

Flexim Fluxus F501

The Flexim Fluxus F501 is a modular metering system for the measurement of water flow in full round pipes.

The following requirements do not replace the User Manual for the Fluxus F501. The user 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 transmitter and new transducers installed	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 or replacement transducers only and no new transmitter	Section 2.0 and Section 3.0
Ongoing (revalidation) or Faulty meter (maintenance) – existing meter installation – new transmitter and no new transducers Ongoing (revalidation) or Faulty meter (maintenance) – existing meter installation – no new transducers and no new transmitter	Section 2.0

1.0 Key terms

Term	Definition
F501	The transmitter operates the transducers, measures the travel times between the transducers and calculates the volume of water passing through the meter. It is a modular metering system.
Transmitter	The logger/brains of the F501.
Transducers	Retrofit sound transducers

2.0 Authorised Meter Validator

From 1 December 2022, an authorised meter validator must have completed training with FLEXIM for the F501, 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 new transducers are installed. This training is essential to achieve the uncertainties published by FLEXIM.

Requirements for	CMI	Training by FLEXIM
Fit-for-purpose use	✓	✓
Number of sound paths and arrangement for transducers	✓	✓
Upstream and downstream lengths	✓	✓
New transducer position, installation, and uncertainty – transducer spacing length – transducer position on pipe - path angle – diameter, for round pipe	✓	✓
Power supply	✓	✓
System calibration	✓	✓
Configuration – user defined parameters	✓	✓
Data output	✓	✓
Maintenance	✓	✓

3.0 Measurement assurance requirement B

The installation of new transducers must be in accordance with FLEXIM procedures and must be completed by CMI's trained by FLEXIM.

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

- installation
- position of transducers on pipe
- length between transducers measurement
- path angle measurement
- diameter measurement.

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