

BACKGROUND SUPPRESSION  
PHOTOELECTRIC SENSORS

**HTM**<sup>TM</sup>  
**SENSORS**



 **IO-Link**



- MINIATURE HOUSING
- SENSITIVITY ADJUSTMENT VIA POTENTIOMETER
- IO-LINK FOR PROCESS OPTIMIZATION
- EXCELLENT BLACK/WHITE BEHAVIOR
- IMMUNITY TO MUTUAL INTERFERENCES

[HTMSENSORS.COM](http://HTMSENSORS.COM)

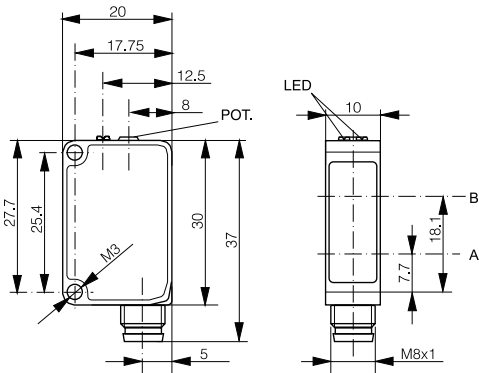
# BACKGROUND SUPPRESSION PHOTOELECTRIC SENSORS SPECIFICATIONS



OPTICAL DATA		INTERFACE	
Sensing range typ. max.	10...300 mm <sup>1</sup>	Sensitivity adjustment	30...300 mm, 3/4-turn pot.
Operating range	15...250 mm <sup>1</sup>	Indicator LED, green	Excess gain
Light source	Pinpoint LED, red 640 nm	Indicator LED, yellow	Sensing state
Light spot size (distance)	Ø 6 mm (100 mm)/Ø 10 mm (300 mm)	IO-Link	✓

<sup>1</sup>Object with 90% reflectance (standard white paper)

## H30-BGS-0300P-M08-4QD



A: emitter axis B: receiver axis

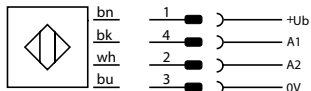
ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U <sub>b</sub> )	10...30 VDC	Enclosure rating	IP67
Residual ripple	≤ 10% V <sub>pp</sub>	Ambient temperature operation	-25...+65°C
Output current	≤ 100 mA	Shock and vibration	IEC 60947-5-2
Signal PNP high/low	≤ (U <sub>b</sub> -2.0 V)/approx. 0 V	Weight (connector version)	6 g (M8)/16 g (cable + M12)
Power consumption (no load)	≤ 30 mA	Housing material	ABS
Response time <sup>1</sup>	≤ 500 µs (normal)/≤ 1 ms/≤ 340 µs	Window material	PMMA
Switching frequency	1 ≤ 1 kHz (normal)/≤ 500 Hz/≤ 1.5 kHz	Connector type	M8 3-pin or 4-pin
Short circuit protection	✓		
Voltage reversal protection	✓		

<sup>1</sup>By default, "Normal" mode. "Fine" and "Fast" modes selectable via IO-Link.



IO-LINK FUNCTIONALITIES	
IO-Link version	1.0
SIO mode	Supported
Process data	Detection state & stability alarm
Baudrate	COM2 (38.4 kBaud)
Special functions	Output configuration, output timing, sensor mode, detection counter, event flags, maximum and actual sensor temperature

### WIRING DIAGRAM



### PINS



BACKGROUND SUPPRESSION PHOTOELECTRIC SENSORS WITH VISIBLE LED ENSURE RELIABLE AND EXTENDED SENSING RANGES FOR LIMITED SPACES, WITH IP67 ENCLOSURE RATING AND ARE ECOLAB-APPROVED FOR USE IN HYGIENIC AREAS. IO-LINK COMMUNICATION FOR PROCESS OPTIMIZATION.



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