

Clarification regarding classification report AK151023-1.3 Thies First Class Advanced X Revision 2, October 2nd, 2020

This document clarifies frequent questions regarding the classification of the "Thies First Class Advanced X" sensor (4.3352.00.400, 4.3352.10.400).

- How does the classification of the sensor model "Advanced X" relate to the classification of the sensor model "Advanced II"?
 - o The classification of the "Advanced X" and the "Advanced II" models are based on the same measurement. Both sensors "Advanced X" and the "Advanced II" have an identical upper body. For the measurements concerning the "air density induced effects", the lower body (electronics) was exchanged.
- Does the classification of the Advanced X imply the correction of pressure induced effects?
 - Yes, the classification was performed with the sensor's pressure correction activated. If the pressure correction is not used, the classification of the "Advanced II" is applicable.
- What was the configuration of the sensors during the classification?
 - The sensors were configured using the parameters displayed on *Table 1*. For a detailed description of the commands, please refer to the sensor manual.

Command	Response	Comment
99BT	!00BT00000	
99CI	!00Cl00000	
99FB	!00FB00001	
99FO	!00FO00003	Direct output of frequency. In newer firmware releases this is equivalent to FO7.
99HP	!00HP00000	
99HT	!00HT00001	
99ID	!00ID00000	
99MI	!00MI00010	
99RC1	no correction used	
99RC99	no correction used	
99SH	!00SH00000	
99SM	!00SM00090	
99SR	!00SR00000	
99SV	!00SV00108	
99UC	!00UC00000	

Table 1 Sensor configuration during classification procedure



- What output signal was used for the classification?
 - The serial output telegram including the pressure correction was used for the classification of the "Advanced X".
- The system measures the frequency output on Pin 1, which is configured to F07. What is the correct classification number?
 - No pressure correction is applied to the frequency when it is configured to F07. In this case, the classification of the "Advanced II" is applicable.
- How should individual sensors be calibrated and used for a full compliance with the classification?
 - Individual sensors should be calibrated and used with the pressure correction activated.

Heiko Westermann

12 Vet

Deputy Head of the Calibration Laboratory