

McCROMETER FPI Mag

The McCROMETER FPI Mag is a modular metering system for the measurement of water flow in full round pipes.

The following requirements do not replace the McCROMETER Full Profile Insertion Electromagnetic Flow Meter Installation, Operation and Maintenance Manual. The manual is essential for the successful installation, operation and maintenance of this device and must always be used.

However, for use of this meter under this module of the standard the following requirements must be met, as a minimum, and have been formulated from recommendations/advice in manufacturer literature and where required with input from the manufacturer.

Requirements to be confirmed by validation type	
Post-installation (new meter installation) Existing meter installation – new FPI Mag sensor and new converter	Table 2 applies – Full pipe meters larger than 600 millimetres only Section 2.0 and Section 3.0
Ongoing (revalidation) or Faulty meter (maintenance) – existing meter installation – new FPI Mag sensor and no new converter	Section 2.0 and Section 3.0
Ongoing (revalidation) or Faulty meter (maintenance) – existing meter installation – new converter and no new FPI Mag sensor Ongoing (revalidation) or Faulty meter (maintenance) – existing meter installation – no new FPI Mag sensor and no new converter	Section 2.0

1.0 Key terms

Term	Definition
Converter	The logger/brains of the FPI Mag.
FPI Mag	The convertor and the FPI Mag Sensor
FPI Mag Sensor	Full profile insertion, multi-point electromagnetic sensor

2.0 Authorised Meter Validator

From 1 December 2022, an authorised meter validator must have completed training with McCROMETER for the FPI Mag, within the previous 2 years to perform the activities in the following table. The training record/certificate must be provided with the validation certificate where a new FPI Mag sensor is installed. This training is essential to achieve the uncertainties published by McCROMETER.

Requirements for	CMI	Training by McCROMETER
Fit-for-purpose use	✓	✓
Diameter measurement and sizing of FPI Mag Sensor	✓	✓
Upstream and downstream lengths	✓	✓
FPI Mag installation	✓	✓
Power supply	✓	✓
System calibration	✓	✓
Configuration – user defined parameters	✓	✓
Data output	✓	✓
Maintenance	✓	✓

3.0 Measurement assurance requirement B

The installation of the FPI Mag sensor must be in accordance with McCROMETER procedures and must be completed by CMI's trained by McCROMETER.

To ensure uncertainty specifications published by McCROMETER are met, the following attributes must be determined according to McCROMETER procedures:

- diameter measurement
- sizing of FPI Mag sensor
- installation.

Confirmation that these attributes above have been determined in accordance with McCROMETER procedures, must be provided with the validation certificate. For example, provision of training record/certificate issued by McCROMETER (within the previous 2 years).