

SPECTEC

THUNDERBIRD INTERNATIONAL CORPORATION
 P.O. BOX 360, EMIGRANT, MT 59027, USA
 (406) 333-4967 FAX: (406) 333-4259
 www.spectecensors.com



0220 LINEAR POSITION PICKUP CONNECTOR 5/8, 3/4 & M18 Threads

PAGE 1 OF 2

PRODUCT DESCRIPTION

SPECTEC's Linear Position Sensor is designed to sense continuous variations in magnetic field and convert field strength to a proportional voltage. The output voltage produced for zero field is nominally 2.5v, with a standard transfer function of +/- 10mV/Gauss. Magnetic sensitivity is in one axis only. Several units can be combined to measure (X, Y, Z) magnet fiel vectors. Custom ranges, output configuration, sensitivity, and packaging are available on request. Sensors can also be supplied to Intrinsically Safe standards.

APPLICATION

Position Sensing, Rotation, Angle, Field profiling, ELF, Vibration, Proximity, Incoming inspection of magnetic products.

SPECIFICATIONS

Vs, Supply Voltage: 8 - 30 Vdc @ ≤ 8 mA

Vo, Output Range: $<.5 - V_o - >4.5$ V
 (.06 - 4.95 V typ)

Io, Output Range: -1.0 mA (source) Max.
 10. mA (sink) Max.

Output resistance: 100 Ohms

Input Sensitivity*: Std.: 5 mv/Gauss*
 Med.: 3.125 mv/Gauss*
 High: 2.5 mv/Gauss

Quiescent Output Voltage: + / - .075 V
 (2.20 to 2.80 V at zero field)
 + / - 30 G equivalent

Frequency Range: DC to 30 kHz

Sensing Distance: .00" to >1.00"
 @ 3000 Gauss typ

Temperature Range: -40° to +250° F (-40° to 125° C)

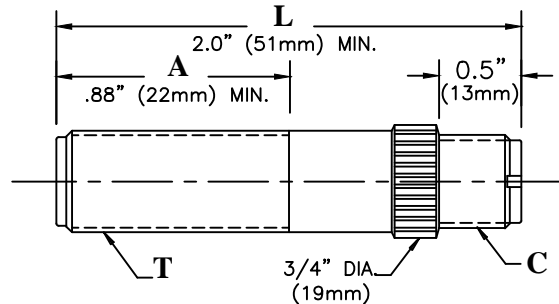
Construction: 300 Series Stainless Steel, solid epoxy encapsulation

CE Compliance: EN55011, EN50022-2

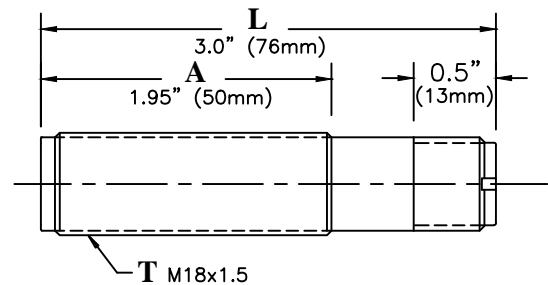
INSTALLATION

For mating connector/cable assemblies refer to respective bulletins: 3000, 3001, & 3004 or commercially available alternatives.

0220
K



0220
A



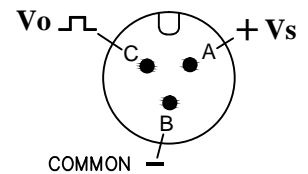
T Threads:

Standard: 5/8-18 UNF or 3/4-20 UNEF
 Options: M18 x 1.5

C Connector Options:

MS3

Mates w/ MS3106A-10SL-3S
 P/N: 3000-xx

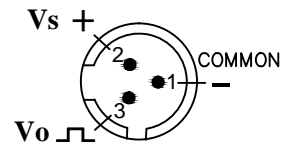


MS3B:

B becomes V_o
 C becomes COMMON

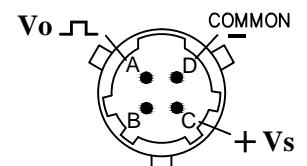
MC3

Mates w/ Micro Change 3 Pole
 P/N: 3004-xx



B4, (Bayonet)

Mates w/ MS3113HA4P
 P/N: 3001-xx



H Lin Pickup, Digispec, Connector, 0220

PRODUCT DETAILS							
ASSIGNED SPECTEC P/N s	Pickup Type	Output Logic	Connector	Body	Thread	Thread Length	Overall Length
						A	L
0220-01	H Lin	STD.	MS3	K	5/8-18	.88 (22mm)	2.0 (51mm)
-02						1.5 (38mm)	3.0 (76mm)
-03						1.8 (45mm)	3.5 (89mm)
Model Variant Options:							
0220-xx	H Lin	STD	MS3	K	5/8-18	.88 (22mm)	2.0 (51mm)
		OC	MS3B	A	3/4-20	1.5 (38mm)	3.0 (76mm)
		PNP	MC3		M18	1.8 (45mm)	3.5 (89mm)
			B4			3.0 (76mm)	4.1 (104mm)
						4.0 (101mm)	5.1 (130mm)
						5.0 (127mm)	6.1 (155mm)
				(or spec)	(or spec)		

Some options are unavailable in certain combinations.

Overall lengths $L \geq 3.5$ (89mm) are normally only available in body style K with 5/8-18 thread. Contact your sales representative for more information.

SPECTEC, Thunderbird International Corp. 406-333-4967 • FAX 406-333-4259, www.spectecensors.com

Page 2 of 2

