# INTERNATIONAL STANDARD

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# Measurement of fluid flow in closed conduits — Ultrasonic transit-time meters for liquid

Mesurage de débit des fluides dans les conduites fermées — Compteurs ultrasoniques pour liquides



13U 12242:2012(E)



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## **Foreword**

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ISO 12242 was prepared by Technical Committee ISO/TC 30, *Measurement of fluid flow in closed conduits*, Subcommittee SC 5, *Velocity and mass methods*.

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# Introduction

Ultrasonic meters (USMs) have become one of the accepted flow measurement technologies for a wide range of liquid applications, including custody-transfer and allocation measurement. Ultrasonic technology has inherent features such as no pressure loss and wide rangeability.

USMs can deliver diagnostic information through which it may be possible to demonstrate that an ultrasonic liquid flowmeter is performing in accordance with specification. Owing to the extended diagnostic capabilities, this International Standard advocates the addition and use of automated diagnostics instead of labour-intensive quality checks. The use of automated diagnostics makes possible a condition-based maintenance system.