

# **VTP10-P** PROFIBUS-PA POSITION TRANSMITTER



- ✓ Profibus-PA Communication Protocol
- ✓ No Polarity 9 to 32 Vdc Power Supply
- ✓ Analog Input (AI) and Totalizer (TOT) Functional Blocks
- ✓ Magnetic Sensor with no Mechanical Contact
- ✓ 5-digit, rotative, multi-function LCD including bargraph
- ✓ Preditive Maintenance Diagnosis
- ✓ Position Histogram
- ✓ Configurable Measurement Unit
- ✓ Operating Temperature -40 to 85 °C
- ✓ Support to EDDL and FDT/DTM Programmers/Tools

#### DESCRIPTION

Profibus-PA position transmitter **VTP10-P** integrates *Vivace Process Instruments* field device family, being developed to monitor linear and rotative length systems, such as valve actuators.

The transmitter can be powered by a 9 to 32 Vdc power supply, using Profibus-PA protocol to configuration, calibration, monitoring and diagnostics. VTP10-P generates a position proportional value and exports it through Analog Input Block (AI) to Profibus-PA systems, allowing movement totalization through Totalizer Block (TOT).

The measurement sensor used on VTP10-P has no mechanical contact with the installed system whats so ever, since it works on magnetic field effect, which guarantees high precision and immunity to mechanical variations. Easy to install and to initialize, the transmitter also measures ambient temperature and executes several diagnostics for system preditive maintenance, such as reversal, strokes and mileage counters, and position histogram.

The configuration uses Profibus-PA communication protocol, via Android or EDDL and FDT/DTM tools to configure measurement scales, work units and calibration, also monitoring the measuring values e device status. User can also execute configuratons via local adjustment using a magnetic screwdriver.

#### INSTALLATION EXAMPLES

#### TECHNICAL AND PHYSICAL SPECIFICATIONS

| Precision                                  | $\pm 0.05\%$ (Full Scale, not considering non-linearity and hysteresis effects).   |  |  |  |
|--|--|--|--|--|
| Power Supply / Quiescent Current           | No polarity, 9 to 32 Vdc / 12 mA   |  |  |  |
| Communication Protocol / Functional Blocks | Profibus PA, according to IEC 61158-2 (H1), voltage mode 31.25 Kbits/s bus powered / 2 Functional Blocks: Analog Input (AI) and Totalizer (TOT). |  |  |  |
| Classified Areas                           | Explosion Proof and Intrinsically Safe   |  |  |  |
| Environment Temperature Limits             | - 40 to 85°C   |  |  |  |
| Configuration                              | Local Adjust, EDDL, FDT/DTM, PALM and Android® Tools   |  |  |  |
| Indication                                 | 5-digit, rotative, multifunctional LCD display.  |  |  |  |
| Mounting                                   | On field, with bracket for 2" tube.  |  |  |  |
|  | Remote sensor mounting is optional.  |  |  |  |
| Measurement                                | Hall Effect Magnetic Sensor.   |  |  |  |
|  | Linear: 0 to 100 mm / Rotative: 0° to 120° (minimum span 10 mm or 5°)  |  |  |  |
| Protection Degree                          | IP67   |  |  |  |
| Housing Material                           | Aluminum   |  |  |  |
| Weight without Bracket                     | 1.5 Kg   |  |  |  |

### **ORDERING CODE**

## VTP10 Position Transmitter

| Communication Protocol | Η   |                  |                  |                              |                                  |                   |                           |      |                               |
|------------------------|-----|------------------|------------------|------------------------------|----------------------------------|-------------------|---------------------------|------|-------------------------------|
|                        | P   | PR               | OFIB             | US                           |                                  |                   |                           |      |                               |
| Sensor Type            |     | 0<br>1<br>2<br>3 | RE<br>RE         | ANDA<br>Mote<br>Mote<br>Mote | E 05 M<br>E 10 M                 | 1                 |                           |      |                               |
| MovementType           |     |                  | 0<br>1<br>2<br>3 | LIN<br>LIN                   | TATIN<br>EAR (<br>EAR 4<br>EAR 7 | ) - 40<br>10 - 7( |                           | 1    |                               |
| CertificationType      |     |                  |                  | 0<br>1<br>2                  | INT                              | RINS              | TIFIC<br>SICALL<br>SION P | Y SA | \FE                           |
| Certification Body     |     |                  |                  |                              | 0                                |                   | D CER<br>METF             |      | CATION                        |
| HousingMaterial        |     |                  |                  |                              |                                  | A                 | AL                        | UMIN | NUM                           |
| Electrical Connection  |     |                  |                  |                              |                                  |                   | 1                         | 1/2  | – 14 NPT                      |
| Painting               |     |                  |                  |                              |                                  |                   |                           | 1    | BLUE – RAL 5005               |
| MountingBracket        |     |                  |                  |                              |                                  |                   |                           |      | 0 NO BRACKET 1 SS 304 BRACKET |
| Ordering Code Example: |     |                  |                  |                              |                                  |                   |                           |      |                               |
| VTP10-                 | P - | - 0              | 0                | 0                            | 0                                | Α                 | 1                         | 1    | 0                             |



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