



Supplying NDT Equipment Solutions Since 1989

Address: Unit 8,2 Apollo Street WARRIEWOOD NSW 2102 Ph 02 9979 8777 Email: sales@endetek.com.au www.endetek.com.au

Measuring Head MH-40







Destination:

Measuring Head MH-40 is designed for Non-destructive Inspection (MRT- Magnetic Rope Testing) of Wire Ropes. MH-40 is part of the LRM®XXI Diagnostic System.

Measuring Range:

- Standard solution: nominal diameters from 6mm up to 26mm.
- Dedicated solution: the measuring range of the MH-40 model can be shifted about +-10% at the customer's request.

NOTE:

Dedicated Measuring Head solution for MRT inspection of the locked coil construction of wire rope and umbilical armour is required.

Operation with LRM-XXI diagnostic system:

- Guiding system: slides (preferred for strands wire ropes) or wheels. One adjustable set of guiding system
 for the entire test range.
- Recorder types: LRM®XXI or LRM®XXI-B.
- Encoder types: detachable solution types **LRM®RI-s** (ability to operate in time mode, without encoder).
- Connection cables: All types of **LRM®CA** connection cables with lengths from 0.5m to 60m.

Operating temperature range:

From -25°C up to 55°C.



LRM-NDE Laboratory Lesna 7, 32-080 Zabierzow, Poland www.LRM-NDE.com

Member of IMCA & OIPEEC Organisations

Built-In Sensors:

- LF (Local Fault) based on MFL Method (Magnetic Flux Leakage):
 - Magnetic flux to analog signal converter based on copper coils.
 - Dedicated to detecting short/long wire discontinuities, corrosion pitting, strands loosening, fatigue changes in wire material.
 - Dedicated LF Sensor Inserts (LF-I) 2 types sets.
 - Speed compensation of LF signals is implemented Amplitude of LF sensor indication is not dependent on inspection speed in range from 0,05m/s up to 10m/s.
 - Accuracy of LF indications according to EN12927:2019 and ASTM E1571-11 standards.
- LMA (Loose of Metallic Area):
 - Magnetic flux to analog signal converter based on hall effect elements.
 - Dedicated to detecting changes in metallic cross-sections area caused by mechanical abrasion or corrosion. It also detects shape deformation and fatigue-related material changes, wire breaks with longer distance between broken ends.
 - Accuracy of LF indications according to ASTM E1571-11 standard.
 - The amplitude of the LMA indication is independent of the inspection speed.

NOTE:

The application of LF and LMA sensors allows to meet the discard criteria according to ISO 4309:2017 (Annex C) as well as EN 12927:2019 where the LMA sensor is not required.

Construction:

- IP Ratings for all components is minimum IP67 (The MH underwater operational solution available upon request).
- Strong magnetic field due to NdFeB permanent magnets.
- Durable against mechanical damage, external and chemical factors due to composite housing construction of stainless steel and nylon.
- Simple design, no protruding parts, very easy to clean from grease with available chemicals.
- Dedicated attachment points for rigging.
- Transported in heavy-duty, waterproof plastic cases with wheels.

Dimensions & Weights:

- Dimensions: net (gross with guiding system and handle):
 - Length: 200mm (282mm).
 - Height: 146mm (186mm).
 - Width: 87mm (87mm).
- Weight:
 - Net Weight: 5,9kg.Gross weight: 6,5kg.

NOTE:

At the customer's request, the dimensions of the MH can be customized to meet the requirements of conducting MRT inspections in areas with limited space or access.