

General Specifications

FSA130 ADMAG TI Verification Tool



GS 01E21A04-01EN

■ GENERAL DESCRIPTION

ADMAG TI Verification Tool*1 provides the diagnosis, reporting and data management for the health check of ADMAG TI (Total Insight) Series AXG or AXW magnetic flowmeter with HART protocol.

There are cases that a magnetic flowmeter does not perform normally by failure of magnetic, excitation or calculation circuit, or insulation deterioration of excitation coil or electrodes. The Verification Tool can diagnose the health check of device without demounting a flowmeter from the process line. FSA130 is the license number to activate the Verification Tool.

The verification results can be stored in a database and can be printed as a Verification Report. In this report, not only the check result of each item but also the comprehensive diagnosis result is indicated as "Passed" or "Failed", which is effective in considering the maintenance of the device.

- *1: The Verification Tool runs on FieldMate (Versatile Device Management Wizard) with R3.02.10 or later, and Device Files R3.07.12 or later. FieldMate should be prepared by customers.

■ APPLICABLE MODEL

The applicable model and communication protocol to the Verification Tool is as below.

- AXG/AXW Integral type flowmeter with HART protocol
- Combination of AXG remote sensor and AXG4A remote transmitter with HART protocol
- Combination of AXW remote sensor and AXW4A remote transmitter with HART protocol

■ FUNCTIONS

The Verification Tool has two modes, the Standard Verification and the Enhanced Verification. In order to get the comprehensive result of the verification, at least the Standard Verification has to be performed.

1. Standard Verification

This mode checks the status of magnetic, excitation, and calculation circuit of the device. It also checks the status of alarm occurrence, alarm history, cable connection status for signal and excitation cable, display board and LCD, and physical appearance of the device. This mode is performed with the magnetic flowmeter being mounted onto process line filled with fluid.

2. Enhanced Verification

This mode checks analog input/output, pulse output, transmitter accuracy, and insulation resistance of the coil and signal electrodes for further device diagnosis. This mode is performed with the magnetic flowmeter being demounted from process line.

The necessary equipments are AM012 calibrator for magnetic flowmeter to simulate the flow velocity signal, CA150 HANDY CAL to measure current value, pulse count and also to output current signal, and MY40 insulation resistance tester to measure the coil and electrode resistance.

The CA150 and MY40 can be replaced by other instrument which has equivalent function.

Mode	Check Item		Note
Standard Verification	Circuit	Magnetic Circuit	
		Excitation Circuit	
		Calculation Circuit	
	Device Status	Alarm Occurrence	
		Alarm History	
	Connection Status	Cable Connection Status	
	Indicator /B Check (Display Board Check)	Indicator Status (Display Status)	
LCD display		Visual check by customer on test mode	
Physical Appearance	Flow Sensor	Visual check by customer	
	Transmitter		
Enhanced Verification	Analog Output		Check by using CA150 or equivalent
	Pulse Output		
	Analog Input		
	Transmitter*1		Check by using AM012
	Insulation Resistance*1	Coil	Check by using MY40 or equivalent
Signal (Electrode)			

*1: For remote type only, the item can be checked.

■ SYSTEM CONFIGURATION

The following instruments and software are necessary to use the Verification Tool.

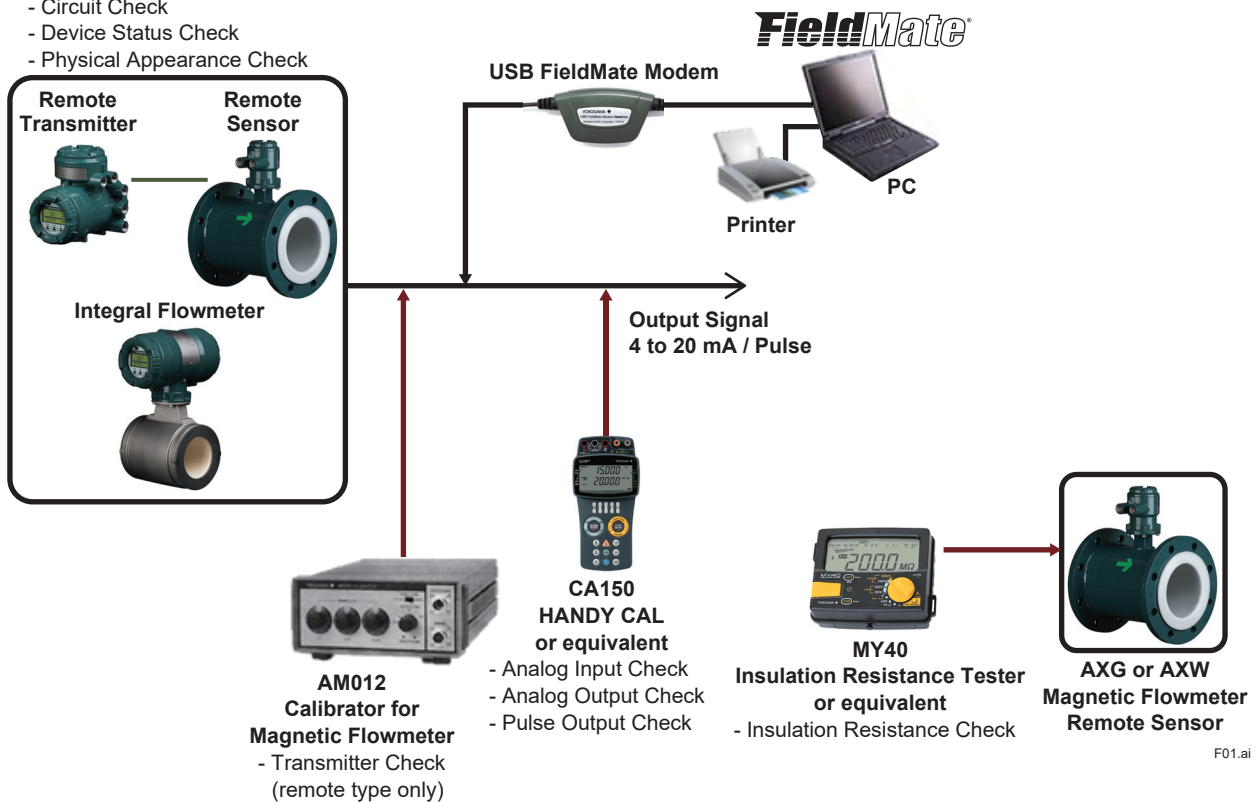
- AXG or AXW Magnetic Flowmeter (HART communication type)*1
- PC*2
- FieldMate*2 (Versatile Device Management Wizard) with R3.02.10 or later, and Device Files R3.07.12 or later
- USB FieldMate Modem*2
- Printer (for printing verification report)
- AM012 Calibrator for Magnetic Flowmeter (for Enhanced Verification)
- CA150 HANDY CAL or equivalent (for Enhanced Verification)
- MY40 Insulation Resistance Tester or equivalent (for Enhanced Verification)

*1: For details, read "APPLICABLE MODEL".

*2: For details, read the general specification of FiledMate.

AXG or AXW Magnetic Flowmeter

- Circuit Check
- Device Status Check
- Physical Appearance Check



■ MODEL AND SUFFIX CODE

Model	Suffix Code	Description
FSA130		ADMAG TI Verification Tool License No.
License	-S	Single License
-	1	Always 1
Language	1	English
-	0	Always 0
Optional Specification	/B	USB FieldMate Modem *1

*1: For the specification of USB FieldMate modem, read the general specification of FiledMate.

■ DOWNLOAD SITE OF VERIFICATION TOOL

The Verification Tool can be downloaded from the following website. Find the DTM*1 file for AXG or AXW magnetic flowmeter. Install and run it on the FieldMate.

<https://www.yokogawa.com/library/documents-downloads/software/yokogawa-dtm-hart/>

*1: DTM (Device Type Manager) is the application which defines the Graphical User Interface (GUI) specific to the device.

■ ORDERING INFORMATION

1. Model, Specification and Optional Code

■ RELATED INSTRUMENTS

Product	Document No.
FieldMate Versatile Device Management Wizard	GS 01R01A01-01E
ADMAG TI Series AXG Magnetic Flowmeter	GS 01E22A01-01EN
ADMAG TI Series AXW Magnetic Flowmeter [Size: 25 to 400 mm (1 to 16 in.)]	GS 01E24A01-01EN
ADMAG TI Series AXW Magnetic Flowmeter [Size: 500 to 1800 mm (20 to 72 in.)]	GS 01E25D11-01EN
AM012 Calibrator for Magnetic Flowmeter	GS 1E6K2-E
CA150 HANDY CAL	GS CA150-01E

■ TRADEMARKS

- All the brands or names of Yokogawa Electric's products used in this document are either trademarks or registered trademarks of Yokogawa Electric Corporation.
- All other company and product names mentioned in this document are trade names, trademarks or registered trademarks of their respective companies.
- In this document, trademarks or registered trademarks are not marked with ™ or ®.