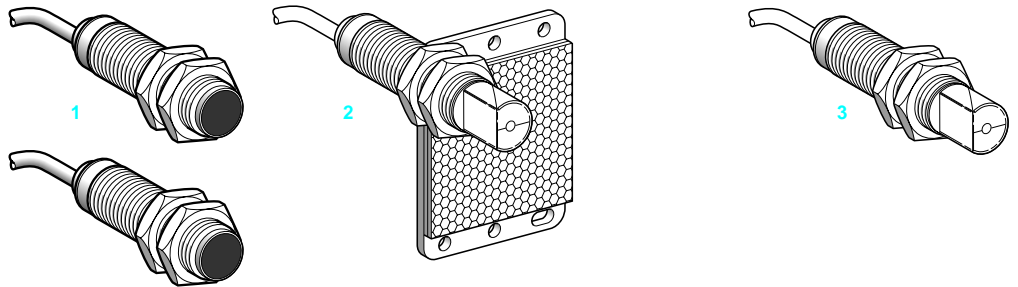


Photo-electric sensors

Osiris® Application, food industry series
Stainless steel body M18 x 1
d.c. supply. Solid-state output

Design 18



System	Thru-beam 1	Reflex 2	Polarised reflex 2	Diffuse 3
Type of transmission	Infrared	Infrared	Red	Infrared
Sensing distance nominal Sn / maximum (excess gain = 2) (excess gain = 1)	15 m / 20 m	4 m / 5.5 m (with reflector 50 x 50 mm)	2 m / 3 m (with reflector 50 x 50 mm)	0.10 m / 0.15 m

References of pre-cabled versions (3)

3-wire, PNP Programmable N/O (object detection) or N/C function	Line of sight along case axis	XU2 N18PP341 (1)	XU1 N18PP341 (2)	XU9 N18PP341 (2)	XU5 N18PP341
	Line of sight 90° to case axis	XU2 N18PP341W (1)	XU1 N18PP341W (2)	XU9 N18PP341W (2)	XU5 N18PP341W
3-wire, NPN Programmable N/O (object detection) or N/C function	Line of sight along case axis	XU2 N18NP341 (1)	XU1 N18NP341 (2)	XU9 N18NP341 (2)	XU5 N18NP341
	Line of sight 90° to case axis	XU2 N18NP341W (1)	XU1 N18NP341W (2)	XU9 N18NP341W (2)	XU5 N18NP341W
Weight (kg)		0.270	0.155	0.155	0.135

References of plug-in connector versions

3-wire, PNP Programmable N/O (object detection) or N/C function	Line of sight along case axis	XU2 N18PP341D (1)	XU1 N18PP341D (2)	XU9 N18PP341D (2)	XU5 N18PP341D
	Line of sight 90° to case axis	XU2 N18PP341WD (1)	XU1 N18PP341WD (2)	XU9 N18PP341WD (2)	XU5 N18PP341WD
3-wire, NPN Programmable N/O (object detection) or N/C function	Line of sight along case axis	XU2 N18NP341D (1)	XU1 N18NP341D (2)	XU9 N18NP341D (2)	XU5 N18NP341D
	Line of sight 90° to case axis	XU2 N18NP341WD (1)	XU1 N18NP341WD (2)	XU9 N18NP341WD (2)	XU5 N18NP341WD
Weight (kg)		0.130	0.085	0.085	0.065

Characteristics

Product certifications	CE, UL, CSA
Ambient air temperature	Operation: - 25...+55 °C. Storage: - 40...+ 70 °C
Vibration resistance	25 gn, amplitude ± 1.5 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	IP 67, conformity to IEC 529
Connection	Pre-cabled Pre-cabled, diameter 4.2 mm, length 2 m (3), wire c.s.a.: 4 x 0.34 mm ² Connector M12 male connector, 4-pin (suitable extension cables and female connectors, see page 30210/2)
Materials	Case Food industry stainless steel, grade 304 Cu Lenses PMMA Cable PvR
Rated supply voltage	≡ 12...24 V with protection against reverse polarity
Voltage limits	≡ 10...30 V (including ripple)
Switching capacity (sealed)	≤ 100 mA with overload and short-circuit protection
Voltage drop, closed state	≤ 1.5 V
Current consumption, no-load	≤ 30 mA (reflex and diffuse), ≤ 50 mA (thru-beam)
Maximum switching frequency	500 Hz
Delays	First-up ≤ 15 ms Response ≤ 1 ms Recovery ≤ 1 ms

(1) Reference for both transmitter and receiver for thru-beam system sensors.

(2) 50 x 50 mm reflector included with reflex and polarised reflex system sensors.

(3) Sensors available with 5 m cable: To order, add the suffix L5 to the reference selected from above.

Example: sensor XU1 N18PP341 with 5 m cable becomes XU1 N18PP341L5.

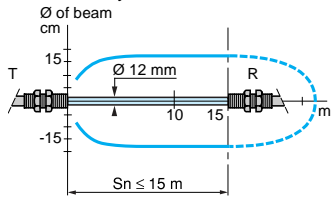
Accessories:
page 37012/2

Photo-electric sensors

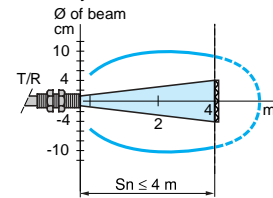
Osiris® Application, food industry series
Stainless steel body M18 x 1
d.c. supply. Solid-state output

Detection curves

Thru-beam system

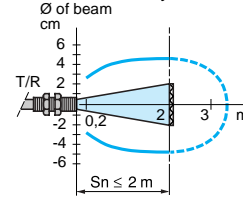


Reflex system



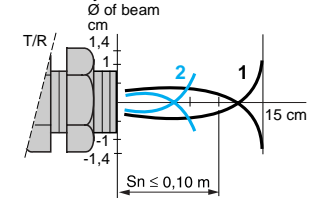
With reflector XUZ C50

Polarised reflex system



With reflector XUZ C50

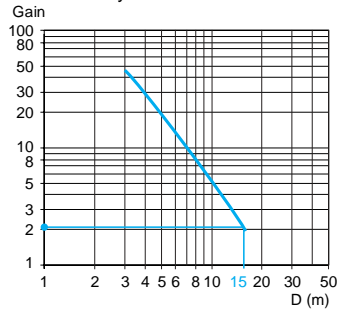
Diffuse system



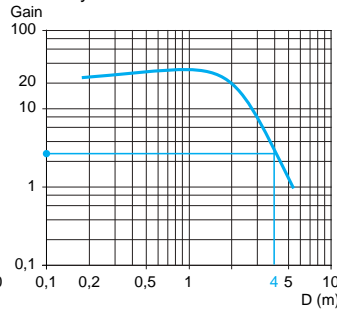
Object 10 x 10 cm
1 White 90 %
2 Grey 18 %

Excess gain curves (ambient temperature: + 25 °C)

Thru-beam system

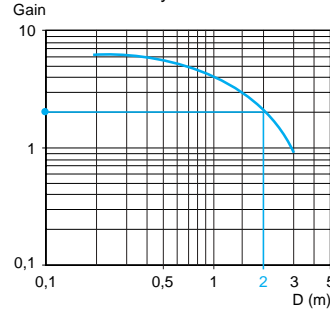


Reflex system



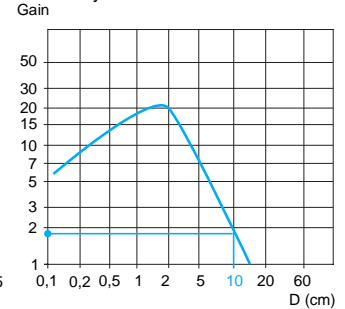
With reflector XUZ C50

Polarised reflex system



With reflector XUZ C50

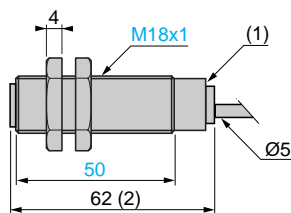
Diffuse system



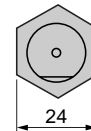
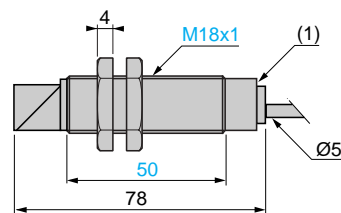
Object 10 x 10 cm
White 90 %

Dimensions

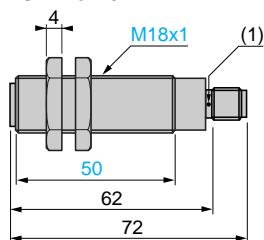
XU● N18●●341



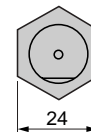
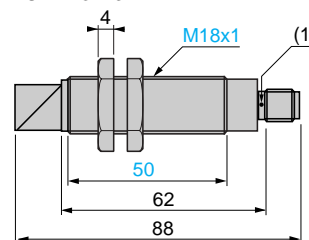
XU● N18●●341W



XU● N18●●341D



XU● N18●●341WD



(1) LED

(2) 64 for XU9 N18●●341

Fixing nut tightening torque: < 15 N.m

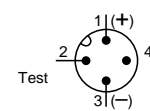
Connector tightening torque: 2 N.m

Cable connections

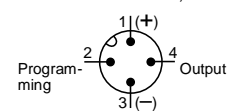
- (-) BU (Blue)
- (+) BN (Brown)
- (OUT) BK (Black)
- (Prog.) OG (Orange)
- (Test) VI (Violet) for thru-beam transmitter only

Connector schemes (sensor connector pin view)

Transmitter



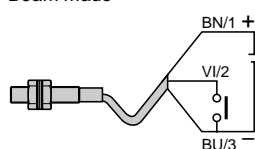
Thru-beam receiver, reflex and diffuse



See connection on page 30210/2.

Beam break test (for thru-beam transmitter only)

Beam made



Beam broken

