



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.

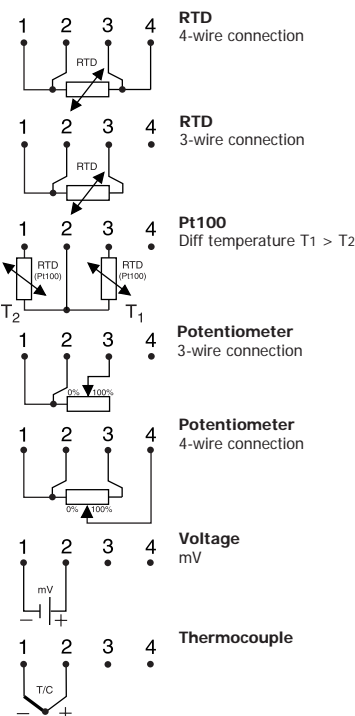
- Utilizes HART Protocol for remote configuration and monitoring
- Communicates with HART Communicator or PC via modem
- Fully universal, linearized and isolated
- Accepts RTD, T/C, mV and Ω
- Sensor error correction
- Easy wiring, large center hole
- 50 point linearization – any sensor can be matched
- 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:

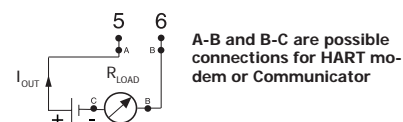
Input RTD and Resistance	3-,4-wire connection
Pt100 ¹⁾ and D100 ²⁾	-200 to +1000 °C/-328 to +1832 °F
Pt1000 ¹⁾	-200 to +200 °C/-328 to +392 °F
PtX $10 \leq X \leq 1000$ ¹⁾	Upper range depending on X value
Ni100 ³⁾	-60 to +250 °C/-76 to +482 °F
Ni1000 ³⁾	-60 to +150 °C/-76 to +302 °F
Potentiometer / resistance	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	$\pm 0.1\%$ of temperature span
Connection head	DIN B or larger

¹⁾IEC 60751, $\alpha=0.00385$ ²⁾Pt100 acc. to JIS 1604, $\alpha=0.003916$ ³⁾IEC 60751

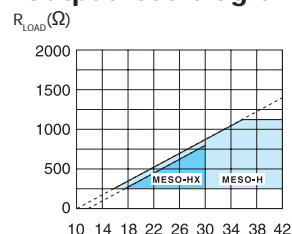
Input connections



Output connections

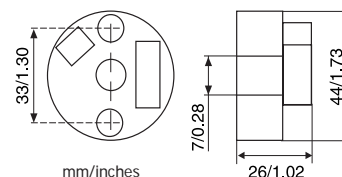


Output load diagram



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
HART PC modem RS232	70MEM00001
HART PC modem USB	70MEM00003
Software CD	70CDSOFT01
Configuration	70CAL00001