## 10000 PROXIMITY PROBES & CABLES FOR 3000 SERIES

### **Datasheet**

#### **OVERVIEW**

Metrix Proximity Probes are offered for the installed base of the older 3000 series transducers, which have "system lengths" in feet not meters and must match the driver "system length". However, the proximity probes and cables are measured in inches. The proximity probe physical length in inches is doubled and matched to the extension cable for the "system length."

All proximity probes/transducers have third party approvals, comply with API 670 specifications, and feature ProxMatch component coding and are ATEX approved.

#### PROXIMITY PROBES & EXTENSION CABLES SELECTION

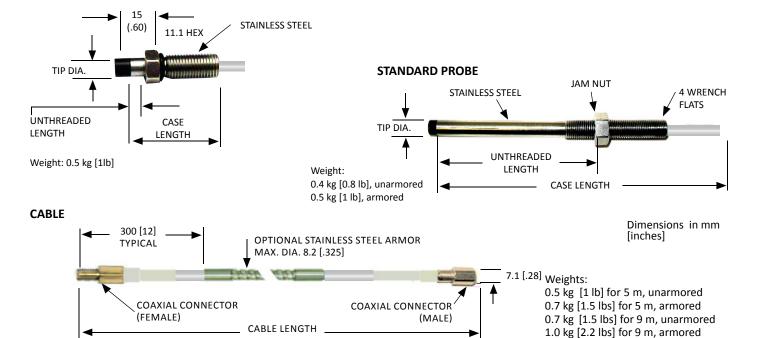
- Select a probe to suit the mechanical requirements of the machine and mates with the same series extension cable and driver, or transmitter.
- 2. Pick an Extension Cable from SAME SERIES as probe and electronics.
- 3. Given the probe length, pick a cable length so the sum of probe and cable add up to the system length.
- 4. Choose with or without armor.

#### **SPECIFICATIONS**

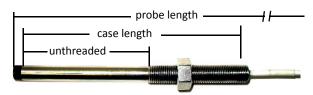
| Probe Tip Material                           | Ryton                                                                                                                                                                                              |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Probe Case Material                          | Series 300 SS for forward mount, smooth case and reverse mount probes                                                                                                                              |
| Probe Cable Specs                            | Coaxial cable with Tefzel insulation for maximum abrasion resistance with ProxMatch color & alphanumeric coding specific to a series and system length.                                            |
| Cable Impedance                              | 50 Ω                                                                                                                                                                                               |
| Connector to Connector<br>Torque             | Hex connector to hex connector- finger tight and 1/8 turn with wrenches. Hex connector to "click type" connector- finger tight plus 1/8 turn with wrench & pliers                                  |
| Tensile Strength                             | 75 lbf. probe case to probe lead. 60 lbf. probe pigtail to connector and 60 lbf. connectors to extenstion cable.                                                                                   |
| Probe / Cable Armor                          | Series 300 SS, flexible, connected to probe body with case internal thread.                                                                                                                        |
| Minimum Bend Radius                          | 1 inch without armor                                                                                                                                                                               |
| Target Material                              | 4140 steel (standard)                                                                                                                                                                              |
| Probe & Extension Cable<br>Temperature Range | -40°C to +177°C (-40°F to +351°F)                                                                                                                                                                  |
| Probe Pressure                               | Standard probe design includes seal between probe tip and case and is not pressure tested before shipment. If pressures are present, contact the factory for possible high pressure probe designs. |
| Relative Humidity                            | 100% condensing but not submersible and with connectors properly protected.                                                                                                                        |
| <b>Connector Material</b>                    | Gold plated brass hex connectors                                                                                                                                                                   |

### **WEIGHT & DIMENSIONS**

## **REVERSE MOUNT PROBE**



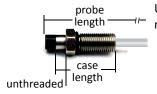




# ORDERING INFORMATION

| STANDARD PROXIMITY PROBE 100XX-AA-BB-CC-02 |              |              |                                                                 |                                                                                                             |                                                                                                              |       |  |  |
|--------------------------------------------|--------------|--------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------|--|--|
| Model No.                                  | Tip Diameter | Case Threads | Unthreaded Length<br>AA                                         | Case Length<br>BB                                                                                           | Probe Length<br>CC                                                                                           | Armor |  |  |
| 10009                                      | 0.190"       | 1/4"-28      | Increments of 0.5 in. 0                                         | 10=1 in. (min)<br>05= 0.05 in. (delta)<br>30= 3 in. (standard)<br>95= 9.5 in. (max)<br>Even increments only | 06 = 6<br>12 = 12<br>18 = 18<br>24 = 24<br>30 = 30<br>36 = 36<br>Must exceed case<br>length by 4.75 in. min. | No    |  |  |
| 10010                                      | 0.190        | 1/4 -28      |                                                                 |                                                                                                             |                                                                                                              | Yes   |  |  |
| 10014                                      | 0.300"       | 2/0" 24      | case length<br>minus 1 in.                                      |                                                                                                             |                                                                                                              | No    |  |  |
| 10015                                      | 0.300        | 3/8"-24      |                                                                 |                                                                                                             |                                                                                                              | Yes   |  |  |
| 10012                                      | 0.190"       | 0.190" M8X1  | Increments of<br>10 mm.<br>Maximum=<br>case length minus 20 mm. | 02= 20mm. (min)<br>07= 70mm. (standard)<br>25= 250mm. (max)                                                 |                                                                                                              | No    |  |  |
| 10013                                      | 0.190        | INOVI        |                                                                 |                                                                                                             |                                                                                                              | Yes   |  |  |
| 10017                                      | 0.300" M1    | M10X1        |                                                                 |                                                                                                             |                                                                                                              | No    |  |  |
| 10018                                      |              |              |                                                                 |                                                                                                             |                                                                                                              | Yes   |  |  |
| 10027*                                     | 0.300"       | 3/8"-24      | 02= 0.2 in.                                                     | 12= 1.2 in.                                                                                                 |                                                                                                              | No    |  |  |

<sup>\*</sup>Reverse Mount



Use a standard straight-through threaded probe or the reverse mounted probe and "stinger" depending on availability of the target.

Model 5499 IS REQUIRED for mounting reverse mount probes



| EXTENSION CABLE FOR 3000 SERIES<br>7386-01/2789 - AAA (no armor) or 7386-01/4454 - AAA (armored) |                                        |                                      |  |  |  |  |
|--------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|--|--|--|--|
| Probe length                                                                                     | Cable length for 15 ft. systems<br>AAA | Cable length for 20 ft. systems  AAA |  |  |  |  |
| 6 in.                                                                                            | 168 in.                                | 228 in.                              |  |  |  |  |
| 12 in.                                                                                           | 156 in.                                | 216 in.                              |  |  |  |  |
| 18 in.                                                                                           | 144 in.                                | 204 in.                              |  |  |  |  |
| 24 in.                                                                                           | 132 in.                                | 192 in.                              |  |  |  |  |
| 30 in.                                                                                           | 120 in.                                | 180 in.                              |  |  |  |  |
| 36 in.                                                                                           | 108 in.                                | 168 in.                              |  |  |  |  |



For probe lengths not listed, double the probe's desired physical length in inches and substract from 180 in. for a 15 ft. system or from 240 in. for a 20 ft. system to get the correct extension cable length.

#### **Example transducer configuration**

Given: A 20 foot system, 3.0 in. case length 3/8-24 probe (0.300 tip dia.,30 inches long, 0 in. unthreaded, no armor on probe, armored cable, driver w/DIN mount. Use:

Probe: 10014-00-00-30-30-02 Extension cable: 7386-01/4454-180

