

Remote Converter Combination and Accuracy Guidelines

Technical Note



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QUICK REFERENCE

Transmitter Sensor	AXG1A	AXG4A	AXW4A	AXFA11	AXFA14	Old Transmitter Other than AXF	Transmitter of Other Manufacturers
AXG	OK	OK	NOT Possible	OK	OK	NOT Possible	NOT Possible
AXW	OK	NOT Possible	OK	OK	OK	NOT Possible	NOT Possible
AXF	OK	OK	OK	OK	OK	NOT Possible	NOT Possible
AM/AE	OK	OK	OK	OK	NOT Possible	Note: Depending on the combination, some features or functions may vary or are not available. Please refer to the information that follows and the General Specifications for complete details.	
YM	OK	NOT Possible	NOT Possible	OK	NOT Possible		
Old Sensor Other than AM/AE/YM	OK	NOT Possible	NOT Possible	OK	NOT Possible		
Sensor of Other Manufacturers	OK	NOT Possible	NOT Possible	OK	NOT Possible		

1. Combining AXG/AXW Sensors with AXG/AXW Transmitters with No Flow Test

Table 1.1 Accuracy for Reference in Combination of AXG/AXW Sensor and AXG1A transmitter without Combined Actual Flow Test

Sensor Category	MS Code	Size ###	Accuracy for Reference
Remote Sensor (for AXG4A)	AXG###-□G	002 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 1.5] \%$
Remote Sensor (for AXW4A)	AXW###-□W	025 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 1.5] \%$
	AXW###-□W	500 - 10L	$\pm [\text{AXG/AXW Standard Accuracy} + 2.5] \%$
Remote Sensor (for AXFA11)	AXG###-□D	002 - 500	$\pm [\text{AXG/AXW Standard Accuracy} + 0.5] \%$
	AXW###-□D	025 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 0.5] \%$
	AXW###-□N	500 - 10L	$\pm [\text{AXG/AXW Standard Accuracy} + 0.5] \%$
		11L - 18L	$\pm [\text{AXG/AXW Standard Accuracy} + 0.5] \%$ (*1)

*1) Select AXFA11 from AXG1A parameter.

Table 1.2 Accuracy for Reference in Combination of AXG/AXW Sensor and AXG4A/AXW4A Transmitter without Combined Actual Flow Test

Sensor Category	MS Code	Size ###	Accuracy for Reference
Remote Sensor (for AXG1A)	AXG###-□E	002 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 1.5] \%$
	AXW###-□E	025 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 1.5] \%$
	AXW###-□B	500 - 10L	$\pm [\text{AXG/AXW Standard Accuracy} + 2.5] \%$
Remote Sensor (for AXFA11)	AXG###-□D	002 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 1.5] \%$
	AXW###-□D	025 - 400	$\pm [\text{AXG/AXW Standard Accuracy} + 1.5] \%$
	AXW###-□N	500 - 10L	$\pm [\text{AXG/AXW Standard Accuracy} + 2.5] \%$



AXG1A



AXG4A/AXW4A

2. Combining AXG/AXW Sensors with AXFA11/AXFA14 Transmitters with No Flow Test

AXFA11

Sensor Category	MS Code	Size ###	Accuracy for Reference
Remote Sensor (for AXG1A)	AXG###-□E	002 - 500	$\pm [\text{AXF Accuracy} + 0.5] \%$
	AXW###-□E	025 - 400	$\pm [\text{AXF Accuracy} + 0.5] \%$
	AXW###-□B	500 - 10L	$\pm [\text{AXF Accuracy} + 0.5] \%$
		11L - 18L	$\pm [\text{AXF Accuracy} + 1.5] \%$
Remote Sensor (for AXG4A)	AXG###-□G	002 - 400	$\pm [\text{AXF Accuracy} + 1.5] \%$
Remote Sensor (for AXW4A)	AXW###-□W	025 - 400	$\pm [\text{AXF Accuracy} + 1.5] \%$
	AXW###-□W	500 - 10L	$\pm [\text{AXF Accuracy} + 2.5] \%$

AXFA14

Sensor Category	MS Code	Size ###	Accuracy for Reference
Remote Sensor (for AXG1A)	AXG###-□E	002 - 400	$\pm [\text{AXF Accuracy} + 1.5] \%$
	AXW###-□E	025 - 400	$\pm [\text{AXF Accuracy} + 1.5] \%$
Remote Sensor (for AXG4A)	AXG###-□G	002 - 400	$\pm [\text{AXF Accuracy} + 0.5] \%$
Remote Sensor (for AXW4A)	AXW###-□W	025 - 400	$\pm [\text{AXF Accuracy} + 0.5] \%$
Remote Sensor (for AXFA11)	AXG###-□D	002 - 400	$\pm [\text{AXF Accuracy} + 1.5] \%$
	AXW###-□D	025 - 400	$\pm [\text{AXF Accuracy} + 1.5] \%$



AXG1A



AXFA14

3. Combining AXF Sensors with AXG Transmitters with No Flow Test

AXG1A

The Meter Factors inscribed on AXF sensors can be set to AXG1A as they are.

- When an existing AXF sensor is combined with an AXFA11 from the factory, the approximate accuracy will be +/- [{AXF accuracy} + 0.5%].
- When an existing AXF sensor is combined with an AXFA14 from the factory, the approximate accuracy will be +/- [{AXF accuracy} + 1.5%].

AXG4A/AXW4A

The meter factors inscribed on AXF sensors can be set to AXG4A/AXW4A as they are.

- When an existing AXF sensor is combined with an AXFA11 from the factory, the approximate accuracy will be +/- [{AXF accuracy} + 1.5%].
- When an existing AXF sensor is combined with an AXFA14 from the factory, the approximate accuracy will be +/- [{AXF accuracy} + 0.5%].



AXFA14

4. Combining AM/AE Remote Sensors with AXG Transmitters with No Flow Test

AXG1A

For sizes between 0.1" and 40" (2.5mm to 1000mm) and 44" to 104" (1100mm to 2600mm), style A or style B (model code: AM5xxx...*A or *B), the meter factors inscribed on AM/AE sensors can be set to AXG1A as they are.

- The approximate accuracy will be $\pm [\{\text{AM/AE accuracy}\} + 0.5\%]$

If the sensor is 44" to 104" (1100 mm to 2600mm) style C (model code: AM5xxx...*C), the Meter Factors cannot be set on the AXG1A because the meter factor in combination with an AXG1A is a different calculation. Please contact Yokogawa for a better way to handle this situation.

AXG4A/AXW4A

The meter factors inscribed on AM/AE sensors can be set to AXG4A/AXW4A as they are.

- For sizes from 0.1" to 16" (2.5mm to 400mm), the approximate accuracy will be $\pm [\{\text{AM/AE accuracy}\} + 1.5\%]$.
- For sizes from 20" to 40" (500mm to 1000mm), the approximate accuracy will be $\pm [\{\text{AM/AE accuracy}\} + 2.5\%]$.



AE Magmeter



AM Magmeter