

## PRODUCT DESCRIPTION

SPECTEC's DIGISPEC Magnetic pickups produce a digital frequency output proportional to speed. The internal amplifier provides for constant pulse shaping, signal amplitude, logic-level output, robust signal-to-noise ratio, usable at lower RPMs and greater air gap between the sensor and the actuator. All models are also available with an internal temperature probe.

For hazardous location Class 1 Division 1 please refer to IS90/91, or for Class 1 Division 2 please refer to N90/91.

## SPECIFICATIONS

- Vs, Supply Voltage:** 7.5(12) to 30 VDC regulated
- Is, Supply Current:** ≤ 20 mA @ 30 VDC (Max.)
- Vo, Signal Out:** See page 2
- Input Sensitivity:** 30, 12, or 5 mVpp
- Operating Freq.:** ≤ 3 to 10 kHz  
 ≤ 40 kHz at increased signal level, varies with target size, distance and pickup sensitivity. (Options: ≤ 100 kHz)
- Rise/Fall Time:** 0.04 μs / 0.16 μs
- Temperature Range:** 2TE: -40° to 248°F (-40° to 120°C)  
 3TE: -49° to 284°F (-45° to 140°C)
- Magnetization:** Standard: ≥ 900 Gauss, TYP.  
 Low Mag: 250 Gauss, TYP. See Pg. 2 Note
- Pole Piece:** Flush (FP), Extended (EP), & Chisel Points (CP)  
 (Chisel to be oriented parallel with gear tooth.)

Gear Pitch	Pole Type
≤36 DP (MODULE 0.7)	EP62, CP10
≤26 DP (MODULE 0.98)	EP93
≤24 DP (MODULE 1.06)	FP130, FPS130 EP106, EPS106 EP125, CP45
≤12 DP (MODULE 2.11)	EP187
≤5 DP (MODULE 5.1)	EP250

- Connectors:** See Page 2 for Configurations  
 All have Gold Plated Contacts
- Lead Wire & Assignments:** See Page 2 for Wire & Cable Options  
 2TE: PVC, 20-24 AWG  
 3TE: TFE, 20 AWG  
 Red: Supply (+)  
 Black: Common (-)  
 White/Green: Signal Out  
 Bare: Cable Shield

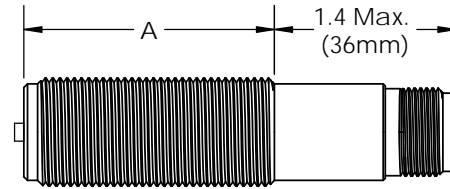
**Construction:** 300 Series stainless steel housing  
 Solid epoxy encapsulation

**CE-Compliance:** EN55011, EN50022-2

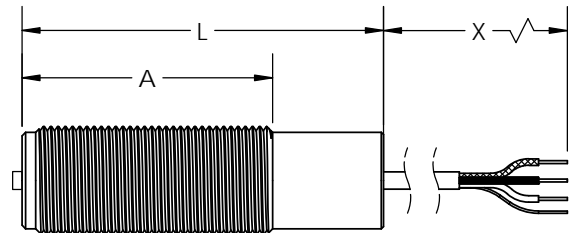
## OPTIONS

Custom configurations, thread sizes, special materials of construction, temperature probes (NTC10, RTD100, or others).

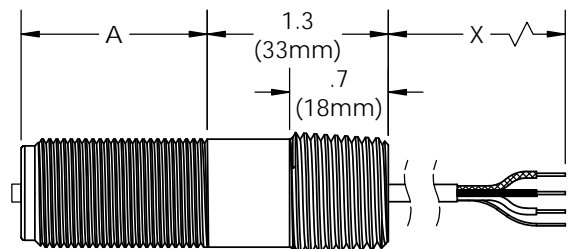
- 0094** 3/4-16 UNF  
**0094B** 3/4-20 UNEF  
**0094M** M18x1.5  
**0094M1** M18x1.0



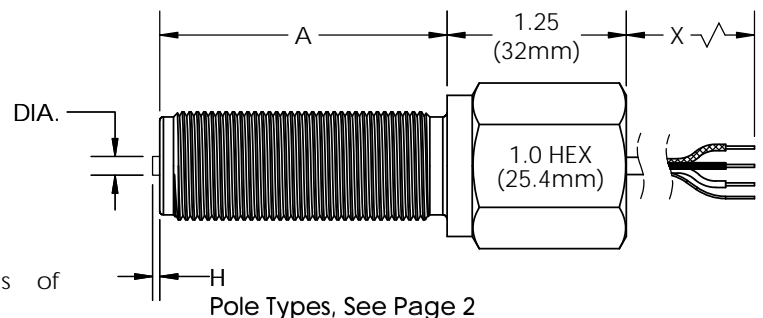
- 0094L** 3/4-16 UNF  
**0094LB** 3/4-20 UNEF  
**0094LM** M18x1.5  
**0094LM1** M18x1.0



- 0094X** 3/4-16 UNF w/ 1/2-14 NPT Male  
**0094XB** 3/4-20 UNEF w/ 1/2-14 NPT Male



- 0094Y** 3/4-16 UNF w/ 1/2-14 NPT Female  
**0094YB** 3/4-20 UNEF w/ 1/2-14 NPT Female



# ORDER INFORMATION

<b>STYLE:</b>	<b>OPTIONS:</b>	<b>THREADS/DIA.:</b>
0094	- [ ] [ ] [ ] [ ] [ ]	3/4-16 UNF
0094B	- [ ] [ ] [ ] [ ] [ ]	3/4-20 UNEF
0094M	- [ ] [ ] [ ] [ ] [ ]	M18x1.5
0094M1	- [ ] [ ] [ ] [ ] [ ]	M18x1.0
<b>Thread Length(A):</b>		0 - 1.0" (25mm) 1 - 2.0" (51mm) 5 - 3.5" (89mm) 6 - 5.0" (127mm)
<b>Pole Type (DIA., H):</b>		1 - FP160 Flush Pole, Ø.160 2 - EP106 Extended Pole, Ø.106" x .02" H 3 - EP187 Extended Pole, Ø.187" x .02" H 5 - FPS160 Flush Pole, Ø.160 in Sealed S.S. Face C - EP250 Extended Pole, Ø.250" x .02" H
<b>Vo, Pulse Out/ Output Logic:</b>		1 - 0 - 10V, NPN 2 - 0 - 5V, NPN [TTL] 3 - 0 - Vs, NPN 4 - 0 - Vs, NPN OC 5 - 0 - Vs, Sink/Source with Short Circuit Protection (85°C max) 6 - 0 - 5V, Sink/Source with Short Circuit Protection (85°C max) 7 - 0 - Vs, Sink/Source (125°C max) 8 - 0 - 5V, Sink/Source (125°C max)
<b>Input Sensitivity and Temp.:</b>		1 - 30 mV 2 - 12 mV 3 - 5 mV 5 - 30 mV (HT 140°C) 6 - 12 mV (HT 140°C) 7 - 5 mV (HT 140°C)

<b>Connector:</b>	1 - MS3: 3 Pin MS3106-10SL-3P (See Bulletin 3000)
	2 - MC3: 3 Pin Micro-C (See Bulletin 3004)
	3 - MS3B: 3 Pin MS3102-10SL-3P (See Bulletin 3000)
	4 - B4: 4 Pin Bayonet, MS3113-H8A-4P (See Bulletin 3001)
	5 - B6: 6 Pin Bayonet, MS3111-H10A-6P (See Bulletin 3001)
	7 - MD4: 4 Pin Micro DIN (See Bulletin 3005)
	8 - MD6: 6 Pin Micro DIN (See Bulletin 3005)

0094L	- [ ] [ ] [ ] [ ] [ ]	3/4-16 UNF
0094LB	- [ ] [ ] [ ] [ ] [ ]	3/4-20 UNEF
0094LM	- [ ] [ ] [ ] [ ] [ ]	M18x1.5
0094LM1	- [ ] [ ] [ ] [ ] [ ]	M18x1.0
<b>Thread (A) &amp; Housing (L) Length:</b>		<b>A</b> 1 - 0.9" (23mm) 2 - 2.0" (51mm) 4 - 3.5" (89mm) 5 - 5.0" (127mm) 8 - 8.0" (203mm) <b>L</b> 1.75" (44mm) Fully Threaded 4.0" (102mm) Fully Threaded Fully Threaded

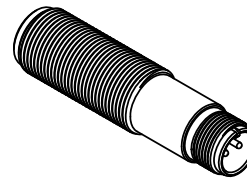
SAME AS ABOVE

<b>Lead Wire(X):</b>	2 - 2' (.6m) Single Leads	Note: For shielded cable, shield is not connected to sensor shell, and is intended to be connected to instrument ground.
	7 - 3' (1m) Shielded Cable	
	9 - 10' (3m) Shielded Cable	

0094X	- [ ] [ ] [ ] [ ] [ ]	3/4-16 UNEF with 1/2-14 NPT Male
0094XB	- [ ] [ ] [ ] [ ] [ ]	3/4-16 UNEF with 1/2-14 NPT Male
0094Y	- [ ] [ ] [ ] [ ] [ ]	3/4-16 UNEF with 1/2-14 NPT Female
0094YB	- [ ] [ ] [ ] [ ] [ ]	3/4-16 UNEF with 1/2-14 NPT Female
<b>Thread Length(A):</b>		<b>0094X</b> 0 - 0.9" (23mm) 1 - 1.3" (33mm) 2 - --- 3 - --- 4 - --- 6 - --- 8 - --- <b>0094Y</b> --- 1.5" (38mm) 2.0" (51mm) 2.8" (71mm) 4.0" (102mm) 6.0" (152mm) 8.0" (203mm)

SAME AS ABOVE

- Notes:**
- The magnetization level for special or low mag. sensors, is designated as a suffix to the P/N, i.e.: 0092 -11111-300G, designating a gauss level of 300(±50). (Standard mag. level will not have a suffix.)
  - The optional 5/8" hex is designated by adding a "H" immediately after the four digit base number. i.e.: 0094HB, designating a hex added to the 3/4-20 connector type 0094.



## Connector Pinouts

