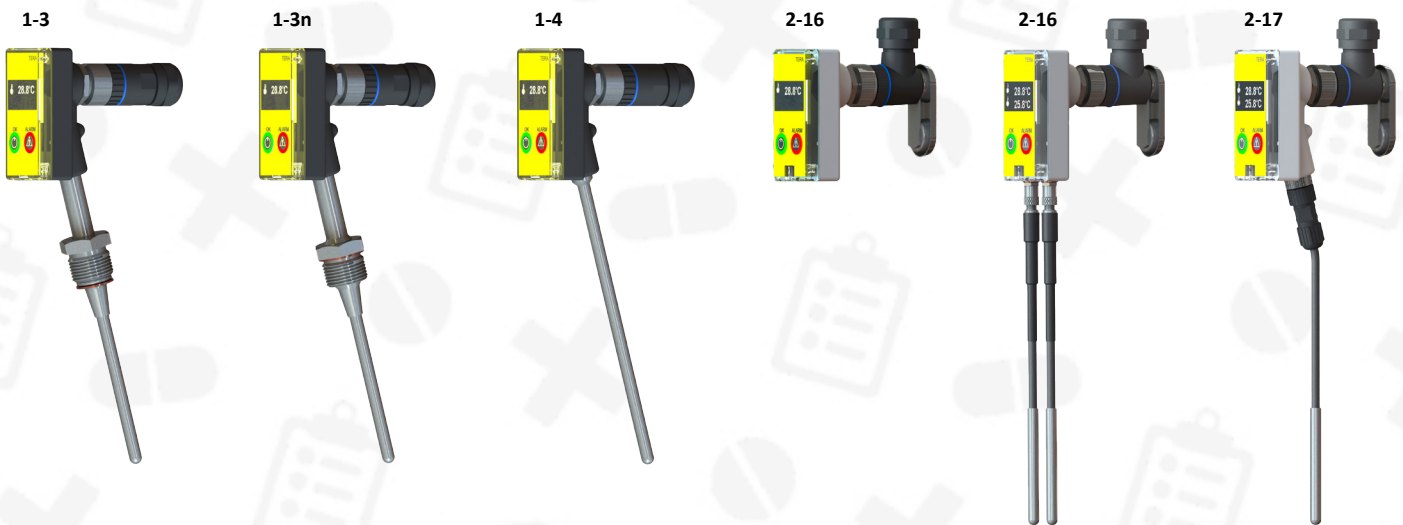


Y-CASE TEMPERATURE TRANSDUCERS



Y-Case Temperature Transducers RS485 use RS485 interface for data transfer. This wired interface allows to connect consistently up to 30 probes using single cable line. The probe connects to RS485 by 5-wired scheme. For networking it's using FTP 5e cables. RS485 connection is implemented by sealed thread M12 connector with internal terminal block (no soldering needed). It allows to dismount the probe easily, when it needs verification or calibration.

The probe provides with junction box CP-06 and its power supply. Probe's power supply is mounted inside of CP-06, as well as the terminal block for easy arrangement of RS485 input and output cables. The high contrast screen is using for data display, that informs current measuring value by every channel, serial number and RS485 settings. It's available to order 2-17 model with several sensors: besides of mounted temperature sensor, a customer may order one external probe Pt1000 or XA, that connects to the probe by sealed thread M8 connector. 2-16 model allows to have two external probes Pt1000, that connects by non-sealed thread M5 connector. 2-16 and 2-17 models provide with magnet and mounting board with screws to mount it easily on the vertical surface.

TECHNICAL SPECIFICATIONS

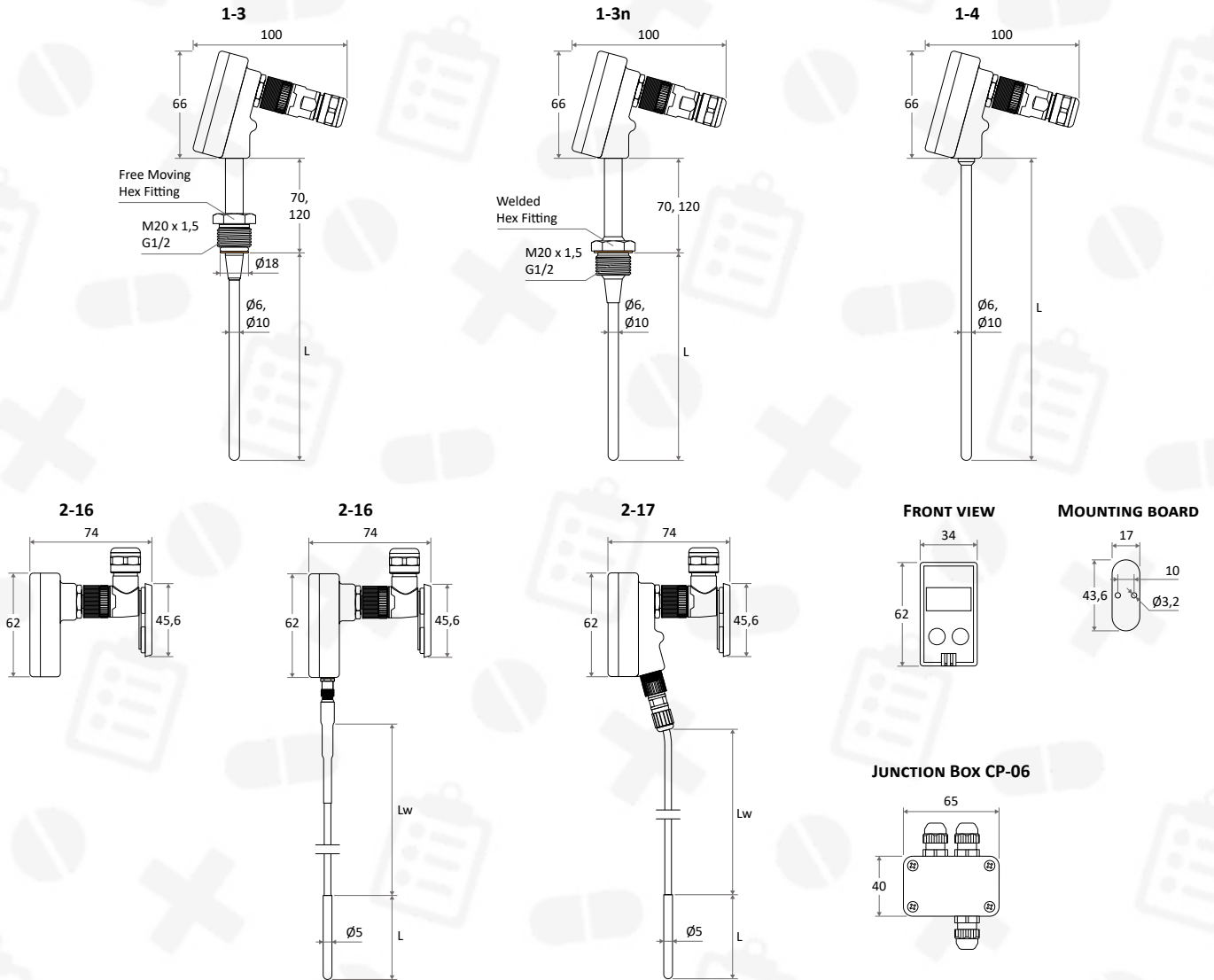
| Model Name | 1-3, 1-3n, 1-4 | | 2-16 | | 2-17 |
|--|--|---|---|---|---|
| Specifications of Transducer | | | | | |
| Number of Channel | 1 | | 1, 2, 3 | | 1, 2 |
| Available channel configuration ¹ | ET | | IT, 2ET, IT+2ET | | ET, IT + ET (Pt1000 / XA) |
| Output Signal | RS485, T-bus Protocol or Modbus RTU | | | | |
| Indication | OLED 0.96", resolution is 128x64 pixels, display by pressing a button | | | | |
| RS485 Connection | Via junction box CP-06 and M12FA or M12FD connector (IP67) | | | | |
| Magnetic Holder | N/A | | Vertical | | |
| Operating Temperature, °C | -30...60 | | | | |
| Specifications of External Temperature Probe | | | | | |
| Sensor Curve | Pt1000 | XA (K) | Pt1000 | Pt1000 | XA (K) |
| Operating Temperature Range, °C | -196...100, -50...100, -50...250, -50...500 | 0...850 | -196...100, -50...100, -50...250, -50...500 | -196...100, -50...100, -50...250, -50...500 | 0...250, 0...500, 0...850, 0...1250 |
| Accuracy, °C | $\pm (0,4 + 0,002 \times T)^2$ | $\pm 2,5$ (up to 375 °C) or $\pm 0,0075 \times T ^2$ (over 375 °C) | $\pm (0,4 + 0,002 \times T)^2$ | | $\pm 2,5$ (up to 375 °C) or $\pm 0,0075 \times T ^2$ (over 375 °C) |
| Transducer Connection | N/A | | M5 (IP52) | M8 (IP67) | |
| Response Time, sec | 15 (Ø6 mm), 25 (Ø10 mm), (water, V=0,2 m/sec) | | | | |
| Thermowell Material | Steel 321 | | | | |
| Hex Fitting M20 x 1,5 | Free Moving (1-3), Welded (1-3n), N/A (1-4) | | Determines by a chosen external probe | | |
| Immersion Length, mm | 80, 100, 120, 160, 200, 250, 320, 400, 500, 630, 800, 1000, 1250, 1600, 2000 | | | | |
| Thermowell Diameter, mm | By default - Ø6 (up to 500 mm), Ø10 (over 500 mm) | | | | |
| Specifications of Internal Temperature Sensor | | | | | |
| Sensor Curve | N/A | | TMP116 | | |
| Operating Temperature Range, °C | N/A | | -30...60 | | |
| Accuracy, °C | N/A | | 0,5 | | |
| Response Time, sec | N/A | | 240 (air, V=0 m/sec) | | |
| Specifications of Junction Box CP-06 | | | | | |
| Input Power Supply | 12-24 V DC | | | | |
| Output Power Supply for Transducer | 5 V DC | | | | |
| RS485 Connection | Via PG7 cable gland using terminal block on junction box microcircuit | | | | |
| Transducer Connection | Using M12FA or M12FD connector (IP67) and FTP 5e cable length by 300 mm | | | | |

¹ - ET - external temperature probe, 2ET - two external temperature probes, IT - internal temperature sensor.

² - T - value of operating temperature, that accuracy is calculating for.

Y-CASE TEMPERATURE TRANSDUCERS

DIMENSIONS



FEATURES



High contrast display



Junction box with a magnetic holder



External temperature probe with a connector



Internal humidity & temperature sensor in transducer's case



Vertical magnetic holder with a mounting board

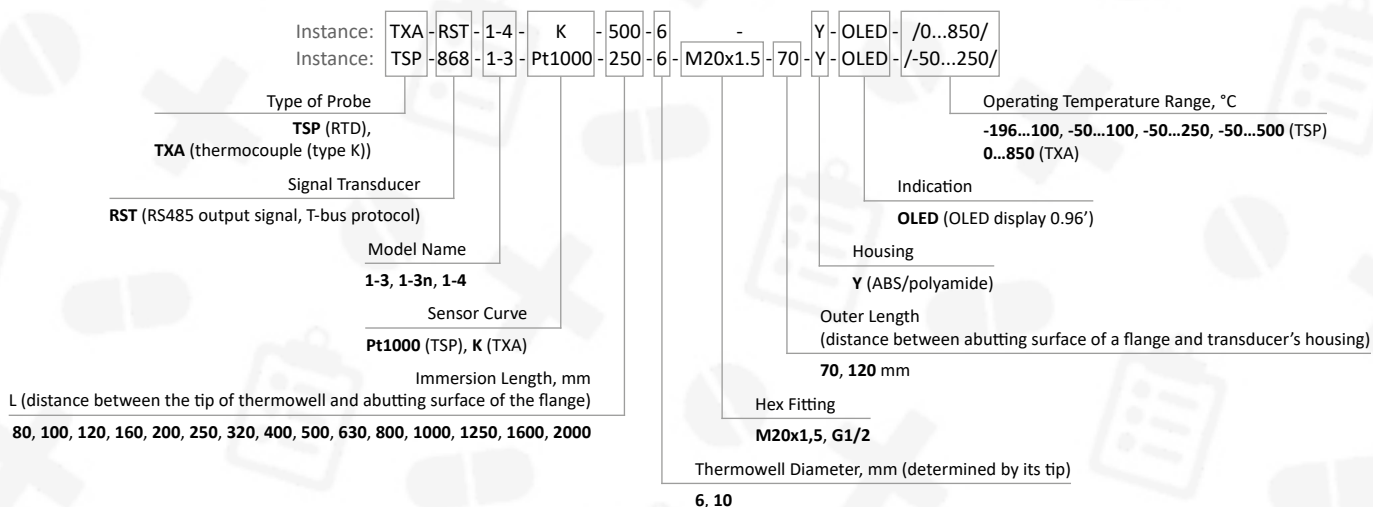


M12 connector for quick RS485 connection with a transducer

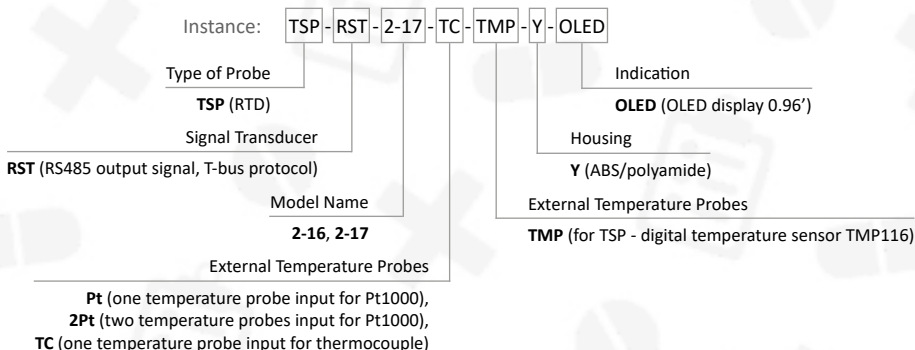
Y-CASE TEMPERATURE TRANSDUCERS

ORDER INFO

Order info for 1-3, 1-3n, 1-4



Order Info for 2-16, 2-17



Order Info for External Temperature Probe for 2-16, 2-17

Instance: TSP - 1-11 - Pt1000 - B - 2 - 120 - 4 - M12x1.5 - 2000 - RE - M8 - /-50...250/
 Instance: TXA - 1-26 - K - 1 - I - 2500 - 6 - INC - 5000 - RE - M8 - /-0...1100/
 Instance: TSP - 2-8 - Pt1000 - B - 2 - - 4000 - RE - M5 - /-50...250/
 Instance: TSP - 1-6 - Pt1000 - A - 2 - 80 - 5 - - 8000 - RE - M12 - /-50...250/

An order of external probe is determined by using an instance of order info of chosen transducer's series presented in category "Temperature Probes". Any of our probes may serve as an external probe with RE cable and Pt1000 / XA (type K) sensor. The following should be specified in the order info before operating temperature range:

- For the model 2-16 with two 2Pt OUTs – IP52 a M5 (male, straight) connector for a cable: **M5**
- For the model 2-17 with Pt OUT or TC OUT – IP67 a M8 (male, straight) connector for a cable: **M8**

Order Info for a Junction Box

Instance: CP - 06 - H3 - 5B - MK