

**3M™ Dynatel™ Locating and Marking  
Electronic Marker System**



# Marker Solutions for the Water Industry



The 3M™ Electronic Marker System (EMS) helps save water utilities time and money by enabling utility field crews to quickly pinpoint the location of buried facilities including valves, bends, clean-outs and road crossings. Using EMS markers during construction, installation and maintenance virtually eliminates the time consuming search for hard-to-locate facilities.



## Markers that Last

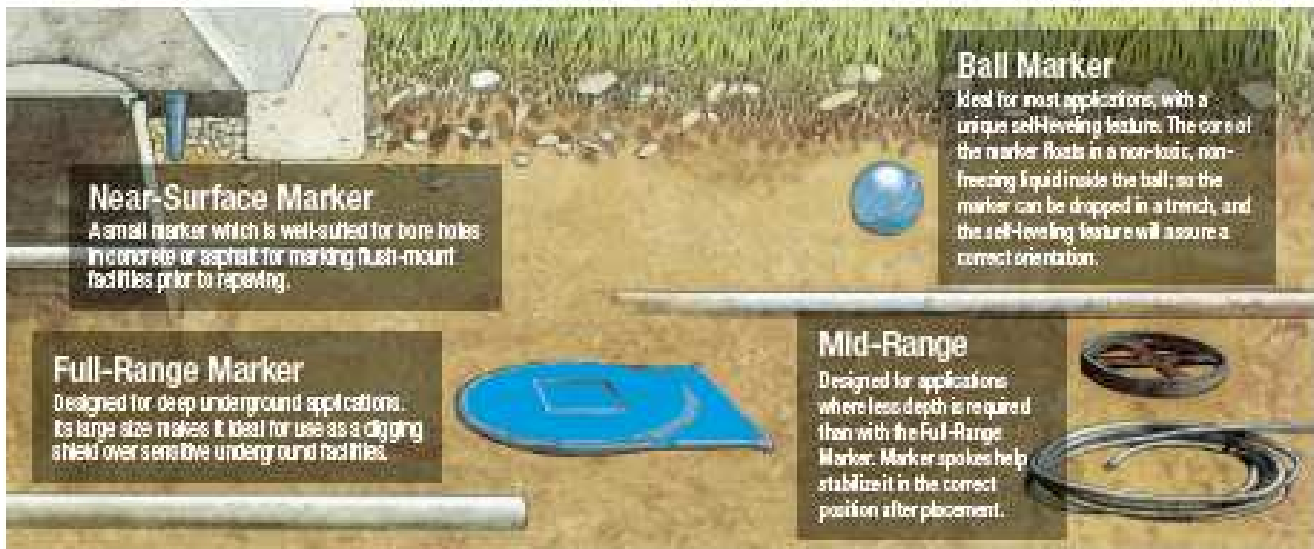
With our Full-Range, Mid-Range, Ball and Near-Surface Markers, there is a marker to meet almost every need. Markers are passive antennas with no internal power source to run down. Their water-resistant, polyethylene shells are impervious to minerals, chemicals and the temperature extremes normally found underground. A four-inch Disk Marker is also available for marking handholes. These markers easily attach to lids or covers over flush-mounted facilities.

## 3M™ ID Markers

3M ID markers are designed to provide an accurate, convenient, long-lasting method of marking underground assets. In addition, these markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.



3M™ Electronic Marker System for the Water Industry









## The Safe Choice










There is no guesswork with the 3M™ Electronic Marker System. 3M markers 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 frequency. EMS signals provide positive identification of each utility, thus helping to reduce the risk of accidentally locating and excavating other buried facilities.

# Help Eliminate the Guesswork








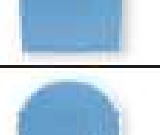

## 3M™ General Purpose/Reclaimed Water

Image	Product	Description	Stock Number
	3M™ ID Near-Surface Marker <b>1438-XR/iD</b>	3M ID markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80051115227554
	3M™ Disk Marker <b>1418-XR</b>	Extended Range Disk Marker - designed to provide an easy, accurate method of locating flush-mounted facilities which become covered by backfill or other obstructions, such as snow or overgrown vegetation. <i>(Do Not Direct Bury)</i>	80051115160967
	3M™ ID Disk Marker <b>1418-XR/iD</b>	3M ID markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details. <i>(Do Not Direct Bury)</i>	80611303563
	3M™ EMS 4" Ball Marker <b>1408-XR</b>	Extended Range Ball Marker - provides self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground and making the job of precisely locating easier.	80611168354
	3M™ ID Ball Marker <b>1428-XR/iD</b>	3M ID markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611142227
	3M™ ID Full-Range Marker <b>1248-XR/iD</b>	3M ID markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611321264

## 3M™ Wastewater Utility Markers

Image	Product	Description	Stock Number
	3M™ EMS Near-Surface Marker <b>1435</b>	Near-Surface Marker - designed to provide an accurate, convenient, long-lasting method of marking underground and street-access facilities.	80610230395
	3M™ iD Near-Surface Marker <b>1435-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611321326
	3M™ Disk Marker <b>1414-XR</b>	Extended Range Disk Marker - designed to provide an easy, accurate method of locating flush-mounted facilities which become covered by backfill or other obstructions, such as snow or overgrown vegetation. <i>(Do Not Direct Bury)</i>	80630000273
	3M™ iD Disk Marker <b>1414-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details. <i>(Do Not Direct Bury)</i>	80611303548
	3M™ EMS 4" Ball Marker <b>1404-XR</b>	Extended Range Ball Marker - provides self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground and making the job of precisely locating easier.	80630000321
	3M™ iD Ball Marker <b>1424-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611143233
	3M™ EMS Mid-Range Marker <b>1258</b>	Mid-Range Marker - designed to provide an accurate, convenient, long-lasting method of marking underground wastewater facilities.	80610221949
	3M™ EMS Full-Range Marker <b>1253</b>	Full-Range Marker - designed to provide an accurate, convenient, long-lasting method of marking underground wastewater facilities.	80610221501
	3M™ iD Full-Range Marker <b>1253-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611321268

## 3M™ Water Utility Markers

Image	Product	Description	Stock Number
	3M™ EMS Near-Surface Marker <b>1434</b>	Near-Surface Marker - designed to provide an accurate, convenient, long-lasting method of marking underground and street-access facilities.	80610230379
	3M™ iD Near-Surface Marker <b>1434-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611321318
	3M™ Disk Marker <b>1413-XR</b>	Extended Range Disk Marker - designed to provide an easy, accurate method of locating flush-mounted facilities which become covered by backfill or other obstructions, such as snow or overgrown vegetation. <i>(Do Not Direct Bury)</i>	80630000265
	3M™ iD Disk Marker <b>1413-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details. <i>(Do Not Direct Bury)</i>	80611303530
	3M™ EMS 4" Ball Marker <b>1403-XR</b>	EMS Ball Marker - provides self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground and making the job of precisely locating easier.	80630000323
	3M™ iD Ball Marker <b>1423-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611143225
	3M™ EMS Mid-Range Marker <b>1257</b>	Mid-Range Marker - designed to provide an accurate, convenient, long-lasting method of marking underground water facilities.	80610221931
	3M™ EMS Full-Range Marker <b>1252</b>	Full-Range Marker - designed to provide an accurate, convenient, long-lasting method of marking underground water facilities.	80610221519
	3M™ iD Full-Range Marker <b>1252-XR/iD</b>	3M iD markers may be programmed to include customer-specific information such as facility data, type of application, material type and size, placement date and other important details.	80611321250

	3M iD Markers Read Range		3M Passive Markers Range*
	With a U.S. Locator	With an Export (CE) Locator	
Near-Surface	3 ft (0.9 m)	2 ft (0.6 m)	2 ft (0.6 m)
Ball-Marker	5 ft (1.5 m) 5 ft (1.5 m)	1.2 m (Tel, Gas, WW, Comm) 1.0 m (Fwr, Wtr)	5 ft (1.5 m) 5 ft (1.5 m)
Mid-Range	N/A	N/A	6 ft (2 m)
Full-Range	9 ft (2.75 m)	2.2 m	8 ft (2.4 m)

\* Using 3M™ Dynalot™ Marker Locator 2300M-Series or 1420

## The EMS water series can be used to mark:

- Buried valves
- Clean-outs
- PVC pipeline
- Road crossings
- Pipeline paths
- Service stubs
- Bends
- Trees

## 3M™ Dynatel™ Electronic Marker Locators

3M™ Dynatel™ offers the following electronic marker and multipurpose locators. Additional information about 3M™ Dynatel™ cable and electronic marker locating products for water applications is available at [www.3M.com/dynatel](http://www.3M.com/dynatel), or contact your local 3M sales professional.



3M™ Dynatel™ Marker Locator 1420 EMS-ID



3M™ Dynatel™ Cable/Pipe and Marker Locator 2250M-ID



3M™ Dynatel™ Cable/Pipe/Fault and Marker Locator 2273M-ID

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### Track and Trace Solutions

6801 River Place Blvd.  
Austin, TX 78728-9000  
800/426-8088  
Fax: 800/828-0329  
[www.3m.com/dynatel](http://www.3m.com/dynatel)

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