

## Main

|                               |                                                      |
|-------------------------------|------------------------------------------------------|
| Range of product              | Hyde Park                                            |
| Sensor type                   | Ultrasonic sensor                                    |
| Series name                   | Superprox 900                                        |
| Device short name             | SM956                                                |
| Sensor design                 | Cylindrical M30                                      |
| [Sn] nominal sensing distance | 1 m                                                  |
| Type of sensing window        | Adjustable                                           |
| Material                      | Plastic                                              |
| Enclosure material            | ULTEM                                                |
| Front material                | Silicone rubber                                      |
| Type of output signal         | Analog                                               |
| ISO thread                    | M30 x 1.5                                            |
| Wiring technique              | 4-wire                                               |
| [Us] rated supply voltage     | 15...24 V DC (overload and short-circuit protection) |
| Supply voltage limits         | 13...28 V DC                                         |
| Analogue output range         | 0...10 V inverse                                     |
| Electrical connection         | 1 male connector M12 4 pins                          |
| Product specific application  | -                                                    |

## Complementary

|                                       |                                                          |
|---------------------------------------|----------------------------------------------------------|
| [Sd] sensing range                    | 0.0508...1 m                                             |
| [Sa] assured operating distance       | 0.0508...1 m with teach pushbutton                       |
| Maximum differential travel           | 2.5 mm                                                   |
| Blind zone                            | 0...51 mm                                                |
| Transmission frequency                | 200 kHz                                                  |
| Repeat accuracy                       | 0.9 %                                                    |
| Beam angle                            | 10 °                                                     |
| Minimum size of detected object       | Cylinder diameter 1.6 mm - up to 305 mm sensing distance |
| Current consumption                   | 80 mA                                                    |
| Maximum switching current             | 60 mA (reverse polarity protection)                      |
| Resistance to electrostatic discharge | 8 kV (level 4) conforming to IEC 61000-4-2               |
| Height                                | 30 mm                                                    |
| Width                                 | 34.7 mm                                                  |
| Depth                                 | 30 mm                                                    |
| Length                                | 96 mm                                                    |
| Product weight                        | 0.26 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 | 0...50 °C                 |
| Ambient air temperature for storage   | -20...80 °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                 |