COX INSTRUMENTS
FLOW MEASUREMENT

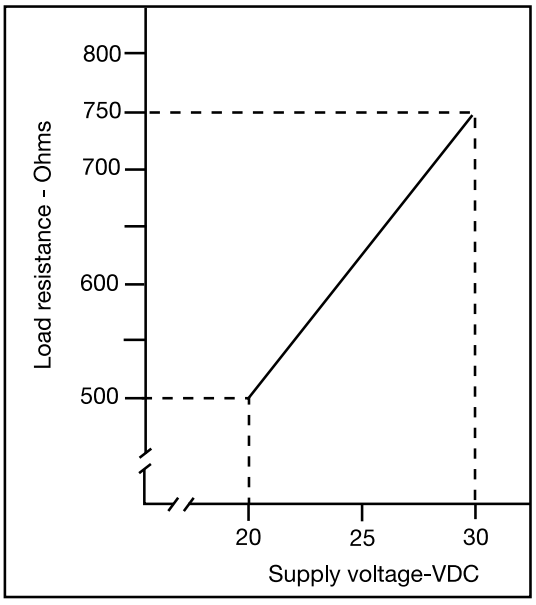
Proven Performance for Over 50 Years

COX PA111, PA112, PA115 Pre-Amplifiers

DESCRIPTION

Pre-amplifiers are used for long distance signal transmission and noise interference elimination. Output signal frequency is proportional to the process flow rate. Meter or remote mounted units are available. PA111 is intrinsically safe; PA112 and PA115 are explosion proof. All three models are available with either Factory Mutual or CSA approvals.

EXTERNAL SENSE RESISTOR VALVE



Specifications	
Input Signal	From pickup coil of turbine flowmeter. 20 mV to 10 V, 10 to 2000 pps
Output Signal	Square wave pulse, 10 V p-p pulses, three wire system (PA115: 20 V p-p pulses two wire system power supplied over signal wires)
Input-output Relationship	The output pulse frequency is the same as the input frequency from the turbine meter
Sense Resistor (PA115 only)	An external, user supplied sense resistor is required for operation. (Refer to graph)
Operating Temperature	-40° to +185°F (-40° to +85°C)
Supply Voltage	15 – 30 Vdc (PA 115: 20-30 Vdc)
Supply Current	4.5 mA (PA115: 40 mA peak, 25 mA average)
Housing	NEMA 4 cast aluminum, explosion proof housing meets IP65
Mass	1 kg (2.2 lbs) approx.

15555 North 79th Place • Scottsdale, AZ 85260 • tel: (480) 922-7446 • fax: (480) 948-3610 • www.cox-instruments.com

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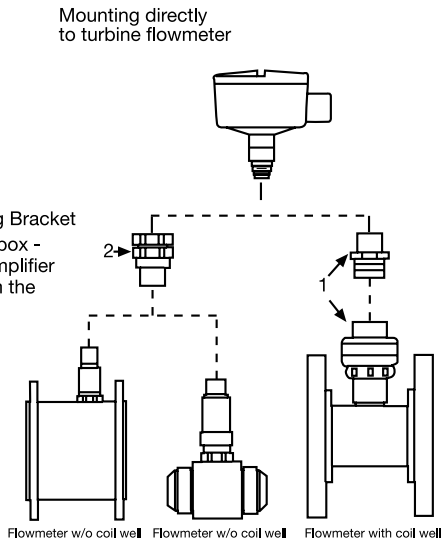
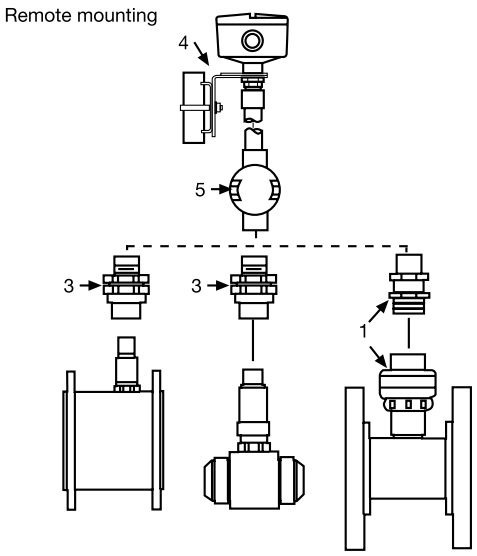
Mounting Kits
(Assembly Options)

1. A2019ZP Mounting Kit
2. A2053WR Connector
3. A2053WJ Connector
4. A2021BZ Remote Mounting Bracket
5. A2020EX Remote junction box - used when a remote pre-amplifier is more than three feet from the turbine meter.





Dimensions

Values of dimensions A and B for the following flowmeter line size codes

	1/2	3/4	1	1-1/2	2	3	4	6	8	10	12
Dimension A	8.8 224	8.9 226	8.9 226	9.1 231	9.7 246	9.9 252	10.4 264	11.5 292	12.5 318	13.6 345	14.6 371
Dimension B	7.1 180	7.2 183	7.2 183	7.4 188	8.0 203	8.2 208	8.7 221	9.8 249	10.8 274	11.9 302	12.9 328

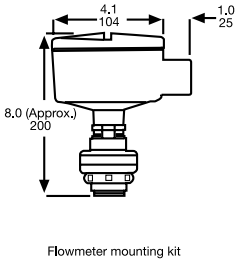
Note: Inches are the top dimension, millimeters the bottom $\frac{(in)}{(mm)}$

ORDERING OPTIONS

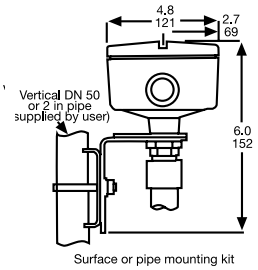
For easy ordering, select the appropriate item number from the information below:

For example:	Model	Electrical Classification
	PA112	FD

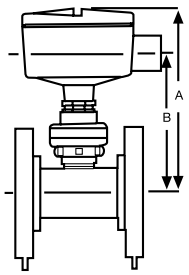
Your order would therefore be PA112-FD



Flowmeter mounting kit



Surface or pipe mounting kit



Electrical Classification
Model PA111 (Intrinsically Safe)

FB Factory Mutual Research approved as intrinsically safe for Classes I and II, Division 1, Groups, A, B, C, D, E, F and G. Enclosure NEMA 4.

CD CSA approved as intrinsically safe for Class 1, Groups A, B, C an\d D; Class II, Groups E, F and G; Class III. Enclosure NEMA 4.

Models PA112 & PA115 (Explosion Proof)

FD Factory Mutual Research approved for hazardous locations. Explosion-proof for Class I, Division 1, Groups B, C and D. Dust ignition-proof for Class II, Division 1, Groups E, F and G. Non-incendive resistive for Class 1, Division 2, Groups A, B, C and D. Enclosure NEMA 4. (Certification CS-E/FD-A).

CD CSA approved for hazardous locations. Explosion-proof for Class I, Division 1, Groups B, C and D; Class II, Division 1, Groups E, F and G; Class III; Class I, Division 2, Groups A, B, C and D. Enclosure NEMA 4. (Certification CS-E/CD-A).

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

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