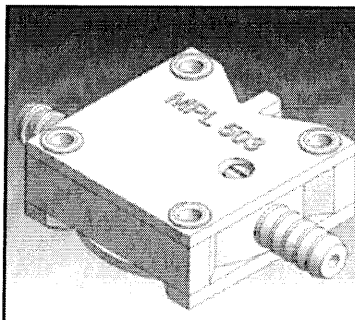


[Home](#) | [About MPL](#) | [MPL Products](#) | [Reference Center](#) | [Contact MPL](#) | [Site Tools](#) | [News](#)
[Quick Help](#)**MPL Products**[Product Overview](#)[How They Work](#)➤ [MPL 500 Series](#)[MPL 600 Series](#)[MPL 9300 Series](#)[Dimensions](#)[Custom OEM Solutions](#)[Submit Your Specification](#)[Download MPL Brochure](#)**MPL 500 SERIES**➤ **Introduction**

MPL 500 Series switches offer pressure, vacuum, and differential sensors, sensitive to as low as 0.05 in/H² O. Their accuracy and reliability offer the designer an excellent general purpose low pressure to electric interface for monitoring and control applications. Miniature size and low cost make the **500 Series** ideal for OEM applications.

[View Schematic](#)➤ **Description**

MPL 500 is diaphragm-operated utilizing low stress deflecting contacts. Elimination of sliding or pivoting parts results in high reliability and long service life. Diaphragm material can be selected for the operating medium, temperature range, and other parameters. During the development of a specification, actuation point can be moderately adjusted by the designer. In production, a factory setting is required.

MPL 500, 501, 502 and 503 are single-setting models, available as pressure, vacuum or differential pressure sensors. **MPL 504** offers two settings. **MPL 533** adds the capability to switch high current loads, utilizing an integral AC static switch (triac). No power source is required other than the AC load.

➤ **Specifications**

Body: glass-filled polyester, grade SEO, standard

Diaphragm: polyurethane, fluorosilicone, EPDM, Teflon, and other materials are available

Terminals: brass, gold-plated

Contacts: phosphor bronze with gold inlay standard. Other materials available

Operating Temperature: -40 to +120C (-40 to +250F), depending on components. Consult factory.

Operating Pressure: 0.05 in/H² O to 550 in/H² O (20psi)

Burst: 25 psi

Response: MPL 500/501/503/504/533, 160Hz; MPL 502/528/509, 270Hz

Life: Over 100,000,000 cycles

Form: SPST-NO, SPST-NC, 2x, SPST-NO (Form F) MPL 504

Resistance: 500 milliohm maximum

Weight: 10 grams

➤ **Electrical**

MPL 500 switches are designed for low current and logic applications, such as LED indicators and solid state relays. Typically, a load of 10 to 20mA will ensure reliable switching. For inductive loads, a varistor or R-C snubber circuit is recommended.

To switch heavier loads, use any **MPL 500 Series** switch with an interface device such as solid state relay (or select the MPL 600 or 9300 Series). Ask your MPL application engineer about using the **MPL 500** with an AC static switch for loads up to 5A.

MPL Spotlight: Micro Contacts

The **MPL 533** features an integral triac. Current capacity of the **MPL 533** is limited by duty cycle (% on-time) and ambient temperature. However, source voltages from 6 to 240VAC can be used with long life and high reliability.

Finally, for loads up to 25A, see the **MPL 600 Series**.

➤ **Terminals**

NEMA 0.020" x 0.187" male tabs are standard, for female quick disconnects. Low-profile terminals for 18-22 gage wire are recommended.

Optional bifurcated terminals are also available on all models, which will accept 0.020" x 0.187" or 0.020" x 0.110" female quick disconnects.

Terminals are available for printed circuit board mounting. Custom applications requiring elongated terminals, tinning, and custom wiring can also be accommodated.

➤ **Leakage**

The standard polyurethane diaphragm functions as both sensor and seal. For dynamic applications such as fan monitoring, the diaphragm alone provides an adequate seal. In static applications (leak detection, liquid level, etc.) a secondary internal gasket will ensure an almost bubble tight seal of the pressure cavity.

➤ **Actuation Settings**

All **MPL 500 Series** sensors are available with factory settings from 0.05 to 550 in/H 2 O. Tolerance is typically about 10% of the setpoint. Ask your MPL application engineer for more information on tolerances.

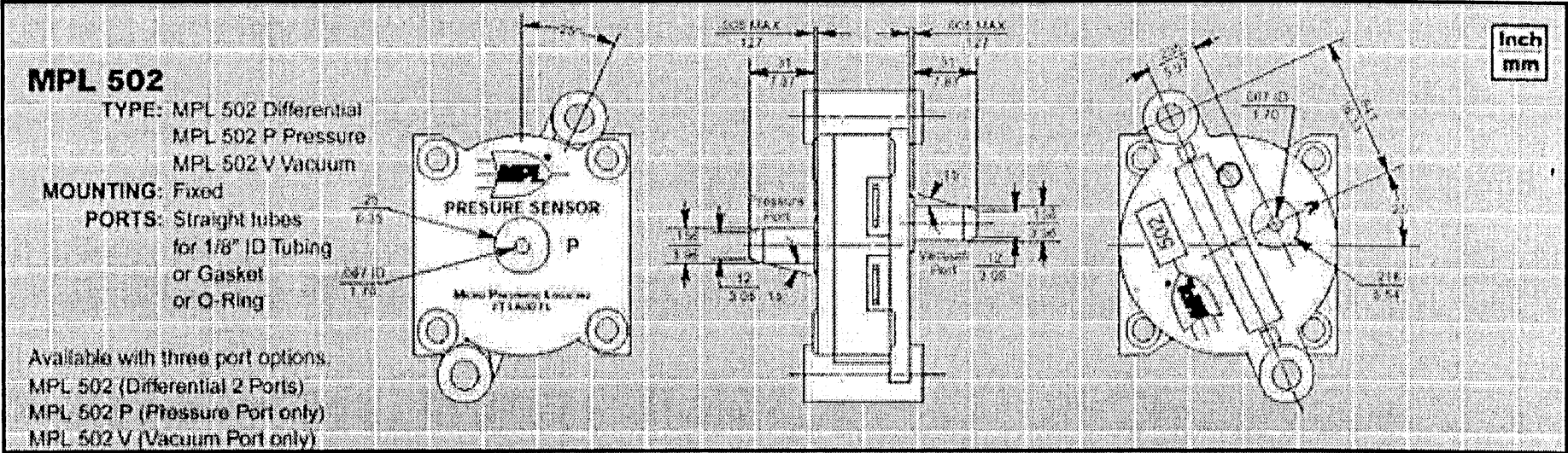
➤ **6 Standard Ranges Available**

Range A 0.05 to 0.75 in/H 2 O
Range B 0.50 to 3.00 in/H 2 O
Range C 2.00 to 13.00 in/H 2 O
Range D 10.00 to 50.00 in/H 2 O
Range E 25.00 to 200.00 in/H 2 O
Range F 100.00 to 550.00 in/H 2 O

➤ **Special Ports & Mounting**

The **MPL 508** adds a 1/8" brass fitting to the **MPL 502** features. **MPL 509** adds a 5/32" barbed brass fitting, and a 5/16" nut and washer for panel mounting.

1/8" NPT Port (above, left) can be molded or die-cast. 5/32" barbed brass port (above, right) also has 5/16" nut and washer for panel mounting.





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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