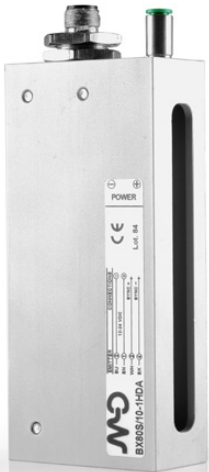


BX80 Series / Transmitter

Light curtains

Industrial light curtains with modulated infrared light monitor a defined control area. The versions with switching output are for example used for detecting objects on conveyors or used in the ejection control of punching and pressing. Light curtains consist of transmitter and receiver units which form a light grid with several invisible light beams. The transmitters have a range up to 2500 mm. The interruption of a light beam is converted by a built-in amplifier into a switching signal.



BX80S/x0-0H BX80S/x0-1H BX80S/x0-2H
BX80E/x0-0H BX80E/x0-1H BX80E/x0-2H

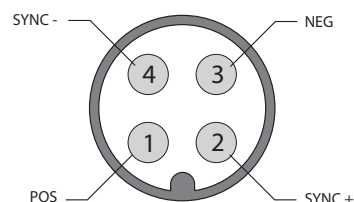
GENERAL DATA			
Type of device	Transmitter		
Connection type	M12 connector, 4-pin		
Display elements	LED – Multifunction		
Beams quantity	12		
Beam's pitch	6 mm		
Cooling function	-	Air cooling	-
TRANSMITTER CHARACTERISTICS			
Controlled area height	70 mm		
Angular displacement	3°		
Light source	Infrared, modulated (880 nm)		
Sensitivity settings	all BX80S/x0-xH		
POWER SUPPLY			
Power supply	12 - 24 V DC		
Load current max.	100 mA		
Short circuit protection	Yes		
Reverse polarity protection	Yes		
Ripple	10 %		
PHYSICAL CHARACTERISTICS			
Housing material	Plastic (PBT)	Aluminium	Plastic (PBT)
Lens material	Polycarbonate		Glas
Ingress protection	IP67		
Dimensions (W x H x D)	20 x 145.5 x 44 mm	30 x 169 x 60 mm	20 x 145.5 x 44 mm
Weight	ca. 280 g	-	ca. 280 g
Tightening torque	25 Nm		
ENVIRONMENTAL			
Operating temperature range	-25 - +50 °C		
Storage temperature range	-40 - +80 °C		
APPROVALS			
EMC	EN 60947-5-2		

BX80 Series / Transmitter

Versions

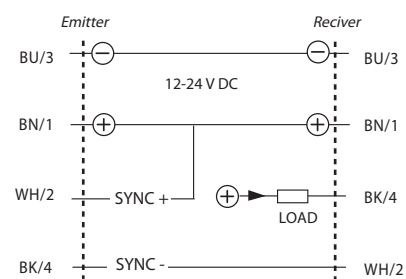
RANGE	TRANSMITTER
2000 mm	BX80x/10-xH
2500 mm	BX80x/10-xH6X
1500 mm	BX80x/20-xH
1000 mm	BX80x/30-xH
600 mm	BX80x/40-xH
250 mm	BX80x/50-xH
500 mm	BX80x/50-xH3E

Connector M12

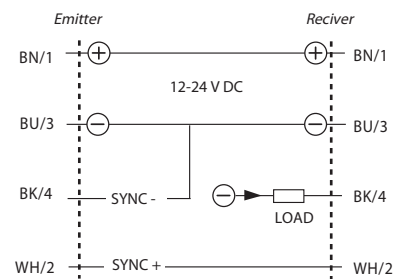


Electrical diagrams

NPN



PNP



BN: brown
 BK: black
 PK: pink
 BU: blue
 WH: white
 GY: gray

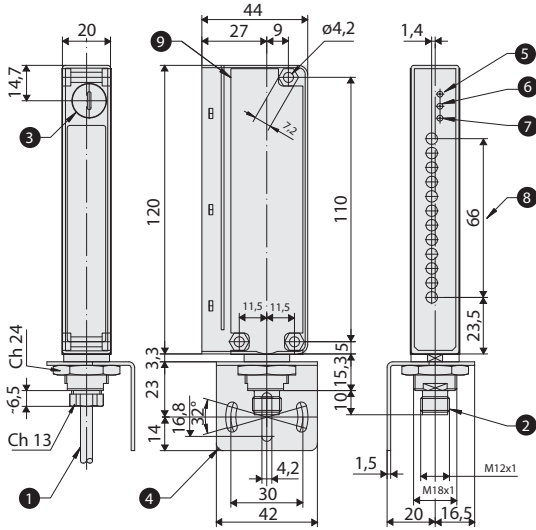
LEDs

LED	LED STATE	OPERATION	CHECK
LED green Supply	Stable On	Supply is present and stable	-
	UnStable On	Supply is present but not stable	Supply
	Off	No supply or voltage lower than 8 V DC	Supply
LED red Alignment	Full On	No Alignment	Alignment (by free area)
	Light On	Partial alignment or short signal	Alignment (by free area)
	Off	Correct alignment and sufficient signal	-
	Blinking On	Receiver does not function correctly or output short circuit	Wiring or failure
LED yellow Output	On	Output in On state	-
	Off	Output in Off state	-

BX80 Series / Transmitter

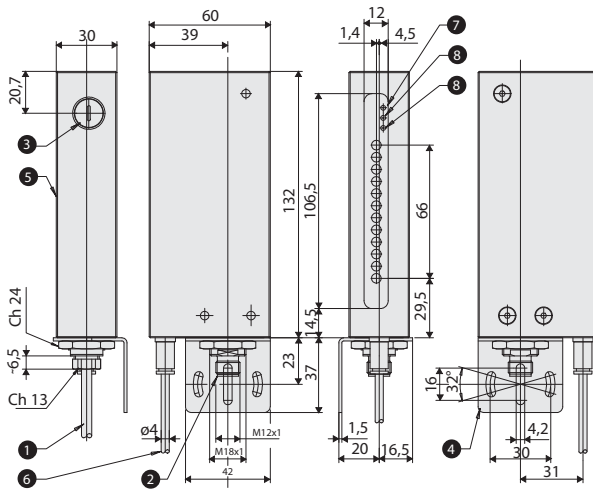
Dimensions (mm)

Plastichousing



- 1: Cable exit
- 2: M12 connector, 4-pin
- 3: NO / NC
- 4: Mounting bracket
- 5: LED green
- 6: LED red
- 7: LED yellow
- 8: Sensitivity area
- 9: Metal label

Aluminiumhousing



- 1: Cable exit
- 2: M12 connector, 4-pin
- 3: NO / NC
- 4: Mounting bracket
- 5: Aluminium housing
- 6: Air cooling
- 7: LED green
- 8: LED red
- 9: LED yellow