

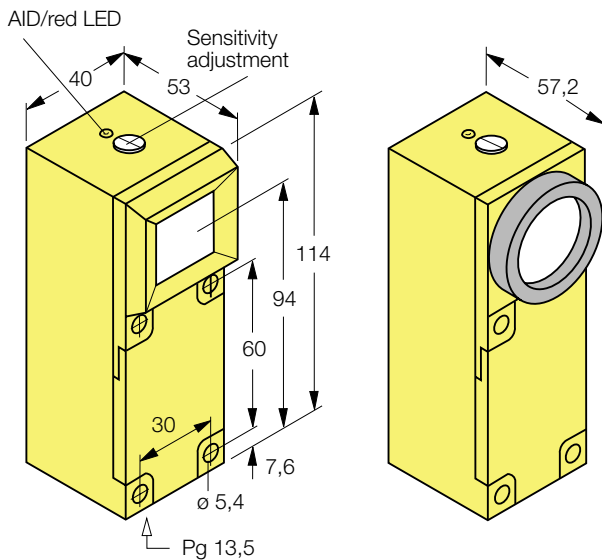


# MULTI-BEAM™ series

## DC operation



### Dimensions [mm]



MB13/MB15

### Wave length

IR (infrared)	940 nm
IR (infrared)	880 nm (MB14/MB21)
Red	650 nm
Green	560 nm

### Adjustment

sensitivity  
light/dark operate

### Timing function

replace LU1 with a timing module	
LK1	one-shot, 0,1...1 s
LE1	on-delay, 1,5... 15 s
LA1	off-delay, 1,5...15 s
LT1	on and off-delay, 1,5...15 s

### Supply

Supply voltage $U_B$	10...30 VDC
Ripple $V_{pp}$	≤ 10 %
No load current $I_0$	≤ 60 mA
Delay upon power up	100 ms

### Protection

reverse polarity  
short-circuit (pulsed)

### Output

Programmable (see wiring)	pnp or npn
Continuous load current	≤ 150 mA
Overload trip point	≥ 400 mA typical at 20 °C
Switching frequency	≤ 500 Hz
	≤ 50 Hz (MB14)

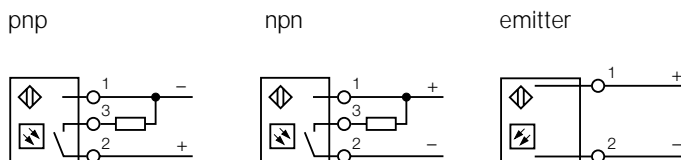
### Material

Housing	PBT
Lens	acrylic glass (MB13/15) vinyl (MB11)
Protection class (IEC 60529/EN 60529)	IP65
Temperature range	-40...+70 °C

### Indicator LED's

Red	AID (alignment indicating device)
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### Wiring



### Accessories

<b>Brackets</b>		
MW360	37 418	2-axis bottom mounting
SMB700SS	34 164 00	2-axis bottom mounting

# Photoelectric sensors

## MULTI-BEAM™ series

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Excess gain curve:  
Excess gain in relation to the distance

	Max. range / Fibre type	Light source	Output function	Connection	Type	Ident number
<b>— Retro-reflective</b> 	9 m	IR	pnp, npn	terminals	<b>MB32-LU1-NP6X</b> <i>with polarisation filters</i>	37 962
	4,5 m	red	pnp, npn	terminals	<b>MB33-LU1-NP6X</b>	37 963 00
<b>— Diffuse</b> 	0,3 m	IR	pnp, npn	terminals	<b>MB11-LU1-NP6X</b>	37 902
	0,6 m	IR	pnp, npn	terminals	<b>MB12-LU1-NP6X</b>	37 912
	2 m	IR	pnp, npn	terminals	<b>MB14-LU1-NP6X</b>	37 932
<b>— Convergent</b> 	38 mm	red	pnp, npn	terminals	<b>MB13-LU1-NP6X</b>	37 922
	38 mm	green	pnp, npn	terminals	<b>MB15-LU1-NP6X</b>	37 929
<b>— Opposed</b> 	45 m	IR	(emitter) pnp, npn	terminals	<b>MB52-0-S7</b>	37 970
	200 m	IR	(emitter) pnp, npn	terminals	<b>MB62-LU1-NP6X</b>	37 973
					<b>MB53-0-S7</b>	37 985
					<b>MB63-LU1-NP6X</b>	37 988
<b>— Fibre-optic</b> 	glass	IR	pnp, npn	terminals	<b>MB20-LU1-NP6X</b>	37 942
	glass	IR	pnp, npn	terminals	<b>MB21-LU1-NP6X</b>	37 952

Subject to changes without notice • Edition 10.00 • P/N ED069



**IMPORTANT SAFETY WARNING !** These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.