

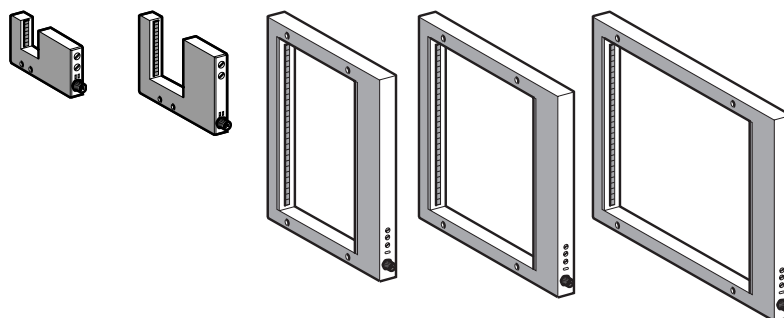
Photo-electric sensors

OsiSense XU Application, conveying series

Dynamic/static detection of passage of objects (1)

For detecting and counting parts

DC supply. Solid-state output



System	Thru-beam					
Type of transmission	Infrared					
Passageway dimensions	30 x 30 mm	60 x 60 mm	200 x 120 mm	200 x 180 mm	200 x 250 mm	
References						
4-wire, PNP or NPN NO or NC programmable function	Minimum size of object detected					
	Dynamic mode	Static mode				
	Ø 2 mm	–	XUVF30M8	XUVF60M8	–	–
	Ø 4 mm	Ø 6 mm	–	–	XUVF120M12	XUVF180M12
	Ø 10 mm	Ø 15 mm	–	–	XUYFRS120S	XUYFRS180S
					XUYFRS250S	
Weight (kg)			0.080	0.140	0.860	1.000
						1.120

References of U shape frames

Open (U shape) frames for sizes 120, 180 and 250 mm are also available.

To order an open frame, add the letter **U** to the end of the reference. Example: XUVF120M12 becomes **XUVF120M12U**.

Characteristics

Product certifications	CE, cULus	
Ambient air temperature	For operation: 0...+60°C. For storage: -20...+80°C	
Vibration resistance	7 gn, amplitude ± 1 mm (f = 10...55 Hz), conforming to IEC 60068-2-6	
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27	
Degree of protection	Conforming to IEC 60529	IP 65
Connection	M8 connector (suitable female connectors, including pre-wired versions, refer to our "OsiSense XZ" catalogue)	M12 connector (suitable female connectors, including pre-wired versions, please refer to our "Cabling accessories OsiSense XZ" catalogue)
Materials	Case Lenses	Painted aluminium Polycarbonate Altuglass
Immunity to ambient light	Sunlight: 4000 lux max. Incandescent light: 400 lux max.	Sunlight: 10,000 lux max. Incandescent light: 3000 lux max.
Passing speed of object	Min.: 10 cm/s, max.: 15 m/s (Ø 2 mm object)	Min (2): 10 cm/s, max.: 15 m/s (Ø 4 mm object) or max.: 70 m/s (Ø 10 mm object)
Rated supply voltage	24 V $\overline{\text{---}}$ with protection against reverse polarity	
Voltage limits	18...30 V $\overline{\text{---}}$ (including ripple)	
Switching capacity (sealed)	≤ 100 mA with overload and short-circuit protection	
Voltage drop, closed state	< 2 V	
Current consumption, no-load	≤ 120 mA	≤ 150 mA
Maximum switching frequency	500 Hz	5000 Hz
Delays	Response: < 1 ms Recovery: < 1 ms	Response: < 0.1 ms Recovery: < 0.1 ms
Time delay	Off-delay (reset): adjustable between 0 and 5 seconds	

Function table	Function	Thru-beam system	
		No object present in the beam	Passage of object through the beam
Output state (PNP or NPN) and orange LED: illuminated when sensor output is ON.	NC		
	NO		

(1) XUVF●● sensors are suitable for detecting the passage of all types of objects (both metal and plastic), of any shape and colour.

XUVF120M12, XUVF180M12 and XUVF250M12 frames can be used:

- In dynamic mode for counting parts or monitoring the passing of parts on injection moulding machines.

- In static mode for detecting bar or cable type moving or non-moving parts, entering machines (maintain the signal).

(2) The min. value only applies to dynamic mode.