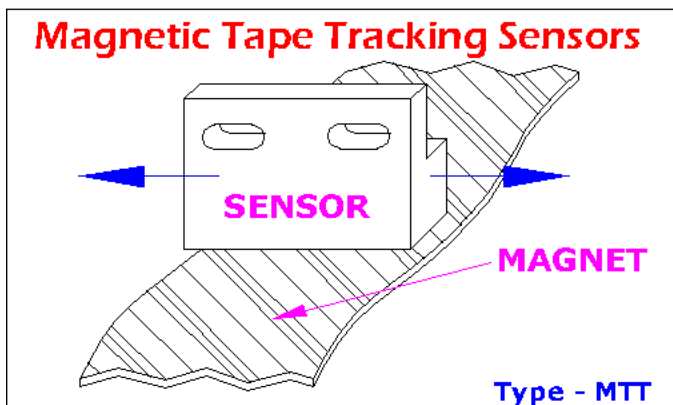


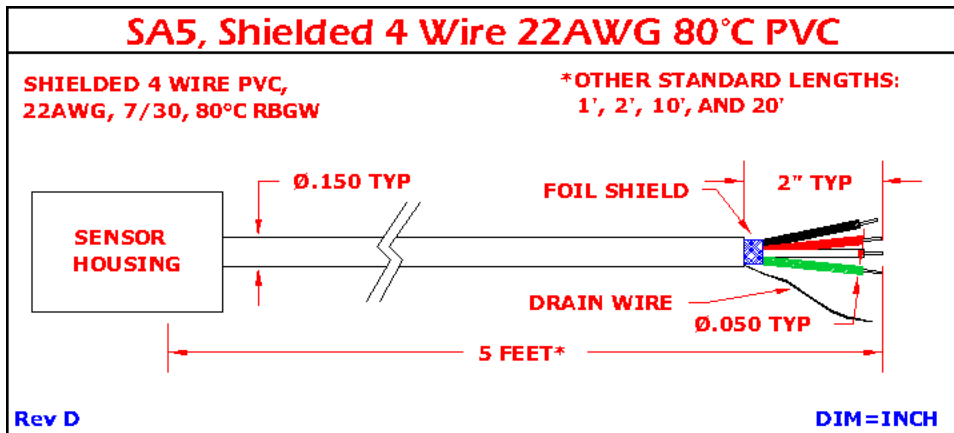
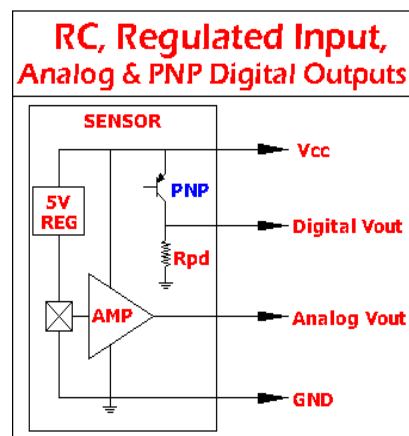
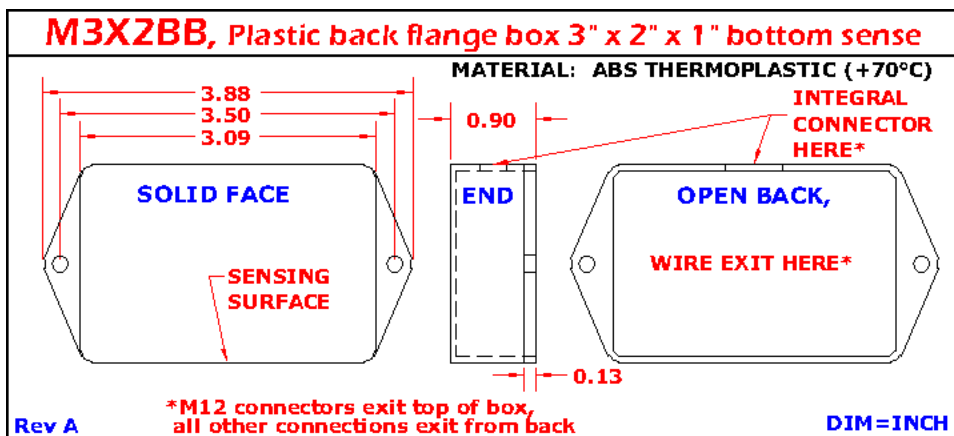
M3X2BB-MTTA-RCSA5 - Magnetic Tape Tracking Sensors

Analog Output Magnetic Tape Tracker, regulated input, both analog and pnp digital outputs, Plastic back flange box 3 x 2 x 1" bottom sense, shielded 4 wire 22AWG 80C PVC, 5 ft



- o ANALOG OUTPUT VS OFFSET DISTANCE
- o DIGITAL 'TAPE DETECT' OUTPUT
- o DETECTS VERY LOW FIELDS
- o POTTED AND SEALED
- o WIDE SENSING GAP RANGE

ENVIRONMENTAL SPECIFICATIONS - M3X25BB	
Corrosion Resistance	TBD
Installation Torque	TBD
Enclosure	TBD
Vibration	TBD
Max Temp (overrides Elec. Max Temp)	70°C



Connections Chart	
Red	Vcc
Black	Ground
Green	Analog Vout
White	Digital Vout
SA5-MTTA	

Date Code 'YYM'			
YY = YEAR, M = MONTH			
A JAN	D APR	H JUL	L OCT
B FEB	E MAY	J AUG	M NOV
C MAR	G JUN	K SEP	N DEC

The MTTA Magnetic Tape Tracking Sensors provide an analog output that varies from 0 to 10 volts as they move left and right over magnetic tape. To work properly, the tape must be magnetized with the NORTH pole pointing toward the sensor. The positions Left, Centered, and Right are defined on page 2 of this specification.

These sensors also have a digital 'Tape Detect' output that goes on only when they detect tape. This output clamps the analog voltage to 0 or 5 volts if it does not detect tape (see page 2). The 'Detection Gap' is defined on page 2.

We also offer Digital-Only Magnetic Tape Tracking Sensors that have 3 outputs 'Left, Right, and Center'. These outputs only go on when they are over the tape; if the tape moves left, the right output goes off. Contact Sensor Solutions for more information.

M3X2BB-MTTA-RCSA5 - Magnetic Tape Tracking Sensors

Analog Output Magnetic Tape Tracker, regulated input, both analog and pnp digital outputs, Plastic back flange box 3 x 2 x 1" bottom sense, shielded 4 wire 22AWG 80C PVC, 5 ft

MTTA-RC, Electrical & Functional Specifications

ABSOLUTE MAX LIMITS	CONDITIONS	MIN	MAX	UNITS
Supply Voltage, Vcc	Absolute Max	-0.4	36	Volts DC
Short Circuit Vout to Gnd	Vcc = 0 to 30 volts, Analog Vo only	-----	5	Minutes
Short Circuit Vout to Vcc	Vcc = 0 to 30 volts, Analog Vo Only	-----	5	Minutes
Maximum Magnetic Field	Max field at point 1/4" inside the box	-----	500	Gauss
Storage Temperature	Non powered	-40	+110	Deg C
Digital Output Power	T=25C	--	1	W

ELECTRICAL SPECS	CONDITIONS	MIN	MAX	UNITS
Temperature Range	Operating	-40	+85	Deg C
Supply Voltage, Vcc	T = -40 to +60°C	+11	+36	Volts DC
Supply Voltage, Vcc	T = -40 to +85°C	+11	+23	Volts DC
Supply Current	Operating	10	45	mA
Magnet Detect Time Delay	Output delay after seeing magnet	0.2	1.0	mS
Magnet Lose Time Delay	Output delay after magnet goes away	5	10	mS
Analog Source Current	Analog Vout to Gnd	-3	+3	mA
Pull Down Resistor, Rpd	Internal, Digital Vout to Gnd	4.9	5.1	k Ohms
Digital Vout Low Vol	No Tape, Rload > 100k	0	.7	Volts
Digital Vout High, Voh	Over Tape, Rload > 100k	Vcc-1	Vcc	Volts
Rise Time, PNP Output	C load < 100pf	-----	5	uS
Fall Time, PNP Output	C load < 100pf	-----	5	uS

MAGNETIC CHARACTERISTICS, T = 25C	MIN	TYP	MAX	UNITS
300-05-001 Magnet Tape, N. Pole Up				
TAPE Detect Gap Range (centered over tape)	0 - 1.4	0 - 2.6	0 - 4.0	Inches
TAPE LEFT (POS 1) Max Detect Offset Distance, 0.75" gap.	2.0	2.2	3.2	Inches
TAPE RIGHT (POS 3) Max Detect Offset Distance, 0.75" gap.	2.0	2.4	3.5	Inches
Analog Output, Tape Left 2" (Position 1 in picture below)	.72	0.8	.88	Volts
Analog Output, Centered (Position 2 in picture below)	4.75	5.0	5.25	Volts
Analog Output, Tape Right 2" (Position 3 in picture below)	8.8	9.2	9.5	Volts
Analog Output, No magnetic field present	0.0	0.02	0.2	Volts
Digital PNP Output, no magnetic field present	0	.01	0.7	Volts

Rev G Analog Vout without tape was 5V.

Violet represents 100 % test before shipping

