

# VM1VD3000

Hyde Park, Ultrasonic sensor, analog, voltage (V), 18 mm snout dual mount, 15 24 V DC



## Main

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| Range of product          | Hyde Park                                               |
| Sensor type               | Ultrasonic sensor                                       |
| Series name               | Virtu VM1                                               |
| Device short name         | VM1                                                     |
| Sensor design             | Flat form + cylindrical M18                             |
| Type of sensing window    | Adjustable                                              |
| Material                  | Plastic                                                 |
| Enclosure material        | Valox                                                   |
| Front material            | Glass epoxy                                             |
| Type of output signal     | Analog                                                  |
| ISO thread                | M18 x 1                                                 |
| Wiring technique          | 4-wire                                                  |
| [Us] rated supply voltage | 15...24 V DC with overload and short-circuit protection |
| Supply voltage limits     | 13...28 V DC                                            |
| Analogue output range     | 0...10 V direct                                         |
| Electrical connection     | Cable, 3 m cable length                                 |

## Complementary

|                                 |                                                          |
|---------------------------------|----------------------------------------------------------|
| [Sn] nominal sensing distance   | 508 mm                                                   |
| [Sd] sensing range              | 50.8...508 mm                                            |
| Blind zone                      | 51 mm                                                    |
| Transmission frequency          | 300 kHz                                                  |
| Repeat accuracy                 | 1.27 %                                                   |
| Beam angle                      | 5 °                                                      |
| Minimum size of detected object | Cylinder diameter 2.5 mm - up to 200 mm sensing distance |
| Current consumption             | 40 mA                                                    |
| Maximum switching current       | 40 mA with reverse polarity protection                   |
| Height                          | 43.7 mm                                                  |
| Width                           | 18 mm                                                    |
| Depth                           | 43.7 mm                                                  |
| Length                          | 65.61 mm                                                 |
| Net weight                      | 0.033 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...85 °C                                                |
| Relative humidity                     | 100 % without condensation                                 |
| Vibration resistance                  | +/- 1 mm conforming to IEC 60068-2-6 (f = 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                   |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 14.288 cm |
| Package 1 Width              | 6.35 cm   |
| Package 1 Length             | 14.288 cm |
| Package 1 Weight             | 13.608 g  |

## 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> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>                                                                                                                                                                                                                                                                                                    |

## Contractual warranty

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