

Model MC2085 Pressure Switch (Pressure Controller)



MC2085 Pressure Switch (Pressure Controller) is an intelligent digital display pressure measurement and control product integrating pressure measurement, display, output and control. The product features a full electronic structure, and the output signal is amplified by a high-precision and low-temperature drift amplifier which is converted into digital signals that can be processed by the microprocessor. This product is widely used in pneumatic, hydro power, tap water, petroleum, chemical, mechanical, hydraulic and other industries.

MC2085 Pressure Switch (Pressure Controller) measure pressure by a diffused silicon sensor, and the signal is processed by a post-processing circuit and converted into a standard industrial electrical signal for output and display. The all-metal housing design with a highlighted LED digital display, enables the series to be used in a variety of industrial applications. Double key and menu design make the product more convenient to use, and various connection methods can fully meet various specific installation needs. The 330° rotating display head ensures the best viewing angle under different installation modes.

Technical parameters

Power supply voltage: 12...30 VDC

Switch output: PNP/NPN, NO/NC optional

S1, S2 output current: <500mA

Response time: <10ms Accuracy: $\leq \pm 0.5\%FS$

Output type:4-20ma, 0-5V/0-10V, 0-20mA Display: red 4-bit 8mm high brightness LED

Display range: -1999... 9999 Stability: $\leq \pm 0.3\%$ FS/year Temperature: -20...85 $^{\circ}$ C

Ambient temperature:-20...80 °C Storage temperature:-30...80 °C

Materials: stainless steel Protection level:IP67 Wire connector: M12x1

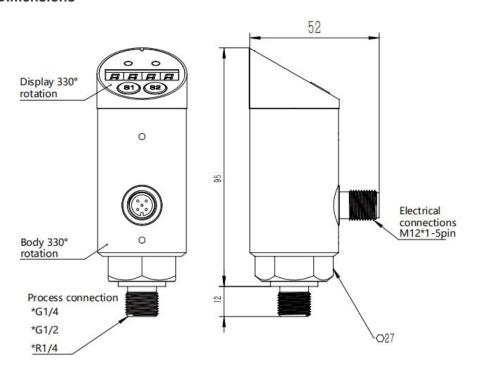


| Pressure Range | bar | 1 | 2 | 5 | 10 | 16 | 25 | 60 | 100 | 160 | 250 | 400 | 600 |
|------------------------|-----|----|----|----|-----|-----|-----|-----|------|------|------|------|------|
| riessure italige | psi | 15 | 30 | 75 | 145 | 230 | 370 | 900 | 1500 | 2300 | 3600 | 6000 | 9000 |
| Max. Overload pressure | | | ×5 | | | ×3 | | | ×2 | | ×1 | 5 | ×1.3 |
| Min. damage pressure | | | ×6 | | | ×4 | | | ×3 | | × | 2 | ×1.6 |

Ordering Codes (Model selection)

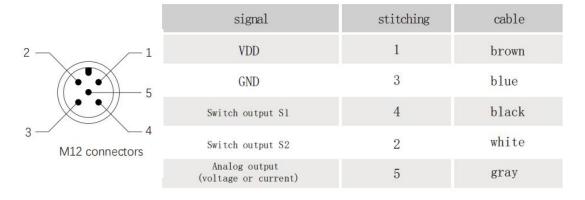
| MC2085 | Pressure Switch (Pressure Controller) | |
|--------|---------------------------------------|-----------------------------|
| - | Pressure range | e.g. 0-10bar or 0-1MPa etc. |
| - | Signal output | S2: 2 switches outputs |
| | | A3: Switch + 020mA/420mA) |
| | | V5: Switch + 05V/15V |
| | | V10: Switch + 010/110V |
| - | Switch type | P: PNP output |
| | | N: NPN output |
| - | Installment | G14M: G1/4 male thread |
| | | G12M: G1/2 male thread |
| | | G14F: G1/4 female thread |
| | | N14M: NPT1/4 male thread |
| | | R14M: R1/4 male thread |
| | | M20M: M20*1.5 male thread |
| | | K50: Clamp (OD 50.5mm) |

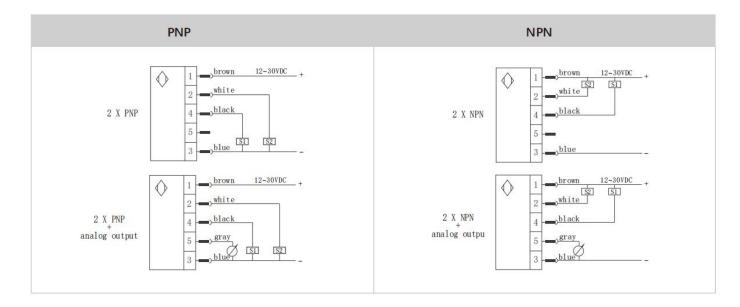
Dimensions



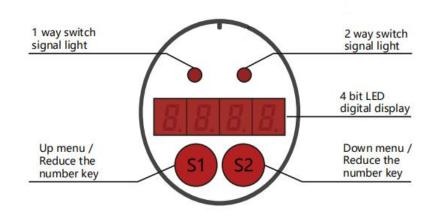


Wiring





Controlling Points Preset Step:



Press S1: turn to back menu / add the number

Press S2: turn to next menu / reduce the number

S1 + S2 (press S1 and S2 simultaneously): enter / exit menu

Press S2 for 5 seconds to reset zero



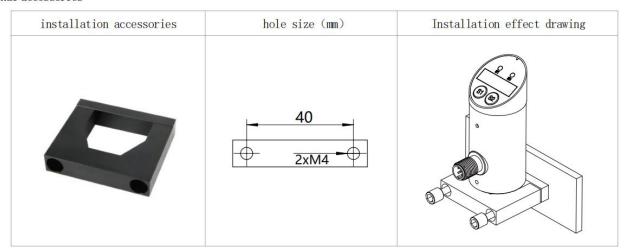
Menu and setting operation process: Press S1 + S2 to enter the LOCK password, change the password through S1 (password 0001 for setting the switch points and password 0066 for advanced menu), press S1 + S2 to enter the menu, and press S1 + S2 to exit the setting. After the parameters are set, press S1 + S2 to save and exit when the menu is at END channel.

| Password 000 | 11 menu: |
|--------------|---|
| AL1H | Switch 1 connected (when pressure reaches this point) |
| AL1F | Switch 1 opened (when pressure returns to this point) |
| AL1D | Switch 1 action delay (resolution of 0.1 seconds) |
| OUT1 | Switch 1 NO / NC select |
| AL2H | Switch 2 connected (when pressure reaches this point) |
| AL2F | Switch 2 opened (when pressure returns to this point) |
| AL2D | Switch 2 action delay (resolution of 0.1 seconds) |
| OUT2 | Switch 2 NO / NC select |
| END | Complete and confirm, exit |

| Password 0066 | menu: |
|---------------|--|
| DSAL | The default value is 0 which means this function closed. |
| | 1 represents over-range indicate, if over-range 120% then display flashing. |
| BS-L | The value corresponding to 4mA output, default is minimum range value |
| BS-H | The value corresponding to 20mA output, default is minimum range value |
| OFST | Display value compensation, default is 0. If increase and decrease the value, the actual |
| | display value corresponds to increase or decrease the corresponding value. |
| FILT | The filter coefficient is adjustable in 0-4. Default is 1. In interference situation, the larger |
| | the filter value, the more stable, and the display rate is relatively lower. |
| SPDL | Display value reaction accelerated / decrease rate |
| A-04 | 4mA output calibration |
| A-20 | 20mA output calibration |
| AL1P | Switch 1 output lag / window mode switch |
| AL1C | Switch 1 hysteresis (pressure difference) setting |
| AL2P | Switch 1 output lag / window mode switch |
| AL2C | Switch 1 hysteresis (pressure difference) setting |
| BACK | Restore the factory settings |
| END | Complete and confirm, exit |



Optional accessories



Optional accessories - electrical accessories

| name | Outline drawing/dimension drawing (m m) | material | mode1 |
|--------------------------|---|----------|-------------|
| M12*1-5Pin | - | | ZL05-PU02G |
| (2m cable) | 1 50 | PUR | ZL05-PU05G |
| M12*1-5Pin (5m cable) | 1000 | | ZL05-PU010G |
| | | PVC | ZL05-PC02G |
| M12*1-5Pin | | | ZL05-PC05G |
| (10m cable) | • | | ZL05-PC010G |
| M12*1-5Pin | 36 | | ZL05-PU02W |
| (2m cable) | | PUR | ZL05-PU05W |
| M12*1-5Pin | * | | ZL05-PU010W |
| (5m cable) | <u> </u> | | ZL05-PC02W |
| M12*1-5Pin | M12*1 | PVC | ZL05-PC05W |
| (10m cable) | | | ZLO5-PC010W |

