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# **Certificate of Conformity**

Certificate num. Registration date Version Valid until

afp - 1365

12-Dec-2000

Registration date Version Valid until

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## **Product designation**

Mack, P93X-A7 Series, Angle Seated, Roll Grooved Ends, Combination Deluge/Pressure Reducing 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, P93X-A7 Series, Angle Seated, Roll Grooved Ends, Combination Deluge/Pressure Reducing Valves have 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'.
- Australian Standard AS 4118.1.8-1999, 'Fire sprinkler systems Components -Pressure-reducing valves'.
- 3. SSL Test Specification 103-91, Version E:March-1993, 'Relief, reducing deluge and pre-action valves for fire protection service'.

#### 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.

- To be installed in accordance with the manufacturer's instructions, and appropriate building regulations and standards, to the satisfaction of the relevant Authority having Jurisdiction.
- ii. The maximum allowable inlet pressure of the valve assemblies is 1400 kPa (203 psi).

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, P93X-A7 Series, Angle Seated, Roll Grooved Ends, Combination Deluge/Pressure Reducing Valves consist of diaphragm-actuated angle seated cast iron main valve with a pilot circuit that includes a solenoid valve and a field-adjustable pressure-reducing valve. The deluge operation occurs when the solenoid is energised, and ceases when it is de-energised. The pilot circuit pressure-reducing valve functions to maintain a steady pressure at the outlet of the main valve in accordance with the chosen adjusted outlet pressure of the pilot reducing valve. The opening and closing rate of the main valve are factory-determined by means of a fixed restrictor orifice that is sized to suit the individual customers' required opening/closing rates. The pilot circuit is fitted with a lockable ball-valve for inhibiting deluge operation when deluge system maintenance is being undertaken, and a non-lockable ball valve that by-passes the solenoid valve, thus providing a manually opening deluge valve. The model range includes the following.

Model	Size, mm
P93X-A7-080	80
P93X-A7-100	100
P93X-A7-150	150

# **Technical specification**

The following details are a representative extract of the technical specification for the Mack, P93X-A7 Series, Angle Seated, Roll Grooved Ends, Combination Deluge/Pressure Reducing Valves and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Main Valve:

Valve model: Mack, 1312RG-22-080 (80 mm), 1312RG-22-100 (100 mm), 1312RG-22-150 (150 mm)

diaphragm-actuated angle-seated globe valves.

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

Trim components:

Pilot pressure-reducing valve: Mack, Figure 7838X-A9-008 (nominal 8 mm orifice size).

Suitable for use with either straight or angle seated Mack main valves sized in the range

of 80 mm to 200 mm for use in fire-protection deluge systems.

Pilot solenoid valve: Asco Model SC E238A001 24DC (24 Vdc coil).

The maximum working static pressure of the solenoid valve is 1600 kPa (232 psi).

Suitable for use with either straight or angle seated Mack main valves sized in the range

of 80 mm to 200 mm for use in fire-protection deluge systems.

Pilot system ball valves: Mack, Figure B85, 10 mm brass ball valve.

The maximum working static pressure rating of the body to 3000 kPa (434 psi).

Suitable for use with either straight or angle seated Mack main valves sized in the range

of 80 mm to 200 mm for use in fire-protection deluge systems.

**Pilot system strainer:** Mack, Figure 416-1-010, 10 mm self-cleaning finger strainer.

Suitable for use with either straight or angle seated Mack main valves sized in the range

of 80 mm to 200 mm for use in fire-protection deluge systems.

The designated models under this series include the following.

Model	Size, mm
P93X-A7-080	80
P93X-A7-100	100
P93X-A7-150	150

Note: This listing is not valid if trim components, other than those nominated above, are used for the specified function.