

PRODUCT CONFORMITY CERTIFICATE

This is to certify that the

Flygt MagFlux EMF 801

Manufactured by:

MJK Automation ApS

Blokken 9
3460 Birkerød
DENMARK

has been assessed by CSA Group
and for the conditions stated on this certificate complies with:

Performance Standards and Test Procedures for Continuous Water Monitoring Equipment, Part 3: Performance standards and test procedures for water flowmeters, Environment Agency, version 4, March 2020

The combined performance characteristic (U_c , the expanded uncertainty) is **2.05%** (Class2)

Certification Ranges:

Velocity	0.1m/s to 10 m/s
Pipe size	25mm to 400mm

Project No.:	80102047
Certificate No:	Sira MC160319/02
Initial Certification:	16 December 2016
This Certificate issued:	27 October 2021
Renewal Date:	15 December 2026



Andrew Young
Environmental Project Engineer

MCERTS is operated on behalf of the Environment Agency by

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Approved Site Application

Any potential user should ensure, in consultation with the manufacturer, that the monitoring system is suitable for the intended application. For general guidance on monitoring techniques refer to the Environment Agency Monitoring Technical Guidance Notes available at www.mcerts.net

The product is suitable for use, where it is appropriate, for regulated applications such as abstraction, effluent discharge, ultraviolet disinfection and industrial processing.

Basis of Certification

This certification is based on the following Test Report(s) and on Sira’s assessment and ongoing surveillance of the product and the manufacturing process:

WRc Report UC12078.01 dated October 2016

Product Certified

The measuring system consists of the following parts:

- 1. Flygt MagFlux EMF 801 Flow Sensor
- 2. MagFlux Converter, with or without display

MagFlux® Flow Meters can be installed either with the converter mounted on the flow sensor, on a wall or mounted in a panel.

This certificate applies to all instruments fitted with software version 842012 and onwards.

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Certified Performance

The instrument was evaluated for use under the following conditions:

Ambient Temperature Range: -10°C to +55°C
Instrument IP Rating: IP67

The instrument meets MCERTS Class 2 requirements for the combined performance characteristic as specified in Table 6 of the MCERTS performance standard. Details of individual performance characteristics are summarised below:

Results are expressed as error % of certification range, unless otherwise stated.

Test	Results expressed as % of the certification range				Other results	MCERTS specification
	<0.5	<1	<2	<8		
Protection against unauthorised access					Passcode required	Clause 3.1.2
Indicating Device					The flowmeter incorporates two digital outputs and one digital input	Clause 3.1.3
Units of measurement					The flowmeter records in metric units	Clause 3.1.6
Combined performance characteristic					2.05%	Clause 4.2.1 ±5% Class 2
Mean Error			-1.45			Clause 6.3.2 ±4% Class 2
Repeatability	0.17					Clause 6.3.2 ±1% Class 1
Supply Voltage						
AC (110 V to 230 V)	0.03					Clause 6.3.3 0.5% Class 1
DC (10 to 30 V)	0.05					
Output impedance (10Ω to 800Ω)	0.13					Clause 6.3.4 0.5% Class 1
Fluid Temperature (+1°C to +30°C)		0.95				Clause 6.3.5 1% Class 2
Ambient temperature (-10°C to +55°C)	0.21					Clause 6.3.6 0.5% Class 1
Relative humidity (-10°C to +55°C)	0.13					Clause 6.3.6 0.5% Class 1
Presence of stray currents	0.38					Clause 6.3.9 0.5% Class 1
Bi-directional flow			1.49			Clause 6.3.13 4% Class 2

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Test	Results expressed as % of the certification range				Other results	MCERTS specification
	<0.5	<1	<2	<8		
Conduit Size				4.35		Clause 6.3.16 6.5% Class 3
Response time					30 seconds	Clause 6.3.19 <30 seconds
Error under field test conditions	Max error 0.47% Min error -1.45% Mean error 0.29% Proportion of errors $\leq 2\%$ = 100%					Clause 7.3 2% Class 1
Up time					100%	Clause 7.4 >95%
Maintenance					None	Clause 7.5 to be reported

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Description

MagFlux® Flow Sensors are available in sizes ranging from DN 15 to DN 2000, with standard construction lengths and connections.

MagFlux® Flow Meters can be installed either with the converter mounted on the flow sensor, on a wall or mounted in a panel.

General Notes

1. This certificate is based upon the equipment tested. The Manufacturer is responsible for ensuring that on-going production complies with the standard(s) and performance criteria defined in this Certificate. The Manufacturer is required to maintain an approved quality management system controlling the manufacture of the certified product. Both the product and the quality management system shall be subject to regular surveillance according to 'Regulations Applicable to the Holders of CSA Certificates'.
2. The design of the product certified is defined in the CSA Design Schedule for certificate No. Sira MC160319/01.
3. If the certified product is found not to comply, CSA Group should be notified immediately at the address shown on this certificate.
4. The certification marks that can be applied to the product or used in publicity material are defined in 'Regulations Applicable to the Holders of CSA Certificates'.
5. This document remains the property of CSA Group and shall be returned when requested by CSA Group.

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