



9000E

Signal Isolator



Stable



Robust



Accurate



HART Protocol
Supported



9000E is compact DIN rail mount Signal Isolator which is used to isolate 4-20mA Analog Field Signals. Separate Inbuilt Transmitter Power supply is available in each channel to energise the 2-wire field Transmitter, and this will eliminate the requirement of external Transmitter Power Supply. 9000E is suitable for 2-W and 4-W Field Transmitters.

9000E is available in one, two channel and one input-two output options. Both channels are isolated from each other. 9000E is highly accurate, have low Temperature drift and fast response time. It allows bidirectional HART signal communication between the field transmitter and HART Communicator.

9000E have slim design which occupy less space and accommodate more number of Signal Isolators in single panel. The Power consumption of device is very less which eliminate the Bulky power supply requirement. 9000E is designed with advance technology for low power dissipation to ensure minimal heat generation. This feature allows for the efficient use of multiple isolator devices on a single panel, providing a reliable and space-saving solution for industrial applications.

9000E-12 Model acts as a signal distributor. A typical application could be where the signal has to be distributed for indication on local panel, field control room, main control room or DCS system. The isolator provides a protection for sensitive system parts against voltage spikes.

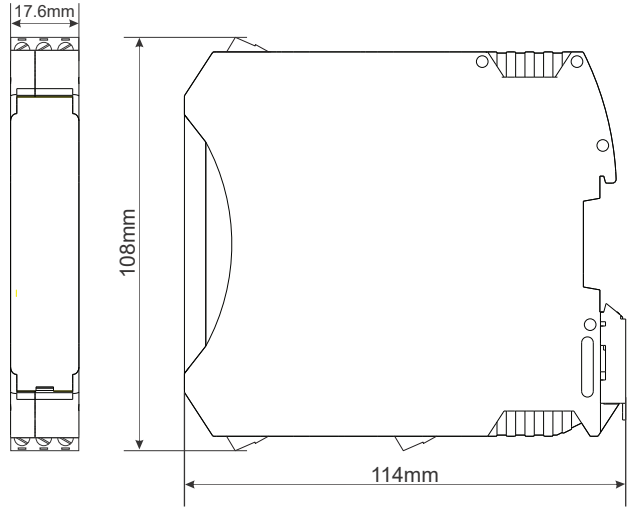
Features

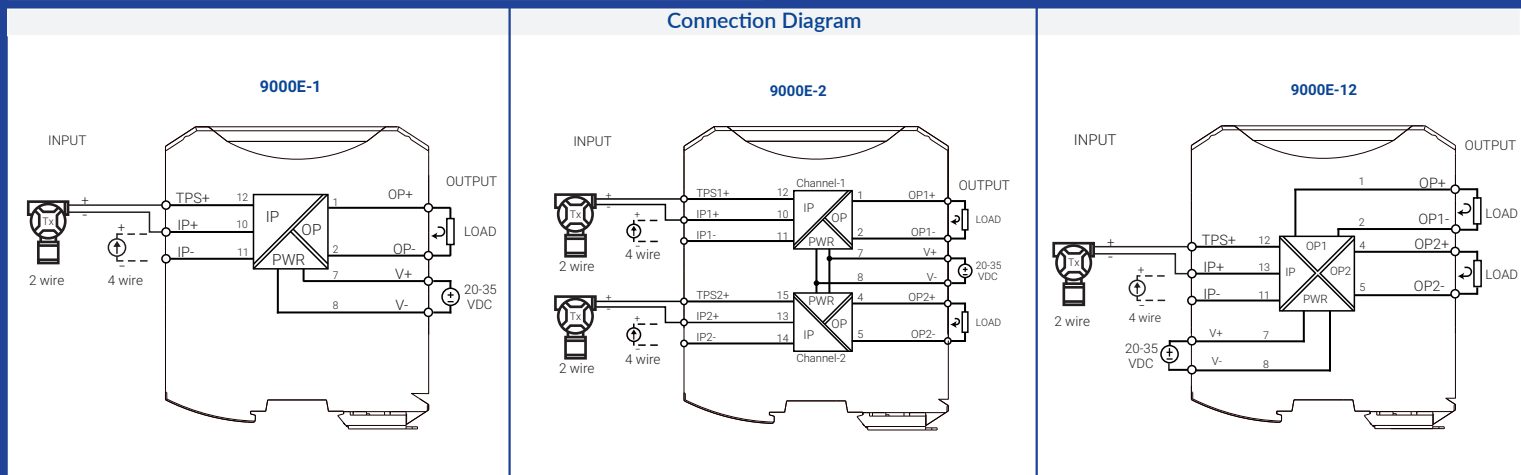
- Compact DIN-Rail mount design of 17.6mm width
- 2W transmitter input with HART Pass
- High KV 3 port isolation of each channel
- High Accuracy, low drift, low temperature effect
- Input and Output well protected
- Fast response suits all applications
- Low power dissipation

Applications

- Isolation of process field signals
- Signal isolation in VFD panels
- Distribution of signals in Automation Panels
- Protect Systems against Field over voltage/Lightning
- Convert/distribute signals
- Impedance matching of transmitters and receiver instruments
- Powering of field transmitters

TECHNICAL SPECIFICATIONS

Input		Physical	
Input type	Current	Mounting Type	DIN Rail (35 mm)
Input Range	4 to 20mA	Terminal Block	UL,CSA standard
Input Impedance	$\leq 30\Omega$	Terminal Cable Size	2.5mm ²
Temperature Coefficient	≤ 50 ppm/°C	Enclosure Material	PA66
CMRR	≥ 100 dB	IP Rating	IP20
NMRR	≥ 70 dB	Dimension (in mm)	17.6(W)x108(H)x114(D) mm
No. of channels	9000E-1: One Input, One Output	Weight	≤ 150 g
	9000E-2: Two Input, Two Output	Environmental	
	9000E-12: One Input, Two Output	Operating Temperature	-20 to 60 °C
Output		Storage Temperature	-20° to 70 °C
Output Type	Current	Relative Humidity	30 to 95% RH (Non-Condensing)
Output Range	4 to 20mA	Protection	Conformal Coating on PCB
Response Time	$\leq 50\mu$ S	Dimensions	
Accuracy	$\pm 0.1\%$ of FS		
Output Load Resistance	$\leq 450\Omega@20$ mA		
Transmitter Power Supply	Open circuit voltage: ≥ 24 VDC Available voltage: ≥ 23 VDC @ 4mA, ≥ 21 VDC @ 20mA		
Communications Supported*	9000E-1 / 9000E-2: HART pass supported in both individual channels. 9000E-12: HART pass supported in output-1.		
*HART Pass supported with 2W transmitter only			
Power Supply			
Voltage	20 to 35 VDC		
Power Consumption (20mA Signal)	9000E-1/9000E-2: ≤ 1.3 W / IO Channel @ 24VDC 9000E - 12 : ≤ 2 W @ 24VDC		
Power Dissipation (20mA Signal)	9000E-1/9000E-2: ≤ 0.8 W / IO Channel @ 24VDC 9000E - 12 : ≤ 1.2 W @ 24VDC		
Power ON status LED	Red		
Isolation (Withstanding voltage)			
Between Power to Input and Output	Galvanic Isolation of 2KVAC for 1 minute		
Between Input to Output	Galvanic Isolation of 2KVAC for 1 minute		
Between Output to Output	Galvanic Isolation of 2KVAC for 1 minute		
Between Input to Input	Galvanic Isolation of 2KVAC for 1 minute		
Insulation resistance: >200 M $\Omega@1000$ V DC between All Ports.			



Ordering Code

Model	No. of Channels
9000E	X
	1 One Input, One Output
	2 Two Input, Two Output
	12 One Input, Two Output