

**AS 3778.2.3:2023**  
ISO 18320:2020



**STANDARDS**  
Australia



# Measurement of water flow in open channels

**Part 2.3: General — Determination of the stage-discharge relationship  
(ISO 18320:2020, IDT)**



AS 3778.2.3:2023

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- Australian Bureau of Meteorology
- Australian Hydrographers Association
- Australian Industry Group
- Department of Planning and Environment (NSW)
- Engineers Australia
- Institute of Instrumentation, Control and Automation Australia
- Irrigation Australia
- National Measurement Institute
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# Measurement of water flow in open channels

## Part 2.3: General — Determination of the stage-discharge relationship (ISO 18320:2020, IDT)

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## Preface

This Standard was prepared by the Standards Australia Committee CE-024, Measurement of Water Flow in Open Channels and Closed Conduits, to supersede AS 3778.2.3—2001.

The objective of this document is to specify methods of determining the stage–discharge relationship for gauging stations, including accuracy, based on sufficient discharge measurements with corresponding stage measurements.

This document considers the stage–discharge relationship for stable and unstable channels, and includes brief descriptions of the effects of —

- (a) the transition from inbank to overbank flows;
- (b) shifting controls;
- (c) variable backwater; and
- (d) hysteresis.

Methods of determining discharge for twin-gauge stations, ultrasonic velocity-measurement stations and other complex rating curves are not described in detail and can be found in other International Standards, Technical Specifications and Technical Reports.

This document is identical with, and has been reproduced from, ISO 18320:2020, *Hydrometry — Measurement of liquid flow in open channels — Determination of the stage–discharge relationship*.

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