

Type AB Meters for AMR Systems



Electromechanical Meters

Elster Electricity's Type AB electromechanical meters are the most cost-effective meters for measuring kilowatt-hour energy usage. The AB electromechanical meter is available as a single phase (AB1) or polyphase (ABS) meter and can be supplied with either a clock-dial or cyclometer type register. Elster Electricity has designed electromechanical meters to integrate different communication technologies into the product line. These communication modules are mounted under the meter's cover and support automated meter reading (AMR) systems. The modules can be supplied on either single phase or polyphase meters. Existing installed meters can also be retrofitted with the communication devices.

The AB1, AB1R (with AMR module) single phase meters, and the ABS polyphase meters meet or exceed the ANSI standards for electricity metering. The Underwriters Laboratory (UL) audited the manufacturing facility and recognized Elster Electricity's world-class quality procedures and implementation by conveying the ISO 9001 Registered Firm Status certification making Elster Electricity the first meter manufacturer to hold this certification.

Commercial Performance

Key features of the AB1 single phase meter are its accuracy, long-life, and consistent service performance.

The fully automated, robotic final calibration system provides the greatest consistency in setting very tight accuracy levels for all AB1 meters. This consistency means that each meter arrives at the electric utility ready for installation. If requested, a computerized calibration data file can be provided by request with each shipment, listing each meter and its specific factory settings. This data file can be easily transferred into the utility's meter database or meter record system.

Elster Electricity's electromechanical meters are designed to operate in the harshest environments. Type AB meters are painted, corrosion-protected and have an epoxy-encapsulated voltage coil. The Type AB electromechanical meters continue to meet utility expectations by consistently exceeding their 30-year expected life span.

Design Strengths

Elster Electricity's exceptional attention to detail in engineering and manufacturing results in outstanding performance in the field. Performance-enhancing design features include the following:

- highly reliable, epoxy-encapsulated voltage coil
- Magnethrust® Bearing System for accurate registration and tamper resistance
- corrosion protection for long life
- fixed register mesh requiring no adjustment during register installation
- filter seal system protects against contaminants while minimizing condensation

Automated Meter Reading

The AB1 meter can be purchased with a communication module that facilitates automated meter reading. The AB1R meter supports many AMR system vendors today. Information is available to new vendors to assist them in adding their module to the AB1 meter.

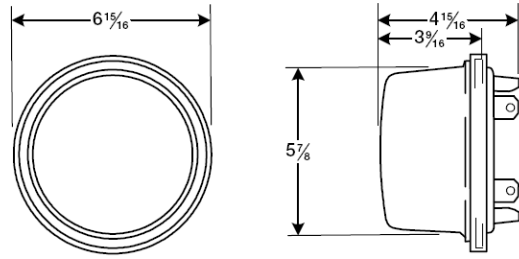
AMR modules compatible with the AB1R meter are indicated in the following table.

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Medium	AMR module
Radio frequency (900 MHz)	<ul style="list-style-type: none"> ▪ Itron* ▪ Schlumberger CellNet
Distribution power line carrier	<ul style="list-style-type: none"> ▪ Hunt Turtle ▪ DCSI
Telephone	<ul style="list-style-type: none"> ▪ Itron (DCI) ▪ American Innovations

*Uses a switch containing mercury. Dispose of according to local, state, and federal laws.



Dimensions in inches; provided for reference only. Not to be used for construction.

Type AB Specifications

Type AB meters meet or exceed ANSI C12.1-1995 and ANSI C12.10-1998.

Meter	Description	Voltages	Forms
AB1	A single phase meter available as a self-contained, socket-type or transformer-type meters with 4, 5, or 6 terminals.	120 or 240	1S, 2S, 3S, 4S
ABS-2	A 2-stator meter for 3-phase, 3-wire or network service. It is a transformer-rated, socket-type meter with 8 terminals.	120, 240, or 480	5S
ABS-3	A 3-stator meter for 3-phase, 4-wire wye service. It is available as a self-contained (7 terminals) or transformer-rated (13 terminals) socket-type meter.	120, 240, or 480	9S, 16S
ABS-5	A 2-stator meter for 3-phase, 3-wire or network service. It is self-contained, socket-type meter with 5 terminals; the 5th terminal is moveable.	120, 240, or 480	12S
ABS-5U	Similar to the ABS-5 but designed for urban network applications. The meter is used where 120/208 V network is the electrical service and lightning protection for the service is provided at the service entrance.	120	12S, 25S
ABS-7	A 2-stator meter for 3-phase, 4-wire delta service. It is available as a self-contained (7 terminals) or transformer-rated (13 terminals), socket-type meter.	240 or 480	8S, 15S
ABS-8	A 2-stator (2½ element) meter for 3-phase, 4-wire wye service. It is available as a self-contained (7 terminals) or transformer-rated (13 terminals), socket-type meter.	120 or 240	6S, 14S

Meter type	Number in carton	Domestic		Export			Shipping dimensions of box (inches)
		Net weight (lb/kg)	Shipping weight (lb/kg)	Net weight (lb/kg)	Legal weight (lb/kg)	Gross weight (lb/kg)	
AB1	4	15.5 / 7	18.25 / 8.3	15.5 / 7	18.25 / 8.3	18.25 / 8.3	15.75 x 15.75 x 7.38
ABS-2	1	7 / 3.2	9 / 4.1	7 / 3.2	8 / 3.6	9 / 4.1	9.5 x 11 x 9.5
ABS-2	4	27.75 / 12.6	31.5 / 14.3	27.75 / 12.6	30.25 / 13.7	31.5 / 14.3	16.5 x 16.5 x 10.63
ABS-3	1	8 / 3.6	10 / 4.5	8 / 3.6	9 / 3.6	10 / 4.5	9.5 x 11 x 9.5
ABS-3	4	32 / 14.4	35.5 / 15.98	32 / 14.4	34.5 / 15.53	35.5 / 15.98	16.5 x 16.5 x 10.63
ABS-5	1	7 / 3.2	9 / 4.1	7 / 3.2	8 / 3.6	9 / 4.1	9.5 x 11 x 9.5
ABS-5	4	27.75 / 12.6	31.5 / 14.3	27.75 / 12.6	30.25 / 13.7	31.5 / 14.3	16.5 x 16.5 x 10.63
ABS-7	1	7 / 3.2	9 / 4.1	7 / 3.2	8 / 3.6	9 / 4.1	9.5 x 11 x 9.5
ABS-7	4	27.75 / 12.6	31.5 / 14.3	27.75 / 12.6	30.25 / 13.7	31.5 / 14.3	16.5 x 16.5 x 10.63
ABS-8	1	7 / 3.2	9 / 4.1	7 / 3.2	8 / 3.6	9 / 4.1	9.5 x 11 x 9.5
ABS-8	4	27.75 / 12.6	31.5 / 14.3	27.75 / 12.6	30.25 / 13.7	31.5 / 14.3	16.5 x 16.5 x 10.63



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