



(continued from previous page)

Transmitter and Electronics	
Code [BLOCK 12] Local Enclosure – Sensors Termination	
<b>6</b>	Aluminum IP67; NPT cable entries <sup>6</sup> ; Div 1/Zone 1 rated
<b>F</b>	Aluminum IP67; metric cable entries <sup>6</sup> ; Div 1/Zone 1 rated
<b>8</b>	Stainless steel IP67; NPT cable entries <sup>6</sup> ; Div 1/Zone 1 rated
<b>P</b>	Stainless steel IP67; metric cable entries <sup>6</sup> ; Div 1/Zone 1 rated
<b>W</b>	Other, agency approved
Code [BLOCK 13] Remote Enclosure – Transmitter and Electronics Housing	
<b>A</b>	Standard stainless steel rectangular wall-mount box; NEMA 4X/IP66 rated; NPT conduit ports; Div 2/Zone 2 rated
<b>B</b>	Standard stainless steel rectangular wall-mount box; NEMA 4X/IP66 rated; metric conduit ports; Div 2/Zone 2 rated
<b>W</b>	Other, agency approved
Code [BLOCK 14] Interconnecting Cable Length for Remote Configuration	
<b>0</b>	Not required <i>Specify with user supplied cable or if cable ordered as separate line item<sup>7,16</sup></i>
<b>A</b>	10 feet [3 meters] PVC jacketed; fully prepped, wires marked <sup>8</sup>
<b>B</b>	25 feet [7,6 meters] PVC jacketed; fully prepped, wires marked <sup>8</sup>
<b>C</b>	50 feet [15 meters] PVC jacketed; fully prepped, wires marked <sup>8</sup>
<b>D</b>	100 feet [30 meters] PVC jacketed; fully prepped, wires marked <sup>8</sup>
<b>1</b>	10 feet [3 meters] Teflon jacketed; fully prepped, wires marked <sup>8</sup>
<b>2</b>	25 feet [7,6 meters] Teflon jacketed; fully prepped, wires marked <sup>8</sup>
<b>3</b>	50 feet [15 meters] Teflon jacketed; fully prepped, wires marked <sup>8</sup>
<b>4</b>	100 feet [30 meters] Teflon jacketed; fully prepped, wires marked <sup>8</sup>
<b>W</b>	Other, agency approved
<b>*</b>	Other, not agency approved
Code [BLOCK 15] Power Supply, Readout, Transmitter	
<b>A</b>	24 Vdc power; no display
<b>B</b>	24 Vdc power; with display
<b>F</b>	24 Vdc power; with display; with CEMS protocol
<b>K</b>	24 Vdc power; with display; with QAL1 protocol <i>pending</i>
<b>C</b>	85 Vac to 265 Vac power; no display
<b>D</b>	85 Vac to 265 Vac power; with display
<b>H</b>	85 Vac to 265 Vac power; with display; with CEMS protocol
<b>M</b>	85 Vac to 265 Vac power; with display; with QAL1 protocol <i>(pending)</i>
<b>W</b>	Other, agency approved
<b>*</b>	Other, not agency approved
Code [BLOCK 16] Transmitter Outputs and Communications	
<b>1</b>	(2) 4-20 mA analog outputs, HART and Modbus 485, (1) frequency/pulse output
<b>F</b>	(2) 4-20 mA analog outputs, FOUNDATION™ Fieldbus, (1) frequency/pulse output
<b>P</b>	(2) 4-20 mA analog outputs, PROFIBUS-PA, (1) frequency/pulse output
<b>W</b>	Other, agency approved
<b>*</b>	Other, not agency approved
Code [BLOCK 17]	
<b>E</b>	Always “E”

Calibration <sup>10, 11, 12</sup>	
Code [BLOCK 18] Calibration Application	
<b>T</b>	Air; flat profile calibration
<b>C</b>	Air equivalency (digester gas, chlorine, flue gas, etc.)
<b>E</b>	Nitrogen, helium, argon, carbon dioxide or nitrous oxide
<b>1</b>	Natural gas (90% or greater methane content)
<b>F</b>	Hydrocarbons (methane, ethane, propane, etc.)
<b>G</b>	Hydrogen or hydrogen mixture
<b>W<sup>13</sup></b>	Agency approved, customer specified
Code [BLOCK 19] Calibrations, Set-up and Conditions	
<b>0</b>	None
<b>A</b>	Extended temperature compensation
<b>B</b>	Extended range (>100:1 turndown)
<b>E</b>	Extended temperature compensation and extended range
Code [BLOCKS 20-21] Second Calibration	
<b>0 0</b>	Not required
<input type="checkbox"/> <input type="checkbox"/>	Select from Codes shown in Blocks 18-19

General	
Code [BLOCK 22] Agency Approvals	
<b>0</b>	General purpose, CE marking
<b>1</b>	FM, Div/Zone per Blocks 12 and 13, CE marking
<b>2</b>	FMc, Div/Zone per Blocks 12 and 13, CE marking
<b>3</b>	ATEX, Div/Zone per Blocks 12 and 13, CE marking <sup>16</sup>
<b>4</b>	IECEx, Div/Zone per Blocks 12 and 13, CE marking <sup>16</sup>
<b>5</b>	EAC/TR CU, Zone 2, CE marking
<b>9</b>	CCoE (India), Div/Zone per Blocks 12 and 13, CE marking

**Notes**

6. Local enclosure (attached to flow elements) conduit ports vary by process connection selected:

When Block 5, Process Connection is	NPT	Metric
Code = C, D, G, M, N, J, F*	(2) 1/2"	(2) M20 x 1.5
Code = P, H, Q, K, R, L, T, V, Y, F**	(1) 1"	(1) M20 x 1.5

\* with 1" or DN25 flange

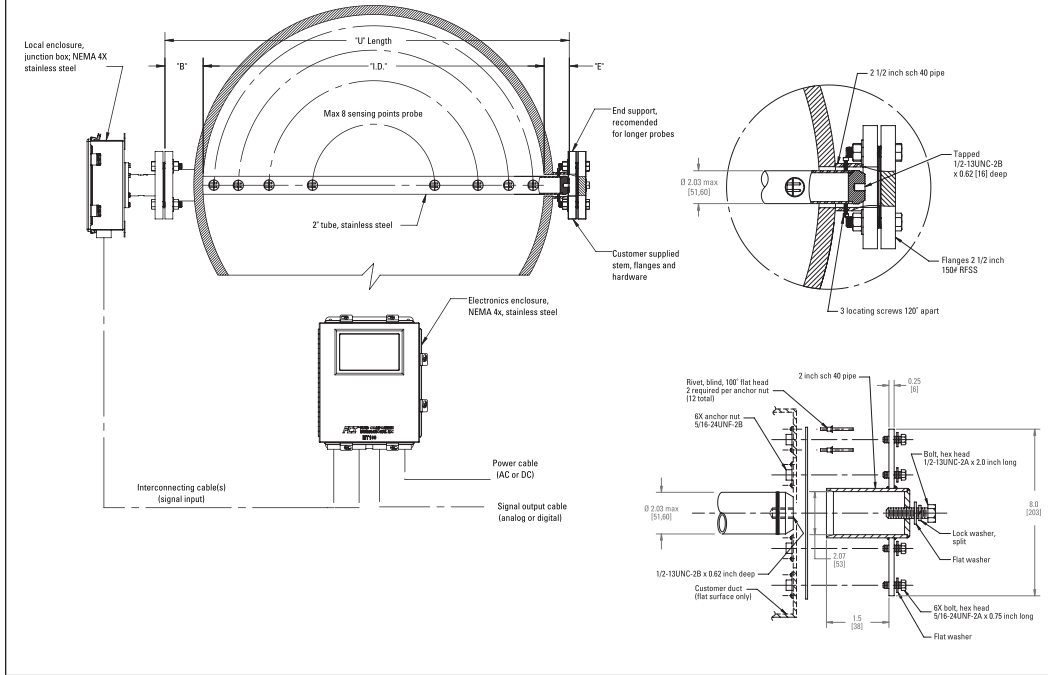
\*\* with flange size larger than 1" or DN25

- Remote cable in an MT100S is 8-conductor. For user-supplied cable, overall shielded conductor type is required and wire resistance must be less than 8 Ohms.
- Cable suitable for conduit and some cable gland systems. For other cable gland systems, contact FCI to supply separately. PVC cable maximum temperature 176 °F [80 °C]; Teflon cable maximum temperature 392 °F [200 °C].
- FCI standard conditions are 14.7 psia [1,01 bar(a)] and 70 °F [21.1 °C].
- Calibration codes must be selected using FCI's proprietary AVAL application evaluation software.
- Transmitter setup, changes to factory supplied standard settings, verification or modification to calibration parameters or diagnostics requires external source communication with the transmitter.
- Customer specified calibration must not exceed temperature and pressure limitations of the MT100 Series product specifications.
- ATEX/IECEx rated requires cable glands or conduit fittings which meet or exceed the installation area's required rating. When rated cable glands, armored cables and non-armored cable supplied are user supplied or ordered separately, enter Code 0 in Block 14.

**MT100M Sensor Type Installation**

**U-length = ID + B + E**

Convert to inches and enter in MT100M OIS Boxes 7-10



- ID** = Inside diameter of pipe (or duct)  
**B** = Distance from process connection to pipe inside wall; if a threaded process connection is used, reduce "B" by the engagement allowance

For MT100M sensor types only

- E** = Additional flow element length to provide for optional end support

**Required installation dimensions**

ID = \_\_\_\_\_  
B = \_\_\_\_\_  
E = \_\_\_\_\_  
Wall thickness = \_\_\_\_\_

For MT100S sensor types only

- Y** = Distance from inside pipe/duct wall to sensing point

- If round pipe/duct,  $Y = 0.146 \times ID$
- If square pipe/duct, consult factory or use FCI's AVAL program to calculate Y

For 36" or larger diameter pipes, 3- or 4-point configurations are recommended; use the same factor for calculating "Y," and space the flow elements evenly around the pipe circumference (120° or 90° apart, respectively)

**MT100S Sensor Type Installation**

**Threaded connection: U-length = (B - thread engagement) + Y + 0.5 inch**

**Fixed flange: U-length = B + Y + 0.5 inch**

Convert to inches and enter in MT100S OIS Boxes 8-10

