

MODEL ASTC IN-LINE PREAMPLIFIER & PULSE SHAPER FOR MAGNETIC PICKUPS



- IDEAL FOR LONG CABLE RUNS
- CURRENT SINKING OUTPUT
- PROVIDES ULTRA-LOW THRESHOLD SPEEDS
- ALLOWS LARGER AIR-GAPS
- PROVIDES HIGH NOISE IMMUNITY

GENERAL DESCRIPTION

The ASTC boosts magnetic pickup signals by a factor of more than 100, and provides an NPN Open-Collector pulse output. Low speed input sensitivity is 20 millivolts which permits operation at 1/50th of the 1-Volt Threshold Speeds listed in the Magnetic Pickup Specifications and Ordering Table. The unit is epoxy-encapsulated in a 3/4" Dia. stainless steel shell, with overall dimensions of 0.9" D X 4.5" L including Neoprene strain-reliefs on each end. In installations where long signal runs are to be made it is advisable to keep the ASTC close to the magnetic pickup and make the longer cable run with the output from the ASTC. Input and output cables should not be run in conduit, cable troughs, or bundles with power or control voltage lines.

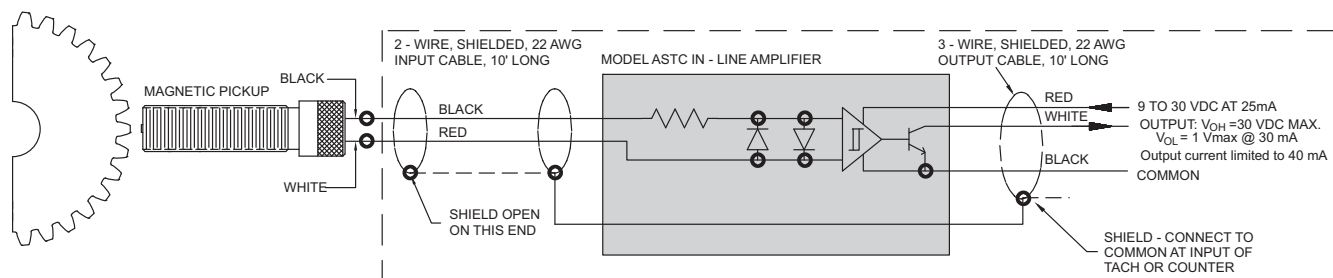
ORDERING INFORMATION

| MODEL NO. | DESCRIPTION | PART NUMBER |
|-----------|-------------------|-------------|
| ASTC | In-Line Amplifier | ASTC0000 |

SPECIFICATIONS

1. **SUPPLY VOLTAGE:** +9 to +30 VDC @ 25 mA max.
2. **INPUT:**
 Input sensitivity: 20 mV.
 Maximum input: 16 Vrms
 Input sensitivity increases as input frequency increases.
3. **OUTPUT:** NPN Open Collector, $V_{OH} = 30$ VDC max; $V_{OL} = 1$ Vmax. @ 30 mA, output current limited to 40 mA.
4. **OPERATING FREQUENCY:** 10 KHz max.
5. **OPERATING TEMPERATURE:** -18°C to +60°C (0°F to +140°F)
6. **CONSTRUCTION:** Epoxy encapsulated #304 stainless steel case. Neoprene strain-reliefs on each end.
7. **DIMENSIONS:** Overall dimension of 0.9"D X 4.5" L (22.9 mm X 114.3 mm), Case dimension of 0.750" ±0.005" dia.
8. **INPUT CABLE:** Integrally potted 10 ft. PVC jacketed, 2-wire 22 AWG conductors, with stranded shield and 100% foil shield coverage.
9. **OUTPUT CABLE:** Integrally potted 10 ft. PVC jacketed, 3-wire 22 AWG conductors, with stranded shield and 100% foil shield coverage.
 RED = +VDC, BLK = COMMON, WHT = NPN O.C. OUTPUT

SPECIFICATIONS & HOOK-UP FOR ASTC



Note: Both magnetic pickup leads must be floating.
 Do NOT ground or connect to shield.

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