

3M™ ScotchMark™ Locating and Marking Products

This was Wall Street, 1921...



Imagine what it's like down there today.







Specifications for ScotchMark™ Electronic Marker System

	Water	Wastewater	Gas
Near-Surface Marker Product Number / Color	1434 / Blue	1435 / Green	1436 / Yellow
Ball Marker Product Number / Color	1403-XR / Blue	1404-XR / Green	1405-XR / Yellow
Mid-Range Marker Product Number / Color	1257 / Blue	1258 / Green	1259 / Yellow
Full-Range Marker Product Number / Color	1252 / Blue	1253 / Green	1254 / Yellow
Marker Locator EMS II Series	1266	1265	1267

Specifications for ScotchMark™ Electronic Marker System

	Net weight	Shipping weight	Range (dependent on marker type)	Standard Packaging
Near-Surface Marker	0.055 lbs (0.025 kg)	3.75 lbs (1.71 kg)	2 ft (0.6 m) from locator probe	50/case
Ball Marker	0.7587 lbs (0.35 kg)	24.0 lbs (10.5 kg)	5 ft (1.5 m) from locator probe	30/case
Mid-Range Marker	0.31 lbs (0.142 kg)	17.0 lbs (7.7 kg)	6 ft (1.8 m) from locator probe	50/case
Full-Range Marker	1.75 lbs (0.8 kg)	30.9 lbs (14.0 kg)	8 ft (2.4 m) from locator probe	25/case
Marker Locator 1265/1266/1267	5.5 lbs (2.5 kg)	12.0 lbs (5.4 kg)	N/A	1/case

Marking your spot with the ScotchMark™ Electronic Marker System.

The front cover photos show the corner of Wall Street and Williams Street in New York City in 1921 and as it appears today. Clearly it has become even more difficult to locate and identify underground utility lines.

The main element of the 3M™ ScotchMark Electronic Marker System (EMS) is a durable, passive marker that can be buried over key facilities during construction or used to mark existing facilities during maintenance. After installation, EMS saves both time and money by eliminating the search for “lost” facilities.

With EMS, you can find gas, water and wastewater utilities in the heaviest of traffic. Unlike surface markers such as stakes, flags or paint, an EMS Marker is not affected by overgrown vegetation or vandalism, and can't be worn away by weather.

Find it fast

It takes just minutes to learn to use EMS, and finding buried markers is just as easy. The locator transmits an RF signal to the buried marker. The marker reflects the signal back to the locator, and the location is indicated with both a visual meter reading and an audible tone.

Markers that last

With our Full-Range, Mid-Range, Ball, and Near-Surface Markers, there is a marker to meet every need. A four-inch Disc Marker is also available for marking handholds. It easily attaches to lids or covers over flush-mounted facilities.

Markers are passive antennas with no internal power source to run down. Their water-resistant, polyethylene shells are impervious to minerals, chemicals and the temperature extremes normally found underground.

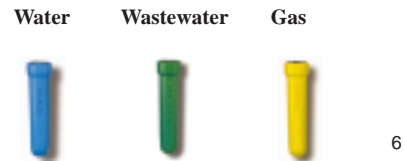
The safe choice

There is no guesswork with the Electronic Marker System. 3M locators operate even in the presence of metal conduit or pipe, metallic conductors, fences, AC power lines and electronic markers of other utilities. All EMS Markers are color-coded to APWA standards for visual reference and each utility has its own specific frequency. EMS signals provide positive identification of each utility, thus reducing the risk of accidentally locating and excavating other buried facilities.

Backed by a name you can trust

When you invest in a quality 3M locator, you also get the best warranty in the business and a service center dedicated to diagnosing and repairing 3M products. Our service center provides calibration, repair, upgrades and modifications for safety, performance and reliability.

Even beyond the initial warranty period, standard turnaround time is five days or less. If you're in a hurry, we can fix it in a day and ship via Federal Express, RPS or United Parcel Service.



Near-Surface Marker Ideal for marking underground and street-access facilities up to two feet in depth. Its 3½-inch long cylindrical size and shape allows for easy installation in asphalt, concrete or rock without extensive digging or drilling.



Ball Marker Engineered for narrow trench applications up to five feet in depth, the 4-inch diameter Ball Marker has a unique, patented self-leveling feature that ensures an accurate, horizontal position regardless of how it is placed in the ground.



Mid-Range Marker Designed for marking applications at depths up to six feet, marker spokes in the 8¼-inch diameter Mid-Range Marker help stabilize it in the correct position after placement.



Full-Range Marker The Full-Range Marker is suited for deep applications up to eight feet. Its 15-inch diameter makes it ideal for use as a digging shield over sensitive underground facilities.

<u>Applications</u>		
<u>Water</u>	<u>Wastewater</u>	<u>Gas</u>
<ul style="list-style-type: none"> • Pipeline paths • Service stubs • Clean-outs • Road crossings 	<ul style="list-style-type: none"> • Pipeline paths • Service stubs • PVC pipeline • Buried valves • Road crossings • Tees 	<ul style="list-style-type: none"> • Pipeline paths • Main stubs • Service stubs • Tees • Road crossings • Valve boxes • Meter boxes

Electronic Marker Locator and Probe Package



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The ScotchMark™ EMS II Marker Locator is portable and lightweight. The electronics package is supported by a strap around the neck or shoulder, and the probe is hand-held.

Size:

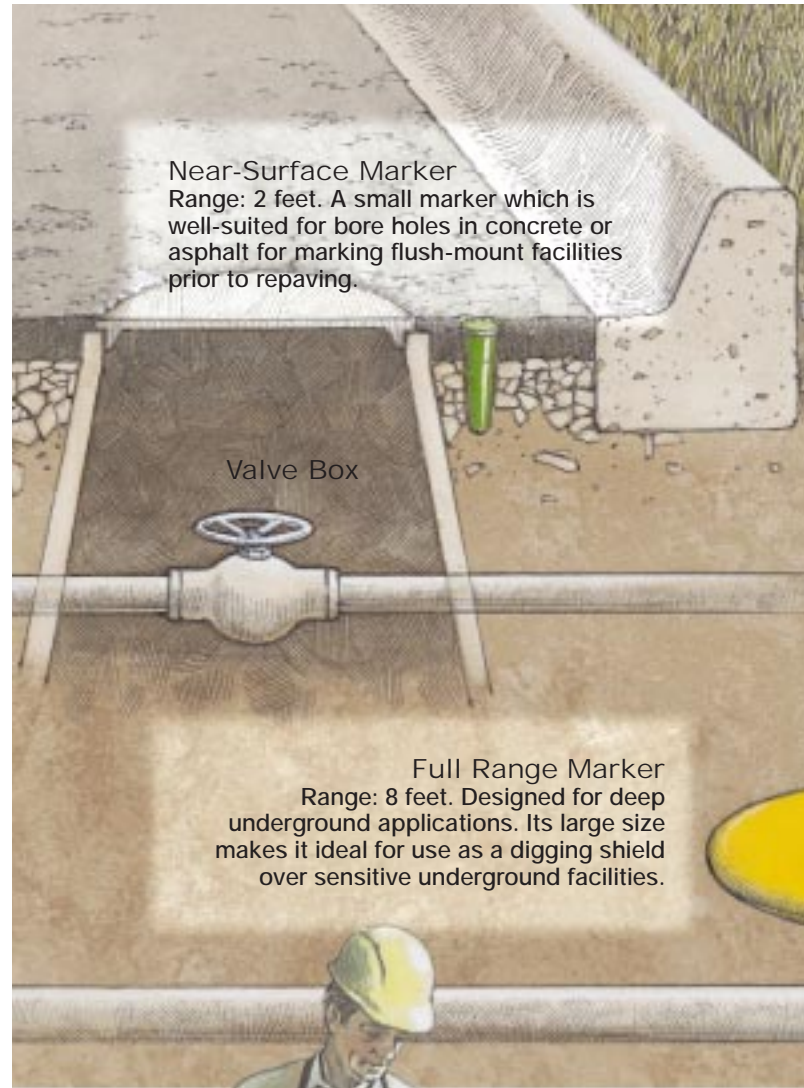
- Electronics package – 9" x 10" x 3"
(22.9 cm x 25.4 cm x 7.62 cm)
- Probe – 8 1/4" diameter x 1 3/4" thick
(20.9 cm x 4.4 cm)
- Telescoping handle – collapsed, 22" (55.9 cm)
extended, 32" (81.3 cm)

Weight:

- Shipping – 12 lbs. (5.44 kg)
- Electronics package – 4 lbs. (1.81 kg)
- Probe – 1 1/2 lbs. (.60 kg)

Operating Temperature: 0°F to 130°F (-17°C to 54°C)

Power Source: Eight "C" size alkaline batteries

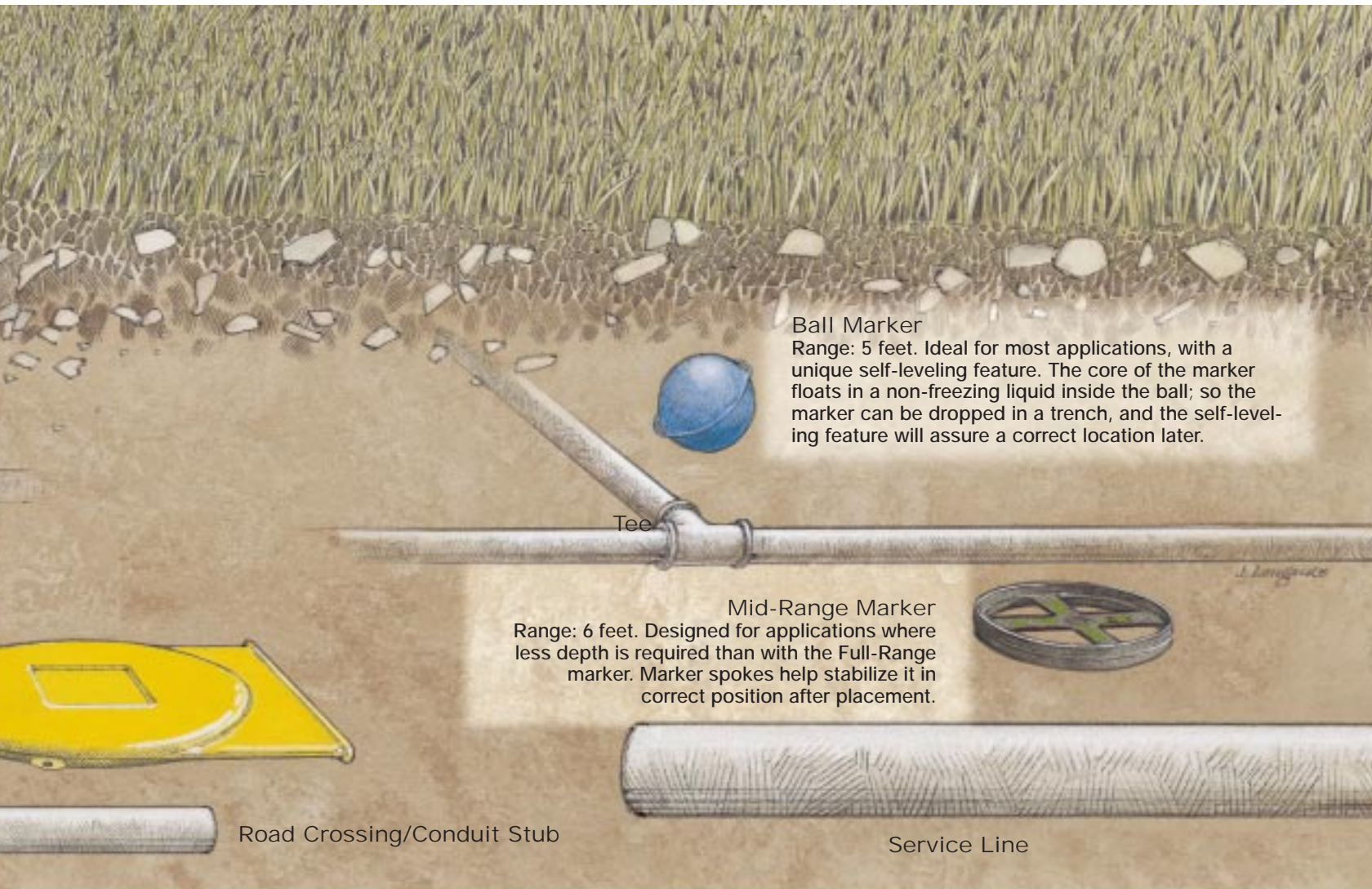


Near-Surface Marker
Range: 2 feet. A small marker which is well-suited for bore holes in concrete or asphalt for marking flush-mount facilities prior to repaving.

Valve Box

Full Range Marker
Range: 8 feet. Designed for deep underground applications. Its large size makes it ideal for use as a digging shield over sensitive underground facilities.





Ball Marker
 Range: 5 feet. Ideal for most applications, with a unique self-leveling feature. The core of the marker floats in a non-freezing liquid inside the ball; so the marker can be dropped in a trench, and the self-leveling feature will assure a correct location later.

Mid-Range Marker
 Range: 6 feet. Designed for applications where less depth is required than with the Full-Range marker. Marker spokes help stabilize it in correct position after placement.

Road Crossing/Conduit Stub

Service Line

The ScotchMark™ System...on the mark for every application.

Gas

- buried valves
- meter boxes
- service stubs
- tees
- road crossings
- main stubs
- pipeline paths
- snow-covered installations

Water

- valve boxes
- meter boxes
- service stubs
- tees
- road crossings
- main stubs
- pipeline paths
- snow-covered installations

Wastewater

- service stubs
- clean outs
- laterals
- road crossings
- pipeline paths
- snow-covered installations

For ordering information, technical information or product information:

Phone: 1-800-722-6721 or 1-512-984-1038

Fax: 1-800-828-9329 or 1-512-984-2210

Important Notice

WARRANTY AND REMEDY. This product will conform to 3M published specifications and be free from defects in materials and workmanship for a period of one year from the date of purchase. In addition, 3M provides the following Conditional Lifetime Warranty for its Electronic Marker Products: When installed in accordance with 3M's installation instructions, 3M warrants 3M™ Electronic markers for the lifetime of the product, to be free from defects in material and manufacture, provided the Electronic Markers are located with 3M™ Dynatel™ Test and Measurement instruments or Scotchmark EMS Electronic Marker locators or other brand locators as may be designated by 3M in writing.

This warranty does not extend to Electronic Markers that have been subjected to misuse or improper applications or that have been repaired or altered by others. 3M MAKES NO OTHER WARRANTY INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If the Marker is found to be defective within the stated warranty period, your exclusive remedy shall be, at 3M's option, to repair or replace the Marker or refund the purchase price. 3M will not be liable for any special, incidental, or consequential damages arising from use of this 3M product, regardless of the legal theory asserted.



Corrosion Protection Department

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Recycled paper
40% Pre-consumer waste paper
10% Post-consumer waste paper

Litho in USA.

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