



*Proven Performance
for Over 50 Years*

Model 104-922 A/B Signal Conditioner

DESCRIPTION

The COX 104-922 Signal Conditioner is a wall mounted equivalent of the 92-244 and 92-245. The unit is packaged in a NEMA and UL approved enclosure. The 104-922 is powered with 115 VAC or 230 VAC. Because the 104-922 is wall mounted and not directly coupled to the pickoff, the unit must be mounted within an approximate distance of 50 feet (maximum) to maintain the signature of the pickoff signal.

INTRODUCTION

The system detailed herein has been designed specifically for measuring turbine speed in turbine flowmeters, with low speed operation emphasizing carrier technology. As a result, fluid flow at low turbine speeds may be accurately measured without sustaining the significant drag normally encountered in magnetic type flowmeter pickoffs. Additionally, the signal conditioner may be used to boost the output from pulse producing flowmeter transducer pickoffs, where the cable run from transducer to indicator or ancillary equipment exceeds 500 feet. This signal conditioner pulse output is ideally suited for driving ancillary equipment such as controllers, totalizers, computers, and variable time base counters.

UNIT OPERATION

The 104-922A/B is designed to receive a signal from a COX Carrier or Magnetic pickoff and provide a high level pulse output. The rotation of the internal rotor of the turbine produces a change of the flux field produced by the pickoff, resulting in frequency and amplitude modulated signal, in direct proportion to the speed of the rotor. The modulated signal is amplified, demodulated, and conditioned to a normalized rectangular pulse output. This is accomplished by the internal module of the 104-922A/B.

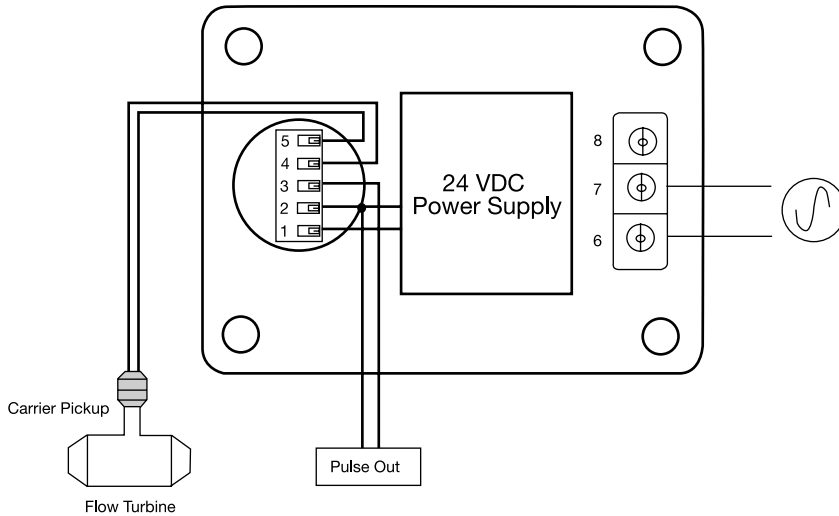
Specifications

Electrical Service	
Voltage:	115/230 VAC
Phase:	Single
Frequency:	60/50 Hz
Power:	2.75 watts
Power Supply Outlet	
Voltage:	24 VDC
Current:	2 Amps
Ripple :	50 mV (RMS) max
Signal Input	
Frequency:	Near Zero to 5k Hz
Transmission Cable:	Two conductor shielded (Belden 8422 or equivalent)
Transmission Distance:	500 ft max.
Signal Output	
Frequency:	Same as input (NZ to 5k Hz)
Amplitude:	0-10 Vpk pulse



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TYPICAL WIRING CONFIGURATION



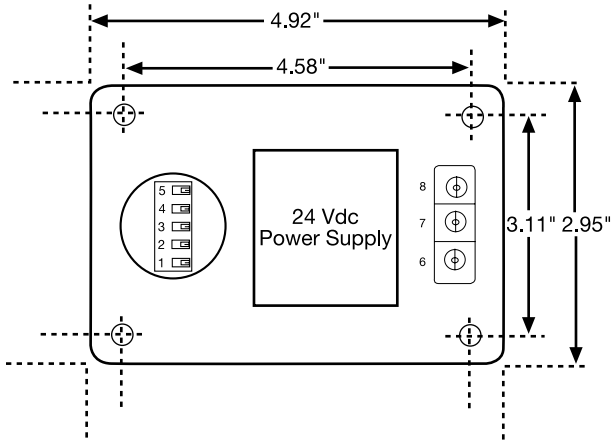
TERMINAL FUNCTIONS

- 1.) +12 Vdc from Power Supply
- 2.) Common between Power & Pulse Out
- 3.) Pulse Output
- 4.) Carrier/Mag Pickoff
- 5.) Carrier/Mag Pickoff
- 6.) 230 VAC IN
- 7.) 115 VAC IN
- 8.) AC Common (Neutral)

ENCLOSURE SPECIFICATIONS

Dimensions: 4.92 x 2.95 x 3.00
Standards: NEMA Type 4, 12 & 13
UL 508 Type 1 CSA Type 1

ENCLOSURE DIMENSIONS



For more information, contact COX Instruments
or your local COX Instruments representative.



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