General Specifications

GS 01E24A21-04EN

ADMAG TI Series
AXW Electromagnetic Flowmeter
[Size: 25 to 400 mm (1 to 16 in.)]
Marine Approval Type

■ OUTLINE

This General Specifications describes ADMAG TI Series AXW Electromagnetic Flowmeter [Size: 25 to 400 mm (1 to 16 in.)] for Marine Approval Types. For standard specifications, functions, other optional specifications, limitation and separate table, please refer to the General Specifications as below.

Document Name	Document No.
ADMAG TI Series AXW Electromagnetic Flowmeter [Size: 25 to 400 mm (1 to 16 in.)]	GS 01E24A01-01EN

Note: AXW Electromagnetic Flowmeter [Size: 500 to 1800 mm (20 to 72 in.)] is handled as special products. Therefore, please contact Yokogawa's sales office when ordering.

Integral Flowmeter

Remote Transmitter

■ CONFORMITY STANDARDS

In addition to CONFORMITY STANDARDS described in the general specifications of ADMAG TI Series AXW Electromagnetic Flowmeter [Size: 25 to 400 mm (1 to 16 in.)], following marine approval have been approved.

Please refer to GS 01E24A01-01EN for other specifications.

Marine Approval:

Det Norske Veritas Type Approval

Approval/Cert.no: TAA00002H4

Location classes:

Temperature	D
Humidity	B
Vibration	A
EMC	A
Enclosure	C (IP66/IP67)

URL:
https://approvalfinder.dnvgl.com/#approval/TAA00002H4

■ MODEL AND SUFFIX CODE

The model name and basic specification code of the classification type product of ADMAG TI Series AXW Electromagnetic Flowmeter [Size: 25 to 400 mm (1 to 16 in.)] are described. Please refer to GS01E24A01-01EN for the ADMAG TI Series AXW Electromagnetic Flowmeter for optional codes.

Note:

1: There are some limitations on the combination of specifications. Read specification code table when selecting specification code.
2: For EN standard wafer and flange type of sizes 25 to 50 mm (1 to 2 in.), select PN40 even for lower pressure rating because the dimensions of mating faces for PN10, 16, and 40 are the same.
For EN standard wafer and flange type of sizes 65 to 150 mm (2.5 to 6 in.), select PN16 even for lower pressure rating because the dimensions of mating faces for PN10 and 16 are the same.
3: The dimensions of mating faces are based on the following flange standards. The usable range is also limited by fluid temperature and pressure conditions. JIS F12: JIS G 3443-2, JIS 10K, 20K: JIS B 2220 and JIS G 3443-2, ASME: ASME B 16.5, EN: EN 1092-1
4: In the case of size from 25mm to 400mm, the grounding device is selectable from none or grounding ring. When selecting the grounding ring, it is also necessary to select its type (material etc.) from the optional codes.
5: The lay length (face to face) of the flange type of polyurethane rubber, natural hard rubber, and natural soft rubber lining conforms to ISO standard (ISO 20456). The lay length depends on the presence or absence of the optional grounding rings or gaskets, so see the Dimensional Drawings.
6: Lining, electrode, and grounding device (grounding ring plate) are wetted parts.
Users must consider the characteristics of selected wetted parts material and influence of process fluids. The use of inappropriate materials can result in the leakage of corrosive process fluids and cause injury to personnel and/or damage to plant facilities. It is also possible that the instrument itself can be damaged and that fragments from the instrument can contaminate the user's process fluids. Be very careful with highly corrosive process fluids such as hydrochloric acid, sulfuric acid, hydrogen sulfide, sodium hypochlorite, and high-temperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material.
7: In the case of remote sensor from 25mm to 400mm, select "None (or Without)" for each specification code of "Power Supply", "Communication and I/O", "Transmitter Wiring Terminal" and "Display".
8: In the case that final destination is Taiwan and explosion type is required, select IECEx flameproof type.
9: When combining IECEx Flameproof and CE marking, it is limited to applications mounted on seagoing vessels.
10: ⚠For Power Cord -1, TDK ferrite core ZCAT3035-1330 is attached to the product. Be sure to attach the ferrite core to the wiring port side of the cable connected to the I/O terminal.
11: ⚠Specify the cable length for remote type up to 5 m (16 feet).

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GS 01E24A21-04EN

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●General-purpose, Submersible, Explosionprotection, Wafer, Flange

Model	Suffix Code				Description	Limitation
AXW025					Electromagnetic Flowmeter (25 mm/1 in)	
AXW032					Electromagnetic Flowmeter (32 mm/1.25 in)	
AXW040					Electromagnetic Flowmeter (40 mm/1.5 in)	
AXW050					Electromagnetic Flowmeter (50 mm/2 in)	
AXW065					Electromagnetic Flowmeter (65 mm/2.5 in)	
AXW080					Electromagnetic Flowmeter (80 mm/3 in)	
AXW100					Electromagnetic Flowmeter (100 mm/4 in)	
AXW125					Electromagnetic Flowmeter (125 mm/5 in)	
AXW150					Electromagnetic Flowmeter (150 mm/6 in)	
AXW200					Electromagnetic Flowmeter (200 mm/8 in)	
AXW250					Electromagnetic Flowmeter (250 mm/10 in)	
AXW300					Electromagnetic Flowmeter (300 mm/12 in)	
AXW350					Electromagnetic Flowmeter (350 mm/14 in)	
AXW400					Electromagnetic Flowmeter (400 mm/16 in)	
Use	**-G**				General-purpose	
	-C				Explosion protection	
	-W				Submersible	Only for Remote Sensor
Construction	**A**				Integral Flowmeter	
	W				Remote Sensor (for AXW4A)	
Explosion Protection	**000**				Non Explosion Protection Approval	
	KF2				ATEX Flameproof	See Restriction for Explosion Protection type in GS01E24A01-01EN
	SF2				IECEx Flameproof	See Note 8, 9 and Restriction for Explosion protection type in GS 01E24A01-01EN
Process Connection	Wafer	**AA1**			ASME Class 150 Wafer	25 to 200 mm (1 to 8 in.)
		AA2			ASME Class 300 Wafer	25 to 200 mm (1 to 8 in.)
		AE1			EN PN10 Wafer	200 mm (8 in.)
		AE2			EN PN16 Wafer	65 to 200 mm (2.5 to 8 in.)
		AE4			EN PN40 Wafer	25 to 50 mm (1 to 2 in.)
		AG1			JIS F12 Wafer	80 to 200 mm (3 to 8 in.)
		AJ1			JIS 10K Wafer	25 to 200 mm (1 to 8 in.)
		AJ2			JIS 20K Wafer	25 to 200 mm (1 to 8 in.)
	Stainless Steel Flange (F304)	**BA1**			ASME Class 150 Flange	
		BA2			ASME Class 300 Flange	25 to 300 mm (1 to 12 in.)
		BE1			EN PN10 Flange	200 to 400 mm (8 to 16 in.)
		BE2			EN PN16 Flange	65 to 300 mm (2.5 to 12 in.)
		BE4			EN PN40 Flange	25 to 50 mm (1 to 2 in.)
		BG1			JIS F12 Flange	80 to 400 mm (3 to 16 in.)
		BJ1			JIS 10K Flange	
		BJ2			JIS 20K Flange	25 to 300 mm (1 to 12 in.)
	Carbon Steel Flange	**CA1**			ASME Class 150 Flange	50 to 400 mm (2 to 16 in.)
		CA2			ASME Class 300 Flange	50 to 300 mm (2 to 12 in.)
		CE1			EN PN10 Flange	200 to 400 mm (8 to 16 in.)
		CE2			EN PN16 Flange	65 to 300 mm (2.5 to 12 in.)
		CE4			EN PN40 Flange	50 mm (2 in.)
		CG1			JIS F12 Flange	80 to 400 mm (3 to 16 in.)
		CJ1			JIS 10K Flange	50 to 400 mm (2 to 16 in.)
		CJ2			JIS 20K Flange	50 to 300 mm (2 to 12 in.)
Lining			**F**		PTFE Lining	Applicable for Flanges only. Not applicable for Submersible.
			U		Polyurethane Rubber Lining	
			H		Natural Hard Rubber Lining	50 to 400 mm (2 to 16 in.)
			D		Natural Soft Rubber Lining	50 to 400 mm (2 to 16 in.)
Erectrode				**L**	Stainless Steel 316L	
				H	Nickel Alloy	
Grounding Device					**1** None	
					2 Grounding Rings	Select an optional code

(Continued)

Housing and Coating	**1**	Standard Material with Standard Coating	
	2	Standard Material with Rugged Coating	Not applicable for Submersible
Cable Entry	**0**	JIS G1/2 Female	See Restriction for Explosion Protection type
	2	ASME 1/2 NPT Female	Not applicable for Submersible, See Restriction for Explosion Protection type
	4	ISO M20×1.5 Female	Not applicable for Submersible, See Restriction for Explosion Protection type
Accuracy	**B**	Standard	
Power Supply	**-1**	100-240 V AC / 100-120 V DC	Only for Integral Flowmeter
	-2	24 V AC / DC	Only for Integral Flowmeter
	-N	None (Remote Sensor)	Only for Remote Sensor
Communication and I/O	**J#**	#: A, E, G HART 7 and I/O (Type A, E, G, See separate table)	Only for Integral Flowmeter
	M#	#: 0, 6 Modbus and I/O (Type 0, 6, See separate table)	Only for Integral Flowmeter
	NN	None (Remote Sensor)	Only for Remote Sensor
Transmitter Wiring Terminal	**1**	M4 Screw-type	
	2	Clamp Type	
	N	None (Remote Sensor)	Only for Remote Sensor
Display	**1**	With Display (English, Multi-language)	Only for Integral Flowmeter
	2	With Display (English, Chinese)	Only for Integral Flowmeter
	N	Without Display/Remote Sensor	

●General-purpose, ExplosionProtection, Remote Transmitter

Model	Suffix Code	Description	Limitation
AXW4A		Electromagnetic Flowmeter Remote Transmitter	
Use	**-G**	General-purpose	
	-C	Explosion protection	
Explosion Protection	**000**	Non Explosion Protection Approval	
	KF2	ATEX Flameproof	See Restriction for Explosion Protection type in GS 01E24A01-01EN
	SF2	IECEx Flameproof	See Note 8, 9 and Restriction for Explosion protection type in GS 01E24A01-01EN
Housing and Coating	**1**	Standard Material with Standard Coating	
	2	Standard Material with Rugged Coating	
Cable Entry	**0**	JIS G1/2 Female	See Restriction for Explosion Protection type
	2	ASME 1/2 NPT Female	See Restriction for Explosion Protection type
	4	ISO M20×1.5 Female	See Restriction for Explosion Protection type
Power Supply	**1**	100-240 V AC / 100-120 V DC	
	2	24 V AC / DC	
Communication and I/O	**J#**	#: A, E, G HART 7 and I/O (Type A, E, G, See separate table)	
	M#	#: 0, 6 Modbus and I/O (Type 0, 6, See separate table)	
Transmitter Wiring Terminal	**1**	M4 Screw-type	
	2	Clamp Type	
Display	**1**	With Display (English, Multi-language)	
	2	With Display (English, Chinese)	
	N	Without Display/Remote Sensor	

●**Signal Cable**

Model	Suffix Code	Optional Code	Description
AX01C			Electromagnetic Flowmeter Signal Cable
Cable Finish and Length	-A### (*1)		Unfinished, Cable length ### m, Set of Finishing Parts for M4 Screws
	-C### (*1)		Finished for AXW4A, Cable Length ### m
Finishing Parts		/C# (*2)	Finishing Parts (# sets)

*1: Specify the cable length in the "###" with the numerical value three digits (001 to 200) as multiple of 1 meter (e.g. 001, 002, or 005) for a length up to 5 m, as multiple of 5 meters up to 100 m (e.g. 010, 020, or 100), or as multiple of 10 meters up to 200 m (e.g. 110, 120, or 200). The maximum cable length: -A###: 200 m,-C###: 5 m

*2: Specify the finishing parts quantity in the "#" with the numerical value one digit (1 to 9).

■ OPTIONAL CODE

Item	Specification and Applicable Condition	Code
Marine Approval	Det Norske Veritas Type Approval Approval/Cert.no: TAA00002H4	WCD

For other optional codes, refer to the general specifications (GS 01E24A01-01EN).

Be sure to add / WCD to applications that require Marine approval.

■ ACCESSORIES

- Centering Device (wafer type only): 1 set
- Blanking Plug: 1 to 2 pcs.
- Gasket (sensor side): 2 sheets
- Mounting (transmitter only): 1 set
- Ferrite Core (Power Cord -1): 2pcs.

Note: Accessories differ depending on specifications to be selected.

For TERMINAL CONFIGURATION and ORDERING INFORMATION, refer to GS01E24A01-01EN.

■ TRADEMARKS

Det Norske Veritas is a registered trademark of Det Norske Veritas Group.

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EU WEEE (Waste Electrical and Electronic Equipment) Directive is only valid in the EU.

This instrument is intended to be sold and used only as a part of equipment which is excluded from WEEE Directive, such as large-scale stationary industrial tools, a large-scale fixed installation and so on, and, therefore, subjected to the exclusion from the scope of the WEEE Directive. The instrument should be disposed of in accordance with local and national legislation/regulations.