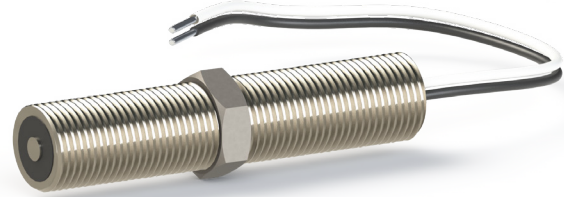


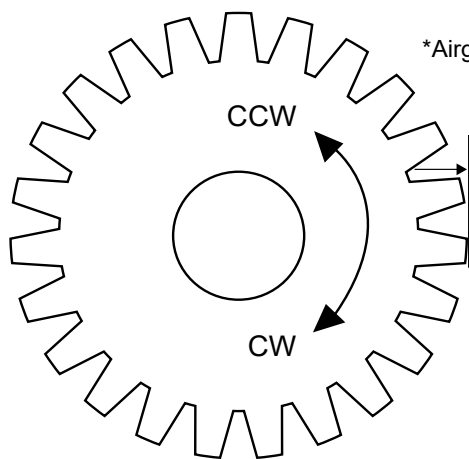
Features and Benefits

- Passive (no power required)
- Sinusoidal speed-dependent output
- 2 wires
- 303 stainless steel housing
- 5/8-18 thread
- Non-magnetic stainless steel nut
- Environmentally sealed
- Resistant to shock and vibration
- Corrosion proof and fungus resistant
- Humidity up to 100%

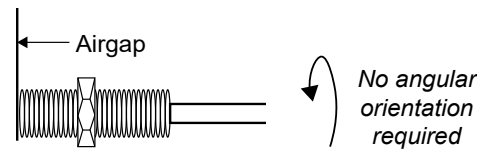


Sensor

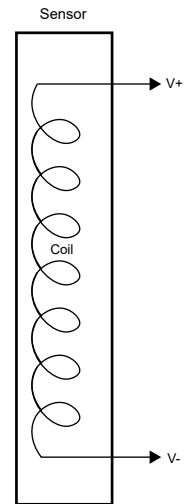
Application Example



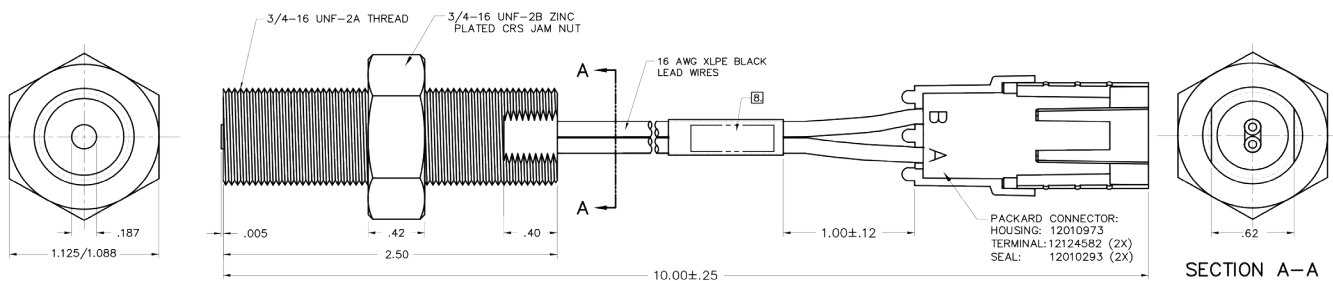
*Airgap is dependent on tooth gear geometry



Typical Output Voltage



Physical Outline



Sensor Characteristics ($T = -40$ to $221^{\circ}F$)

Table 2.2

Characteristic	Test Condition	Limits			
		Min.	Typ.	Max.	Units
Resistance	78°F	144	180	216	Ohm
Inductance	78°F		60		mH
Output Voltage	Operating	1.0			V P-P
High Pot	Wires to Case	485	500	515	VRMS
Lead Pull	Operating	2			lbs

Test Conditions:

- Air Gap: .055 in
- Test Wheel: 8.5 pitch
- Speed: 200 Hz
- Load: 20K Ohms

Sensor Operation

The V Series provides an analog voltage output that is both frequency and amplitude dependent on target attributes, target speed, and the air gap between sensor and target. The output is typically a sinusoid when the target presented has regularly spaced areas of material/no material such as a spur gear.

One requirement of a target is that the material **MUST** be ferrous (iron, steel and 400 series or stainless steels). The output characteristics that you will achieve are difficult to predict and performance testing must take place. As a general rule, to maximize output, you would use a target that is iron/steel (low-carbon) with large teeth. As you move away from this combination, the output of the sensor will decrease at a given speed and air gap. V Series are passive, that is they do not require external power and are 2-wire versus a typical active Hall Effect gear tooth speed sensor, which is 3-wire. This can be an advantage in many applications.

Wiring

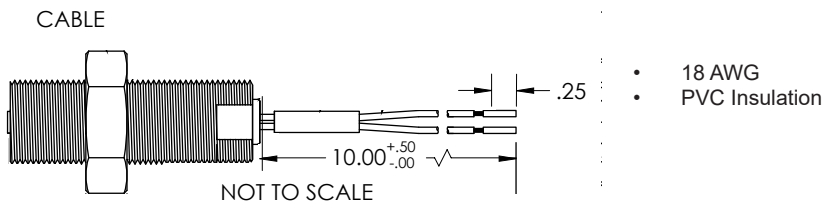


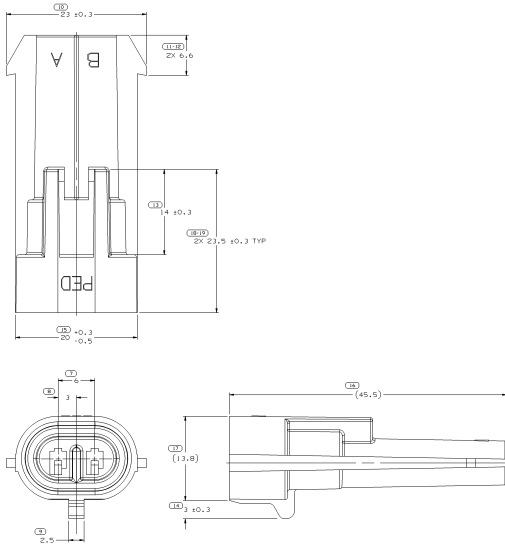
Table 3.1

Standard Wiring Color Code	
	Cable
Pin 1	White
Pin 2	black

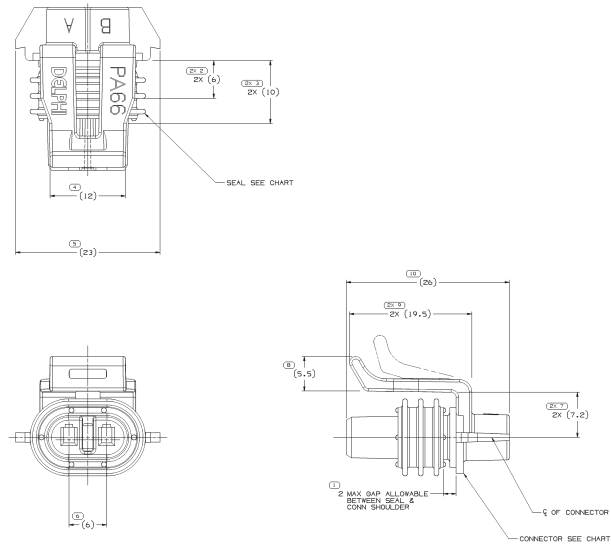
Pin 1 (white) positive with respect to Pin 2 (black) with the approach of a ferrous target

Connector Options

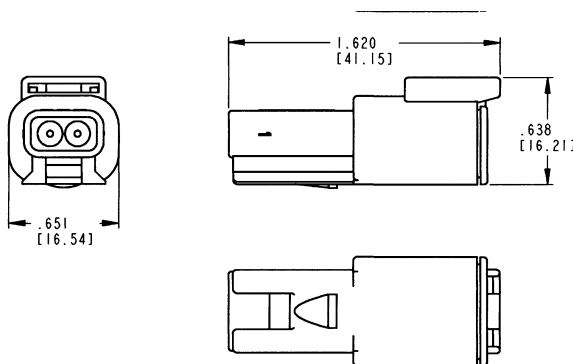
Aptiv Metri-Pack 150 Series (Male)



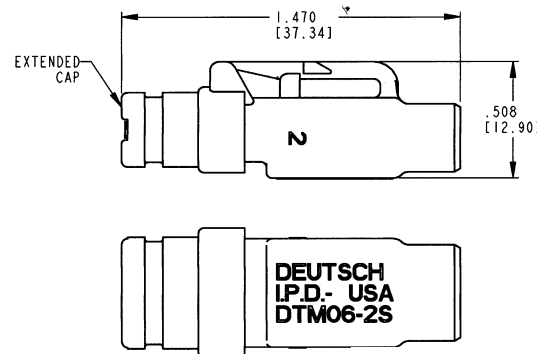
Aptiv Metri-Pack 150 Series (Female)



Deutsch DTM-04 (Male)

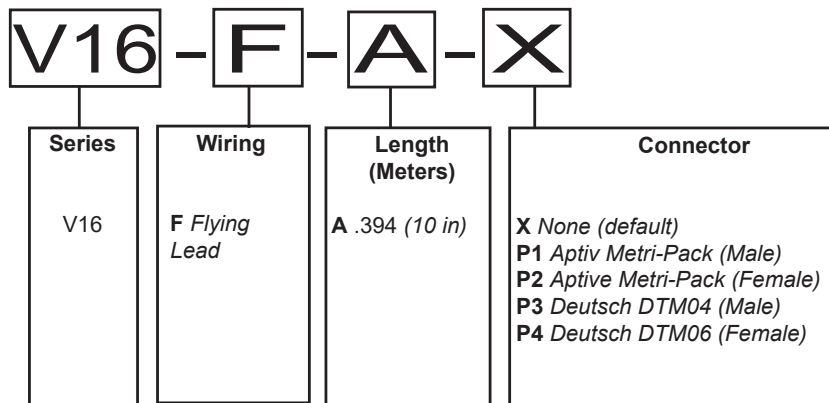


Deutsch DTM-06 (Female)



Need a different connector? Contact sales@phoenixamerica.com.

Part Number Description



Example: V16-F-A-X