

### PRODUCT DESCRIPTION

SPECTEC's unique dual output magnetic pickups are part of a modular family of high performance, passive, variable reluctance sensors (VRS). The dual output is designed for pulse security applications where a redundant high reliability output is a must. It may be used in place of two separate sensors, providing component and installation savings. An integral temperature sensor is available as an option.

### SPECIFICATIONS

#### DC-Coil Resistance/Inductance, Output Voltage:

Type 2: 300/450Ω 150 mH, 60 Vpp  
 Type 4: 600/900Ω 300 mH, 100 Vpp  
 Type 5: 900/1350Ω 500 mH, 150 Vpp  
 (When tested at 1000 IPS against 20 pitch, 30 tooth gear at .005" gap, 100k Ohm load. Inductance and output voltage notations are maximum values.)

**Magnetization:** Standard: 1100 GAUSS, TYP.  
 Low Mag: 250 GAUSS, TYP.

**Temperature Range:** 2T: -100° to 260° F (-73° to 125° C)  
 3T: -150° to 330° F (-101° to 165° C)  
 5HT: -450° to 450° F (-268° to 232° C)

With temperature probe:  
 RTD 100 Ohm platinum probe:  
 -330° to 450° F (-201° to 232° C)  
 NTC 10 kOhm thermistor:  
 -40° to 260° F (-40° to 125° C)

**Pole Piece:** Flush (FP), Extended (EP) & Chisel Points (CP) are available. (Chisel must be oriented parallel with gear tooth.)

All illustrations are shown w/ flush pole (FP). 0022Y is shown w/ extended pole (EP). To optimize performance please note gear pitch/pole piece recommendations:

GEAR PITCH	POLE PIECE
≤ 36 DP (Module 0.7)	EP62, CP10
≤ 26 DP (Module 0.98)	EP93
≤ 24 DP (Module 1.06)	FP, EP106 EP125, CP45
≤ 12 DP (Module 2.11)	EP188
≤ 5 DP (Module 5.1)	EP250

**Construction:** 300 Series S.S., Solid Epoxy Encapsulation.

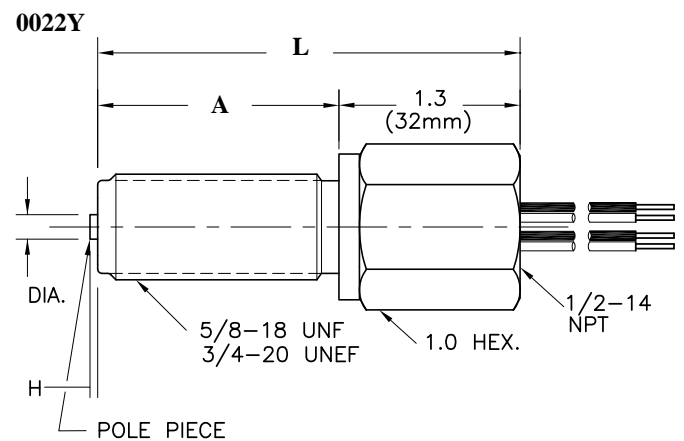
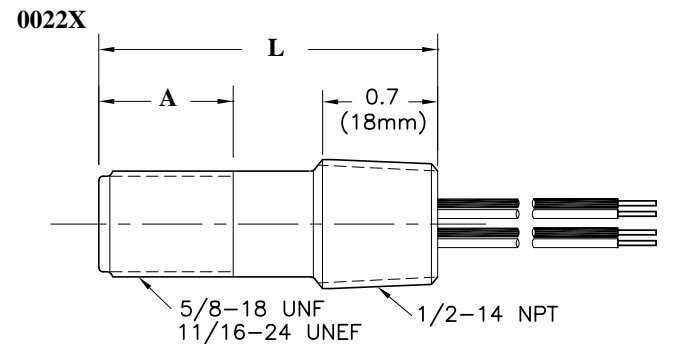
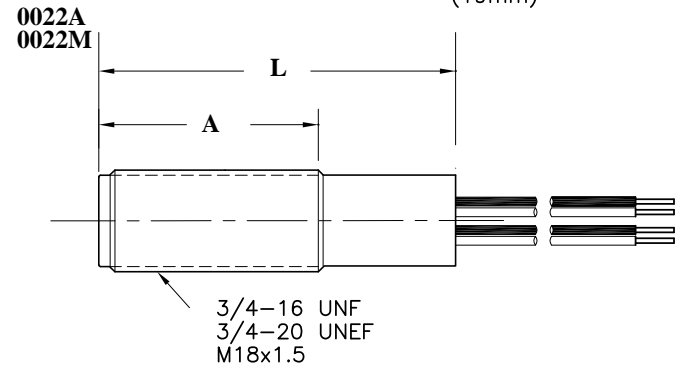
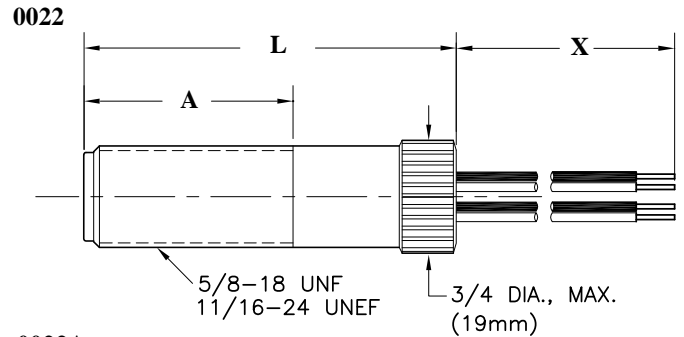
**Lead Wire 'x':** 20 AWG, PVC or Teflon insulated.  
 See Page 2 for options.

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

### OPTIONS:

For different length, material of construction, configuration, special pole-piece types, thread size, hermetically sealed, precision custom magnetization, connector and/or cable termination, please contact factory.

For connector type, refer to: 0021.



### Dual Magnetic VRS Speed Sensor, P/N Selection Chart:

SPECTEC P/N	Thread	A	L	Coil Type	Pole Piece	Temp. Range	X
<b>0022-xx</b>	5/8-18	0.7 - 8.0 (18 - 200mm)	1.0 - 8.5 (25 - 216mm)	Type 2 300/450Ω Power Output	FP (.130 DIA.) EP62 (.062 DIA. x .03 H) EP93 (.093 DIA. x .03 H) EP106 (.106 DIA. x .02 H) EP125 (.125 DIA. x .07 H) EP187 (.187 DIA. x .02 H) EP250 (.250 DIA. x .02 H) CP10 CHISEL (.010 W) CP45 CHISEL (.045 W)	2T 3T 5HT RTD 100 NTC 10	12" (0.3m) 36" (1m) 60" (1.5m) 120" (3m)
	11/16-24	0.7 - 1.5 (18 - 38mm)	1.0 - 3.0 (25 - 76mm)	Type 4 Std. Output 600/900Ω			
<b>0022A-xx</b>	3/4-16	0.7 - 4.0 (18 - 100mm)	1.0 - 4.5 (25 - 114mm)	Type 5 High Output 900/1350Ω			
	3/4-20						
<b>0022M-xx</b>	M18x1.5	0.7 - 4.0 (18 - 100mm)	1.0 - 4.5 (25 - 114mm)				
<b>0022X-xx</b>	5/8-18	0.7 - 1.3 (18 - 33mm)	1.8 - 2.5 (25 - 64mm)				
	11/16-24	0.7 - 1.3 (18 - 33mm)	1.8 - 2.5 (25 - 64mm)				
<b>0022Y-xx</b>	5/8-18	1.0 - 6.0 (25 - 152mm)	2.5 - 7.3 (64 - 185mm)				
	3/4-20	1.9 - 6.0 (48 - 152mm)	3.1 - 7.3 (79 - 185mm)				

When ordering, please specify features selected from the above table.

#### Specific Models:

<b>0022-01</b>	5/8-18	1.3 (33mm)	2.0 (51mm)	Type 4	FP	3T	12"
<b>0022-02</b>						5HT	
<b>0022-03</b>		3.0 (76mm)	3.6 (91mm)		EP92	3T	
<b>0022-04</b>		1.8 (46mm)	2.5 (64mm)	Type 2	EP106		
<b>0022M-01</b>	M18x1.5	2.0 (51mm)		Type 5	FP		
<b>0022Y-01</b>	5/8-18	1.1 (28mm)	2.2 (56mm)	Type 4	EP93		
<b>0022Y-02</b>	3/4-20	1.9 (48mm)	3.1 (79mm)	Type 5			

NOTE: THE MANGNETIZATION LEVEL FOR SPECIAL OR LOW MAGNETIC DRAG SENSORS, IS CALLED OUT AS A SUFFIX TO THE PART NUMBER, ie: **0022-xx-300G** DESIGNATING A GAUS LEVEL OF 300.

(STANDARD MAGNETIC LEVEL (UP TO 1200G) WILL NOT HAVE A SUFFIX.)