



Engineering Specification

SPEC,APPVL INST 2200 IECEX ZN2

EB-20012525

Revision: AA

Number of Pages: 5

Comments:

THIS COMPONENT MUST COMPLY WITH REGULATORY AGENCY REQUIREMENTS. NO CHANGES ARE ALLOWED WITHOUT PRIOR AUTHORIZATION FROM APPROVALS ENGINEERING.

Originator: RCS 6/27/08

Approved: RCS 6/27/08

Rev	ECN	Description	Approval	Date
A	1035856	Release	RCS	6/27/08
AA	1038207	Added Output Option Codes 5 and 6 for Wireless HART	RCS	6/25/09

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Subject: Equipment type **Transmitter type 2200S*****3*******

Manufactured and submitted for examination **Micro Motion, Inc.**

Address **Boulder, Co. 80301, USA**

Standard basis IEC 60079-15:2005 non sparking 'n'

Code for type of protection **Ex nA IIC T4**

Certificate of Conformity IECEx BVS 08.0042 X



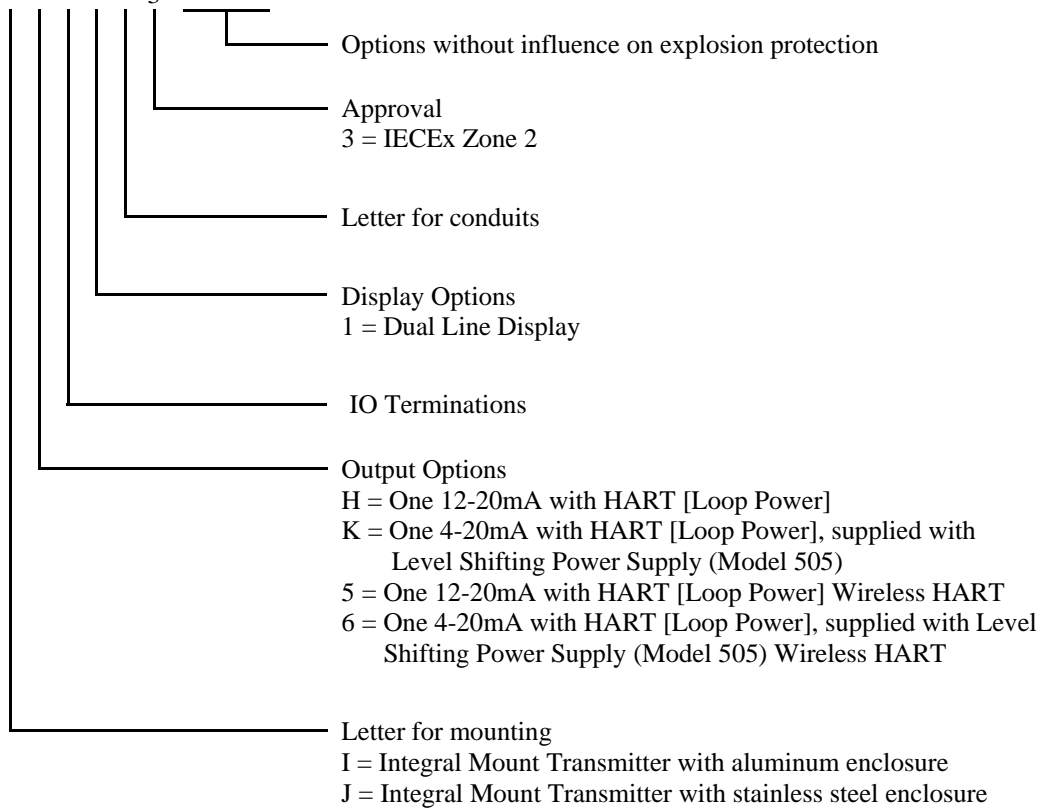
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1) Subject and Type

Transmitter type 2200S*****3*****

Instead of the *** in the complete denomination letters and numerals will be inserted which characterize the following variations:

Type 2 2 0 0 S * * * * * 3 * * * *



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2)Description

The Micro Motion model 22**S*(H or K)**3** Transmitter is integrally mounted to a Micro Motion Coriolis Meter.

The model 22**S*(H or K)**3** integral mount transmitter system architecture consists of two circuit boards, which are encapsulated into a potting shell. The encapsulated assembly makes a 9-wire connection to the Micro Motion Coriolis Meter via a fixed 9-wire cable. Attached to the encapsulated assembly, by two mounting screws, is a User Interface (UI) that contains an optional LCD display and temporary service connections.

The model 22**S*(H or K)**3** has one sets of two screw terminals for connecting multifunctional wires providing both I/O communication and power input

The enclosure material is either aluminum with blue paint or stainless steel.

The enclosure has two conduit openings for customer wiring to power terminals and I/O signaling however, only one conduit opening will be used and one conduit opening will be provided with an approved blanking plug. A chassis ground terminal is located both inside the power terminal compartment and also external on the housing.

Amendment 1 to Certificate of Conformity IECEx BVS 08.0042 X incorporates the new Output options 5 and 6 for the installation of the SMART Wireless THUM Model 775 marked as Ex nA IIC T4 (Certificate of Conformity IECEx BAS 09.0058). The THUM comes pre-installed from the factory. The denomination is 22**S*(5 or 6)**3**.

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3) Electrical Parameters

3.1 Input Circuit (terminals 1-2)	DC	28 0,56	V W
3.2 Output circuits to sensor:			
3.2.1 Drive circuit (J4 pins 7-8) voltage current	DC	10,5 80	V mA
3.2.2 Pick-off circuit (J4 pins 3-6) voltage current	DC	12,6 4,29	V mA
3.2.3 Temperature circuit , receptacle 1,2 and 9 voltage current	DC	12,6 3,31	V mA
3.3 Ambient temperature range	Ta	-40°C to +60°C	

4) Marking

-40 °C ≤ Ta ≤ +60 °C

- type	- type of protection
2200SI(H or K)*1*3**** With Aluminum Housing	Ex nA II T4
2200SJ(H or K)*1*3**** With Stainless Steel Housing	Ex nA II T4
2200SI(5 or 6)*1*3**** With Aluminum Housing	Ex nA IIC T4
2200SJ(5 or 6)*1*3**** With Stainless Steel Housing	Ex nA IIC T4

5) Special condition for safe use/Installation instruction

- 5.1 The permissible ambient temperature range for the transmitter is -40 °C up to +60 °C. The use of the transmitter at an ambient temperature under - 20 °C is only admissible, if the cables and cable entries or conduit entries are suitable for that temperature and use.
- 5.2 The cable entries or conduit entries shall have a degree of protection of at least IP54 for use in category 3G
- 5.3 The user interface module must not be disconnected from the encapsulated assembly unless the unit has been de-energized or the area is known to be safe.
- 5.4 The HART and Temporary Service Port connections are not available for customer use. The terminals are covered by a plug and labeled “Factory Use Only”. When the service port is utilized by service personnel for upgrade purposes, the circuits are protected from incidental damage potentially caused by non-I.S. devices temporarily connected to the port.
- 5.5 For wiring instructions of the SMART Wireless THUM Model 775, see Installation drawing IECEx-D-IS EB-20015946.

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