



# Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
<b>afp - 2302</b>	30-Mar-2009	Number 8	Issue date 23-Apr-2014	30-Apr-2015

## Product designation

**Mack, 2377RG-21 Series, combination pressure reducing and solenoid valve, hydraulically operated with manual override, single diaphragm control valves**  
(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Mack Valves Pty Ltd  
30 Burgess Road, BAYSWATER, VIC, AUSTRALIA, 3153

## Registrant

Mack Valves Pty Ltd  
30 Burgess Road, BAYSWATER, VIC, AUSTRALIA, 3153

### Producer

Mack Valves Pty Ltd  
30 Burgess Road, BAYSWATER, VIC, AUSTRALIA, 3153

## Conformance criteria and evaluation

The Mack, 2377RG-21 Series, combination pressure reducing and solenoid valve, hydraulically operated with manual override, single diaphragm control valves has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 4118.1.5-1996, 'Fire sprinkler systems - Components - Deluge and pre-action valves'.
2. Australian Standard AS 4118.1.8-1999, 'Fire sprinkler systems - Components - Pressure-reducing valves'.

## Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. The maximum allowable inlet pressure of the valve assemblies is 1600 kPa.

This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Issued by

David Whittaker  
Executive Officer – ActivFire Scheme



# Schedule to Certificate of Conformity

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## Producer's description

The Mack, 2377RG-21 Series, combination pressure reducing and solenoid valve, hydraulically operated with manual override, single diaphragm control valves are based around a single diaphragm automatic control valve (SDCV) manufactured in epoxy coated ductile iron with roll groove end connections.

This equipment has a single moving component which is a cylindrical diaphragm; by applying pressure on the cover chamber, the diaphragm seals drip tight on its seat by realizing this pressure. The line pressure lifts the diaphragm allowing the valve to open fully. The valve is modulated to a control point by controlling the flow rate at which the water pressure fills and empties the diaphragm chamber.

The Mack, 2377RG-21 series valves are mainly used in underground traffic tunnels where water pressure at each deluge station is required at a fixed pressure, fitted with a by-pass to manually open valve. Manual operation does not bypass reducing function.

## Technical specification

The following details are a representative extract of the technical specification for the Mack, 2377RG-21 Series, combination pressure reducing and solenoid valve, hydraulically operated with manual override, single diaphragm control valves and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Model	Nominal size
2377RG-21-050	50 mm
2377RG-21-080	80 mm
2377RG-21-100	100 mm
2377RG-21-150	150 mm

Connection details: 50 mm, 80 mm, 100 mm, 150 mm roll-grooved for pipe O.D. conforming to AS 1074.