

## PSS-AEN-CYZ-WO-S173 Photoelectric proximity switch

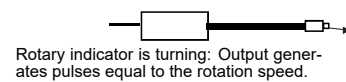
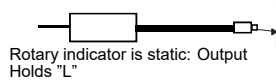
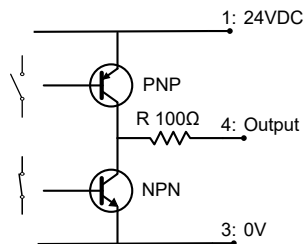


- Suitable for connecting fiber optics

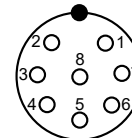
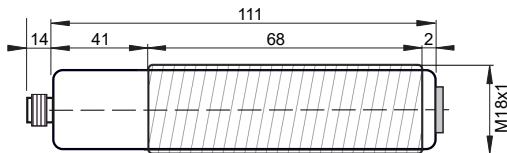
Technical Data	PSS-AEN-CYZ-WO-S173	
Light Source	Infrared 850nm	
Permissible ambient light	None, use only inside enclosed environments	
Output type	push-pull, max. 50mA, short circuit protected	
Output rise and fall time	<= 20uS	
Output pulse length	50uS	
Supply voltage, Ue	24VDC ±10%	
Absolute maximum supply voltage, Um	30VDC	
Current consumption	44mA	
Power consumption	max. 1.3W	
Switching frequency	3Hz - 10kHz <sup>1</sup>	
Power up delay time	< 1s	
Housing	M18, brass Ms 58, nickel plated	
Ambient working temperature range, T <sub>amb</sub>	0°C up to +50°C	
Socket	Socket M12, Lumberg, type RSF8, 8 contacts	
Accessories	<b>Included</b>	<b>Optional</b>
	• 2x nuts M18	

Note 1: The actual reachable switching/rotary frequency is dependent on the condition of the marking disc and the careful working up and length of the optical fibres.

Output function:



### Wiring and Dimensions



- 1: 24VDC
- 2: DNC
- 3: 0V
- 4: F\_SIG\_OUT
- 5: DNC
- 6: DNC
- 7: DNC
- 8: PE/PA

### Operating Manual / EU-declaration of conformity

#### General installation prescriptions

The electrical connections must be exactly as shown in the connection diagram. The cable shield must be connected short. The cable shield should be connected to protection earth, large-surfaced. Do not exceed the maximum ratings. Connection cables must not be installed parallel to high voltage cables.

#### Function

The sensor can only be used with connected fibre optics. Light reflection alterations, generated by the turning marking disc of the spraying apparatus, will be amplified and formed.

#### Using the fibre optics

The sensor PSS-AEN-CYZ-WO-S173 must not go into operation without mounted fibre optics. The fibre optics must be handled careful. The functional safety of the sensor is given by the condition of the marking disc and the careful working up of the optical fibres. The fibre optics must not be buckled or laid with a small radius. Buckled or bad laid fibre optics results to a strong decrease of performance. Avoid performance decreasing and failures caused by wear, by a functional mounting of the fibre optics.

#### General safety

The sensor must not be used for Accident-Prevention! In worst case the output can change to any state! When installing and operating the product, it is necessary to take into consideration all relevant international and other national regulations.

#### Maintenance

No special maintenance is required.  
The equipment must only be repaired or serviced by the manufacturer.

#### General notes and disposal

We reserve the right to modify our products. Our products are designed in such a way, that it has the least possible adverse effect on the environment. It neither emits or contains any damaging or siliconized substances and use a minimum of energy and resources. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.

#### EU-Declaration of Conformity

The product meets the requirements of the following standards and directives:  
EN 60529:2000, IEC 61000-4-2 to IEC 61000-4-6, EN 61000-6-1/-2, EN 61000-6-4, Machine directive 2006/42/EC, RoHS directive 2011/65/EU, EMC directive 2014/30/EU  
Pablo Ledergerber, Matrix Elektronik AG, is authorized to generation of documentation.  
The conformity of the devices with all used standards, directives and EC-type examination certificates and the observation of the Quality Management System ISO 9001:2015, declares:

Ehrendingen, 11.12.2025

Pablo Ledergerber, Matrix Elektronik AG

PSS-AEN-CYZ-WO-S173\_e1/2025-12-11/MP

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