

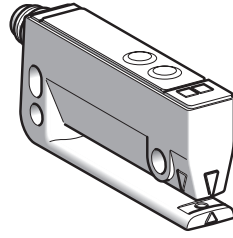
Photoelectric sensors

OsiSense XUVE Application, packaging series

Optical fork for detection of opaque labels

DC supply, solid-state output

Fork design



System	Thru-beam
Type of transmission	Infrared
Nominal sensing distance (Sn)	3 mm (0.12 in.)
Depth	40 mm (1.57 in.)

Catalog numbers

4-wire	XUVE04M3KSNM8	XUVE04M3PSNM8	XUVE04M3NSNM8
NO or NC programmable function	PNP/NPN	PNP	NPN
Remote adjustment	No	Yes	
Adjustment	By numeric potentiometer (+/- buttons) and red LED		
Protection of settings	By locking keypad		
Weight, kg (lb)	0.035 (0.78)		

Specifications

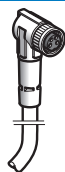
Product certifications	CE, cULus		
Material	Thermoplastic case (PA12)		
Connection	M8, 4-pin connector		
Detection performance	Minimum length of label	2 mm (0.08 in.)	
	Minimum distance between 2 labels	2 mm (0.08 in.)	
	Maximum flow rate	200 m/min	
	Detection accuracy	± 50 µm at 150 m/min	
Supply	Rated supply voltage	12–24 V with protection against reverse polarity	
	Voltage limits	10–30 V $\overline{\text{---}}$ (including ripple)	
	Current consumption, no-load	35 mA	
	Residual voltage at 100 mA	< 2 V	
Output	Maximum rated current	100 mA with overload and short-circuit protection	
	Maximum switching frequency	10 kHz	
	Tower lights	Output state	Yellow LED
		Adjustment and keypad locking	Red LED
	Delay (response and recovery)	50 µs	
Environment	Operating temperature	- 20...+ 60 °C (- 4...+140 °F)	
	Storage temperature	- 30...+ 80 °C (- 22...+ 176 °F)	
	Degree of protection	IP 65	

Function table

	Function	Thru-beam system	
		No label present in the beam (output inactive)	Label present in the beam (output active)
Output state (PNP or NPN) indicator: yellow LED (illuminated when sensor output is on)	NC		
	NO		

Catalog numbers of pre-wired connectors

	Type of connector	For use with forks	Type	Cable length (m)	Catalog number	Weight kg (lb)
 XZCP0941L●	Female, M8, 4 pins	XUVE04M3KSNM8, XUVE04M3PSNM8, XUVE04M3NSNM8,	Straight	2	XZCP0941L2	0.08 (0.18)
				5	XZCP0941L5	0.18 (0.40)
			Elbowed	2	XZCP1041L2	0.08 (0.18)
				5	XZCP1041L5	0.18 (0.40)



XZCP1041L●

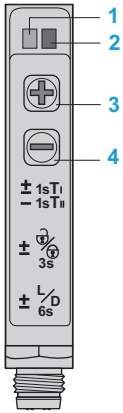
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Introduction (adjustment and indicators)



- 1 Yellow LED On: Output activated
- 2 Red LED On: Adjustments and keypad locking
- 3,4 Sensitivity adjustment
- 3+4 Teach mode and automatic adjustment of sensitivity (press time < 3 seconds)
- 3+4 Keypad locking (3 s ≤ press time < 6 s)
- 3+4 NO/NC (press time ≥ 6 s)

Connections

Connector

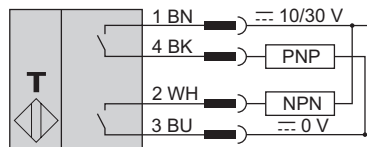


Pin no. -color

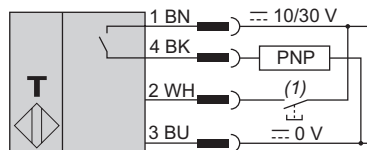
- 1 **BN**: Brown
- 2 **WH**: White (remote teaching)
- 3 **BU**: Blue
- 4 **BK**: Black

Wiring diagrams

PNP/NPN: XUVE04M3KSNM8

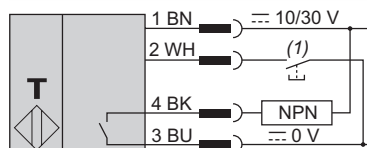


PNP: XUVE04M3PSNM8



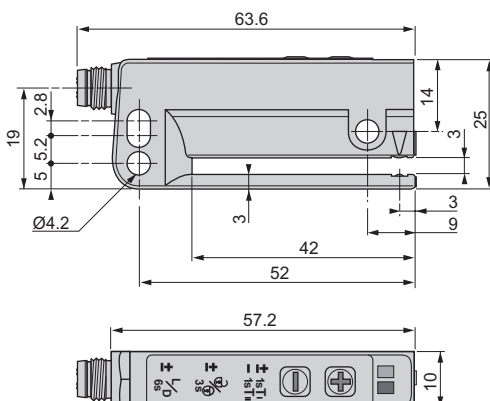
(1) Remote teaching.

NPN: XUVE04M3NSNM8



(1) Remote teaching.

Dimensions (mm)



Application example

Detection of opaque labels before application to a package

