## 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 $330^{\circ}$ 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: $\leqslant \pm 0.5 \%$ FS
Output type:4-20ma, 0-5V/0-10V, 0-20mA
Display: red 4-bit 8 mm high brightness LED
Display range: -1999... 9999
Stability: $\leqslant \pm 0.3 \%$ FS/year
Temperature: -20... $85^{\circ} \mathrm{C}$
Ambient temperature:-20... $80^{\circ} \mathrm{C}$
Storage temperature:-30... $80^{\circ} \mathrm{C}$
Materials: stainless steel
Protection level:IP67
Wire connector: M12x1


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 $+0 \ldots 20 \mathrm{~mA} / 4 . .20 \mathrm{~mA}$ ) |
|  |  | V5: Switch $+0 \ldots 5 \mathrm{~V} / 1 \ldots 5 \mathrm{~V}$ |
|  |  | V10: Switch $+0 \ldots 10 / 1 \ldots 10 \mathrm{~V}$ |
| - | Switch type | P: PNP output |
|  |  | N: NPN output |
| - | 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



STRONG M\&C

Wiring

| signal | stitching | cable |  |
| :---: | :---: | :---: | :---: |
| M12 connectors | VDD | 1 | brown |



## 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 $\mathrm{S} 1+\mathrm{S} 2$ 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 0001 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. <br> 1 represents over-range indicate, if over-range $120 \%$ then display flashing. |
| BS-L | The value corresponding to 4 mA output, default is minimum range value |
| BS-H | The value corresponding to 20mA output, default is minimum range value <br> display value corresponds to increase or decrease the corresponding value. |
| OFST | The filter coefficient is adjustable in $0-4$. Default is 1. In interference situation, the larger <br> the filter value, the more stable, and the display rate is relatively lower. |
| FILT | Display value reaction accelerated / decrease rate |
| SPDL | 4mA output calibration |
| A-04 | 20 mA output calibration |
| A-20 | Switch 1 output lag / window mode switch |
| AL1P | Switch 1 hysteresis (pressure difference) setting |
| AL1C | Switch 1 output lag / window mode switch |
| AL2P | Switch 1 hysteresis (pressure difference) setting |
| AL2C | Restore the factory settings |
| BACK | Complete and confirm, exit |
| END |  |

Optional accessories

| installation accessories | hole size (mm) | Installation effect drawing |
| :---: | :---: | :---: |

Optional accessories - electrical accessories

| name | Out line drawing/dimension drawing ( m m) | material | model |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { M12*1-5Pin } \\ (2 \mathrm{~m} \text { cable }) \end{gathered}$ |  | PUR | ZL05-PU02G |
|  |  |  | ZL05-PU05G |
| $\begin{aligned} & \mathrm{M} 12 * 1-5 \mathrm{Pin} \\ & (5 \mathrm{~m} \text { cable }) \end{aligned}$ |  |  | ZL05-PU010G |
|  |  | PVC | ZL05-PC02G |
| M12*1-5Pin <br> ( 10 m cable) |  |  | ZL05-PC05G |
|  |  |  | ZL05-PC010G |
| $\begin{gathered} M 12 * 1-5 \mathrm{P} \text { in } \\ (2 \mathrm{~m} \text { cable }) \end{gathered}$ |  |  | ZL05-PU02W |
|  |  | PUR | ZL05-PU05W |
| $\begin{gathered} M 12 * 1-5 \mathrm{P} \text { in } \\ (5 \mathrm{~m} \text { cable }) \end{gathered}$ |  |  | ZL05-PU010W |
|  |  |  | ZL05-PC02W |
| M12*1-5Pin <br> ( 10 m cable) |  | PVC | ZL05-PC05W |
|  |  |  | ZL05-PC010W |


| M12* 1-4pin /5Pin self-connector/size drawing (m) | model |
| :---: | :---: |
|  | $\begin{gathered} \text { GL04 } \\ \text { (4Pin joint) } \\ \hline \text { GL05 } \\ \text { (5 Pin joint) } \end{gathered}$ |
|  | $\begin{gathered} \text { WL04 } \\ \text { (4 Pin joint) } \end{gathered}$ <br> WL05 (5Pin joint) |

