



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation Interim Certificate of Approval No 5/6A/216

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in Interim
Certificate of Approval No 5/6A/216 issued 28 March 2008 in respect of the

Bott AdBlue Model Quantum 500 T AdBlue Fuel Dispenser for Motor Vehicles

submitted by Tennant Ltd
 Level 2, 40 Yeo Street
 Neutral Bay NSW 2089

has been cancelled in respect of new instruments as from 1 September 2009.

Instruments verified/certified before 28 June 2008 may be reverified/recertified
at the discretion of the relevant trade measurement authority.

Signed by a person authorised by the Chief Metrologist
to exercise his powers under Regulation 60 of the
National Measurement Regulations 1999.

A handwritten signature in black ink, consisting of stylized cursive letters, positioned above a horizontal line.



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**Interim
Certificate of Approval
No 5/6A/216**

**VALID FOR VERIFICATION/CERTIFICATION PURPOSES UNTIL
28 JUNE 2008**

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect
of the

Bott AdBlue Model Quantum 500 T AdBlue Fuel Dispenser for Motor Vehicles

submitted by Tennant Ltd
 Level 2, 40 Yeo Street
 Neutral Bay NSW 2089.

NOTE: This Certificate relates to the suitability of the pattern of the instrument
for use for trade only in respect of its metrological characteristics. This
Certificate does not constitute or imply any guarantee of compliance by the
manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 117-1,
Measuring Systems for Liquids Other than Water, dated July 2004.

CONDITIONS OF APPROVAL

It is the responsibility of the submitter to make special arrangements with the
respective state or territorial trade measurement department (if required by that
department) to have instruments covered by this Interim Certificate
verified/certified pending issue of the final Certificate and Technical Schedule.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 5/6A/216' and only by persons authorised by the submitter.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

DESCRIPTIVE ADVICE

Pattern: approved 28 March 2008

- A Bott AdBlue model Quantum 500 T fuel dispenser for certain motor vehicles (*) and approved for use to dispense AdBlue (aqueous urea solution) in attendant-operated mode over a flow rate range of 4 to 40 L/min.

(*) For use with vehicles fitted with diesel engines and a Selective Catalytic Reduction system.

The field of operation of the measuring system is determined by the following characteristics:

- Minimum measured quantity, V_{min} 2 L
- Maximum flow rate, Q_{max} 40 L/min
- Minimum flow rate, Q_{min} 4 L/min
- Maximum pressure of the liquid, P_{max} 350 kPa
- Minimum pressure of the liquid, P_{min} 50 kPa
- Range of liquids viscosity (at 25°C) 1.4 mPa.s (#)
- Maximum temperature of the liquid, T_{max} 50°C
- Minimum temperature of the liquid, T_{min} -10°C
- Ambient temperature range -25 to 55°C
- Accuracy class 0.5

(#) The flowmeter is adjusted for use with AdBlue (aqueous urea solution).

The measuring system incorporates the following components:

- (i) A submersible turbine pumping unit with a low level detection float switch to prevent air from entering the system.
- (ii) The measurement transducer is a Tokheim model TM80-AdB two-piston positive displacement meter fitted with a Tokheim model MP-T1 pulse generator producing 50 pulses per revolution.
- (iii) A hose and nozzle mounted on the side of the dispenser housing. The nozzle used is a ZVA 19 mm Slimline.
- (iv) A Tokheim model WWC calculator/indicator which has 3 displays for indicating volume, unit price and price. The instrument is approved with version IFSF 2.04 software.

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.



Date of Approval: 28 March 2008