

**SPECIFICATIONS:**

Analog I/Os: (See Note 1)

0 - 5 VDC output, 8 - 30 VDC input, 35mA max.

0.5 - 4.5 VDC output, 8 - 30 VDC input, 35mA max.

0 - 10 VDC output, 12 - 30 VDC input, 35mA max.

4 - 20 mA DC output, 18 - 30 VDC input, 60 mA max. (75 C max.)

Measuring Ranges: See range table

Zero and Full Scale: SenSet Adjustable

Linearity Error: ±0.15% of FSO (Full Span Output) typical, ±0.25% max.

Resolution: 0.025% of FSO

Update Rate: 300 Hz nominal

Operating Temperature Range: -20 to 85 C (-40 to 105 C extended temp.)

Temperature coefficient: <±0.015% of FSO/K

Humidity: 95% RH non-condensing

Shock: 1000 g, 11 msec.

Sealing: IEC IP-67

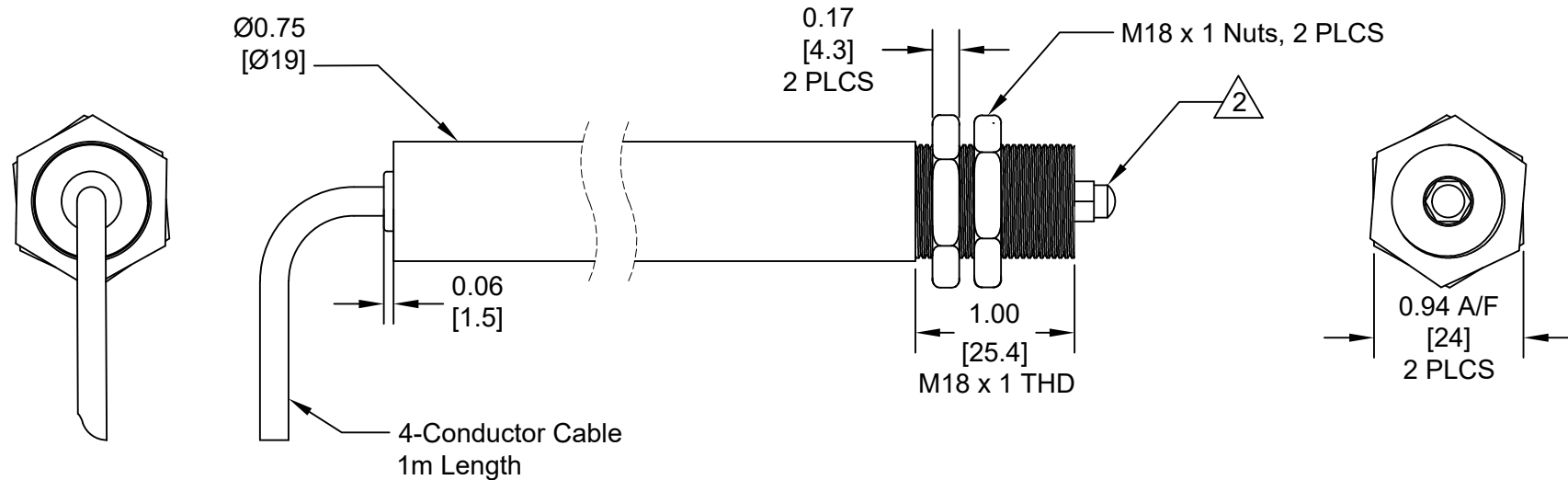
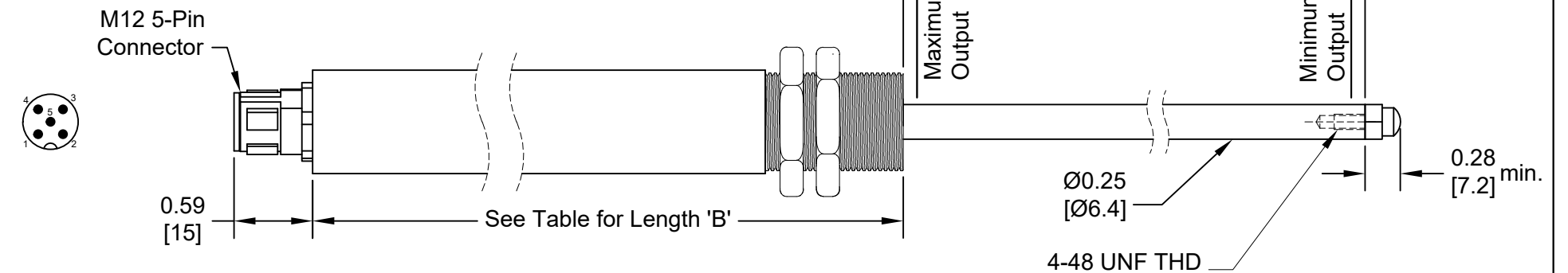
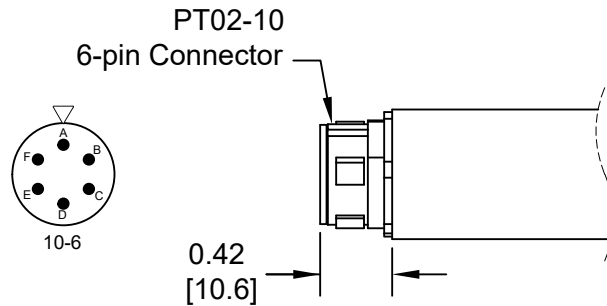
**Notes:**

1. Analog output is maximum with probe retracted; See technical data sheet to specify reversed output.

2. Sensor supplied with AGD #9 contact tip. (4-48 UNF THD)

3. Specifications are subject to change without notice. Please contact Alliance Sensors for the most up to date information.

| REVISIONS |   |          |          |
|-----------|---|----------|----------|
| REV.      | DESCRIPTION   | DATE     | APPROVED |
| --        | Initial Release   | 05-07-15 | EH       |
| A         | Added PT02-10 6-pin connector, updated connection table, added view of M12 5-pin connector, modified Range Table & displayed 4-48 UNF THD | 07-29-15 | EH       |
| B         | Refer: ECN 16-154   | 02-24-16 | EH       |
| C         | Range table modified  | 06-08-16 | EH       |
| D         | M18 x 1 Thread length reduced to 1.00   | 07-26-16 | EH       |



| 'A' Nominal Range | 'B' Body Length | Spring Rate     | Max. Force |
|-------------------|-----------------|-----------------|------------|
| inches [mm]       | inches [mm]     | Lbf/in [kgf/cm] | Lbf [kgf]  |
| 0.5 [12.7]        | 3.50 [88.9]     | 0.75 [0.134]    | 0.9 [0.41] |
| 1.0 [25.4]        | 4.00 [101.6]    | 0.75 [0.134]    | 0.9 [0.41] |
| 2.0 [50.8]        | 5.08 [129.0]    | 0.43 [0.077]    | 1.0 [0.45] |
| 3.0 [76.2]        | 6.16 [156.5]    | 0.30 [0.054]    | 1.0 [0.45] |
| 4.0 [101.6]       | 7.25 [184.1]    | 0.23 [0.041]    | 1.0 [0.45] |

| LRS-18-A Electrical Connections Table |         |             |             |
|---------------------------------------|---------|-------------|-------------|
| I/O Function                          | M12 Pin | PT02-10 Pin | Cable Color |
| +DC Power Input                       | 1       | E           | Red         |
| Common Ground                         | 2       | D           | Black       |
| Voltage Output                        | 3       | A           | Green       |
| Current Output                        | 4       |             |             |
| SenSet™                               | 5       | B           | White       |

|   |               |                      |  |
|---|---------------|----------------------|--|
| UNLESS OTHERWISE SPECIFIED:               |               | CONTRACT NO.         |  |
| 1. DO NOT SCALE DRAWING                   |               | --                   |  |
| 2. DIMENSIONS ARE IN INCHES               |               | DRAWN BY: D McCauley |  |
| 3. INTERPRET DIM/TOL PER ANSI Y14.5M-1994 |               | DATE: 05-07-15       |  |
| 4. DEBURR/BREAK SHARP EDGES               |               | ENGINEER: Ed Herceg  |  |
| 5. DIMS ARE BEFORE FINISH                 |               | CHECKED BY: --       |  |
| 6. (DATA) FOR REFERENCE ONLY              |               | QA: --               |  |
| TOLERANCES                                |               | MFG: --              |  |
| DECIMAL: X ±.020                          | ANGULAR: ±.5° | APPROVED BY: --      |  |
| XX ±.010                                  |               |                      |  |
| XXX ±.005                                 |               |                      |  |
| THIRD ANGLE PROJECTION                    |               |                      |  |

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**LRS-18 Series LVIT, M18 x 1 thread**  
**Outline Drawing**

|  |                |                           |               |
|--|----------------|---------------------------|---------------|
| SIZE: <b>B</b>   | CAGE CODE: N/A | DWG. NO.: 3000-0021-XX-1Y | REV: <b>D</b> |
| FILENAME: 3900-0021-XX-1Y_LRS-18 Series LVIT, M18 x 1 thread_Outline | SCALE: 1:1     | RELEASE DATE: 05-07-15    | SHEET 1 OF 1  |

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