Section 1 - Field Wireable Connector Assembly

1. Insert cable through Pressing Screw, Compression Ring, Seal Grommet, and Sleeve as shown below.

2. Strip back 1-1/4" of outer sheathing, cut off any excess wires, shield and ground. Strip off 1/4" insulation from remaining four wires. It is not necessary or recommended to tin the wires.

3. Orient Connector end so that center pin connecting screw is horizontal facing right (see detail).

4. Refer to pin detail.
   4A - Wiring for full (immersed) indication:
   Wire PWR+ to top right terminal (Pin 1) and PWR- wire to bottom left (Pin 3). Wire output to bottom right (Pin 4).
   4B - Wiring for empty (not immersed) indication:
   Wire PWR- to top right terminal (Pin 1) and PWR+ to bottom left (Pin 3). Wire output to bottom right (Pin 4).

5. Screw on the Sleeve. Hand-tighten only.

6. Press the Seal Grommet into the Sleeve and hand-tighten the Pressing Screw against the compression ring.

7. Use a wrench to tighten the Pressing Screw another 3/4 turn. Do not over-tighten!

CABLE REQUIREMENTS
3 conductor, stranded, 18-24 AWG, shielded with ground.
4-8mm (0.16-0.31") Cable Sheath OD.

Section 2 - Installation

Select Switch Action:
- Switch action is determined by power supply polarity. If field wireable connector is used see instruction 4 in section 1 for wiring instructions. If assembly cable is purchased connect Red conductor to PWR+ (18-36V) and Green conductor to PWR- for full (immersed) indication. Reverse these for empty (not immersed) indication.

Rotary Switch Output Test & Threshold Adjustment:
1. For installation testing sensor may be set for continuous output:
   Position 0 - output off
   Position 1 - output on

2. Positions 2-9 act as a sensitivity adjustment, position selects a minimum dielectric recognized. Reducing dielectric threshold can help eliminate false readings.
   Position 2 - ≥ Dielectric 20
   Position 3 - ≥ Dielectric 25
   Position 4 - ≥ Dielectric 30
   Position 5 - ≥ Dielectric 35
   Position 6 - ≥ Dielectric 40
   Position 7 - ≥ Dielectric 50
   Position 8 - ≥ Dielectric 60
   Position 9 - ≥ Dielectric 70

Output Circuit:
Standard unit is PNP output see detail for connection
Optional unit is NPN output see detail for connection

Misc:
- Coatings are generally ignored. Coatings of highly conductive media ≥ 30ms/cm may cause errors.
- Foam is generally ignored

To install connector, simply line up key, press into receptacle, and the retaining ring hand-tighten.

*Receptacle pins should be coated with USDA approved dielectric grease to minimize possibility of corrosion.

*Dielectric Grease
P/N: 5662400000

**Polarity determined by desired switch action. See switch action below.
Section 3 - Specification

Operation/Environmental Specifications

Ambient Temperature Limits: 14 - 140°F (-10 - 60°C)
Pressure Rating: 150 PSI (10 BAR) max
Process Temperature Limits: 32 - 212°F (0 - 100°C)
CIP Cleaning: 302°F (150°C) max 60 minutes
Function: Full/empty signal determined by wiring
Response Time: 0.1s
Minimum Dielectric Threshold: Selectable from 20-70

Electrical Specifications

Voltage Required: 18 to 36 Vdc (≤ 20mA)
Power Consumption: 0.6 W Typ. (i.e. 25mA at 24 Vdc)
Signal Output: PNP - Sourcing (active 50mA)
Optional NPN - Sinking (max 50mA)
Signal Transmission Power: ≤ 1mw
Connection: One 3 pin M12 Micro-mini electrical connector (QDR)

Mechanical Specifications

Wetted Materials: 316L Stainless Steel, PEEK
Wetted Finish: Better than Ra=32
Housing Material: 300 series Stainless Steel housing, lid and threaded connection (non contact surfaces)
Enclosure Protection: NEMA 4X, IP69K
Agency Approval: CE compliant; 3-A compliant, Third party verified in accordance with standard 74-03

Visual Indication

Status LED: Red - Probe Immersed
Green - Probe Dry

Warranty: 2 years

ATTENTION: CONNECTOR WIRING

Pin1 - 18-36 VDC VDC Com
Pin3 - VDC Com 18-36 VDC
Pin4 - Switch Output MAX 50 mA
Refer to technical bulletin for Anderson cable color coding

Weight: 2" Tri-Clamp* 1.85 lbs (.84kg)
1.5" Tri-Clamp* 1.65 lbs (.75kg)