

## Viewline Freshwater Gauges 12/24 Volt

### Description

Indication of Freshwater tank levels (capacitive).



Picture: Freshwater Gauge

### Features

- \_ LED Illumination
- \_ Integrated Warning LED
- \_ Backlit technology
- \_ Changeable bezels
- \_ Antifog and splash protection
- \_ Panel and flush mount possibility



### Concept

|              |   |
|--------------|---|
| Housing      | Polycarbonat (PC)   |
| Bezel        | PC (black, white) or ABS (chrome); several colors and shapes (see accessories table)              |
| Lens         | PMMA; double lens   |
| Dial         | backlit, different colors (black, white)  |
| Pointer      | backlit, white on black dials; red on white dials   |
| Illumination | backlit<br>Dial: LED amber (605nm)<br>Pointer: LED red (632nm)                                    |
| Warning LED  | red (632nm)   |
| Mounting     | Spinlock Nut; locking height 0.5mm – 20mm,<br>Optional Studs and Bracket; locking height 2 – 15mm |
| Connection   | 8 pin MQS connector system  |
| Sensor:      | VDO sensors N02-240-402, N02-240-404, N02-240-406   |

| Technical Data  |  |   |
|---|--|---|
| Installation depth  | 50mm   |   |
| Installation diameter                                     | 52mm   |   |
| Deflection angle  | 90°  |   |
| Operating Voltage   | 10 – 32 Volt   |   |
| Accuracy  | < 3.6 angular degrees at 13.0 Volt   |   |
| Current consumption                                       | < 60 mA, incl. Warn LED  |   |
| Operating temperature                                     | -30°C to +80°C; plated bezels (chrome) -30°C to +70°C  |   |
| Storage temperature                                       | -30°C to +80°C for 48h; plated bezels (chrome) -30°C to +70°C  |   |
| Temperature shock   | Range<br>Transformation time<br>Retention time   | -40°C to +85°C; plated bezels (chrome) -40°C to +70°C<br>10 seconds<br>2h |
| Climatic test   | Range<br>Rel. Humidity   | +25°C to +55°C<br>95%   |
| EMC in conformity with<br>(Electromagnetic compatibility) | DIN_EN 61000-6-2<br>DIN_EN 61000-6-3   |   |
| Standards   | CE   |   |
| Vibration   | Sinus 2g; 10-500Hz; duration 16h<br>Noise 3g; 10-1000Hz, duration 8h   |   |
| Mechanical shock  | continuous<br>Single shock<br>Free fall  | 25g; 6ms; 1Hz<br>100g; 11ms<br>1m; 3 times                                |
| Chemical resistance against                               | <ul style="list-style-type: none"> <li>- preservative agent</li> <li>- preservative agent remover</li> <li>- cold cleaner</li> <li>- methylated spirit</li> <li>- interior cleaner</li> <li>- drinks containing caffeine and tannin</li> </ul> |   |
| Nominal position  | NL 0 to NL 85 (DIN16257)   |   |
| Protection class  | according to IEC 60529<br>Front: IP67 (in nominal position)<br>Rear: IP52 (in nominal position)  |   |
| Reverse polarity protection                               | yes, 5 minute  |   |
| Over voltage protection                                   | yes, 1 minute  |   |

## Available Gauges:

| No. unpacked* | Dial color | Measurement range outer |     | Measurement range inner |     | ISO Symbol | Sensor resistance range |
|---------------|------------|-------------------------|-----|-------------------------|-----|------------|-------------------------|
|               |            | Min                     | Max | Min                     | Max |            |                         |
| A2C31401700   | black      | 0                       | 1/1 | non                     | non | Water      | 4 - 20 mA               |
| A2C31402000   | white      | 0                       | 1/1 | non                     | non | Water      | 4 - 20 mA               |

\* "No. unpacked" is not a order number.

## Accessories:

|                    |  |
|--------------------|--|
| A2C59510854        | VL Mounting Kit (studs and brackets) 52, 85, 110mm     |
| A2C53007398        | Fastening nut  |
| A2C59510864        | VL Mounting bracket flush mount                        |
| A2C53215640        | VL Sealing Ring 52mm flush mount                       |
| A2C59510847        | Bush housing, 8-pin                                    |
| A2C53324664        | Protective connector cap, 8-pin                        |
| Tyco No. 539635-1  | Hand pliers  |
| Tyco No. 539682-2  | Tool for hand pliers.                                  |
| Tyco No. 1355718-1 | Single contacts 0.14 – 0.22 mm <sup>2</sup> tin plated |
| Tyco No. 963729-1  | Single contacts 0.5 – 0.75 mm <sup>2</sup> tin plated  |
| Tyco No. 1355717-1 | Strip 0.14 – 0.22 mm <sup>2</sup> tin plated           |
| Tyco No. 928999-1  | Strip 0.25 – 0.5 mm <sup>2</sup> tin plated            |
| Tyco No. 963715-1  | Strip 0.5 – 0.75 mm <sup>2</sup> tin plated            |

## Bezels 52mm

|          | Black       | Chrome      | White       |
|----------|-------------|-------------|-------------|
| Flat     | A2C53186040 | A2C53186023 | A2C53186022 |
| Round    | A2C53186027 | A2C53186029 | A2C53186028 |
| Triangle | A2C53186024 | A2C53186026 | A2C53186025 |