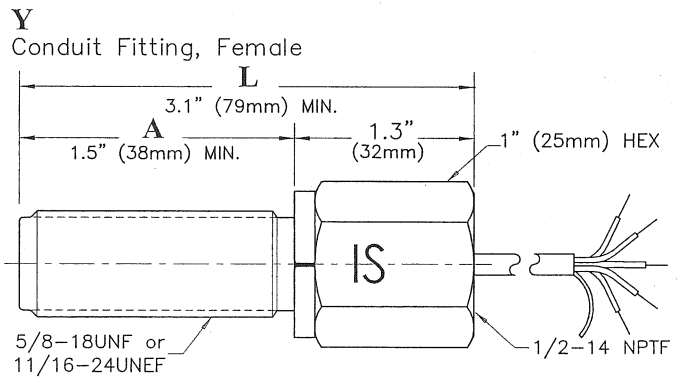
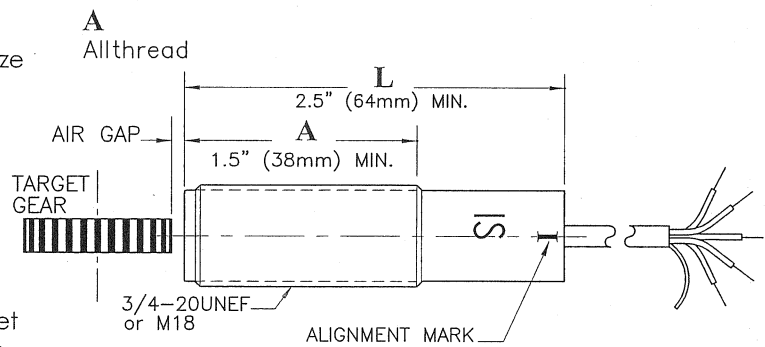
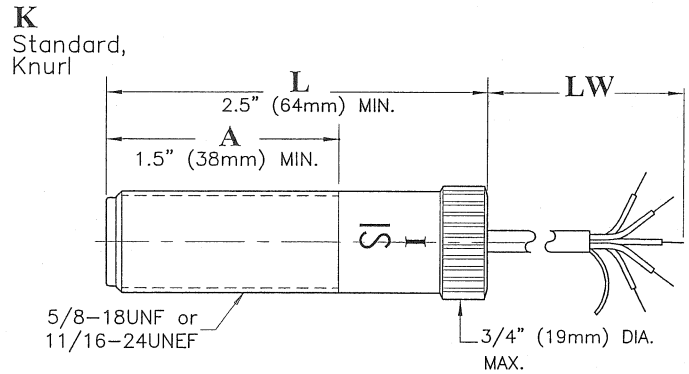


### PRODUCT DESCRIPTION

The 0191 Gear Actuated Directional Zero Speed Sensor provides a square wave quadrature signal at Frequency A and Frequency B outputs and contains internal decoding logic to determine Clockwise/Counterclockwise direction. The direction information is available as a logic level at the direction output. Operation is consistent down to zero speed. All outputs are available with 5V TTL compatible and Open Collector options.

### SPECIFICATIONS

- Vs, Supply Voltage:** Standard: 5-30 Vdc @ ≤15 mA
- Vo, Output/Logic:** Refer to Page 2 tabulation. 25mA max current sinking.
- Frequency Range:** 0 to ~ 25 kHz depending on Target size and distance
- Air Gap:**  
 5 DP: ≤.160" (4mm)  
 48 DP: ≤.025" (2mm)  
 Low Mag ~ 50% less
- Rise/Fall Time:** Std: 0.04 μs/0.18 μs (Nom.)
- Direction:**  
 Logic 1: 5V max. Forward target gear rotates toward alignment mark.  
 Logic 0: .06V max. Reverse
- Lead Wire Assignments:**  
 22 AWG, Shielded Cable Length 36" (1m) Standard. Other lengths are available, please specify.  
 Red: Vs, Supply Voltage  
 Black: Common  
 White: VoA, Signal Out  
 Yellow: VoB, Signal Out  
 Green: Direction, Signal Out
- Temperature Range:**  
 -40° to 185° F (85° C) T5  
 -40° to 149° F (65° C) T6
- Construction:** 300 Series Stainless Steel, solid epoxy encapsulation
- CE Compliance:** EN55011, EN50022-2



**Intrinsically Safe, Digispec Directional, Zero Speed Pickup, Feature Selections:**

SPECTEC P/N	Body	T Thread	A Thread Length	L Overall Length	LW Shielded Cable Length	Vo Output/Logic/LED
IS191-xx	K	5/8-18	1.75 (45mm)	2.5 (64mm)	36" (1m) 120" (3m)	0-5V, NPN (2.2k) 0-5V, NPN, OC
			3.0 (76mm)	3.6 (91mm)		
			4.0 (102)	4.6 (117mm)		
			5.0 (127)	5.6 (142mm)		
		11/16-24	1.5 (38mm)	2.5 (64mm)		
	A	3/4-20	2.0 (51mm)	2.5 (64mm)		
			M18	2.0 (51mm)	2.5 (64mm)	
	Y	5/8-18	1.5 (38mm)	3.0 (76mm)		
		11/16-24	1.5 (38mm)	3.0 (76mm)		

**NOTE:**

THE MAGNETIZATION LEVEL FOR SPECIAL OR LOW MAG SENSORS, IS DESIGNATED AS A SUFFIX TO THE PART NUMBER, ie: IS190-xx-3G DESIGNATING A GAUSS LEVEL OF 300, (250 to 340G). (STANDARD MAG. LEVEL (600 to 1200G) WILL NOT HAVE A SUFFIX.)

When ordering, please specify features selected from the above table.  
Most sensors have short production lead times or are in stock. Please contact sales.