

MTBF estimation

Herewith the manufacturer:

KROHNE Altometer
Kerkeplaat 12
3313 LC Dordrecht
Netherlands

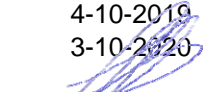
States that the estimated MTBF for the following product is:

Product: **ALTOSONIC V12**
MTBF: **2824** years

Mean time between failure (MTBF) has been used for over 60 years as a basis for various decisions. Over the years more than 20 methods and procedures for lifecycle predictions, estimations and calculations have been developed.

We believe we have used a way, which truly reflects the performance of our flow meters. It is based on the Field Data Measurement Method, which uses real field failures and accounts for failure modes that prediction methods sometimes miss.

For this estimation of the MTBF, we analysed instruments produced since 2010, we analysed the number of shipped instruments and analysed the number of returned units for repair and all of their defects over that period. The variation of these returns is ranging from customer faults and complaints, customer requests for overhaul or annual recalibration, as well as unexpected meter failures occurred during operation. The latter is considered to be useful for the MTBF calculation, and incorporated in the calculation of the MTBF.

Name: J. van der Graaf
Position: Quality manager
Date: 4-10-2019
Expiry date: 3-10-2020
Signed: 

Note:

This declaration becomes invalid if technical modifications are introduced to the product without the manufacturers consent.