



Meso-HX



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Universal HART-compatible 2-wire Transmitters



MESO-H/-HX are smart and universal 2-wire in-head transmitters for temperature and other measurement applications. MESO-H/-HX are fully HART-compatible, with communication through the HART protocol.

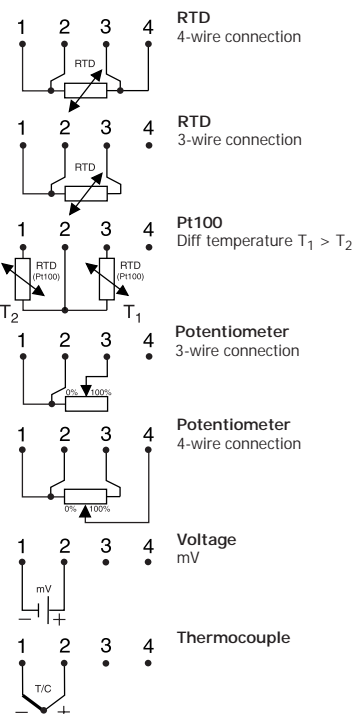
- Utilizes HART Protocol for remote configuration and monitoring
- Communicates with HART Communicator or PC via modem
- Fully universal, linearized and isolated
- Accepts RTD, T/C, mV and ohm
- Sensor error correction
- Easy wiring, large center hole
- 50 point linearization – any sensor can be matched
- Consistent sensor break function
- Full access to all features while in operation
- Low sensor isolation detection
- MEPRO, easy-to-use Windows configuration software
- Integrated in Emerson AMS and Siemens PDM systems

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

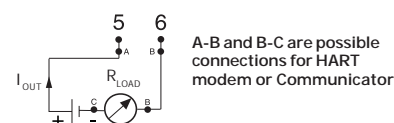
Input RTD and Resistance	3-,4-wire connection
Pt100 ¹ and D100 ²	-200 to +1000 °C/-328 to +1832 °F
Pt1000 ¹	-200 to +200 °C/-328 to +392 °F
PtX 10 ≤ X ≤ 1000 ¹	Upper range depending on X value
Ni100 (DIN 43760)	-60 to +250 °C/-76 to +482 °F
Ni1000 (DIN 43760)	-60 to +150 °C/-76 to +302 °F
Potentiometer / resistance	0 to 2000 Ω
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	10 Ω
T/C, mV	2 mV
Output	4-20 / 20-4 mA
Operating temperature	-40 to +85°C / -40 to +185°F
Galvanic isolation	1500 VAC, 1 min
Power supply	MESO-H 10 to 42 VDC MESO-HX 12 to 30 VDC
Intrinsic safety	MESO-HX ATEX: II 1 G EEx ia IIC T4-T6 MESO-HX FM: Class I-III, Div. 1, Gr. A-D, G
Typical accuracy	±0.1% of temperature span
Connection head	DIN B or larger

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

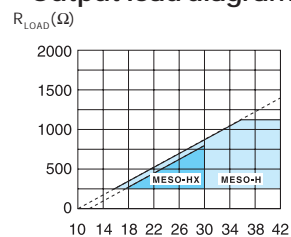
Input connections



Output connections

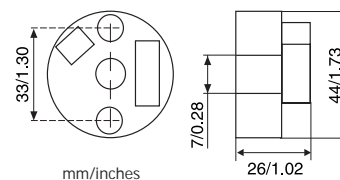


Output load diagram



Supply voltage U (V DC)
 $R_{LOAD} = (U-10)/0.023$ (MESO-H)
 $R_{LOAD} = (U-12)/0.023$ (MESO-HX)

Dimensions



Ordering information

MESO-H	70MEH00001
MESO-HX (ATEX)	70MEHX0001
MESO-HX (FM)	70MEHX1001
PC Configuration Kit	70CFG00007
Configuration	70CAL00001