

50 x 50 x 18 mm Block Style

Auto Calibration / Auto Learn
AC / DC Version
NPN / PNP Version

Diffused (Retro-Reflective)
 Reflective
Thru - Beam



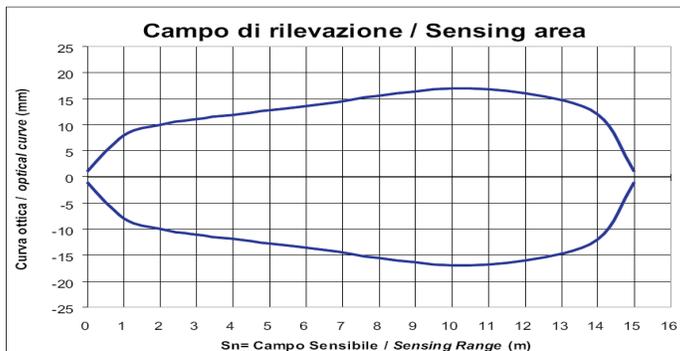
	2.0 Meter Cable	PES50V84C	PES50E84C	PES50V94C	PES50E94C	-	
	M12 Connector	PES50V84M12	PES50E84M12	PES50V94M12	PES50E94M12	-	
		Receiver	Emitter	Receiver	Emitter		
Mating cables / connectors							
Version		PNP / NPN	PNP / NPN	AC / DC	AC / DC	+	
Nominal Sensing Distance (Sn)		0.2 ~ 15 m		0.2 ~ 15 m			
Housing Material		ABS	ABS	ABS	ABS	-	
Lens Material		PMMA	PMMA	PMMA	PMMA	-	
Termination Type		Diffused	Diffused	Diffused	Diffused	-	
Min / Max Supply Voltage		10 to 30Vdc	10 to 30Vdc	15 to 240V ac/dc	15 to 240V ac/dc	-	
Max. Load Current (I _r)		250mA	250mA	0.5A @ 240Vac	0.5A @ 240Vac	-	
Max ripple factor (V _r)		≤ 10%	≤ 10%	< 10%	< 10%	-	
Voltage Drop (U _d)		1.5V @ 100mA	1.5V @ 100mA	Relay Output	Relay Output	-	
Power Consumption (I _o)		<25 mA	<25 mA	<6mA @ 240Vac	<6mA @ 240Vac	-	
Switching Frequency (Hz)		150 Hz	150 Hz	20 Hz	20 Hz	-	
Emission		Pulsed IR 880nm	Pulsed IR 880nm	Pulsed IR 880nm	Pulsed IR 880nm	-	
Hysteresis				≤ 10% Sn		-	
Short Circuit Protection		Yes	Yes	-	-	-	
Reverse Polarity Protection		Yes	Yes	-	-	-	
Operating Temperature (Storage Temperature)		0 to +50 C (-25 to 75 C)					
IP Rating		IP64					
Compliance		EN 60947.5.2	EN 60947.5.2	EN 60947.5.2	EN 60947.5.2		

* Sensing distance is defined by a white paper with 90% reflex and dimensions of 200 x 200mm.

Optical Curves

Through Beam

Accessories

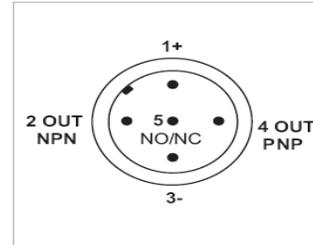
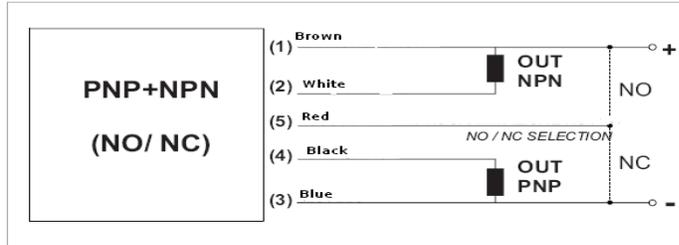


Wiring Diagrams

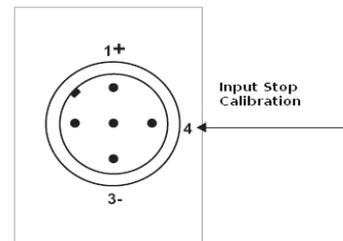
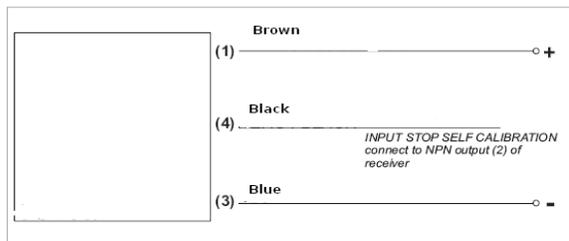
NPN / PNP Wiring

Receiver

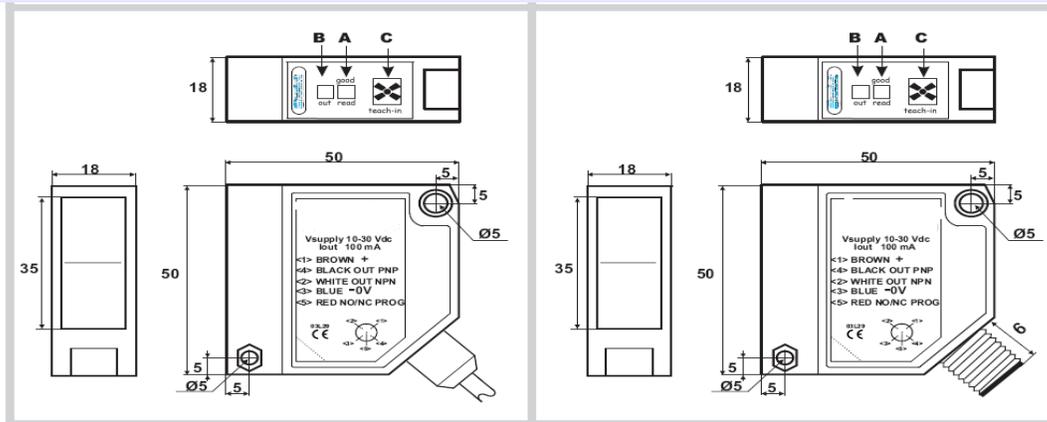
NPN / PNP Wiring – M12



Emitter



Dimensions



A.) Good Detection LED

B.) Output Status LED

C.) "Teach-In" Key for Autocalibration

Calibration – Automatic and Manual

Install the transmitter and receiver in the desired location within the sensing distance specified, The calibration must be void of external noises which may interfere with the calibration. Press and hold the power button for approximately one second. Upon its release, the green LED will blink as the automatic calibration begins. The emission power will increase by three levels. This test can be stopped at any time by pressing the button. The transmitter also has an input which can be grounded to stop the calibration. It can also be connected to the NPN output of the receiver. Please note that in this case, the power supply must be the same for both units.

Manual calibration can be performed at any time by pressing the button for approximately one second. If it is always depressed, Calibration will continue until it is released. Calibration can be done by increasing power emission (solid green LED) or by decreasing (green LED off). To switch from increasing to decreasing, double click the button. In decrease mode, the power will revert to increase after about 15 seconds if no user interaction. In working mode, when the object enters the detection zone, the yellow LED will turn change its status according to the output and PROG configuration. Conversely, the green LED could be blinking or off according to the object's position.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Crouzet:

[PES50E94C](#) [PES50D94C](#) [PES50V94C](#)