



## Main

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Range of product                   | OsiSense XS                                          |
| Series name                        | General purpose                                      |
| Sensor type                        | Inductive proximity sensor                           |
| Device application                 | -                                                    |
| Sensor name                        | XS1                                                  |
| Sensor design                      | Cylindrical M18                                      |
| Size                               | 37 mm                                                |
| Body type                          | Fixed                                                |
| Detector flush mounting acceptance | Flush mountable                                      |
| Material                           | Metal                                                |
| Type of output signal              | Discrete                                             |
| Wiring technique                   | 4-wire                                               |
| [Sn] nominal sensing distance      | 0.2 in (5 mm)                                        |
| Discrete output function           | 1 NO + 1 NC                                          |
| Output circuit type                | DC                                                   |
| Discrete output type               | NPN                                                  |
| Electrical connection              | Cable                                                |
| Cable length                       | 6.56 ft (2 m)                                        |
| [Us] rated supply voltage          | 12...24 V DC with reverse polarity protection        |
| Switching capacity in mA           | <= 200 mA with overload and short-circuit protection |
| IP degree of protection            | IP68 double insulation conforming to IEC 60529       |

## Complementary

|                          |                           |
|--------------------------|---------------------------|
| Thread type              | M18 x 1                   |
| Detection face           | Frontal                   |
| Front material           | PPS                       |
| Enclosure material       | Nickel plated brass       |
| Operating zone           | 0...0.16 in (0...4 mm)    |
| Differential travel      | 1...15% of Sr             |
| Cable composition        | 4 x 0.22 mm <sup>2</sup>  |
| Wire insulation material | PvR                       |
| Status LED               | 1 LED yellow output state |
| Supply voltage limits    | 10...36 V DC              |
| Switching frequency      | <= 2000 Hz                |
| Voltage drop             | <= 2 V at closed state    |
| Current consumption      | 0...10 mA at no-load      |
| Delay first up           | <= 5 ms                   |
| Delay response           | <= 0.15 ms                |
| Delay recovery           | <= 0.35 ms                |
| Marking                  | CE                        |
| Threaded length          | 1.1 in (28 mm)            |
| Height                   | 0.71 in (18 mm)           |
| Length                   | 1.46 in (37 mm)           |
| Product weight           | 0.22 lb(US) (0.1 kg)      |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| Environment                           |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| product certifications                | CSA<br>UL                                                               |
| ambient air temperature for operation | -13...158 °F (-25...70 °C)                                              |
| ambient air temperature for storage   | -40...185 °F (-40...85 °C)                                              |
| vibration resistance                  | 25 gn amplitude = +/- 2 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| shock resistance                      | 50 gn 11 ms conforming to IEC 60068-2-27                                |

|                                                                                                                            |                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Green Premium product                                                                                                      | Green Premium product                                                                                                      |
| Compliant - since 0821 - Schneider Electric declaration of conformity                                                      | Compliant - since 0821 - Schneider Electric declaration of conformity                                                      |
| Reference not containing SVHC above the threshold                                                                          | Reference not containing SVHC above the threshold                                                                          |
| Available                                                                                                                  | Available                                                                                                                  |
| Available                                                                                                                  | Available                                                                                                                  |
| WARNING: This product can expose you to chemicals including:                                                               | WARNING: This product can expose you to chemicals including:                                                               |
| Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                                | Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                                |
| Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. | Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. |
| For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                              | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                              |

|                 |           |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

Technical drawing of a 1/2 inch NPT x 1/2 inch NPT female adapter. The drawing includes a top view showing a hexagonal base with a central threaded hole and a side view showing the adapter's profile. Dimensions are provided in both millimeters (mm) and inches (in.).

**Top View Dimensions:**

- Hexagonal base width: 24 mm (0.94 in.)

**Side View Dimensions:**

- Total length: 44.15 mm (1.74 in.)
- Thread length: 3.7 mm (0.15 in.)
- Hex base width: 3 mm (0.12 in.)
- Curved end radius: 5.7 mm (0.22 in.)
- Thread specification: M18

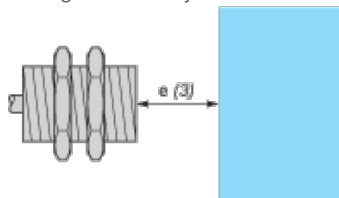
The diagram shows two adjacent layers of a laminate. Each layer is represented by a vertical rectangle with horizontal hatching. Between the two layers, there are three horizontal ovals representing the interface. A double-headed arrow labeled  $e(f)$  indicates the relative displacement between the two layers.

IV

e (2) 60 mm/2.36 in.

≥

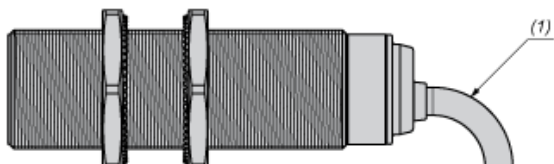
Facing a metal object



e (3) 15 mm/0.60 in

≥

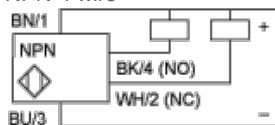
## Mounting



(1) Bending cable: 4 x external cable diameter

## Wiring Schemes

NPN 4-wire



BU : Blue

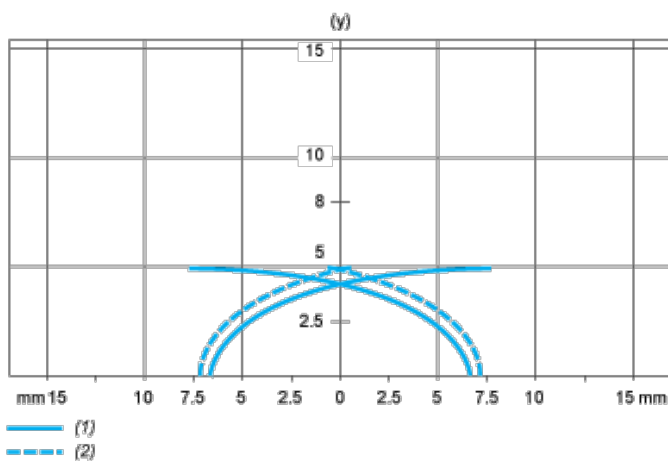
BN : Brown

BK : Black

WH : White

## Performance Curves

Standard Steel Target : 18x18x1 mm



(1) Pick-up points

(2) Drop-out points (object approaching from the side)

(y) Sensing distance in mm