

5510C/5516C SIGNAL CONDITIONER

Datasheet

OVERVIEW

The 5510C (Radial Vibration) & 5516C (Position/Thrust) convert a proximity transducer system to a transmitter for connection to a PLC or DCS. Replaces older monitor racks incrementally at lower cost.

Provides 4-20 mA output proportional to shaft radial vibration or position. Dynamic signal is available at the signal conditioner or remotely.

FEATURES

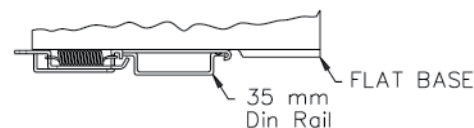
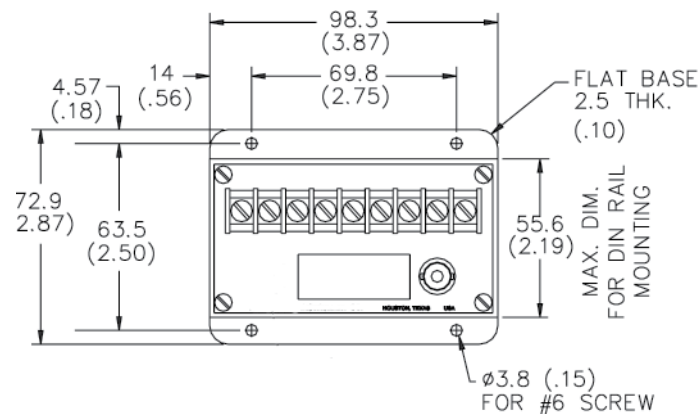
- Easiest conversion of obsolete monitor racks on the market today
- Powers Metrix drivers or Bently Nevada Proximitors*
- Outputs 4 - 20 mA output proportional to vibration (5510C) or position (5516C)
- Dynamic signal is available at the signal conditioner or remotely

APPLICATIONS

- Blowers
- Centrifuges
- Compressors
- Engines
- Fans
- Generators
- Motors
- Pumps
- Steam Turbines
- Turbochargers

*Note: Proximitor is a registered trademark of Bently Nevada.

WEIGHT & DIMENSIONS



Height: 69.9 (2.75) max. (with DIN-rail)
 Weight: 0.5 kg (1.1 lb)
 Dimensions in mm [inches]



SPECIFICATIONS

PC Series Input Power	18 - 30 V _{DC} , 60 mA
Probe Driver Power Provided	-24 V _{DC}
Input Signal	-8 mV/μm (-200 mV/mil) from a proximity probe driver
Frequency Response (5510)	5 Hz-10 kHz
Test Output (AC & DC)	-8 mV/μm (-200 mV/mil), buffered
4-20 mA (Source) Output	4-20 mA proportional to shaft radial vibration (5510) or shaft axial position (5516)
Sensor Malfunction	Output current driven below 3.6 mA and LED indicates either probe/cable not OK or probe gap is outside the linear range
Max. Load Resistance (R_L):	600 Ω
Max. Current Draw	40 mA
Full Scale Output Range (20 mA)	See Ordering Option A
Isolation	500 V, circuit to case
Temperature Limits	-51°C to +100°C
Housing	Polymer internally coated for EMI protection. 35mm DIN-rail available
Electromagnetic Compatibility	CE Mark



ORDERING INFORMATION

Verify Probe Driver is -8 mV/ μm (-200 mV/mil) and note $-V_{\text{DC}}$ is required. 24 V_{DC} is standard.
For 18 V_{DC} , add -18V to end of model number (see examples).

5510C RADIAL VIBRATION			
5510C- A A A - B B B			
□□□ - □□□			
A			Position Range (4-20 mA) / Mount
0	0	1	0-5 mils (125 μm), pk-pk / Base
1	0	1	0-5 mils (125 μm), pk-pk / DIN-rail
0	0	2	0-10 mils (250 μm), pk-pk / Base
1	0	2	0-10 mils (250 μm), pk-pk / DIN-rail
B			V_{DC}
1	8	V	18 V_{DC}
2	4	V	24 V_{DC}

Example: 5510C- 001- 24V:

0-5 mils (125 μm), pk-pk/Base with 24 V_{DC}

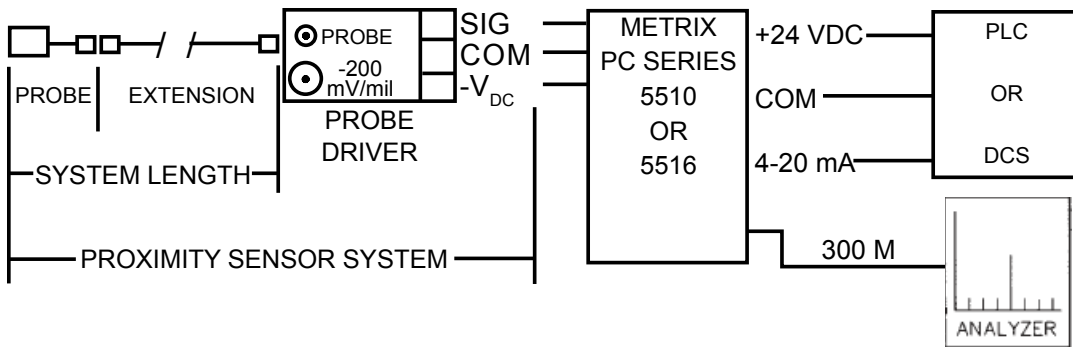
5516C POSITION (THRUST) VIBRATION			
5516C- A A A - B B B			
□□□ - □□□			
A			Position Range (4-20 mA) / Mount
0	0	1	± 30 mils (± 750 μm) Baseplate*
1	0	1	± 30 mils (± 750 μm) DIN-rail*
0	0	2	± 20 mils (± 500 μm) Baseplate
1	0	2	± 20 mils (± 500 μm) DIN-rail
B			V_{DC}
1	8	V	18 V_{DC}
2	4	V	24 V_{DC}

Example: 5516C- 001- 24V:

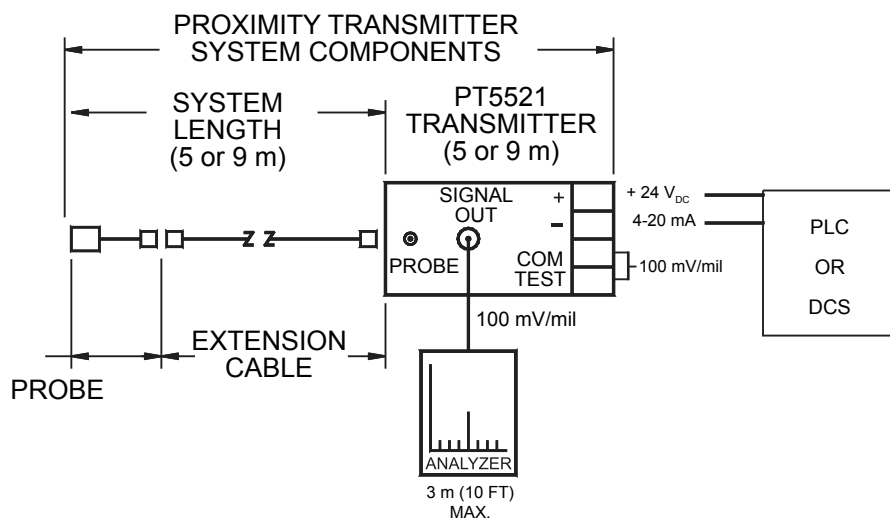
± 30 mils (± 750 μm) Baseplate with 24 V_{DC}

* Not available with 18 V_{DC} option

5533 DRIVER & 5510/5516 SIGNAL CONDITIONER



PT5521 LOOP-POWERED RPM TRANSMITTER



TRENDSETTER TXR/TXA PROXIMITY TRANSMITTERS

