

## Model 616 : Manifold Absolute Pressure Sensor (MAP)

### FEATURES

- 0.2 bar to 1.0 bar 0.2 bar to 2.0 bar  
0.2 bar to 3.0 bar
  - 1.5%FS Static Accuracy
  - MEMS technology
  - Programmable ASIC to meet customer specifications
  - Low part count enhances reliability
  - Amplified and temperature com
  - EMI protection
  - Combination of pressure and temperature sensor(MAP/MAT)
- MAP sensor precision with reliable thermistor output  
—Two-in-one sensor yields cost reduction and space savings w/one fewer component, wire and connector



### DESCRIPTIONS

616 incorporates MEMS technology and custom Application Specific Integrated Circuit (ASIC) technology in the design. It is specifically designed for tough automotive application.

The Temperature Manifold Air Pressure sensors in Model 616 provide two separate outputs critical to air/fuel ratio optimization:

One voltage output proportional to engine intake manifold pressure

One resistance output proportional to manifold air temperature

Model 616 is designed to perform in the underhood harsh environment such as temperature extremes, vibration, thermal and mechanical shock, and corrosive chemical. Please contact us for special design to meet your requirements.

### SENSOR SPECIFICATIONS

#### **Electrical:**

Supply Voltage	5.0±0.5 VDC
Supply Current	10 mA max
Maximum Output Current	Sink 1 mA Source 0.1 mA
Output Impedance	10 ohms max
Output Type	ratiometric
Output Voltage	0.25 to 4.85 VDC at 5VDC excitation

**Sensor Operating Characteristics:**

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Range	0.2 bar to 1.0 bar 0.2 bar to 2.0 bar 0.2 bar to 3.0 bar
Proof Pressure	200%FS
Static Accuracy (%FS)	1.5 typ.
Temperature Measurement Accuracy	±1°C at 25°C

**Environmental Effects:**

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Compensated Temperature Range	-40°C to +135°C
Storage Temperature Range	-50°C to +150°C

**Mechanical:**

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Media Compatibility Media Compatible with Silicon

**APPLICATION:**

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FIAT	46553045, 71732447
BOSCH	0261230030
FACET	10.3091
MEAT DORIA	82120

FIAT	73503657,735036570
BOSCH	0281002437
MEAT&DORIA	82143
IVECO	504088431,73503657
BENZ	1571530128
MWM	9 6120 06 9 0024
OPEL	24459853,9196671,93171176
SAAB	9543901
VM MOTORI S.P.A	45962069F
VOLKSWAGEN	2R0 906 051C
FACET	10.3082

FORD	2U1L 9F479 AA
HODA JAZZ(GD)1.2	37830PWEG01
OPEL	1571530028
BOSCH	93399801
CHERY	0261230099,480ED-108060

FIAT	46769978
GM	93170309

OPEL            1238244  
 BOSCH         0261230042  
 FACET          10.9302

**Notes:**

1. Static accuracy is the RSS of non-linearity, hysteresis, and non-repeatability
2. Please contact us for special design to meet your requirements.

