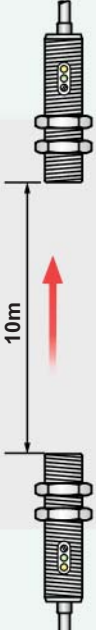





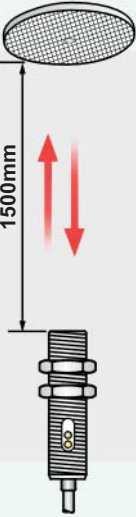





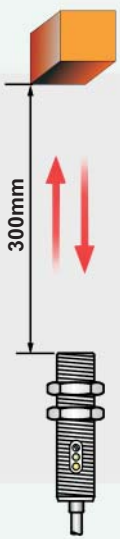

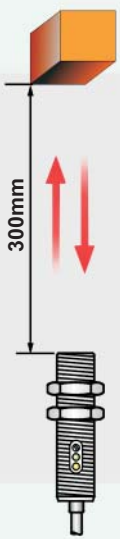

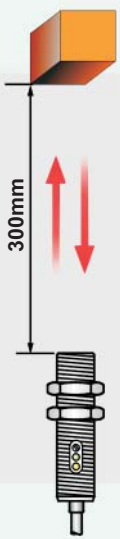

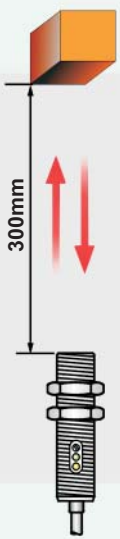

Through-beam sensor

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number
<p>LED Red 660nm</p>  <p>10m</p> <p>Through-beam mode Sensing distance: 10m</p>	<p>Cable</p> 	10-36VDC	Emitter	M12B-T010MD-EX6C2U2
			NPN light-ON	M12B-T010MN-LX6C3U2
			NPN dark-ON	M12B-T010MN-DX6C3U2
			PNP light-ON	M12B-T010MP-LX6C3U2
			PNP dark-ON	M12B-T010MP-DX6C3U2
	<p>Quick disconnect (M8)</p> 	10-36VDC	Emitter	M12B-T010MD-EX6Q4UP
			NPN light-ON	M12B-T010MN-LX6Q4UP
			NPN dark-ON	M12B-T010MN-DX6Q4UP
			PNP light-ON	M12B-T010MP-LX6Q4UP
			PNP dark-ON	M12B-T010MP-DX6Q4UP
	<p>Quick disconnect (M12)</p> 	10-36VDC	Emitter	M12B-T010MD-EX6Q4UE
			NPN light-ON	M12B-T010MN-LX6Q4UE
			NPN dark-ON	M12B-T010MN-DX6Q4UE
			PNP light-ON	M12B-T010MP-LX6Q4UE
			PNP dark-ON	M12B-T010MP-DX6Q4UE
	<p>EURO 4 Pin 6" Pig tail</p> 	10-36VDC	Emitter	M12B-T010MD-EX6P4UE
			NPN light-ON	M12B-T010MN-LX6P4UE
			NPN dark-ON	M12B-T010MN-DX6P4UE
			PNP light-ON	M12B-T010MP-LX6P4UE
			PNP dark-ON	M12B-T010MP-DX6P4UE

Reflex sensor

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number	
LED red polarized 660nm	Cable 	10-36VDC	NPN light-ON	M12B-L1500N-LX6C3U2-PF	
			NPN dark-ON	M12B-L1500N-DX6C3U2-PF	
			PNP light-ON	M12B-L1500P-LX6C3U2-PF	
			PNP dark-ON	M12B-L1500P-DX6C3U2-PF	
		Quick disconnect (M8) 	10-36VDC	NPN light-ON	M12B-L1500N-LX6Q4UP-PF
				NPN dark-ON	M12B-L1500N-DX6Q4UP-PF
				PNP light-ON	M12B-L1500P-LX6Q4UP-PF
				PNP dark-ON	M12B-L1500P-DX6Q4UP-PF
Retro-reflective mode with polarizing filter Sensing distance: 1500mm	Quick disconnect (M12) 	10-36VDC	NPN light-ON	M12B-L1500N-LX6Q4UE-PF	
			NPN dark-ON	M12B-L1500N-DX6Q4UE-PF	
			PNP light-ON	M12B-L1500P-LX6Q4UE-PF	
			PNP dark-ON	M12B-L1500P-DX6Q4UE-PF	
	EURO 4 Pin 6" Pig tail 	10-36VDC	NPN light-ON	M12B-L1500N-LX6P4UE-PF	
			NPN dark-ON	M12B-L1500N-DX6P4UE-PF	
			PNP light-ON	M12B-L1500P-LX6P4UE-PF	
			PNP dark-ON	M12B-L1500P-DX6P4UE-PF	

Diffuse sensor

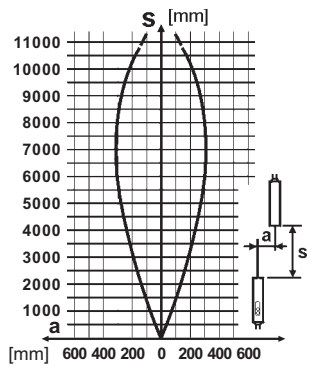
Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number
LED red 660nm 	Cable 	10-36VDC	NPN light-ON	M12B-D0300N-LX6C3U2
			NPN dark-ON	M12B-D0300N-DX6C3U2
			PNP light-ON	M12B-D0300P-LX6C3U2
			PNP dark-ON	M12B-D0300P-DX6C3U2
300mm 	Quick disconnect (M8) 	10-36VDC	NPN light-ON	M12B-D0300N-LX6Q4UP
			NPN dark-ON	M12B-D0300N-DX6Q4UP
			PNP light-ON	M12B-D0300P-LX6Q4UP
			PNP dark-ON	M12B-D0300P-DX6Q4UP
Diffuse mode Sensing distance: 300mm 	Quick disconnect (M12) 	10-36VDC	NPN light-ON	M12B-D0300N-LX6Q4UE
			NPN dark-ON	M12B-D0300N-DX6Q4UE
			PNP light-ON	M12B-D0300P-LX6Q4UE
			PNP dark-ON	M12B-D0300P-DX6Q4UE
Diffuse mode Sensing distance: 300mm 	EURO 4 Pin 6" Pig tail 	10-36VDC	NPN light-ON	M12B-D0300N-LX6P4UE
			NPN dark-ON	M12B-D0300N-DX6P4UE
			PNP light-ON	M12B-D0300P-LX6P4UE
			PNP dark-ON	M12B-D0300P-DX6P4UE

Sensors specifications

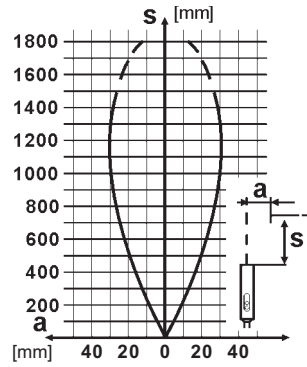
Item	Type	Through-beam	Retro-reflective mode with polarizing filter	Diffuse reflective
	Model No.	M12B-T010Mx-xxxxxx	M12B-L1500x-xxxxxx-PF	M12B-D0300x-xxxxxx
Sensing range		10,000mm	1500mm	300mm
Sensing object		—	Reflector type RE-D82	100x100mm white
Hysteresis		10% typ.		
Supply Voltage		10-36V		
Max. Ripple content		20%		
Output current		200mA max.		
No-load supply current		15mA Typ.		
Output voltage drop		2.0V max. At 200mA		
Max. Switching frequency		1000Hz		
Short-circuit protection		Yes		
Reverse polarity protection		Yes		
Overload current protection		Yes		
Switching time(↑ and ↓)		1msec		
Operation indicator	The yellow LED lights up when the output is switched on. The green LED lights up when sufficient light is available for reliable operation (approx.80% of the maximum operating distance).			
Sensitivity setting	The sensitivity can be adjusted by means of the built-in potentiometer(diffuse sensor; optional for other models). Turning clockwise increases the sensitivity.			
Protection		IP67(IEC)		
Ambient temperature		-25 to 55°C		
EMC	IEC 60947-5-2, Parts 7.2.6.1. 2. 3 or RFI>3V/m(in 30-1000MHZ), EFT>1KV, ESD>4KV(contact)			
Emitting element	LED red 660nm	LED red polarized 660nm	LED red 660nm	
Cable	cable 2m long			
Pigtail type	M8 pico 4pin+6" cable and M12 Euro 4pin+6" cable			
Connection type	M8 pico 4pin and M12 EURO 4pin			
Weight(cable/connector model)	100/20g	100/20g	200/65g	

Curve

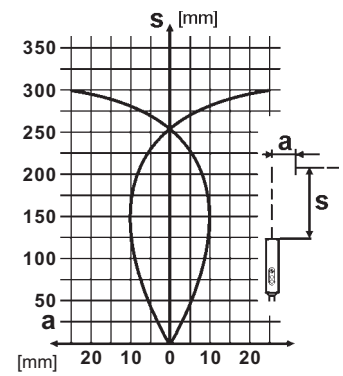
* Receiver only



Through-beam sensor



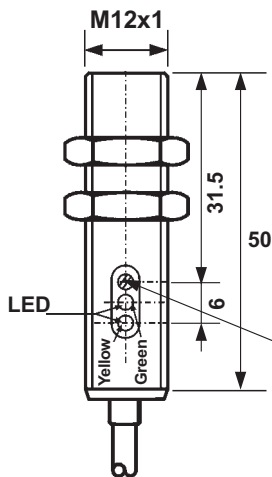
Retro-reflective sensor (with polarizing filter)



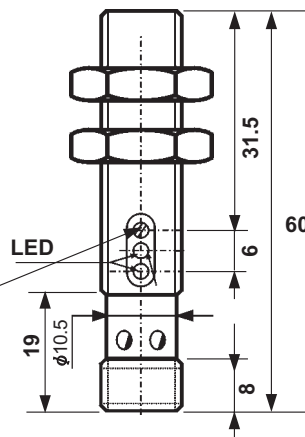
Diffuse sensor

Dimensions

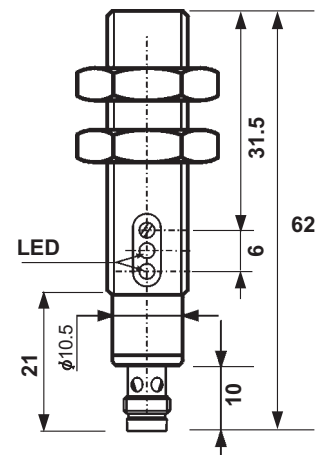
X-state, Cable version



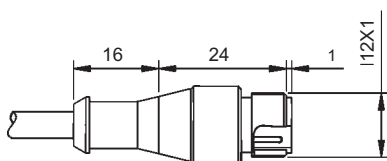
X-state, EURO-style quick connector



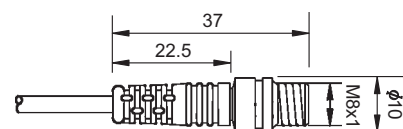
X-state, PICO-style quick connector



EURO-style quick connector for pig-tail series

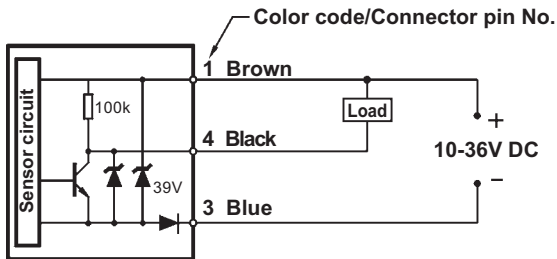


PICO-style quick connector for Pig-tail series

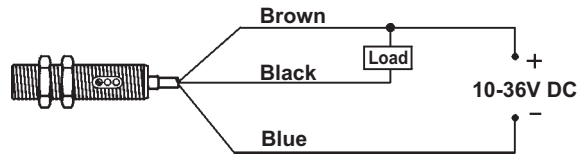


NPN output type

I/O circuit diagram

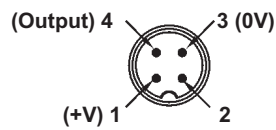


Wiring diagram

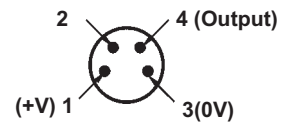


Connector pin position

EURO-Style

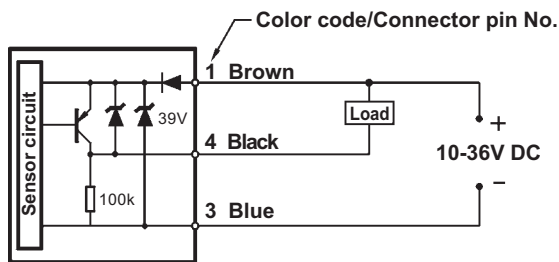


PICO-Style

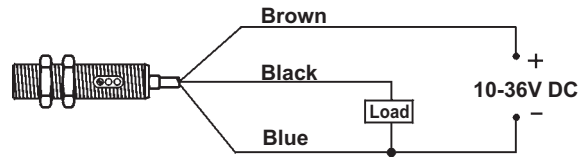


PNP output type

I/O circuit diagram

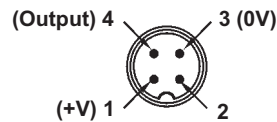


Wiring diagram

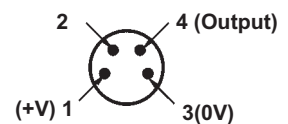


Connector pin position

EURO-Style

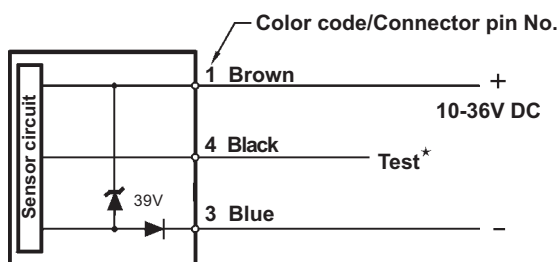


PICO-Style

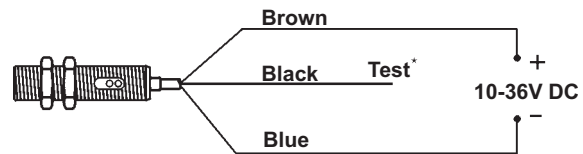


Emitter

I/O circuit diagram

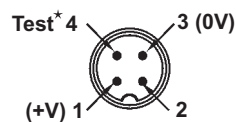


Wiring diagram

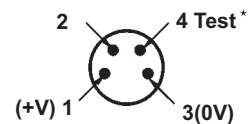


Connector pin position

EURO-Style



PICO-Style



*: Test(black wire)=0V, Emitter off.