Product data sheet Characteristics

XX230A20PA00M12

Ultrasonic sensors XX, ultrasonic sensor cylindrical M30, 2 emptying levels, Sn 2 m, 2 NO, M12





Commercial status

To be discontinued on: 28 February 2022

Main

Range of product	Telemecanique Ultrasonic sensors XX	
Sensor type	Ultrasonic sensor	
Series name	Application	
Sensor name	XX2	
Sensor design	Cylindrical M30	
Detection system	Diffuse	
[Sn] nominal sensing distance	2 m adjustable with teach push-button	
Material	Plastic	
Type of output signal	Discrete	
Discrete output function	1 NO + 1 NC	
Wiring technique	4-wire	
Discrete output type	PNP	
[Us] rated supply voltage	1224 V DC with reverse polarity protection	
Electrical connection	Male connector M12 4 pins	
Product specific application	For 2 emptying levels monitoring	
[Sd] sensing range	0.122 m	
Beam angle	10 °	
IP degree of protection	IP67 conforming to IEC 60529	

Complementary

Enclosure material	ULTEM	
Front material	Silicone	
Thread type	M30 x 1.5	
Supply voltage limits	1028 V DC	_
Function available	Without synchronisation mode	į

[Sa] assured operating distance	0.122 m (teach mode)
Maximum differential travel	2.5 mm
Blind zone	0120 mm
Transmission frequency	200 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-1010 °
Minimum size of detected object	Cylinder diameter 1.6 mm at 0.635 m
Status LED	Output state: 1 LED (green/red (flashing)) Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)
Current consumption	100 mA
Maximum switching current	100 mA with overload and short-circuit protection
Maximum voltage drop	1 V
Maximum delay first up	1000 ms
Maximum delay response	150 ms
Maximum delay recovery	1000 ms
Marking	CE
Threaded length	45 mm
Height	35 mm
Width	35 mm
Depth	85 mm
Net weight	0.091 kg

Environment

Standards	IEC 60947-5-2
Product certifications	UL CCSAus
Ambient air temperature for operation	050 °C
Ambient air temperature for storage	-1080 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 (f = 1055 Hz)
Shock resistance	30 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 conforming to IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m level 3 conforming to IEC 61000-4-3
Resistance to fast transients	1 kV level 3 conforming to IEC 61000-4-4

Packing Units

Package 1 Weight	122.470 g
Package 1 Height	13.462 cm
Package 1 width	9.906 cm
Package 1 Length	4.572 cm

Offer Sustainability

Office Oddital lability		
Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known	

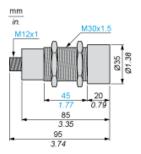
Contractual warranty

Warranty 18 months

Product data sheet Dimensions Drawings

XX230A20PA00M12

Dimensions



Product data sheet Mounting and Clearance

XX230A20PA00M12

Minimum Mounting Distances

Side by side



e: respect the distances indicated on the detection curves

Face to face



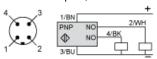
e > 4 x Sn

Product data sheet Connections and Schema

XX230A20PA00M12

Wiring Diagram

NO + NO outputs, PNP



(+) Brown

(1) (2) (3) (4) NO output (White) (-) Blue

NO output (Black)

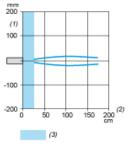
ÈŃ Brown

WH White BU Blue BK Black

Product data sheet Performance Curves

XX230A20PA00M12

Curves

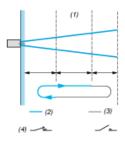


- (1) (2) (3) Parallel movement
- Distance
- Blind zone for diffuse sensors.

Product data sheet Performance Curves

XX230A20PA00M12

Operating Curves



- (1) (2) (3) (4) Adjustable detection zone
- Output activated
- Output deactivated
- NO output

XX230A20PA00M12 is replaced by:



Ultrasonic sensors XXS30P2PM12

Ultrasonic sensors XX, ultrasonic sensor, plastic, cylindrical M30, straight, 2 m, PNP Qty 1