

Model 167 series are low range differential pressure transducers and transmitters. It was specially designed for 35mm DIN Rail Mount, which dramatically reduces the required mounting space and installation cost. The green and red LED indicators show the working status of the unit in the field.

The pressure range covers from 0.1WC to 100WC, unidirectional or bidirectional. The output can be 3-wire 0 to 5V, 0 to 10V, or 2-wire 4 to 20 mA, fully protected against short circuit and incorrect wiring. In the voltage version, the output can go down to true zero. The units can be temperature compensated to 0.01%FS/°F. The accuracy can be 0.8%, 0.4% or 0.25% at room temperature.

The patented stainless steel sensor provides good corrosion resistance, excellent performance and long term stability.

### Model 167 Specifications

Performance Data	Standard	Optional	Optional
Accuracy* (at room temp)	± 0.8%FS	± 0.4%FS	± 0.25%FS
Non-Linearity (BFSL)	± 0.76%FS	± 0.33%FS	± 0.20%FS
Hysteresis	± 0.20%FS	± 0.20%FS	± 0.10%FS
Non-Repeatability	± 0.10%FS	± 0.10%FS	± 0.10%FS
<b>Thermal Effects</b>			
Zero/Span Shift (1/°F)	± 0.03%FS	± 0.02%FS	± 0.01%FS
Compensated Range	20 to 170°F (-7 to 77°C)		
Maximum Line Pressure	15PSI(100kPa)		
Overpressure	15PSI(100kPa) in Positive or Negative Direction for all Ranges		
Warm-up shift	± 0.1%FS		
Position Effect	Each unit is calibrated in the vertical position. For best accuracy, adjust zero of the unit if it is mounted in other position. It is not necessary to adjust the sensitivity.		

\* RSS of Non-Linearity, Hysteresis, and Non-Repeatability.

### Environmental Data and Physical Description

Operating Temperature	0 to 170°F (-18 to 77°C)
Storage Temperature	-65 to 185°F (-54 to 85°C)
LED for Quick Status	LED Off ..... No Power or Too much Pressure to Negative side
Diagnostics	Only Green On ..... Working Properly Green and Red On ... Too much Pressure to Positive Side.
Electrical Termination	5mm Euro style pluggable terminal block accepts 12-24 gauge wire
Pressure Fittings	3/16" O.D. barbed brass for 1/8" I.D. push-on tubing(standard). 8mm O.D. barbed brass(optional)
Zero Adjustment	Top accessible
Pressure Media	Typically air or similar non-conducting gases
Enclosure	PC+ABS Alloy, Nickel Plated or 94V-0 Rated
Weight	7.00Z/198g
Installation	35mm DIN Rail (EN50022)

### Applications:

- Power Plant Air Flow Monitor and Control
- Textile Machinery
- Clean Room and Fume Hood Control
- Duct Static Pressure Measurement
- Draft Control
- HVAC and VAV Control
- Furnace Air Flow Control

### Features

- LED Working Status Indicators
- DIN Rail Mount
- Up to 15 PSI Over Pressure on all Ranges
- Detachable Euro Style Terminal Block Reduces Wiring Errors and Field Wiring Time.
- Miswiring Full Protection
- Unsymmetrical Bidirectional Pressure Ranges
- True Zero Output for Voltage Unit
- Meets CE Conformance Standards
- Meets RoHS Requirements
- Pressure Ranges as Low as 10Pa!

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# Model 167 Specifications

## Electrical Data (Voltage)

Circuit 3-Wire (+EXC, -EXC, OUTPUT), Protected from Miswiring  
 Excitation 16-32VDC  
 Output\* 0-5VDC, 0-10VDC  
 Output Impedance  $\leq 5.0$  OHMS

\* Zero output: factory set at  $\pm 25$ mV(0-5VDC),  $\pm 50$ mV(0-10VDC)  
 Span output: factory set at  $\pm 25$ mV(0-5VDC),  $\pm 50$ mV(0-10VDC)  
 Calibrate with a 50K OHM load, operable with a load greater than 5K OHM for 0-5VDC output, greater than 10K OHM for 0-10VDC output.

## Electrical Data (Current)

Circuit 2-Wire (+EXC, -EXC), Protected from Miswiring  
 Excitation 16-32VDC (see diagram 2 for maximum loop resistance)  
 Output\*\* 4-20mA  
 Bidirectional Output at Zero 12mA as standard  
 External Load 0-800 OHM

\*\* Zero output: factory set at  $\pm 0.08$ mA  
 Span output: factory set at  $\pm 0.08$ mA  
 Calibrated with a 250 OHM load and a 24VDC supply voltage.

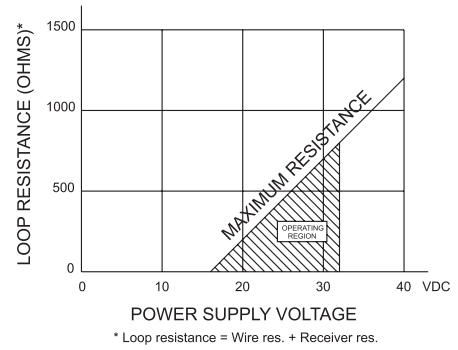


Diagram 2

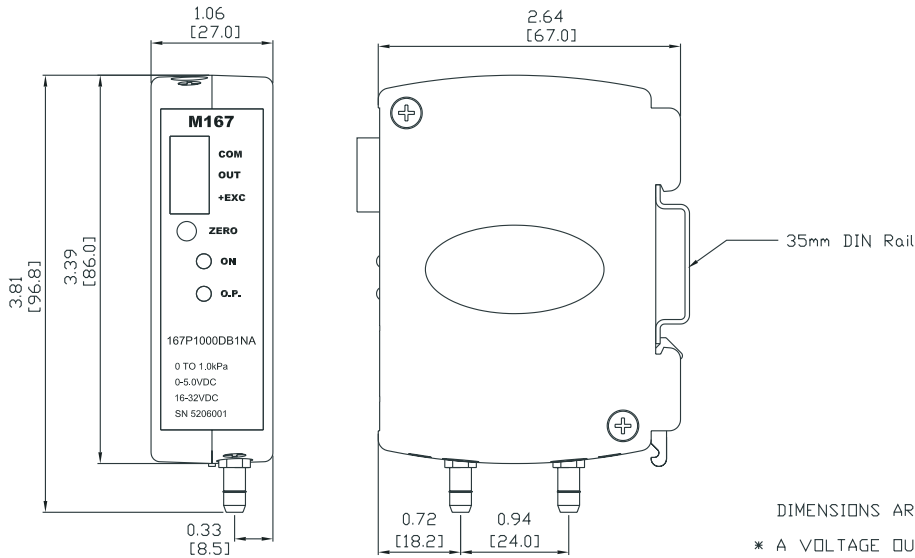


Diagram 1

## Ordering Information

Code all blocks in table.

Example: 167W00R1DA8NA for 167 Transmitter, 0-0.1 in. WC Range, Unidirectional, 4-20mA Output, 0.8% Accuracy, No Calibration Certificate, 3/16" Barbed Brass Pressure Fittings.

1	6	7							
Model	Unit	Range	Pressure Type	Output	Accuracy	Certificate	Pressure Fitting	Special Range	
167	P: Pascal W: in. W.C.	NNNN	Differential D: Unidirectional B: Bidirectional	A: 4-20mA B: 0-5VDC C: 0-10VDC	8: 0.8%FS 4: 0.4%FS 2: 0.25%FS	Y (with) N (without)	A: 3/16" B: 8mm (Barbed Brass)	S	
Pressure Unit/Range/Type									
in. W.C. (Unidirectional)			in. W.C. (Bidirectional)			Pascal (Unidirectional)		Pascal (Bidirectional)	
W00R1D=0-0.1 in. W.C.			W0R05B=0~ ± 0.05 in. W.C.			P0025D=0-25 Pa		P0010B=0~ ± 10 Pa	
W0R25D=0-0.25 in. W.C.			W00R1B=0~ ± 0.1 in. W.C.			P0050D=0-50 Pa		P0025B=0~ ± 25 Pa	
W00R5D=0-0.5 in. W.C.			W0R25B=0~ ± 0.25 in. W.C.			P0100D=0-100 Pa		P0050B=0~ ± 50 Pa	
W0001D=0~1 in. W.C.			W00R5B=0~ ± 0.5 in. W.C.			P0250D=0-250 Pa		P0100B=0~ ± 100 Pa	
W02R5D=0-2.5 in. W.C.			W0001B=0~ ± 1 in. W.C.			P0500D=0-500 Pa		P0250B=0~ ± 250 Pa	
W0005D=0~5 in. W.C.			W02R5B=0~ ± 2.5 in. W.C.			P1000D=0-1000 Pa		P0500B=0~ ± 500 Pa	
W0010D=0~10 in. W.C.			W0005B=0~ ± 5 in. W.C.			P1500D=0-1500 Pa		P1000B=0~ ± 1000 Pa	
W0025D=0~25 in. W.C.			W0010B=0~ ± 10 in. W.C.			P2500D=0-2500 Pa		P1250B=0~ ± 1250 Pa	
W0050D=0~50 in. W.C.			W0025B=0~ ± 25 in. W.C.			P5000D=0-5000 Pa		P2000B=0~ ± 2000 Pa	
W0100D=0~100 in. W.C.			W0050B=0~ ± 50 in. W.C.			P100CD=0-10000 Pa		P5000B=0~ ± 5000 Pa	
						P250CD=0-25000 Pa		P100CB=0~ ± 10000 Pa	

\* Specifications subject to change without notice. If you don't see what you need here, please contact us.