

Product datasheet

Characteristics

SM300A22800

Ultrasonic sensor - discrete - 12 mm barrel - 12-24 V DC

Main

Range of product	Hyde Park
Sensor type	Ultrasonic sensor
Series name	Superprox 300
Device short name	SM300
Sensor design	Cylindrical M12
[Sn] nominal sensing distance	50.8 mm
Type of sensing window	Fixed
Material	Plastic
Enclosure material	ULTEM
Front material	Glass epoxy
Type of output signal	Discrete
Discrete output function	1 NO
ISO thread	M12 x 1
Wiring technique	4-wire
[Us] rated supply voltage	12...24 V DC (overload and short-circuit protection)
Supply voltage limits	10...28 V DC
Discrete output type	PNP/NPN
Electrical connection	Cable 3 m
Product specific application	Discrete proximity

Complementary

[Sd] sensing range	6.3 mm...50.8 m
Maximum differential travel	0.7 mm
Blind zone	6.4 mm
Transmission frequency	500 kHz
Repeat accuracy	0.7 %
Beam angle	8 °
Minimum size of detected object	Cylinder diameter 2.5 mm - up to 1 mm sensing distance
Current consumption	25 mA
Maximum switching current	100 mA (reverse polarity protection)
Height	12 mm
Width	12 mm
Depth	12 mm
Length	53.08 mm
Product weight	0.08 kg

Environment

Product certifications	UL
Marking	CE
NEMA degree of protection	NEMA 4X (indoor use only)
IP degree of protection	IP67
Ambient air temperature for operation	-30...70 °C
Ambient air temperature for storage	-40...100 °C
Relative humidity	100 % without condensation
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 10...55 Hz
Shock resistance	30 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27

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