

## Compact Digital Pressure Switch Model: MDI 11

### Applications

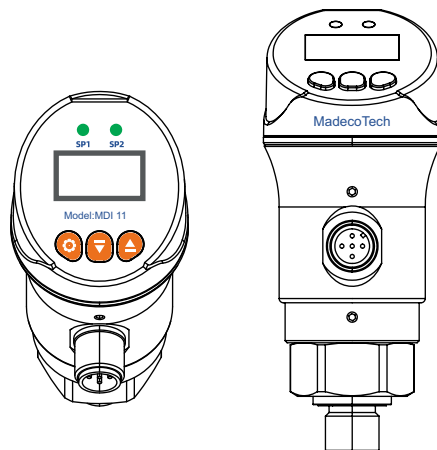
- Machine tool drive monitoring
- Automated production line
- High speed train
- Hydraulic equipment
- Other occasions to replace mechanical pressure switches
- Automatic control equipment

### Special features

- 304 stainless steel shell, IP65/66 structural design
- Double-stage rotation structure, quickly adjust the screen orientation
- OLED screen design, wide viewing angle range and high resolution
- Multiple output modes optional: 4~20mA, PNP/NPN switchable
- Dual-channel alarm lights, multi-function button design



MDI 11 is a digital pressure switch with an OLED screen suitable for hydraulic environments. The product is designed with a 304 stainless steel case and a plastic case head. The protection capability can reach IP65 level. The product can be used in harsh environments. This pressure switch adopts a universal threaded joint design. It is designed for high load conditions in hydraulic environments and is equipped with an ED sealing method to achieve good long-term stability. This product is equipped with a double-section rotating structure that can adjust the screen orientation to ensure that customers can obtain good viewing angles in different installation positions. This pressure switch is equipped with multiple function buttons. Users can quickly set hysteresis value, upper and lower limit settings, hysteresis mode/window mode and other functions. Equipped with a standard 5-core MI2 aviation plug line (1 meter), users can directly replace the old mechanical pressure switch.



## Description

### Technical Parameters:

- Measuring Range -1 ~ 600 bar
- Accuracy Level  $\pm 0.5\%$ FS
- Overload Pressure  $\leq 10\text{MPa } 200\% - >10\text{MPa } 150\%$
- Destroying Pressure  $\leq 10\text{MPa } 300\% - >10\text{MPa } 200\%$
- Screen Display Mode OLED
- Screen Resolution 128\*64
- Supply Voltage 12~28VDC
- Output Signal  
Output 1: NPN or PNP (switchable)  
Output 2: NPN or PNP (switchable)  
Other outputs 4~20mA
- Load Current  $\leq 100\text{mA}$
- Operating Temperature  $(-20 \sim 65)^{\circ}\text{C}$
- Electrical Connections M12 plug
- Electrical Protection Anti-reverse connection protection, anti-electromagnetic interference
- Threaded Port M20\*1.5, G1/4, NPT1/4 or customized thread
- Interface Material 304 stainless steel
- Diaphragm Material 316L stainless steel
- Protection Level Ip65/66
- Accessories M12 standard 5-core 12-pin cable (1meter)

| code                                                                         | bar        | Range (kPa)    | mBAR            | mmHg                    | mmH2O                     | Mpa         | Kgf/cm2             |    |          |
|------------------------------------------------------------------------------|------------|----------------|-----------------|-------------------------|---------------------------|-------------|---------------------|----|----------|
| M1                                                                           | -1 ... 0   | -100 ... 0     | -1000 ... 0     | -750.0671 ... 0         | -10197.162 ...0           | -0.1 ... 0  | -1.019 ... 0        |    |          |
| M2                                                                           | -1 ... +1  | -100 ... +100  | -1000 ... 1000  | -750.0671 ... +750.0671 | -10197.162 ... +10197.162 | -0.1 ~ +0.1 | -1.019 ... +1.0197  |    |          |
| M3                                                                           | -1 ... +2  | -100 ... +200  | -1000 ..2000    | -750.0671 ... +1500.12  | -10197.162 ... +20394.32  | -0.1 ~ +0.2 | -1.019 ... +2.039   |    |          |
| M5                                                                           | -1 ... +5  | -100 ... +500  | -1000 ... 5000  | -750.0671 ... +3750.380 | -10197.162 ... +50985.81  | -0.1 ~ +0.5 | -1.019 ... +5.0985  |    |          |
| M7                                                                           | -1 ... +10 | -100 ... +1000 | -1000 ... 10000 | -750.0671 ... +7500.62  | -10197.162 ... +101971.6  | -0.1 ~ +1   | -1.019 ... +10.1972 |    |          |
| M00                                                                          | 0 ... 0.25 | 0 ... 25       | 0 ... 250       | 0 ... +187.5154         | 0... +25492.90            | 0 ~ +0.025  | 0 ... +0.2549291    |    |          |
| M01                                                                          | 0 ... 0.4  | 0 ... 40       | 0 ... 400       | 0 ... +300.0247         | 0... +4078.86             | 0 ~ 0.04    | 0 ... +0.4078       |    |          |
| M02                                                                          | 0 ... 0.6  | 0 ... 60       | 0 ... 600       | 0 ... +450.037          | 0... +6118.29             | 0 ~ 0.06    | 0 ... +0.6118       |    |          |
| M03                                                                          | 0 ... 1    | 0 ... 100      | 0 ... 1000      | 0 ... +750.0617         | 0... +10197.16            | 0 ~ 0.1     | 0 ... +1.0197       |    |          |
| M04                                                                          | 0 ... 2.5  | 0 ... 250      | 0 ... 2500      | 0 ... +1875.15          | 0... +25492.90            | 0 ~ 0.25    | 0 ... +2.54929      |    |          |
| M05                                                                          | 0 ... 4    | 0 ... 400      | 0 ... 4000      | 0 ... +3000.247         | 0... +40788.64            | 0 ~ 0.4     | 0 ... +4.0788       |    |          |
| M06                                                                          | 0 ... 6    | 0 ... 600      | 0 ... 6000      | 0 ... +4500.37          | 0... +61182.97            | 0 ~ 0.6     | 0 ... +6.1182       |    |          |
| M07                                                                          | 0 ... 10   | 0 ... 1000     | 0 ... 10000     | 0 ... +7500.617         |                           | 0 ... 1     | 0 ... +10.197       |    |          |
| M08                                                                          | 0 ... 16   | 0 ... 1600     | 0 ... 16000     | 0 ... +12001            |                           | 0 ... 1.6   | 0 ... +16.3155      |    |          |
| M09                                                                          | 0 ... 25   | 0 ... 2500     | 0 ... 25000     | 0 ... +18751.5          |                           | 0 ... 2.5   | 0 ... +25.4929      |    |          |
| M10                                                                          | 0 ... 40   | 0 ... 4000     | 0 ... 40000     | 0 ... +30002.47         |                           | 0 ... 4     | 0 ... +40.788       |    |          |
| M11                                                                          | 0 ... 60   | 0 ... 6000     | 0 ... 60000     | 0 ... +45003.7          |                           | 0 ... 6     | 0 ... +60.182       |    |          |
| M12                                                                          | 0 ... 100  | 0 ... 10000    | 0 ... 100000    | 0 ... +75006.17         |                           | 0 ... 10    | 0 ... +101.97       |    |          |
| M13                                                                          | 0 ... 160  | 0 ... 16000    | 0 ... 160000    | 0 ... +120010           |                           | 0 ... 16    | 0 ... +163.155      |    |          |
| M14                                                                          | 0 ... 250  | 0 ... 25000    |                 |                         |                           | 0 ... 25    | 0 ... +254.92       |    |          |
| M15                                                                          | 0 ... 400  | 0 ... 40000    |                 |                         |                           | 0 ... 40    | 0 ... +407.88       |    |          |
| M16                                                                          | 0 ... 600  | 0 ... 60000    |                 |                         |                           | 0 ... 60    | 0 ... +611.82       |    |          |
| M17                                                                          | 0 ... 700  | 0 ... 70000    |                 |                         |                           | 0 ... 70    | 0 ... +713.801      |    |          |
| M18                                                                          | 0 ... 1000 |                |                 |                         |                           | 0 ... 100   | 0 ... +1019.7       |    |          |
| M19                                                                          | -1 ... 40  | -100 ... 4000  | -1000 ... 40000 | -750.0671 ... +30002    | -10197.162 ... +40788     | -0.1 ... 4  | -1.019 ... +40.788  |    |          |
|                                                                              |            |                |                 |                         |                           |             |                     |    |          |
| L1                                                                           | 15 mbar    | L2             | 25 mbar         | L3                      | 60 mbar                   | L4          | 100 mbar            | L5 | 160 mbar |
| For special range, please use the code XX and mention the range in the order |            |                |                 |                         |                           |             |                     |    |          |

## MDI 11 Compact Digital Pressure Switch

| ORDERING CODE                                    | Example: | MDI 11 | M11 | T | 6 | D | C | AT | I | C | WA | Note |
|--------------------------------------------------|----------|--------|-----|---|---|---|---|----|---|---|----|------|
| Range                                            |          |        |     |   |   |   |   |    |   |   |    |      |
| Select a range from the table                    |          |        | M11 |   |   |   |   |    |   |   |    |      |
| Process Connection Type                          |          |        |     |   |   |   |   |    |   |   |    |      |
| T - Bottom                                       |          |        |     | T |   |   |   |    |   |   |    |      |
| Process Connection Sizes                         |          |        |     |   |   |   |   |    |   |   |    |      |
| 2 - G 1/4" Male                                  |          |        |     |   |   |   |   |    |   |   |    |      |
| 4 - 1/4" NPT                                     |          |        |     |   |   |   |   |    |   |   |    |      |
| 6 - Customer                                     |          |        |     |   | 6 |   |   |    |   |   |    |      |
| Power Supply                                     |          |        |     |   |   |   |   |    |   |   |    |      |
| A - 220 VAC                                      |          |        |     |   |   |   |   |    |   |   |    |      |
| D - 24 VDC                                       |          |        |     |   |   | D |   |    |   |   |    |      |
| Process Connection Material                      |          |        |     |   |   |   |   |    |   |   |    |      |
| S - 304 Stainless steel                          |          |        |     |   |   |   |   |    |   |   |    |      |
| L - 316L Stainless steel                         |          |        |     |   |   |   |   |    |   |   |    |      |
| H - Hastelloy                                    |          |        |     |   |   |   |   |    |   |   |    |      |
| C - Customer                                     |          |        |     |   |   |   | C |    |   |   |    |      |
| Accuracy                                         |          |        |     |   |   |   |   |    |   |   |    |      |
| AT - 0.5% (std.)                                 |          |        |     |   |   |   |   | AT |   |   |    |      |
| AC - 0.25%                                       |          |        |     |   |   |   |   |    |   |   |    |      |
| Certificate                                      |          |        |     |   |   |   |   |    |   |   |    |      |
| N - None                                         |          |        |     |   |   |   |   |    |   |   |    |      |
| I - Intrinsically safe ( Ex ib IIC T4)           |          |        |     |   |   |   |   |    | I |   |    |      |
| Output                                           |          |        |     |   |   |   |   |    |   |   |    |      |
| D - Two sets of switches Output                  |          |        |     |   |   |   |   |    |   |   |    |      |
| A - 4...20 mA-One set of Switch Output           |          |        |     |   |   |   |   |    |   |   |    |      |
| R - RS485                                        |          |        |     |   |   |   |   |    |   |   |    |      |
| C - Customer                                     |          |        |     |   |   |   |   |    |   | C |    |      |
| Options                                          |          |        |     |   |   |   |   |    |   |   |    |      |
| CM - Material Traceability certification         |          |        |     |   |   |   |   |    |   |   |    |      |
| CP - Hydrostatic testing with certificate        |          |        |     |   |   |   |   |    |   |   |    |      |
| CL - Cleaning for special service                |          |        |     |   |   |   |   |    |   |   |    |      |
| YW - 316L Stainless steel case                   |          |        |     |   |   |   |   |    |   |   |    |      |
| OS - Overload stop                               |          |        |     |   |   |   |   |    |   |   |    |      |
| CC - Calibration certificate                     |          |        |     |   |   |   |   |    |   |   |    |      |
| NH - Stainless steel tag wired to case           |          |        |     |   |   |   |   |    |   |   |    |      |
| AT - ATEX                                        |          |        |     |   |   |   |   |    |   |   |    |      |
| IA - Intrinsically safe (II 1/2 Ex ia IIC T4/T5) |          |        |     |   |   |   |   |    |   |   |    |      |
| WA - One year warranty                           |          |        |     |   |   |   |   |    |   |   | WA |      |
| NS - NACE MR 0175 & NACE MR 0103 standard        |          |        |     |   |   |   |   |    |   |   |    |      |
| Other                                            |          |        |     |   |   |   |   |    |   |   |    |      |



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