

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

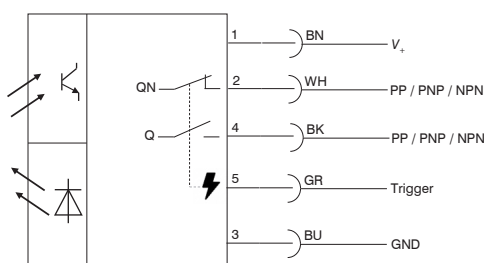
¹⁾ Residual ripple ≤ 10%

Connection diagram

CLS1000-QN-xx



CLS1000-QN-xx-T



Accessories

opto**CONTROL** 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	