



## Main

|                              |                                                    |
|------------------------------|----------------------------------------------------|
| Range of Product             | Hyde Park                                          |
| Sensor Type                  | Ultrasonic sensor                                  |
| Series name                  | Superprox 600                                      |
| Device short name            | SM650                                              |
| Sensor design                | Cylindrical M18                                    |
| Type of sensing window       | Fixed                                              |
| Material                     | Stainless steel                                    |
| Enclosure Material           | Stainless steel 303                                |
| Front material               | Silicone rubber                                    |
| Type of output signal        | Discrete                                           |
| Discrete output function     | 1 NO                                               |
| ISO thread                   | M18 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        | Male connector M12 4 pins                          |
| Product Specific Application | Discrete proximity                                 |

## Complementary

|                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| [Sn] nominal sensing distance   | 7.0000000000 in (177.8 mm)                                 |
| [Sd] sensing range              | 2.0000000000...7.0000000000 in (50.8...177.8 mm)           |
| Maximum differential travel     | 0.01 in (0.35 mm)                                          |
| Blind zone                      | 0.7 in (19 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                          | 0.7 in (18 mm)                                             |
| Width                           | 0.7 in (18 mm)                                             |
| Depth                           | 0.7 in (18 mm)                                             |
| Length                          | 2.91 in (73.91 mm)                                         |
| Net Weight                      | 0.075 lb(US) (0.034 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 |

|                                      |                                          |
|--------------------------------------|------------------------------------------|
| Shock resistance                     | 30 gn in all 3 axes 11 ms IEC 60068-2-27 |
| Resistance to electromagnetic fields | 9.1 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          | US10DS222490   |
| Discount Schedule | 0DS2           |
| GTIN              | 03389119105996 |
| Returnability     | No             |

### Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type of Package 1       | PCE |
| Number of Units in Package 1 | 1   |

### Offer Sustainability

|                           |                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| EU RoHS Directive         | Not applicable, out of EU RoHS legal scope                                                                                                                                                                                                                                                                                                                                        |

### Contractual warranty

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