

SPECIFICATIONS

Recorder Unit

Measuring system	Ultrasonic echo sensing system			
Recording system	Direct recording in two directions (X-X' or Y-Y')			
	DM-602RR			
	DM-604RR			
	DM-604RR-125	Direct recording in four directions (X, X', Y, Y')		
Recording paper	Electrosensitive recording paper 250 mm x20 m A3-560 (DMP-250)			
Measuring range	0.5 m	1.0 m	2.0 m	4.0 m
range shift	0% 0 to 0.5 m	0 to 1.0 m	0 to 2.0 m	0 to 4.0 m
(radius)	50% 0.25 to 0.75 m	0.5 to 1.5 m	1.0 to 3.0 m	2.0 to 6.0 m
	100% 0.5 to 1.0 m	1.0 to 2.0 m	2.0 to 4.0 m	4.0 to 8.0 m
Paper feed rate	Constant speed	7.5 mm/min, 15 mm/min, 30 mm/min and 60 mm/min		
	Synchronized with the depth	25 mm/m of sensor up/down movement		
	1/40	20 mm/m of sensor up/down movement		
	1/50	10 mm/m of sensor up/down movement		
	1/100	5 mm/m of sensor up/down movement		
	1/200			
Measuring accuracy	±2% at full scale			
Depth mark	A depth mark is printed every 1 m and depth is automatically printed numerically every 5 m			
PC display and storage	Serial data output provided (RS-232C cable)			
Power supply protection circuit	Equipped with two built-in non-fuse breakers (2 A and 8 A), A leakage breaker (15 A), A overvoltage protection circuit			
Power supply	100 VAC, 50/60 Hz	110 VAC, 50/60 Hz	220 VAC, 50/60 Hz	
Power consumption	700 VA (At 100 VAC)	700 VA (At 110 VAC)	700 VA (At 220 VAC)	
Operating temperature	-10°C to +50°C (14°F to 122°F)			

Winch Unit

Up/down speed	0 to 20 m / min
Up/down movement distance	DM-602RR/604RR : 100 m maximum DM-604RR-125 : 125 m maximum (150 m version is made to order)
Bottom and casing sensing system	Automatic sensing by limit switch
Operating temperature	-10°C to +50°C (14°F to 122°F)

Standard Configuration

Recorder unit	DMR-602RR (DM-602RR) DMR-604RR (DM-604RR) DMR-604RR-125 (DM-604RR-125)	
Transformer unit (Built into Recorder unit)	DMT-000R For 100 VAC	9 kg
	DMT-001R For 110 VAC	9 kg
Winch unit	DMW-602RR (DM-602RR)	125 kg
	DMW-604RR (DM-604RR)	125 kg
	DMW-604RR-125 (DM-604RR-125)	135 kg
Connecting cable	CW-558R-10M With 15-pin connectors	10 m
	CW-600-10M With 8-pin connectors	10 m
AC power cable	CW-71R-10M With a 3-pin connector and one end plain	10 m
Spare parts kit	Included in Recorder unit	1 set
Operation manual	Contained in Recorder unit	1
Brief operation card	Contained in Recorder unit	1

Spare Parts List

Recording paper	DMP-250 250 mm x 20 m (A3-560)	2
Recording stylus	DMS-001 Contained in a plastic case	2
Current feed stylus	DMS-002 Contained in a plastic case	2

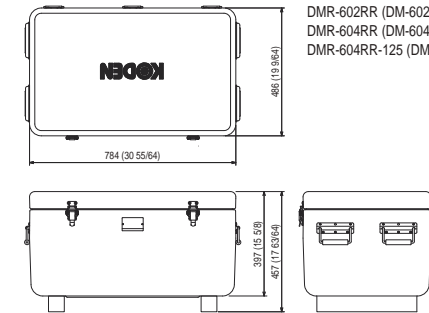
DIMENSIONS AND WEIGHT

Recorder Unit

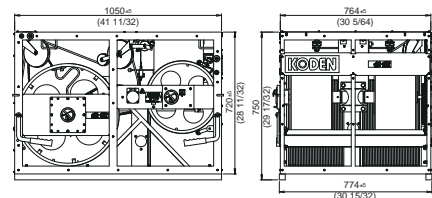
DMR-602RR (DM-602RR)
DMR-604RR (DM-604RR)
DMR-604RR-125 (DM-604RR-125)

Winch Unit

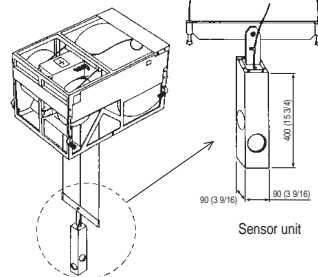
DMW-602RR (DM-602RR)
DMW-604RR (DM-604RR)
DMW-604RR-125 (DM-604RR-125)



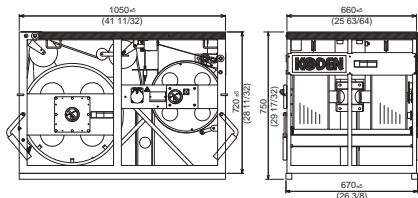
Weight: 55 kg (121 lb) (for 100/110/220 VAC)



Unit: mm (inch) DMW-604RR-125 Weight: 135 kg (297 lb)



Sensor unit



DMW-602RR
DMW-604RR Weight: 125 kg (276 lb)

• Winch unit 150m version has different dimensions and weigh.

• Design and specifications are subject to change without notice.



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To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

For details, please contact:

Ultrasonic Drilling Monitor



DM-602RR / 604RR / 604RR-125

*Koden promotes intelligent foundation work.
125M model now on sale, measuring up to 125M depth!*



- Deeper excavation measurement in high accuracy
- Clear recording even in slurry contaminated with dirt and sand
- High quality excavation work reducing time and cost
- Measure up to 100m depth (Standard model) / 125m depth (125 model)

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The DM-602RR/604RR/604RR-125 helps improve the quality of a drilled hole and reduces working time and cost!

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-602RR/604RR/604RR-125 Drilling Monitor system has been developed in compliance with the user's needs arisen from therecent construction environment to accurately measure and record the shape of a drilled hole of greater depth. It canbe easily positioned and set up for measurement to provide quick and accurate recordings of excavations. The DM-602RR/604RR/604RR-125 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 imported into various Windows applications (Excel,Word, PowerPoint, etc.) for work reports, etc.

Features

- The DM-602RR/604RR/604RR-125 supplies clear records of a drilled hole even in slurry, heavily contaminated with dirt and sand.
- The DM-602RR/604RR/604RR-125 supplies clear and precise records thanks to its unique signal processing technique that discriminates wall echoes from the noise.
- The DM-602RR/604RR/604RR-125 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.
- A non-fuse circuit breaker is used for circuit protection, eliminating the need for cumbersome fuse replacement at the construction site.



Winch set up above the borehole
Recorder connected by a cable

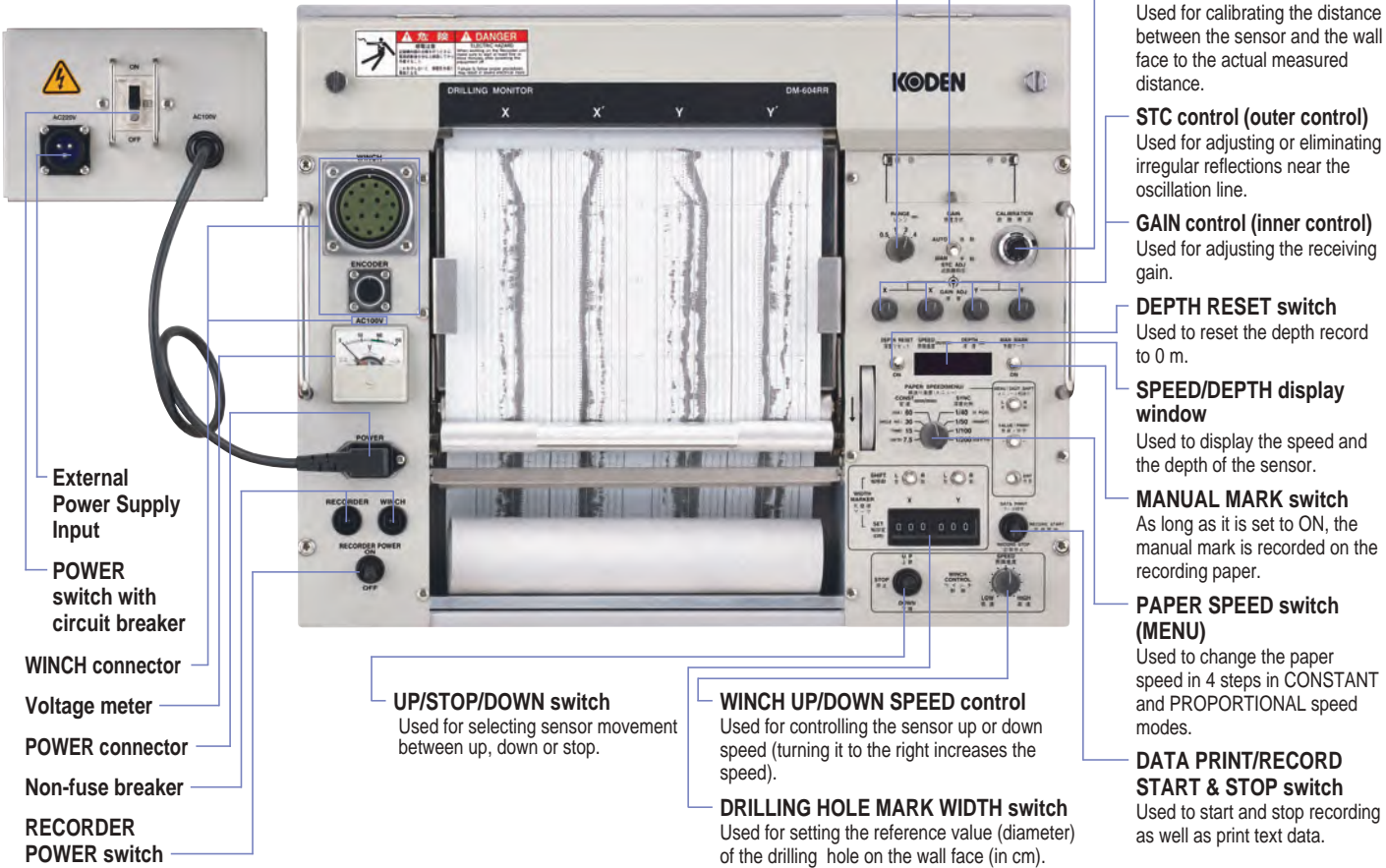


DM used in the field



Main controls / switches

(Photograph shown is DM-604RR /604RR-125 operation panel)



Recording Examples

