Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Interim

Provisional

Certificate of Approval

NMI P5/6B/219

VALID FOR VERIFICATION PURPOSES UNTIL 30 SEPTEMBER 2015

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 instruments herein described.

Alfons Haar Model PreciFUEL Liquid-Measuring System

submitted by HAAR Australia Pty Ltd
3/10 Law Court
Sunshine West VIC 3020

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, Measuring Systems for Liquids Other than Water, dated July 2004.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	7/02/14
1	Pattern amended (validity date) – interim certificate issued	2/05/14
2	Pattern amended (validity date) – interim certificate issued	18/9/14
3	Pattern & variants 1 & 2 approved – certificate issued	29/01/15
4	Variant 3 provisionally approved – interim certificate issued	31/03/15

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI P5/6B/219' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

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

Special Conditions of Approval: (Provisional Approval for Variant 3)

This approval is limited to five (5) instrument/s only having serial numbers which may be obtained from NMI.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI P5/6B/219' and only by persons authorised by the submittor. (Note: The 'P' in the approval number may be a temporary marking.)

The approval will remain provisional pending completion of satisfactory testing and evaluation.

In the event of unsatisfactory performance the approval may be cancelled (or altered).

The submittor shall implement such modifications as required by NMI. In the event that such modifications (if any are required by NMI) are not made to the satisfaction of NMI, this approval may be withdrawn.

Note to Verifiers:

A suitable verification test procedure may be obtained from NMI.

1. Description of Pattern provisionally approved on 18/09/14
approved on 29/01/15

An Alfons Haar model PreciFUEL bulk flowmetering system incorporating an Alfons Haar model MKA 800 positive displacement flowmeter with an Alfons Haar model IGELZ pulse transmitter interfaced to an Alfons Haar model X-Master 4 calculator/indicator for bulk metering of petroleum products other than LPG.

Certificate of Approval 5/6B/219 issued 29/01/15 describes the pattern and variants 1 & 2.

2. Description of Variant 3 provisionally approved on 31/03/15

An Alfons Haar model PreciMA490 bulk flowmetering system incorporating an Alfons Haar model MKA 300 positive displacement flowmeter with an Alfons Haar model IGELZ pulse transmitter interfaced to an Alfons Haar model CountMASTER 4A MID calculator/indicator for bulk metering of petroleum products other than LPG.

The field of operation of the PreciMA490measuring system is determined by the following characteristics:

• Minimum measured quantity (V_{min})	50 L	(#1)
• Maximum flow rate (Q_{max})	500 L/min	
• Minimum flow rate (Q_{min})	50 L/min	
• Maximum pressure of the liquid (P_{max})	1000 kPa	
• Minimum pressure of the liquid (P_{min})	30 kPa (nominal)	(#2)
• Range of liquids viscosity	0.4 to 20 mPa.s (at 20°C)	(#3)
• Liquid temperature range	-10°C to 50°C	
• Ambient temperature range	-25°C to 55°C	
• Power supply	24 V DC	
• Accuracy class	0.5	

(#1) When the calculator/indicator is set to indicate volume in 1 L increments.

(#2) Minimum pressure required for effective operation of the gas elimination device.

(#3) The flowmeter is adjusted for use with one product viscosity for which it is to be verified and as marked on the data plate.

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

Dr A Rawlinson

~ End of Document ~