SPECIFICATIONS

**Recorder Unit**
- Measuring system: Ultrasonic echo sensing system
- Recording system: Direct recording in four directions (X-X' and Y-Y')
- Measuring power: Multimeasurement recording (pre 250 m x 4 in a DMP-250).
- Operating range:
  - Max.: 10 m (when the depth is 10 m)
  - Min.: 0.5 m (when the depth is 0.5 m)
- File size:
  - 250 mm x 20 m (DMP-250)
  - 500 mm x 40 m (DMP-500)
  - 750 mm x 60 m (DMP-750)
  - 1000 mm x 80 m (DMP-1000)
- Paper size:
  - 250 mm x 20 m (DMP-250)
  - 500 mm x 40 m (DMP-500)
  - 750 mm x 60 m (DMP-750)
  - 1000 mm x 80 m (DMP-1000)
- Measuring system:
  - 0.5 m
  - 1.0 m
  - 2.0 m
  - 4.0 m
- Paper speed:
  - Constant speed: 7.5 mm/min, 15 mm/min, 30 mm/min and 60 mm/min
- Recording system:
  - DM-604: Direct recording in four directions (X-X' and Y-Y')
- Recording paper:
  - Electrosensitive recording paper 250 mm x 20 m (DMP-250)
- Measuring range:
  - -10 to 0 (radius)
  - 0 to 0.5 m
  - 0 to 1.0 m
  - 0 to 2.0 m
- Paper weight:
  - 250 g/m²
- Paper feed:
  - Synchronized 1/40, 25 mm/m of sensor up/down movement
  - 1/50, 20 mm/m of sensor up/down movement
  - 1/100, 10 mm/m of sensor up/down movement
  - 1/200, 5 mm/m of sensor up/down movement
- Measuring range:
  - 0 to 2.0 m (radius)
- Measuring repeatability:
  - ±0.2% at full scale
- Depth mark:
  - Depth mark is printed every 0.5 m and depth is automatically printed numerically every 5 m
- PC display and storage:
  - Serial data output provided (RS 232C cable: option)
- Power supply:
  - 100 VAC, 50/60 Hz
  - 110 VAC, 50/60 Hz
  - 220 VAC, 50/60 Hz
  - 440 VAC, 50/60 Hz
- Power consumption:
  - 500 VA (At 100 VAC)
  - 700 VA (At 110 VAC)
  - 700 VA (At 220 VAC)
  - 700 VA (At 440 VAC)
- Operating temperature:
  - -10ºC to +50ºC (14ºF to 122ºF)
- Recorder unit:
  - DMR-604 (DM-604) contained in an aluminum box 47 kg
- Winch unit:
  - DMW-002A (DM-604) With a sensor unit and cable 121 kg

**Recorder Unit**
- Measuring system:
  - 03.12 PDF
  - Lungobisagno Istria 23ar - GENOA - ITALY
  - Tel. +39 010 870058 - Telefax +39 010 870248
  - email: apelmar@koden.it
- Deeper excavation measurement in high accuracy
- Clear recording even in slurry contaminated with dirt and sand
- High quality excavation work reducing time and cost
- www.koden.it/dm-604ce

**Winch Unit**
- Measuring system:
  - 03.12 PDF
  - Lungobisagno Istria 23ar - GENOA - ITALY
  - Tel. +39 010 870058 - Telefax +39 010 870248
  - email: apelmar@koden.it
- Deeper excavation measurement in high accuracy
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**General**

Recent progress and development in foundation engineering has resulted in great strides in excavation techniques. By using artificial slurry of high density and specific gravity, deeper excavation has been made possible. The DM-604CE Drilling Monitor system has been developed in compliance with the user’s needs arisen from the recent construction environment to accurately measure and record the shape of a drilled hole of greater depth. It can be easily positioned and set up for measurement to provide quick and accurate recordings of excavations. The DM-604CE Drilling Monitor provides the following advantages.

- Helps improve the quality of a drilled hole and reduces working time and cost.
- Provides on site records of the perpendicularity of drilled holes and the shape of cross sections in high accuracy.
- Provides numerical measurement data that can be easily exported to various Windows applications (Excel, Word, PowerPoint, etc.) for work reports, etc. (Option)

**Features**

- DM-604CE supplies clear records of a drilled hole even in slurry, heavily contaminated with dirt and sand.
- DM-604CE supplies clear and precise records thanks to its unique signal processing technique that discriminates wall echoes from the noise.
- DM-604CE has the facility to cancel the oscillation line echo that often prevents very close echo recordings.
- The sensor device is automatically controlled to stop at the casing and at the bottom of the hole. An emergency return function is also included.
- Depth range mark, depth mark, drilled hole mark, date, time, etc. can be printed on the recording paper.
- Limit switches are provided to avoid possible wire breakage or entanglement of the wire and cable.
- The recorded result can be output to an external PC via a built-in RS 232C output port. (Option)
- A non-fuse circuit breaker is used for circuit protection, eliminating the need for cumbersome fuse replacement at the construction site.

**Recording Examples**

DM-604CE helps improving the quality of drilled holes and reduces working time and costs!