# VRI10-I
## 4-20 mA REMOTE INDICATOR AND TOTALIZER

- ✓ **Accuracy**
  **± 0,2% of Calibrated Span**

- ✓ **4 – 20 mA Loop Power**

- ✓ **1 or 2 Channels**

- ✓ **Copy Function of Settings from a Channel to the other**

- ✓ **Configuration via Local Adjustment by Magnetic Tool**

- ✓ **Low Power**

- ✓ **Open Loop Self-Diagnosis**

- ✓ **Linear and Square Root Function**

- ✓ **Units of Pressure, Temperature, Flow, Level, Density and User Configuration**

- ✓ **Five Digits, Rotary, Multifunctional with Bargraph LCD**

- ✓ **Factory Restore**

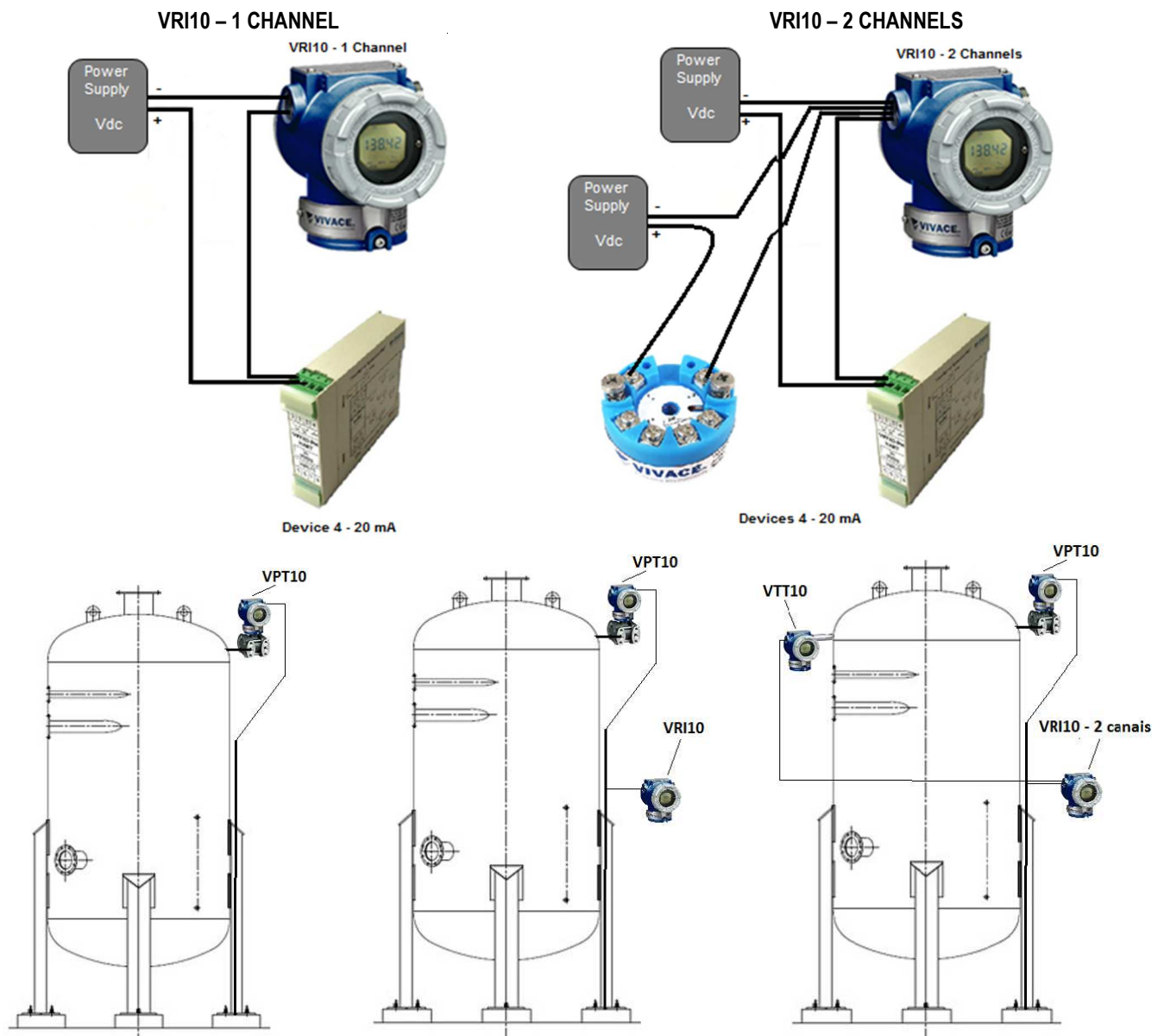- ✓ **Operation Temperature**
  **-40 °C to 85 °C**

## DESCRIPTION

**VRI10-I** is 4 – 20 mA Remote Indicator of two-channels suitable for working with any equipment 4 to 20 mA that need remote indication of the measured variable. So equipment that do not have LCD display, are installed in area of difficult access or far from users it can be connected to VRI10-I in order to have their variable monitored in a favorable location.

VRI10-I can protect the operator where the equipment to be monitored is installed in high places or in hazardous areas. Also, it requires no external power supply since it uses the 4 - 20 mA loop as power supply being 3.6 mA the minimum operating current.

Channel one of VRI10-I is connected in series between the 24 Vdc power supply and the equipment that generates 4-20 mA, which is desired to read the value of the output signal. Channel 2, if used, is connected in series between another power supply 24 Vdc and the second device to read its output signal. See below the connection diagrams of the VRI10-I of one channel and two channels. Through the copy function, it is possible to copy channel 1 settings to the channel 2 and vice versa.

## CONNECTION



VRI10 – 1 CHANNEL

VRI10 – 2 CHANNELS

In some cases the place where a 4 – 20 mA device is installed is inaccessible or difficult to be reached by the operator. In this case VRI10-I Remote Indicator facilitates monitored variable visualization.

## TECHNICAL AND PHYSICAL SPECIFICATIONS

| | |
|---|---|
| Accuracy | ± 0.2% of Calibrated Span |
| Power Supply | 4-20 mA (via current loop) |
| Resolution | ± 0.02% |
| Indication | Five Digits, Rotary, Multifunctional with Bargraph LCD |
| Options of Indication | Linear and Square Root |
| Voltage Drop | 1.0 Vdc (maximum) |
| Operation Temperature | - 40 °C to 85°C |
| Configuration | Local Adjust with Magnetic Tool |
| Hazardous Area Certification | Explosion Proof and Intrinsically Safe |
| Protection Degree | IP67 |
| Indication Channels | 1 or 2 Channels (copy function from one to the other channel) |
| Housing Material | Aluminum with Polyester Painting |
| Gaskets | Buna – N |
| Approximate Weight (with bracket) | 1.8 Kg |

## ORDERING CODE

### VRI10   *Remote Indicator*

| Communication Protocol | I | 4 – 20 mA | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | P | PROFIBUS-PA | | | | | | | |
| Channels | | 0 | NOT APPLICABLE (ONLY PROFIBUS) | | | | | | |
| | | 1 | ONE CHANNEL (ONLY 4 – 20 mA) | | | | | | |
| | | 2 | TWO CHANNELS (ONLY 4 – 20 mA) | | | | | | |
| Certification Type | | | 0 | NO CERTIFICATION | | | | | |
| | | | 1 | INTRINSICALLY SAFE | | | | | |
| | | | 2 | EXPLOSION PROOF | | | | | |
| Certification Body | | | | 0 | NO CERTIFICATION | | | | |
| | | | | 1 | INMETRO | | | | |
| Housing Material | | | | | A | ALUMINUM | | | |
| Electrical Connection | | | | | | 1 | ½ – 14 NPT | | |
| Painting | | | | | | | 1 | BLUE – RAL 5005 | |
| Mounting Bracket | | | | | | | | 0 | NO BRACKET |
| | | | | | | | | 1 | SS 304 BRACKET |

Ordering Code Example:

| VRI10 | - | I | 1 | - | 0 | 0 | A | 1 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|

*Explosion Proof Certification Ex tb (dust ignition) and Ex db (flame)