

GEOTOOL

LMSR

DYNAMIC PROBING RIGS LMSR

Soil Investigation rigs for
light, medium and heavy
dynamic probing and SPT

LMSR

VK

EK &

SPT-VK

—

HK &

SPT-HK

THE RAM SOUNDING DEVICES OF THE LMSR SERIES

Soil Investigation rigs for light, medium and heavy dynamic probing and SPT

The ram sounding devices of the LMSR series are highly functional soil investigation units that are easy to transport thanks to their foldable mast and are also suitable for work in confined spaces. In the field, the devices are moved manually and impress with their intuitive operation. At the drilling point, the mast is aligned vertically.

The devices are used for load-bearing capacity and compaction tests and allow the execution of all dynamic probing methods commonly used worldwide. Conversion is carried out by removing or attaching the weights on the hammer unit. In addition, they offer the possibility to perform ram-core drilling and direct-push drilling.

Within the series, two drive concepts are available:

LMSR – powered by combustion engines or electric motors

LMSR-H – hydraulically operated units with an external power pack and an optional hydraulic extraction unit

LMSR-VK

COMBUSTION ENGINE

The version with combustion engine is ideal for field use without the need for an additional energy source. Compact, self-sufficient, and robust.

Item number: 315200



LMSR-EK

ELECTRIC MOTOR

The electrically powered version is emission-free and therefore particularly suitable for use indoors or in noise-sensitive areas.

Item number: 315204



LMSR-SPT-VK

COMBUSTION ENGINE

This variant expands the range to include SPT probing (Standard Penetration Test) and is suitable for demanding geotechnical investigations. The integrated tripod base provides additional stability.

Item number: 315201



LMSR-HK

HYDRAULIC MOTOR

The standard variant with hydraulic motor is suitable for a wide range of applications. The hammer unit is moved hydraulically, and the power pack can additionally drive a pull cylinder.

Item number: 315208



LMSR-SPT-HK

HYDRAULIC MOTOR

This variant offers all the advantages of the hydraulic LMSR-HK, enhanced by the SPT function and the stable tripod base. Ideal for demanding soil investigations.

Item number: 305209



TECHNICAL DATA

OVERVIEW



Product variant	LMSR-VK	LMSR-EK	LMSR-SPT-VK
Drive	Honda GX-120	Electric motor	Honda GX-120
Fuel type	Gasoline	Current (120V–240V)	Gasoline
Power	2.6 kW (3.5 HP)	1.1 kW	2.6 kW (3.5 HP)
Tank capacity	0.7 liter 0.185 US gal	–	0.7 liter 0.185 US gal
Unladen weight	178 kg 392 lbs	178 kg 392 lbs	227 kg 500 lbs
Dynamic Probing			
DPL	10.0 kg 22 lbs	10.0 kg 22 lbs	10.0 kg 22 lbs
DPM	30.0 kg 66 lbs	30.0 kg 66 lbs	30.0 kg 66 lbs
DPH	50.0 kg 110 lbs	50.0 kg 110 lbs	50.0 kg 110 lbs
SPT	–	–	63.5 kg 140 lbs
Blow energy max.	245 Joule	245 Joule	467 Joule
Blows/min	15 – 30	24	15 – 30
Drop height	500 mm 20 in	500 mm 20 in	500 mm 20 in 750 mm 30 in
Window Sampling / Direct-Push with auto-hammer			
Diameter max.	85 mm 3.5 in	85 mm 3.5 in	85 mm 3.5 in
Tool length	1,000 mm 4 ft	1,000 mm 4 ft	1,000 mm 4 ft



Product variant	LMSR-HK	LMSR-SPT-HK
Drive	External hydraulic drive	External hydraulic drive
Unladen weight	170 kg 375 lbs	230 kg 507 lbs
Dynamic Probing		
DPL	10.0 kg 22 lbs	10.0 kg 22 lbs
DPM	30.0 kg 66 lbs	30.0 kg 66 lbs
DPH	50.0 kg 110 lbs	50.0 kg 110 lbs
SPT	–	63.5 kg 140 lbs
Blow energy max.	245 Joule	467 Joule
Blows/min	15 – 30	15 – 30
Drop height	500 mm 20 in	500 mm 20 in
		750 mm 30 in
Window Sampling / Direct-Push with auto-hammer		
Diameter max.	85 mm 3.5 in	85 mm 3.5 in
Tool length	1,000 mm 4 ft	1,000 mm 4 ft

CONTACT

Do you have questions about our equipment or are you looking for a solution for your project? GEOTOOL stands for personal consultation, technical expertise and partnership support.

Feel free to call us – together we'll find the right solution.
We look forward to your inquiry.

OUR LOCATION IN GERMANY

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GEOTOOL

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