

PRODUCT DESCRIPTION

SPECTEC's RF pickups are active sensors driven by an external RF "carrier" signal conditioner. Together they complete an oscillating circuit. The output of this circuit is amplitude modulated when a ferrous object passes by the pickup coil. This change in modulation of the carrier frequency is then converted into a square wave pulse by the signal conditioner for computing and/or further processing.

RF4 pickups are designed to work with the applicable SPECTEC, Cox F&P, and other carrier signal conditioners.

RF10 pickups work with the applicable SPECTEC, FTI, Hoffer, Sponsler, and other carrier signal conditioners.

An internal temperature probe is available, which is positioned near the face of the sensor. (NTC10, RTD100, or others)

For intrinsically safe versions refer to bulletins: IS70/71 & IS100/101.

SPECIFICATIONS

DC-Coil Resistance/ Inductance: RF4: 4Ω .36mH
 RF10: 12Ω 1.00mh

Operating Freq.: ≥ 0.5 to ≤ 6000 Hz*

Air Gap: Open Face: ≤ .160"* (Sealed epoxy surface, high sensitivity)
 Closed Face: ≤ .130"* (Sealed stainless steel membrane, for harsh environments)
 *Depending on target mass and type of signal conditioner (8HT: 20% loss)

Temperature Range: 3T: -150° to 330°F (-100° to 165°C)
 3T w/NTC: -112° to 300°F (-80° to 150°C)
 3T w/RTD: -150° to 330°F (-100° to 165°C)
 4HT: -250° to 400°F (-157° to 204°C)
 4HT w/RTD: -250° to 400°F (-157° to 204°C)
 5HT: -450° to 450°F (-270° to 232°C)
 5HT w/RTD: -330° to 450°F (-200° to 232°C)
 8HT: -450° to 752°F (-270° to 400°C)
 8HT w/RTD: -328° to 752°F (-200° to 400°C)

Oscillation Voltage: 3-9 Vpp when connected to a 4013/4014 HS type signal conditioner

Connectors: See Page 2 for Configurations
 All have Gold Plated Contacts

Lead Wire: See Page 2 for Wire & Cable Options

Construction: 300 Series Stainless Steel
 Solid Epoxy or Ceramic (8HT)
 Encapsulation
 TFE or Mica (8HT) insulated wires or cables
 See Page 2

CE-Compliance: EN55011, EN50082-2

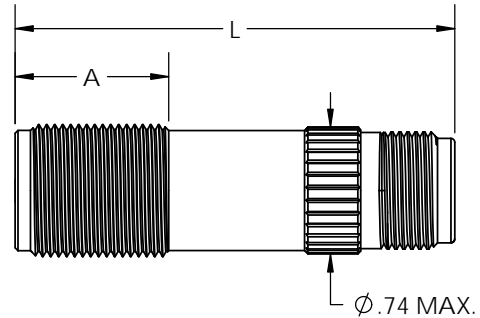
OPTIONS

Custom configurations/enclosures, thread sizes, special materials, or temperature probes. Please contact sales.

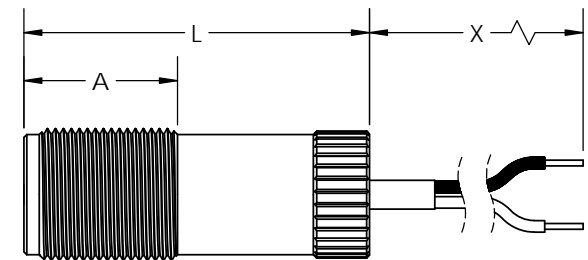
SIGNAL CONDITIONERS

For matching signal conditioners, please refer to SPECTEC's 4010, 4013 & 4014 series.

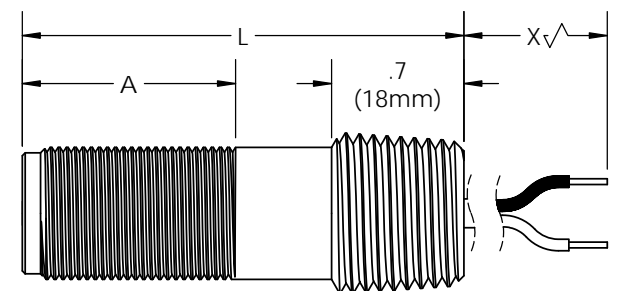
0059 11/16-24 UNEF KNURL STYLE
 0059H 11/16-24 UNEF HEX STYLE



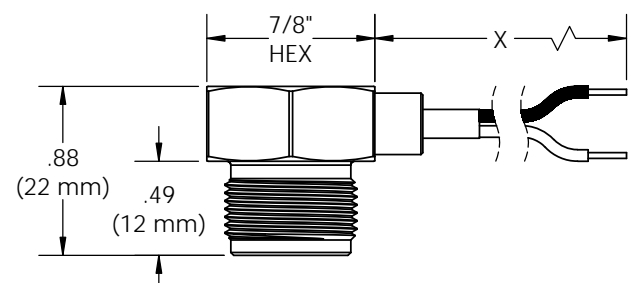
0060 11/16-24 UNEF KNURL STYLE
 0060H 11/16-24 UNEF HEX STYLE



0066 11/16-24 UNEF with 1/2-14 NPT Male



0060R 11/16-24 UNEF with right angle leads



ORDER INFORMATION

STYLE: **OPTIONS:** **THREADS/DIA.:**
0059 - **11/16-24 UNEF KNURL STYLE**
0059H - **11/16-24 UNEF HEX STYLE (11/16 HEX IN PLACE OF KNURL)**

Thread (A) & Housing (L) Length:	A	L
	1 - .75" (20mm)	2.0" (51mm)
	2 - .75" (20mm)	2.3" (58mm)
	3 - 1.3" (28mm)	2.8" (70mm)
	4 - 1.3" (33mm)	3.5" (89mm)

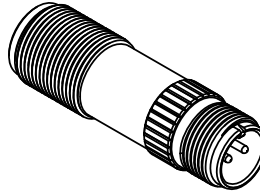
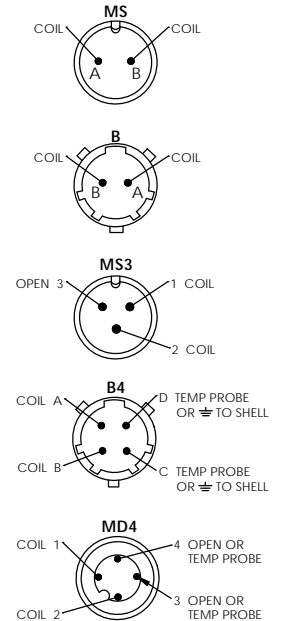
Face: 1 - Epoxy sealed face (for greater sensitivity)
 2 - Stainless steel face (for harsh environments)

Connector: 1 - MS: 2 Pin MS3102-10SL-4P (See Bulletin 3000)
 2 - B: 2 Pin MS3113-H8A2P BAYONET (See Bulletin 3001)
 3 - MS3: 3 Pin MS3102-10SL-3P (See Bulletin 3000)
 4 - B4: 4 Pin MS3113-H8A4P BAYONET (See Bulletin 3001)
 6 - MD4: 4 Pin MICRO DIN M12 (See Bulletin 3005)

Temperature Range: 3 - 3T: -150° to +330°F (-101° to +165°C)
 C - 3T with NTC: -112° to 300°F (-80° to 150°C) – NTC10k Ohm ±1%
 D - 3T with RTD: -150° to +330°F (-101° to +165°C) – RTD100 Ohm, DIN EN 60751 F0.15
 4 - 4HT: -250° to 400°F (-157° to +204°C)
 A - 4HT with RTD: -250° to 400°F (-157° to +204°C) – RTD100 Ohm, DIN EN 60751 F0.15
 5 - 5HT: -450° to +450°F (-268° to +232°C)
 B - 5HT with RTD: -330° to 450°F (-200° to +232°C) – RTD100 Ohm, DIN EN 60751 F0.15
 8 - 8HT: -450° to 750°F (-270° to +400°C)
 E - 8HT with RTD: -328° to 750°F (-200° to +400°C) – RTD100 Ohm, DIN EN 60751 F0.15

RF Type: 1 - RF4: 4.0 Ohm
 3 - RF10: 12.0 Ohm

Connector Pinouts



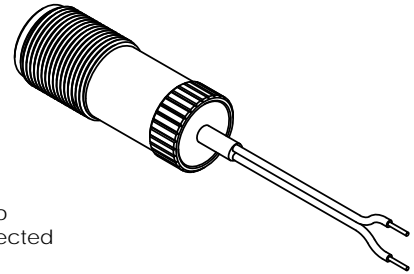
0060 - **11/16-24 UNEF KNURL STYLE**
0060H - **11/16-24 UNEF HEX STYLE (11/16 HEX IN PLACE OF KNURL)**

Thread (A) & Housing (L) Length:	A	L
	1 - .75" (20mm)	Fully Threaded
	2 - .75" (20mm)	1.5" (44mm)
	3 - 1.10" (28mm)	2.3" (57mm)
	4 - 1.3" (33mm)	3.0" (76mm)

SAME AS ABOVE

Lead Wire(X): 1 - 1' (.3m) Single Leads
 2 - 2' (.6m) Single Leads Note: Cable Shielding is not connected to sensor, and is intended to be connected to the instrument ground.
 3 - 3' (1m) Single Leads
 7 - 3' (1m) Shielded Cable
 9 - 10' (3m) Shielded Cable
 A - 16' (5m) Shielded Cable

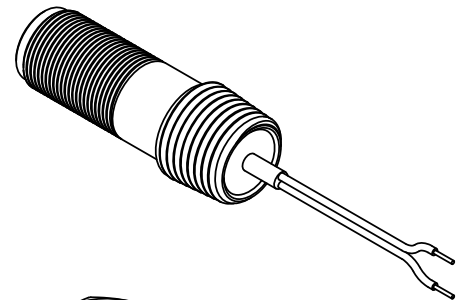
SAME AS ABOVE



0066 - **11/16-24 UNEF with 1/2-14 NPT Female**

Thread (A) & Housing (L) Length:	A	L
	1 - .70" (18mm)	1.9" (48mm)
	2 - 1.3" (33mm)	2.6" (66mm)

SAME AS ABOVE



0060R - **11/16-24 UNEF with Right Angel Leads**

Thread (A) & Housing (L) Length:	A	L
	1 - .49" (12mm)	.88" (22mm)

SAME AS ABOVE

