

## Instrumentation Cable



### Description

Syscor's sensor probes are manufactured with instrumentation cable specifically designed and certified for applications in the petroleum industry. The robust, chemically resistant insulation protects from extreme environmental conditions and UV radiation. In addition, the cable is shielded to reject electromagnetic interference.

### Specifications

| Construction   |                                                                                                                                                                                                           |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component 1    | 4 x 1 COND                                                                                                                                                                                                |
| Conductor      | 20 (7/28) AWG Tinned Copper                                                                                                                                                                               |
| Insulation     | 0.016 inch. Wall, Nom. TPE                                                                                                                                                                                |
| Colour Code    | Black, Red, White, Green                                                                                                                                                                                  |
| Cable Assembly | 4 Components Cabled                                                                                                                                                                                       |
| Twists         | 6.0 Twists/foot (min.)                                                                                                                                                                                    |
| Orientation    | Arranged from inside layer to outside layer                                                                                                                                                               |
| Core Wrap      | Nonwoven Polyester Tape, 25% overlap, min.                                                                                                                                                                |
| Shield         | Alum/Mylar Tape, 25% overlap, min.                                                                                                                                                                        |
| Foil Direction | Foil Facing In                                                                                                                                                                                            |
| Drain Wire     | 20 (7/28) AWG Tinned Copper                                                                                                                                                                               |
| Jacket         | 0.045 in. Wall, Nom. TPE                                                                                                                                                                                  |
| Color(s)       | Black                                                                                                                                                                                                     |
| Ripcord        | 1 End 810 Denier Nylon                                                                                                                                                                                    |
| Label          | ALPHA WIRE-* P/N 45464 4C 20 AWG XTRAGUARD(R) 4 (UL) TYPE PLTC 105C SUN RES OR AWM 20237/21918 125C 300 V OR CRU AWM I/II A/B 125C 300 V FT1 P-07-KA140023-MSHA CE ROHS (SEQ FOOTAGE)<br>* = Factory Code |

### Physical and Mechanical Properties

|               |                     |
|---------------|---------------------|
| Temp. Range   | -50 to 125°C        |
| Bend Radius   | 10 X cable diameter |
| Pull Tension  | 44 lbs. max.        |
| Sunlight Res. | Yes                 |

### Electrical Properties

|                |                                |
|----------------|--------------------------------|
| Voltage Rating | 300 V <sub>RMS</sub>           |
| Conductor DCR  | 10.2 Ω/1000ft. @ 20°C, Nominal |
| OA Shield DCR  | 8.2 Ω/1000ft. @ 20°C, Nominal  |

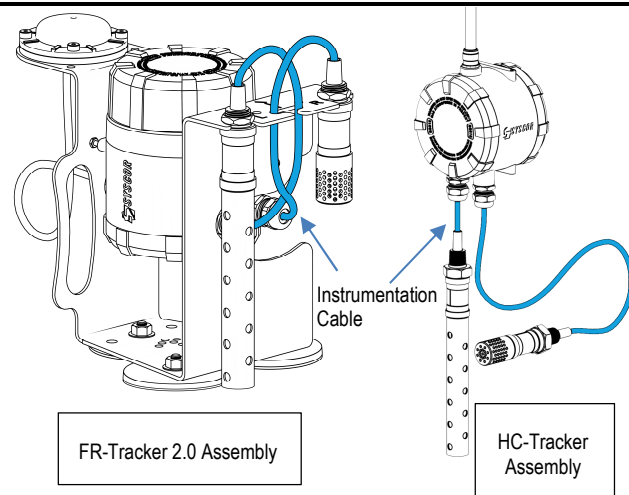
### Certification

|                   |                                                     |
|-------------------|-----------------------------------------------------|
| UL                | AWM/STYLE 20237 125°C / 300 V <sub>RMS</sub>        |
|                   | PLTC 105°C                                          |
|                   | AWM/STYLE 21918 125°C / 300 V <sub>RMS</sub>        |
| CSA International | SUN RES                                             |
|                   | C(RU) AWM I/II A/B FT1 125°C / 300 V <sub>RMS</sub> |
| Other             | PENNSYLVANIA BUREAU OF MINE SAFETY APPROVED         |
| CE                | EU Low Voltage Directive 2014/35/EC                 |

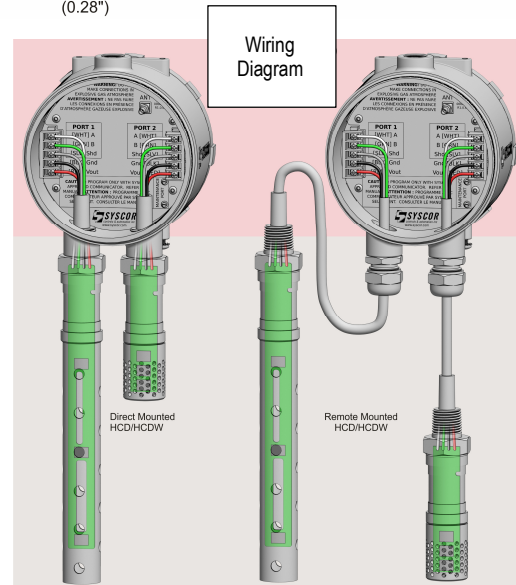
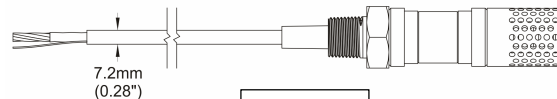
### Environmental

|        |                                                                       |
|--------|-----------------------------------------------------------------------|
| Europe | CE: EU Directive 2011/65/EU (RoHS2), EU Directive 2015/863/EU (RoHS3) |
|        | REACH Regulation (EC 1907/2006)                                       |
| USA    | California Proposition 65                                             |

\*\*If one sensor probe is used, total cable length for Intrinsically Safe operation cannot exceed 10.05m (33ft.). If two sensor probes are used, total combined cable length for Intrinsically Safe operation cannot exceed 10.05m (33ft.).



Cable length can be up to 10058.4mm (396") terminal to terminal\*\*



### Learn More

|                                                           |                                                                                                                                                         |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| PCU-X01 Sensor Hub                                        | <a href="http://www.syscor.com/downloads/PCU01DDS_WiHART-Sensor_Hub_2.1.0.pdf">http://www.syscor.com/downloads/PCU01DDS_WiHART-Sensor_Hub_2.1.0.pdf</a> |
| PCU-X11 Inclinator                                        | <a href="https://syscor.com/downloads/PCU01DDS_WiHART-Inclinator_2.1.0.pdf">https://syscor.com/downloads/PCU01DDS_WiHART-Inclinator_2.1.0.pdf</a>       |
| Hydrocarbon Detector with Water Level (HCDW) Sensor Probe | <a href="https://www.syscor.com/downloads/HCDW01DDS_HDCW-Sensor_2.1.0.pdf">https://www.syscor.com/downloads/HCDW01DDS_HDCW-Sensor_2.1.0.pdf</a>         |
| Hydrocarbon Detector (HCD) Sensor Probe                   | <a href="https://www.syscor.com/downloads/HCD01DDS_HCD-Sensor_2.1.0.pdf">https://www.syscor.com/downloads/HCD01DDS_HCD-Sensor_2.1.0.pdf</a>             |
| Instrumentation Cable                                     | <a href="https://www.syscor.com/downloads/CBL01DDS_4x1-Cable_2.1.0.pdf">https://www.syscor.com/downloads/CBL01DDS_4x1-Cable_2.1.0.pdf</a>               |