Meso-L™

HART® FIELD COMMUNICATIONS PROTOCOL

Universal HART-compatible 2-wire transmitter

MESO-L is a smart and universal 2-wire transmitter for temperature and other measurement applications. MESO-L is fully HART-compatible, with communication through the HART protocol.

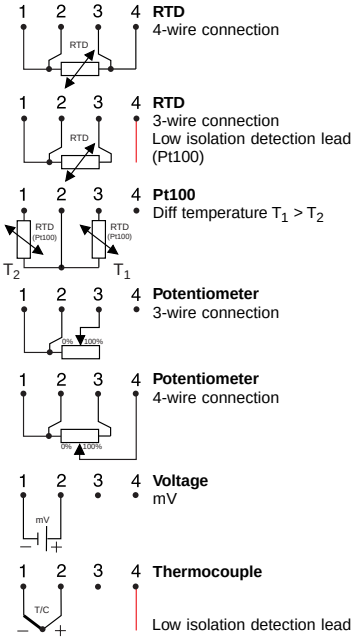
- *Utilizes HART Protocol for remote configuration and monitoring*
- *Communicates with HART Communicator or PC via modem*
- *Fully universal, linearized and isolated*
- *Accepts RTD, T/C, mV and Ohm*
- *Sensor error correction*
- *50 point linearization – any sensor can be matched*
- *Consistent sensor break function*
- *Simplified loop check-up with calibration output*
- *Full access to all features while in operation*
- *Low sensor isolation detection*
- *MEPRO, Easy to use Windows configuration software*
- *Included in Fisher-Rosemount AMS system, version 5.0*

Specifications: *(For detailed specifications, see separate datasheet.)*

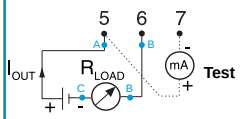
	MESO-L
Input RTD and Resistance	3-,4-wire connection
Pt100[1] and D100[2]	-200 to +1000°C / -328 to +1832°F
Pt1000[1]	-200 to +200°C / -328 to +392°F
PtX 10 ≤ X ≤ 1000[1]	Upper range depending on X value
Ni100 (DIN 43760)	-60 to +250°C / -76 to +482°F
Ni1000 (DIN 43760)	-60 to +150°C / -76 to +302°F
Potentiometer / resistance	0 to 2000Ω
Input Thermocouples	AE, B, E, J, K, L, N, R, S, T, U
Input Voltage	-10 to +500 mV
Sensor failure / Low isolation	User definable output
Adjustments - Zero	Any value within range limits
Adjustments - Minimum spans	
Pt100, Pt1000, Ni100, Ni1000	10°C / 18°F
Potentiometer	10Ω
T/C, mV	2 mV
Output	4-20 / 20-4 mA
Operating temperature	-20 to +70°C / -4 to +158°F
Galvanic isolation	1500 VAC, 1 min
Power supply	11 to 42 VDC
Typical accuracy	±0.1% of temperature span
Mounting	Rail acc. to DIN EN50022, 35 mm

[1](IEC751, α= 0.00385) [2](Pt100 acc. to JIS1604, α=0.003916)

Input connections

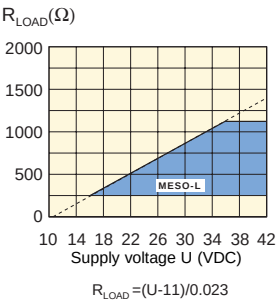


Output connections



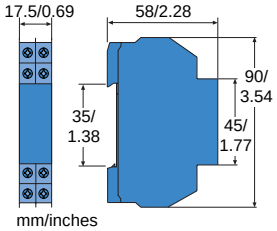
A-B and B-C are possible connections for HART modem or Communicator

Output load diagram



R_{LOAD} =(U-11)/0.023

Dimensions



Ordering information

MESO-L _____ 70MEL00001
MESO-L Datasheet _____ 86DML00003