

3M™ DYNATEL™ LOCATOR 2200 SERIES

Cable/Pipe Locator 2210

The 2210 locator was developed specifically to pinpoint the path of underground cables and conductors. With the push of a button, the 2210 locator quickly and accurately measures relative signal current in the target cable with a direct readout of cable depth. The 2210 locator operates using two different active frequencies and incorporates an improved peak-locating mode which provides a sharp peak response, allowing easy discrimination between adjacent cables. All components are constructed of tough and rugged materials designed to withstand typical field use.

FEATURES

DYNATEL LOCATOR 2200 SERIES

| FEATURES | 2210 CABLE LOCATOR | 2250 CABLE LOCATOR | 2273 CABLE/FAULT LOCATOR |
|--|-----------------------|-----------------------|-----------------------------|
| Transmitter | | | |
| Two operator-selectable frequencies | • | | |
| Four operator-selectable frequencies | | • | • |
| Built-in ohmmeter | | • | • |
| Indicates presence of foreign and hazardous voltage | | • | • |
| Built-in continuity test | • | • | • |
| Three tone application methods (direct connect, coupler, inductive) | • | • | • |
| Auto load impedance matching | • | • | • |
| High and normal output level | • | • | • |
| Sheath (earth return) fault-finding capability | | | • |
| Fault-locate and cable-locate tones applied simultaneously | | | • |
| Receiver | | | |
| Peak mode | • | • | • |
| Null mode | | • | • |
| Differential mode | | • | • |
| Push button digital depth readout | • | • | • |
| Cable identification | | • | • |
| Measures signal current in cable | • | • | • |
| Direct readout of active duct probe depth | | • | • |
| Visual and audible cable locates | • | • | • |
| Digital fault strength indicator | | | • |
| Graphic display | • | • | • |
| Ground level antenna | • | • | • |
| Expander amplifier | • | • | • |
| 50/60Hz power cable locate mode | • | • | • |

*Other accessories are available see pg. 314.

SPECIFICATIONS

| 3M™ DYNATEL™ LOCATOR 2200 SERIES | | | |
|---|---|--|--|
| PRODUCT NUMBER | 2210 CABLE LOCATOR | 2250 CABLE LOCATOR | 2273 CABLE/FAULT LOCATOR |
| Net weight lbs. (kg) | 9.1 (4.1) | 9.3 (4.2) | 9.3 (4.2) |
| Shipping weight lbs. (kg) | 15.7 (7.1) | 15.91 (7.2) | 20.59 (9.3) |
| Operating temperature | -4° to 122°F (-20° to 50°C) | -4° to 122°F (-20° to 50°C) | -4° to 122°F (-20° to 50°C) |
| Storage temperature | -40° to 158°F (-40° to 70°C) | -40° to 158°F (-40° to 70°C) | -40° to 158°F (-40° to 70°C) |
| Transmitter | | | |
| Output frequencies | One of two user-selectable frequencies: | 577Hz, 8kHz, 33kHz, 200kHz | 577Hz, 8kHz, 33kHz, 200kHz |
| Trace mode | | 577Hz and 200kHz pulsed at 8Hz | 10/20Hz for sheath fault; 577Hz and 33kHz pulsed at 8Hz for tracing |
| Sheath fault mode | | | |
| Tone mode | 577Hz, 33kHz | 33kHz, 200kHz | 577Hz and 200kHz pulsed at 8Hz, 33kHz, 200kHz |
| Output voltage (maximum) | 15 Vrms | - | - |
| Sheath fault | - | - | 70 Vrms |
| Trace | - | 70 Vrms | 70 Vrms |
| Tone | - | Normal setting: 10 Vrm, High setting: 60 Vrms | Normal setting: 10 Vrm, High setting: 60 Vrms |
| Output power | 100 milliwatts 3W | Limited to 0.5W | |
| Normal | | Limited to 3W or 5W w/External DC power (Option 'A' only) | |
| High | | | |
| Power | Six "C" cell alkaline | Batteries: Six alkaline "C" (LR14) cells; External DC: 9-18 V DC (1A) (Option 'A' only) | |
| Battery life | 50 hrs. typical (normal mode) 10 hrs. typical (boost mode) | 50 hrs. typical (normal mode) 10 hrs. typical (boost mode) | |
| Size H x W x D in. (cm) | 6.75 x 11.25 x 7.75 (17.2 x 28.6 x 19.7) | 6.75 x 11.25 x 7.75 (17.2 x 28.6 x 19.7) | |
| Weight lbs. (kg) | 5.2 (2.4) | 5.2 (2.4) | |
| Receiver | | | |
| Frequency | 577Hz, 33kHz 60Hz | 577Hz, 8kHz, 33kHz, 200kHz | |
| Active | | 50/60Hz, User-selectable: L50/L60-5th harmonic, H50/H60-9th harmonic, 100/120-rectified power | |
| Passive | | 'T' model: 31.5kHz, 512Hz, 560Hz 'P' model: 31.5kHz | |
| Auxiliary | | | |
| Depth | 0 to 15' (0 to 4.5 m) | 0 to 15' (0 to 4.5 m) | |
| Range | | + 10% + 1 digit for 0 to 60" (0 to 1.5 m); + 15% for 60 to 180" (1.5 to 4.5 m) | |
| Accuracy | | | |
| Power | Six "AA" cell alkaline batteries | Six "AA" (LR6) cell alkaline batteries | |
| Battery life | 84 hrs. typical (normal audio level) | 50 hrs. typical | |
| Size H x W x D in. (cm) | 25.5 x 3.75 x 10.75 (64.8 x 9.5 x 27.3) | 25.5 x 3.75 x 10.75 (64.8 x 9.5 x 27.3) | |
| Weight lbs. (kg) | 3.9 (1.8) | 4.0 (1.8) | |

ORDERING INFORMATION

3M™ DYNATEL™ LOCATOR 2200 SERIES

| PRODUCT NUMBER | DESCRIPTION | PKG. (LBS.) | MIN. ORDER | UPC 051138- |
|----------------|--|----------------|------------|-------------|
| 2210-U3P3 | Cable/pipe locator 60 hz/in 3W power 3" coupler | 1 each (14.00) | 1 each | 34612 |
| 2210-U3T3 | Cable/pipe locator 60 hz/in 3W telco 3" coupler | 1 each (14.30) | 1 each | 34606 |
| 2250-CNTR | Cable/pipe locator 3W contractor 3" coupler | 1 each (20.00) | 1 each | 70449 |
| 2250-CNTR/A | Cable/pipe locator 5W contractor 3" coupler | 1 each (20.00) | 1 each | 70448 |
| 2250-U3P3 | Cable/pipe locator 3W power 3" coupler | 1 each (20.00) | 1 each | 34630 |
| 2250-U3T3 | Cable/pipe locator 3W telco 3" coupler | 1 each (20.00) | 1 each | 34624 |
| 2273-T3 | Cable/pipe locator 3W 3" coupler w/o fault accessories | 1 each (20.00) | 1 each | 36669 |
| 2273-TN | Cable/pipe locator 3W w/o coupler w/o fault accessories | 1 each (20.00) | 1 each | 36670 |
| 2273-U3P3 | Cable/pipe and fault locator 3W power 3" coupler | 1 each (23.00) | 1 each | 34648 |
| 2273-U3R | Cable/pipe and fault locator receiver USA 60hz/inches | 1 each (12.90) | 1 each | 88218 |
| 2273-U3T | Cable/pipe and fault locator transmitter USA 3W | 1 each (9.00) | 1 each | 88219 |
| 2273-U3T3 | Cable/pipe and fault locator 3W telco 3" coupler | 1 each (23.00) | 1 each | 34642 |
| 2273-U5P3/A | Cable/pipe and fault locator 5W power 3" coupler w/external DC input | 1 each (23.00) | 1 each | 70446 |
| 2273-U5T3/A | Cable/pipe and fault locator 5W telco 3" coupler w/external DC input | 1 each (23.00) | 1 each | 70471 |

FEATURES

DYNATEL CABLE AND FAULT LOCATOR (INTERNATIONAL VERSIONS)

| FEATURES | 2210E CABLE LOCATOR | 2250E CABLE LOCATOR | 2273E CABLE/FAULT LOCATOR |
|---|---------------------|---------------------|---------------------------|
| Transmitter | | | |
| Two operator-selectable frequencies | • | | |
| Four operator-selectable frequencies | | • | • |
| Built-in ohmmeter | | • | • |
| Indicates presence of foreign and hazardous voltage | | • | • |
| Built-in continuity test | • | • | • |
| Three tone application methods (direct connect, coupler, inductive) | • | • | • |
| Auto load impedance matching | • | • | • |
| High and normal output level | • | • | • |
| Sheath (earth return) fault-finding capability | | | • |
| Fault-locate and cable-locate tones applied simultaneously | | | • |
| Receiver | | | |
| Peak mode | • | • | • |
| Null mode | • | • | • |
| Differential mode | | • | • |
| Push button digital depth readout | • | • | • |
| Cable identification | • | • | • |
| Measures signal current in cable | • | • | • |
| Direct readout of active duct probe depth | • | • | • |
| Visual and audible cable locates | • | • | • |
| Digital fault strength indicator | | | • |
| Graphic display | • | • | • |
| Ground level antenna | • | • | • |
| Expander amplifier | • | • | • |
| 50/60 Hz power cable locate mode | • | • | • |

SPECIFICATIONS

| 3M™ DYNATEL™ CABLE AND FAULT LOCATOR (INTERNATIONAL VERSIONS) | | | |
|---|--|---|----------------------------------|
| PRODUCT NUMBER | 2210E CABLE LOCATOR | 2250E CABLE LOCATOR | 2273E CABLE/FAULT LOCATOR |
| Net weight kg (lbs.) | 4.1 (9.1) | 4.2 (9.3) | 4.2 (9.3) |
| Shipping weight kg (lbs.) | 7.1 (15.7) | 7.2 (15.91) | 9.3 (20.59) |
| Operating temperature | -20° to 50°C (-4° to 122°F) | -20° to 50°C (-4° to 122°F) | -20° to 50°C (-4° to 122°F) |
| Storage temperature | -40° to 70°C (-40° to 158°F) | -40° to 70°C (-40° to 158°F) | -40° to 70°C (-40° to 158°F) |
| Transmitter | | | |
| Output frequencies Trace mode Sheath fault mode (2273E only) Tone mode Induction mode | One of two user-selectable frequencies | 577Hz, 8kHz, 33kHz, 133kHz for Sheath fault 10/20Hz; and 577Hz, 33kHz for tracing 577Hz and 133kHz pulsed at 8Hz 33kHz, 133kHz | |
| Output voltage (maximum) Sheath fault (2273E only) Trace Tone | 15 Vrms max. Normal setting: 10 Vrms High setting: 60 Vrms | 70 Vrms 70 Vrms | |
| Output power Normal setting High setting | 100 milliwatts 3W | Limited to 0.5W Limited to 5 W w/external power (3W, with batteries) | |
| Power | Six LR14 cell alkaline batteries | Six LR14 cell alkaline batteries | |
| Battery life | 50 hrs. typical (normal mode) 10 hrs. typical (boost mode) | Normal output level: 50 hrs. High output level: 10 hrs. | |
| Size H x W x D cm (in.) | 17.2 x 28.6 x 19.7 (6.75 x 11.25 x 7.75) | 17.2 x 28.6 x 19.7 (6.75 x 11.25 x 7.75) | |
| Weight kg (lbs.) | 2.4 (5.2) | 2.4 (5.3) | |
| Receiver | | | |
| Frequencies Trace and tone modes | 577Hz, 33kHz 50/60Hz, User-selectable; 22kHz | Active: 577Hz, 8kHz, 33kHz, 133kHz ; Passive Power: 50/60Hz User-selectable; L50/60 - 5th harmonic; H50/60 - 9th harmonic; 100/120 - rectified power; Passive VLF: 15k - 30kHz | |
| Depth Range | 0 to 4.5 m (0 to 15 ft.) | 0 to 4.5 m (0 to 15 ft.) | |
| Power | Six LR6 cell alkaline batteries | Six LR6 cell alkaline batteries | |
| Battery life | 50 hrs. typical | 50 hrs. typical | |
| Size H x W x D cm (in.) | 64.8 x 9.5 x 27.3 (25.5 x 3.75 x 10.75) | 64.8 x 9.5 x 27.3 (25.5 x 3.75 x 10.75) | |
| Weight kg (lbs.) | 1.8 (3.9) | 1.8 (4.0) | |

ACCESSORIES

3M™ DYNATEL™ CABLE AND FAULT LOCATORS (INTERNATIONAL VERSIONS)

| PRODUCT NUMBER | DESCRIPTION | PKG. (LBS.) | MIN. ORDER | UPC 054007- |
|-----------------|--|---------------|------------|-------------|
| Standard | | | | |
| 8006 | Ground rod, stainless steel | 1 each (1.38) | 1 each | 34027 |
| 3019 | Coupler kit, consists of 3 in. coupler, coupler cable and pouch | 1 each (1.30) | 1 each | 91427 |
| 2876 | Direct-connect transmitter cable, 10 ft. (3 m) in length; large clip (U models) | 1 each (.00) | 1 each | 71921 |
| 9012 | Direct-connect transmitter cable, 5 ft. (1.5 m) in length; small clip (C models) | 1 each (.00) | 1 each | 31275 |
| 3014 | Earth contact frame, fault locating probe | 1 each (3.00) | 1 each | 31267 |
| 9026 | Earth contact frame cable, 4 ft. (1.2 m) in length | 1 each (.00) | 1 each | 31284 |
| 3001 | Coupler for use on cables up to 3 in. (7.6 cm) in diameter | 1 each (2.00) | 1 each | 31258 |
| 9011 | Coupler cable | 1 each (.00) | 1 each | 31274 |
| Optional | | | | |
| 2892 | Small clip direct-connect transmitter cable, 10 ft. (3 m) in length | 1 each (.00) | 1 each | 19483 |
| 9043 | Ground extension cable | 1 each (.00) | 1 each | 34026 |
| 1196 | Coupler for use on cables up to 6.9 in. (17.5 cm) in diameter; w/pouch | 1 each (5.00) | 1 each | 19042 |
| 2200 | Carrying case/bag | 1 each (1.30) | 1 each | 57743* |

*UPC prefix 051138-

ORDERING INFORMATION

DYNATEL CABLE AND FAULT LOCATOR (INTERNATIONAL VERSIONS)

| PRODUCT NUMBER | DESCRIPTION | PKG. (LBS.) | MIN. ORDER | UPC 051138- |
|----------------|--|----------------|------------|-------------|
| 2210-E3T3 | Cable/pipe locator 3W telco 3" coupler | 1 each (17.00) | 1 each | 34608 |
| 2250-E5T3 | Cable/pipe locator 5W telco 3" coupler | 1 each (20.00) | 1 each | 70429 |
| 2273-E5T3 | Cable/pipe and fault locator 5W telco 3" coupler | 1 each (23.00) | 1 each | 70431 |