

Filtration Air Restriction Sensor

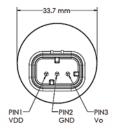


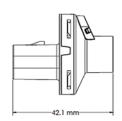
For improved air filtration system performance, Amphenol's new FMA series of Filtration Air Restriction (FAR) Sensors accurately measure the pressure loss across a variety of air filtration devices utilizing Amphenol's high accuracy NPA piezoresistive technology in a low-profile form factor that is easy to install and maintenance-free. With configurable thresholds, FMA can be easily installed for use in a variety of applications, including commercial and automotive HVAC and industrial air filters, engine air filtration systems and rooftop units exposed to pressure or vacuum environments. With hydrophobic reference port and sealed connection system, FMA monitor can be used in a variety of harsh environmental conditions.

The FMA Series of Air Filter Restriction Sensors are available in multiple positive or vacuum pressure ranges, mating with an integrated AMPSEAL 16 (3-way) electrical connector (Drawing No.: C-776402-1-GEN) and a 1/8-27 NPT female pressure connection port.

Features

- Supply Voltage: 5VDC or 3.3VDC
- Diagnostic Features
- Temperature-compensated
- Sealed AMP Electrical Connector
- Multiple Pressure Ranges Available
- Fast Response Time
- REACH & RoHS Compliant

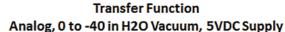


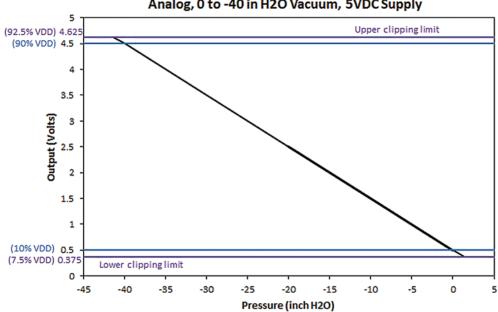


Performance				
Accuracy	2.5% FSO			
Resolution	0.12% FSO			
Compensated Temp Range	0°C to 80°C			
Proof Pressure	2X FSP			
Burst Pressure	3X FSP			
Ingress Protection	IP66			
Operating Temp Range	-40°C to 125°C			
Storage Temp Range	-55°C to 150°C			
Start-Up Time	10 ms			
Response Time	< 2 ms			
Repeatability	1.5% FSO			
Intended Media	Clean Dry Air			
Clamp Limits Upper/Lower	92.5% to 7.5%			
Diagnostic Limits Upper/Lower	97.5% to 2.5%			
	0-5"			
	0-10"			
Pressure Ranges Available*	0-40"			
	1 PSI			
	5 PSI			

^{*} Contact factory for additional custom pressure ranges.

Filtration Air Restriction (FAR) Specifications





Electrical			
Supply Voltage (VDD)	5 VDC +/-5%		
Supply Current	5 mA Max		
Output Voltage (OV) (Ratiometric)	0.5 to 4.5 V (10% to 90% VDD)		
Output Current	0.040 mA Max		
Output Impedance	250 ohm Max		
Over Voltage	28 V Momentary Contact		
Reverse Voltage	28 V Momentary Contact		
ESD Rating	Contact: 8 kV; Air: 15 kV		
EMC Compliance	RE (150 kHz - 3.2 GHz) CI BCI (10 kHz - 400 MHz) RI (100 kHz - 3.2 GHz)		

Ordering Information

FMA	Code	Description			
	300	Analog	Amplified Output, 3.3 VDC Excitation, Calibrated		
	500	Analog	g Amplified Output, 5.0 VDC Excitation, Calibrated		
		Code	Description		
		05W	5 in H20	O (1.25 kPa)	
		10W	10 in H2O (2.5 kPa)		
		40W	40 in H2O (10 kPa)		
		001	1 Psi (7 Kpa)		
		005	5 Psi (35 kPa)		
			Code	Description	
			GV	Vacuum Gage	
			GP	Positive Gage	
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FMA				Typical Order Number	

