

Non-urban water meters conforming to AS4747

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Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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Purpose

This document sets out the range of meters that are pattern approved by the National Measurement Institute and conform to the Australian Standard for non-urban water meters (AS4747). In Australia, most states and territories require or prefer non-urban water meters that conform to AS4747.

The National Measurement Institute maintains the official list of Pattern Approved meters for trade and that list includes all meters used for trade. This document describes the category of non-urban water meters exclusively.

What is a pattern approved meter

The National Measurement Institute of Australia checks non-urban water meters to confirm they conform with the Australian Standard for Non-Urban water meters (AS4747). If the meter passes testing, it is pattern approved. In limited circumstances, equivalent overseas standards may be used to pattern approve a meter.

Schedule 1. Closed conduit meters

Meters in the closed conduit category have been tested by an accredited laboratory and met the Australian pattern approval requirements for closed conduit meters. These meters can be installed within the operating range specified by the manufacturer and certified by the National Measurement Institute.

Table 1 Pattern Approved non-urban water meters

You can download the Pattern Approval certificate for each approved meter via the links marked as NMI 14/3/XX in the table.

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
NMI 14/3/21	KROHNE Waterflux 3070 Water Meter	Electromagnetic	Krohne Waterflux 3070 flow sensor Krohne IFC 070 signal converter Krohne Waterflux 3070 C Krohne Waterflux IFC 300 signal converter	10 - 6300	DN25 – DN600	All	Krohne on (02) 9426 1700
NMI 14/3/24	SIEMENS MAG8000 Water Meter	Electromagnetic	Siemens SITRANS F M MAG8000 signal transmitter Siemens SITRANS F M MAG5100W flow sensor Siemens SITRANS F M MAG8000CT signal transmitter Siemens SITRANS F M MAG8000 Irrigation signal transmitter	63 - 16000	DN25 – DN300 DN200 - DN1200	All Horizontal only	Siemens on 1300 369 515 industrieservice.au@siemens.com
NMI 14/3/29	ARAD Octave Water Meter	Ultrasonic	Arad Octave 2 Arad Octave 2 Hardware version 2.4	40 - 1000	DN40 – DN300	All	Netafim on (03) 8331 6516 0484 555 113
NMI 14/3/30	ABB AquaMaster3 FEV2 Water Meter	Electromagnetic	ABB AquaMaster3 FEV2 flow sensor ABB AquaMaster3 signal transmitter ABB WaterMaster signal transmitter	40 - 1000	DN40 – DN200	All	ABB on 1800 222 435

Pattern Approved non-urban Water Meters

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
NMI 14/3/32	AQUAMONIX (includes Pentair; Tyco & Emflex brands) I500 Water Meter	Electromagnetic	Aquamonix I500 flow transmitter Aquamonix IR2060 flow sensor Aquamonix IR2020 flow sensor Aquamonix IR2030 flow sensor Aquamonix IR2030C flow sensor Aquamonix GM1060 flow sensor	36 - 10800	DN50 – DN1500	Horizontal and Vertical	Aquamonix on 1300 797 246 (02) 8710 4040
NMI 14/3/34	SENSUS WP-Dynamic Water Meter	Inferential turbine	As per meter model	25 - 2000	DN40 – DN400	Horizontal only	Bermad on https://support.bermad.com.au
NMI 14/3/36	EUROMAG MUT 2200 EL Water Meter	Electromagnetic	Euromag MUT 2200 EL flow sensor Euromag MUT 2500 EL flow sensor Euromag MC608B indicating flow converter Euromag MC608R indicating flow converter Euromag MC608I indicating flow converter Euromag MC406 and 406A indicating flow converter	25 - 3600	DN40 – DN1000	Horizontal only	Bermad on https://support.bermad.com.au

Pattern Approved non-urban Water Meters

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
NMI 14/3/42	RUBICON Sonaray Pipe Meter	Ultrasonic	Rubicon 74222AD ultrasonic flow tube Rubicon SolarDrive Board 77264 indicating flow computer Rubicon flowtube connection type model: 74220AD Rubicon flowtube connection type model: 74221AD Rubicon flowtube connection type model: 82175 Rubicon flowtube connection type model: 82176 Rubicon flowtube connection type model: 82177 Rubicon flowtube connection type model: 82188 Rubicon flowtube connection type model: 82189	1313	DN600	Horizontal Only	Rubicon on (03) 9832 3000
NMI 14/3/44	ARAD WSTsb Water Meter	Woltman	As per meter model	63 - 1000	DN50 – DN300	Horizontal only	Netafim on (03) 8331 6516 0484 555 113
NMI 14/3/46	ABB AquaMaster4 Water Meter	Electromagnetic	ABB AquaMaster4 model signal transmitter FET4XY ABB WaterMaster signal transmitter			All	ABB on 1800 222 435
			ABB electromagnetic flow sensor FEW4XY.R (reduced bore, rubber lined) ABB electromagnetic flow sensor FEW4XY.V (virtual full bore, polypropylene lined)	25 - 6300 40 - 16000	DN40 – DN600 DN40 – DN1800		

Pattern Approved non-urban Water Meters

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
			ABB electromagnetic flow sensor FEW4XY.F (full bore, polypropylene lined) ABB electromagnetic flow sensor AquaMaster FEV 2 ABB WaterMaster electromagnetic flow sensor WaterMaster FEV ABB WaterMaster electromagnetic flow sensor WaterMaster FEW ABB WaterMaster electromagnetic flow sensor WaterMaster FEF	40 - 16000 40 - 1000 40 - 4000 40 - 4000 40 - 4000	DN40 – DN1800 DN40 - DN200 DN40 - DN500 DN40 - DN500 DN40 - DN500		
NMI 14/3/49	KROHNE Optiflux 2300C Water Meter	Electromagnetic	Krohne IFC 300 signal converter Krohne Optiflux 2000 flow sensor Krohne Optiflux 4000 flow sensor Krohne Optiflux 2300C (compact arrangement) Krohne Optiflux 4300C (compact arrangement) Krohne Optiflux 2000F (remote arrangement) Krohne Optiflux 4000F (remote arrangement)	16 - 25000	DN25 – DN1800	All	Krohne on (02) 9426 1700
NMI 14/3/50	SIEMENS MAG5100W with MAG6000CT Water Meter	Electromagnetic	Siemens SITRANS F M MAG5100W flow sensor Siemens SITRANS F M MAG6000CT signal transmitter Siemens SITRANS F M MAG5000CT signal transmitter Some flow sensor sizes will bear part numbers starting with FDK:083XXX	63 - 16000	DN25 – DN300 DN350 – DN1200	All Horizontal only	Siemens on 1300 369 515 industry.service.au@siemens.com

Pattern Approved non-urban Water Meters

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
NMI 14/3/52	ELSTER Q4000 Water Meter	Electromagnetic	Elster Q4000 Elster Q4000B	63 - 1000	DN50 – DN200	Horizontal only	At Elster Metering Pty Ltd 1800 595 437 NSW: elsternswsales@honeywell.com VIC: elstervicsales@honeywell.com
NMI 14/3/53	ENDRESS+HAUSER Promag W400 Water Meter	Electromagnetic	Endress+Hauser Promag W400 water meter Endress+Hauser Promag W flow sensor Endress+Hauser Promag 400 transmitter	16 - 6300	DN25 – DN800	All	Endress & Hauser on QLD: (07) 3457 0200 NSW/ACT: (02) 8877 7000 VIC/TAS: (03) 9263 8000 SA/NT: (02) 8877 7050 WA: (08) 6350 2200
NMI 14/3/54	ZENNER BIL WPD Water Meter	Woltman	As per meter model	25 - 1000	DN50 – DN300	Horizontal and Vertical Note: orientation alters the approved flow rate range	HR Products on 1800 486 837 hrsales@hrproducts.com.au
NMI 14/3/57	BERMAD Turbo-IR water meter	Inferential turbine	As per meter model	35 - 800	DN50 – DN300	Horizontal only	Bermad on https://support.bermad.com.au

Pattern Approved non-urban Water Meters

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
NMI 14/3/61	ARAD Octave High Flow Water Meter	Ultrasonic	Arad Octave High Flow Water Meter	160 - 1000	DN80 - DN200	All	Netafim on (03) 8331 6516 0484 555 113
NMI 14/3/71	BERMAD Bermad M10 Water Meter	Ultrasonic	M10 water meter accuracy class 2 M10 water meter accuracy class 2.5	40 - 160	DN50 – DN100	Horizontal	Bermad on https://support.bermad.com.au

Provisional closed conduit meters

Meters in this category have been tested by an accredited laboratory but do *not yet* fully meet the requirements for pattern approval for closed conduit meters. These meters may be installed within the operating range specified by the meter manufacturer and the conditions set out by the National Measurement Institute.

Caution: Until it receives full pattern approval, a provisionally approved meter carries a risk that it may not be accepted as a pattern approved meter for the purposes of state and territory metering requirements. Check with your state or territory regulator.

Table 2 Provisionally approved closed conduit meters

Certificate of Approval number	Meter Model – approved pattern	Meter technology	Meter Model – provisionally approved variants and components	Approved Q3 range (m3/h)	Approved nominal Sizes (DN)	Approved orientation	Contacts for technical support from the meter supplier
NMI P14/3/68	FLOWMETRICS F-NMIR-1049 water meter	Ultrasonic	F-NMIR-1049 water meter Variant 1 & Variant 2	40 - 1000	DN50 – DN300	All	Flowmetrics Pty Ltd on 1300 112 705

Schedule 2. Open channel meters

A meter in the open channel category has been tested by an accredited laboratory and met the Australian Pattern Approval requirements for Open Channel Meters. These meters can be installed within the operating range specified by the meter manufacturer and certified by the National Measurement Institute.

Table 3 Pattern Approved open channel meters

Certificate of approval number	Meter Model / Meter technology	Approved sizes (Channel dimensions)	Approved maximum continuous (Q3) flowrates m3/h
NMI 14/3/62	RUBICON Slipmeter SM model water meter Slipmeter 79200 SM.600.XXXX Slipmeter 73802 SMA.600.1500L Approved orientation: Horizontal only	600 mm x 600 mm x 829 mm 600 mm x 600 mm x 848 mm	1313