

Molding pressure conversion module MPC-203-25

2024/02/28

Features



- A special conversion module of 4-channels input that measures the mold cavity pressure of the injection molding machine.
- Attach the relay box MPC-304 that is convenient for wiring between the amplifier and the sensor built into the metal mold of the injection molding machine.
- The pressure value is watched on the condition set beforehand, and the result is output as an alarm signal.
- Forward the pressure value waveform converted into the analog voltage to the molding machine.
- The real time waveform of the pressure value is displayed, stored, read out, analyzed, and set variously by using the attached application software of a personal computer.
- CE mark applied product.

Specification

Specification name	Specification contents
< Analog input >	
Bridge power supply	5 VDC±0.25 VDC within 20 mA (per one channel)
Applicable sensor	LSMSB-5K~3T/LSMS-20K~3T-S06 (350 Ω, 1 unit/channel)
Number of	

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numbers of input points	Up to 4 points
Input range	-0.1 mV/V ~ 0.8 mV/V
Zero adjustment range	Adjustable between -0.1 mV/V ~ 0.7 mV/V using zero set function
Accuracy	±2.0 %F.S.
Sampling interval	10 ms for each channel (Changeable to 0.5 ms, 1 ms, 2 ms, 5 ms, 20 ms or 50 ms.)
A/D internal resolution	16 bit
Analog filter	Approx. 500 Hz
< Analog output >	
Numbers of outputs	Up to 4 points
Output voltage	0 VDC ~ 10 VDC
Load resistance	5 kΩ or less
Resolution	1/12 000 or more
Output frequency	Synchronized with A/D sampling rate.
Over range	Approx. 11 V at 110 % or more of the rated pressure. Approx. -1 V at -10% or less of the rated pressure
< Digital specifications >	
Measurement range	0 MPa ~ 999.99 MPa (Conversion value from pressure receiving area)
Status LED	POWER, ALARM, ERROR
< Various functions >	
Set of measurement condition	Set of sensor, Set of measuring time, Input signal set of START, Delay time set of START and Protruding detection time set
ALARM function set	Effective/Invalid set of channel, ALARM output signal set, Watch frame condition set (Area watch, Watch at the peak, Watch at (t) second later, Set of integral value condition (Watch integral value, Watch at the peak arrival time
Set of alarm reset	ALARM RESET time set, ALARM RESET signal set
USB interface	Conformed to USB Specification 2.0/1.1, Mini\$USB B\$type connector (Female) * Installation of the attached special driver software for PC is required.
Special application software for	MIP-D-02 Waveform display function (Sequential waveforms, Overlay waveform), Measurement processing function, Peak pressure display, Integral value display, Counter of shot number, Measurement condition setting function, Set of analog voltage output, Data storing function, ALARM judgement function, Data Processing function, Check function, Statistical process function, Screen

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PC	printing capability, Password function
< General Specifications >	
Operating temp./humidity range	Temperature -10 °C~50 °C Humidity 85 %RH or less (Non Condensing)
Stored temperature range	-20 °C ~ 60 °C
Vibration resistance	10 ~ 55 Hz double amplitude 1.5 mm, 2 hours for each direction of X, Y or Z.
Power supply	Power supply voltage: DC24 V (Available variable range DC20.4 V ~ DC27.6 V), Power consumption: Approx. 6.0 W (at DC24 V)
Outline dimensions	160 mm × 98 mm × 40 mm (Excludes protruding parts.)
Weight	Approx. 800 g
Installation	mount on the metal surface with the magnet.
Accessories	USB cable,Ferrite core,Plug for power supply and external control I/O, CD-ROM, Instruction manual

Options

[Load cell LSMSB-*](#)

LSMS-*-S06

External control I/O cable 2.5 m (FA409-477)

Analog voltage output cable 2.5 m (FA409-476)