Product data sheet
Characteristics

SM650A21678FP
Hyde Park, Ultrasonic sensor, discrete, subcompact flat profile, 12 24 V DC



Main

Range of Product	Hyde Park
Sensor Type	Ultrasonic sensor
Series name	Superprox 600
Device short name	SM650
Sensor design	Flat form subcompact
Type of sensing window	Fixed
Material	Plastic
Enclosure Material	ULTEM
Front material	Silicone rubber
Type of output signal	Discrete
Discrete output function	1 NO
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	Male connector M12 4 pins
Product Specific Application	Discrete proximity

Complementary

[Sn] nominal sensing distance	2.00 in (50.8 mm)
[Sd] sensing range	1.00…2.00 in (25.4…50.8 mm)
Maximum differential travel	0.01 in (0.35 mm)
Blind zone	2.01 in (51 mm)
Transmission frequency	500 kHz
Repeat accuracy	0.07 %
Beam angle	7 °
Minimum size of detected object	Cylinder diameter 1.59 mm - up to 63.5 mm sensing distance
Current Consumption	60 mA
Maximum switching current	100 mA reverse polarity protection
Height	0.64 in (16.25 mm)
Width	1.18 in (30 mm)
Depth	0.64 in (16.25 mm)
Length	3.32 in (84.32 mm)
Net Weight	0.10 lb(US) (0.045 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	32…140 °F (0…60 °C)
Ambient Air Temperature for Storage	-40…212 °F (-40…100 °C)
Relative humidity	100 % without condensation
Vibration resistance	+/-1 mm 10…55 Hz)IEC 60068-2-6

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.

Shock resistance	30 gn in all 3 axes 11 ms IEC 60068-2-27
Resistance to electromagnetic fields	9.14 V/m (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV level 3 IEC 61000-4-4

Ordering and shipping details

Category	22490-SENSORS-ULTRASONIC (XX5,6)
Discount Schedule	DS2
GTIN	3389119103145
Nbr. of units in pkg.	1
Package weight(Lbs)	2.08 oz (58.967 g)
Returnability	No
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	3.31 in (8.415 cm)
Package 1 width	1.50 in (3.81 cm)
Package 1 Length	3.31 in (8.415 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
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 to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
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

Contractual warranty

Warranty	18 months