

## Product Update

### Photoelectric Sensors M8 Miniature tubular sensors

Balluff's new line of stainless steel M8 tubular miniature sensors provides extensive capabilities in solving the toughest applications. Their focused light beam is able to detect the smallest parts, grooves, or holes with absolute reliability.

Not only does the small size provide flexibility in installation, alignment is easy with the visible red light or the safe Class 1 Laser light sources. Built to Balluff's high standards, all sensors offer short circuit protection. Balluff's attention to quality, superior sensor design and performance means better reliability, less down time and higher productivity.



#### Features

- Miniature housing
- Precise and repeatable
- 30mm range background suppression sensor
- 60mm range diffuse sensor
- 1,000mm retroreflective sensor
- Up to 3,000mm range through beam sensor, detects parts as small as 0.3mm

#### Advantages

- Red light for easy setup of fixed background suppression, diffuse and retroreflective sensors
- Safe Laser Class 1 light for precise detection with through-beam sensors
- Multiple connection options

#### Benefits

- Tubular 1.5" long miniature housing for easy mounting in space limited applications
- Reliable object detection virtually independent of color
- IP67 fully potted rugged stainless steel housing for harsh environments

#### Applications

- Robot end of arm effectors
- Stack height
- Object Positioning
- Error proofing
- Part counting

#### Industries

- Automotive
- Packaging
- Manufacturing
- Food & Beverage
- Pharmaceutical

#### IO-Link function

- Adjustable sensing distance
- Adjustable hysteresis
- Selectable switching type
- Selectable switching mode
- Diagnostics

#### Height control in automated process

- Miniature sensor enables installation close to process
- Precise laser beam detects the smallest deviations
- Exact switching prevents costly assembly mistakes

Ordering code	Material description <b>Bold = Normal</b> Stock Item	Light Source	Sensing Range	Output	Switching Type	Frequency	Connection
<b>Background Suppression</b>							
BOS01H2	BOS 08E-PS-KF20-00,2-S49	Red Light	20	PNP	Light - NO	450 Hz	M8 Pigtail, 3-pin
BOS01H3	BOS 08E-NS-KF20-00,2-S49	Red Light	20	NPN	Light - NO	450 Hz	M8 Pigtail, 3-pin
BOS01H6	BOS 08E-PS-KF20-S49	Red Light	20	PNP	Light - NO	450 Hz	M8, 3-pin
BOS01H7	BOS 08E-NS-KF20-S49	Red Light	20	NPN	Light - NO	450 Hz	M8, 3-pin
BOS01H9	BOS 08E-PS-KF20-02	Red Light	20	PNP	Light - NO	450 Hz	Cable , 2m
BOS0246	BOS 08E-PI-KH22-00,2-S49	Red Light	30	IO-Link	Light - NO	500 Hz	M8 Pigtail, 3-pin
BOS0247	BOS 08E-PI-KH22-S49	Red Light	30	IO-Link	Light - NO	500 Hz	M8, 3-pin
BOS01H0	BOS 08E-PS-KH22-00,2-S49	Red Light	30	PNP	Light - NO	450 Hz	M8 Pigtail, 3-pin
BOS01H1	BOS 08E-NS-KH22-00,2-S49	Red Light	30	NPN	Light - NO	450 Hz	M8 Pigtail, 3-pin
<b>BOS01H4</b>	<b>BOS 08E-PS-KH22-S49</b>	Red Light	30	PNP	Light - NO	450 Hz	M8, 3-pin
BOS01H5	BOS 08E-NS-KH22-S49	Red Light	30	NPN	Light - NO	450 Hz	M8, 3-pin
BOS01H8	BOS 08E-PS-KH22-02	Red Light	30	PNP	Light - NO	450 Hz	Cable , 2m

# Product Update

**Diffuse**

<b>BOS01NN</b>	<b>BOS 08E-PS-KD20-S49</b>	Red Light	60	PNP	Light - NO	500 Hz	M8, 3-pin
BOS01R6	BOS 08E-NS-KD20-02	Red Light	60	NPN	Light - NO	500 Hz	Cable , 2m
<b>BOS01R8</b>	<b>BOS 08E-PS-KD20-00,2-S49</b>	Red Light	60	PNP	Light - NO	500 Hz	M8 Pigtail, 3-pin
BOS01R9	BOS 08E-PO-KD20-S49	Red Light	60	PNP	Dark - NC	500 Hz	M8, 3-pin
BOS01RA	BOS 08E-PO-KD20-00,2-S49	Red Light	60	PNP	Dark - NC	500 Hz	M8 Pigtail, 3-pin
BOS01RC	BOS 08E-PS-KD20-02	Red Light	60	PNP	Light - NO	500 Hz	Cable , 2m
<b>BOS01RE</b>	<b>BOS 08E-NS-KD20-S49</b>	Red Light	60	NPN	Light - NO	500 Hz	M8, 3-pin
BOS01RF	BOS 08E-NS-KD20-00,2-S49	Red Light	60	NPN	Light - NO	500 Hz	M8 Pigtail, 3-pin

**Retroreflective**

<b>BOS01RK</b>	<b>BOS 08E-PS-PR20-S49</b>	Red Light	1000	PNP	Dark - NO	500 Hz	M8, 3-pin
<b>BOS01RL</b>	<b>BOS 08E-PS-PR20-00,2-S49</b>	Red Light	1000	PNP	Dark - NO	500 Hz	M8 Pigtail, 3-pin
BOS01RM	BOS 08E-PO-PR20-S49	Red Light	1000	PNP	Light - NC	500 Hz	M8, 3-pin
BOS01RN	BOS 08E-PO-PR20-00,2-S49	Red Light	1000	PNP	Light - NC	500 Hz	M8 Pigtail, 3-pin
BOS01RP	BOS 08E-PS-PR20-02	Red Light	1000	PNP	Dark - NO	500 Hz	Cable , 2m
BOS01RR	BOS 08E-NS-PR20-S49	Red Light	1000	NPN	Dark - NO	500 Hz	M8, 3-pin
BOS01RT	BOS 08E-NS-PR20-00,2-S49	Red Light	1000	NPN	Dark - NO	500 Hz	M8 Pigtail, 3-pin
BOS01RY	BOS 08E-NS-PR20-02	Red Light	1000	NPN	Dark - NO	500 Hz	Cable , 2m

**Through-Beam Emitter**

BOS01F6	BOS 08E-X-IS11-02	Infrared	1,500				Cable , 2m
BOS01PW	BOS 08E-X-IS11-00,46-S4	Infrared	1,500				M12 Pigtail, 3 pin
BOS01U7	BOS 08E-X-LS20-0,02-S49	Laser Class 1	3000				M8 Pigtail, 3-pin
<b>BOS01U8</b>	<b>BOS 08E-X-LS20-S49</b>	Laser Class 1	3000				M8, 3-pin
<b>BOS01UL</b>	<b>BOS 08E-X-LS20-02</b>	Laser Class 1	3000				Cable , 2m
<b>BOS01Z5</b>	<b>BOS 08E-X-KS20-S49</b>	Red Light	2,200				M8, 3-pin
BOS01Z6	BOS 08E-X-KS20-02	Red Light	2,200				Cable , 2m
BOS01Z7	BOS 08E-X-KS20-00,2-S49	Red Light	2,200				M8 Pigtail, 3-pin

**Through-Beam Receiver**

BOS01F7	BOS 08E-PS-IE11-02	Infrared	1,500	PNP	Dark - NO	400 Hz	Cable , 2m
BOS01PY	BOS 08E-PS-IE11-00,46-S4	Infrared	1,500	PNP	Dark - NO	400 Hz	M12 Pigtail, 3 pin
BOS01U1	BOS 08E-PS-LE20-0,02-S49	Laser Class 1	3000	PNP	Dark - NO	500 Hz	M8 Pigtail, 3-pin
BOS01U2	BOS 08E-NS-LE20-0,02-S49	Laser Class 1	3000	NPN	Dark - NO	500 Hz	M8 Pigtail, 3-pin
<b>BOS01U3</b>	<b>BOS 08E-PS-LE20-S49</b>	Laser Class 1	3000	PNP	Dark - NO	500 Hz	M8, 3-pin
BOS01U4	BOS 08E-NS-LE20-S49	Laser Class 1	3000	NPN	Dark - NO	500 Hz	M8, 3-pin
<b>BOS01UH</b>	<b>BOS 08E-PS-LE20-02</b>	Laser Class 1	3000	PNP	Dark - NO	500 Hz	Cable , 2m
BOS01UJ	BOS 08E-NS-LE20-02	Laser Class 1	3000	NPN	Dark - NO	500 Hz	Cable , 2m
BOS0205	BOS 08E-NS-KE20-00,2-S49	Red Light	2,200	NPN	Dark - NO	500 Hz	M8 Pigtail, 3-pin
BOS0206	BOS 08E-NS-KE20-02	Red Light	2,200	NPN	Dark - NO	500 Hz	Cable , 2m
BOS0207	BOS 08E-NS-KE20-S49	Red Light	2,200	NPN	Dark - NO	500 Hz	M8, 3-pin
BOS0208	BOS 08E-PO-KE20-00,2-S49	Red Light	2,200	PNP	Light - NC	500 Hz	M8 Pigtail, 3-pin
BOS0209	BOS 08E-PO-KE20-02	Red Light	2,200	PNP	Light - NC	500 Hz	Cable , 2m
BOS020A	BOS 08E-PO-KE20-S49	Red Light	2,200	PNP	Light - NC	500 Hz	M8, 3-pin
BOS020C	BOS 08E-PS-KE20-00,2-S49	Red Light	2,200	PNP	Dark - NO	500 Hz	M8 Pigtail, 3-pin
BOS020E	BOS 08E-PS-KE20-02	Red Light	2,200	PNP	Dark - NO	500 Hz	Cable , 2m
<b>BOS020F</b>	<b>BOS 08E-PS-KE20-S49</b>	Red Light	2,200	PNP	Dark - NO	500 Hz	M8, 3-pin



**Accessories**

Description	51x51 mm reflector	Ø 46 mm reflector	100x100 mm reflective tape Self-adhesive	Clamping holder	Mounting bracket
	<b>BAM00WL</b>	<b>BAM00UW</b>	<b>BAM01JM</b>	<b>BAM00A2</b>	<b>BAM009U</b>



**Connector**

Type	2 m cable PUR with M8 connector, 3-pin (straight)	2 m cable PUR with M8 connector, 3-pin (right-angle)
	<b>BCC050R</b>	<b>BCC0559</b>