Metal Detector

VMH4-VS20
VMH4-VS25

4th Generation Metal Detector
with Exchangeable Search Coil

Searching with Excellence

VALLON

VMH4 – Metal Detector

4th Generation Metal Detector with Exchangeable Search Coil

The VMH4 – the successor to the VMH3 – is the ideal work tool for humanitarian demining organizations. New features such as the integrated web server and GNSS simplify planning and monitoring of large-scale mine clearing projects. The VMH4 is suited for all soils and shallow waters.

The VMH4 demonstrates its outstanding capabilities in the detection of improvised explosive devices (IEDs) in particular. This detector is also available with the larger search coil VS25 with a diameter of 25 cm. The combination of mechanical durability, intuitive operation and maximum detection sensitivity leave the user nothing to be desired. Getting started just requires adjusting the length of the telescoping bar. Another special feature of this new detector generation is that rechargeable batteries can also be charged right in the device, either with a 110 – 240 V/50 – 60 Hz AC adapter or on a 10 – 30 V vehicle on-board power supply.

The VMH4 metal detector is also available in a longlife version as VMH4L. It offers an increased battery operating time at a slightly higher weight by using four disposable/rechargeable batteries.

✔ **Optimized ergonomics for daily long-term operation in humanitarian demining and military mine clearance**

✔ **Flexible application optimization thanks to exchangeable search coils**

✔ **Detection of material with low conductivity and wires**

✔ **VALLON UXO mode**

✔ **Button operated pinpoint function**

✔ **Integrated GNSS for automatic and manual storage of waypoints**

✔ **Infrared LED display for use with night vision devices and vibration alarm**

✔ **Bluetooth® and Wi-Fi interface for cable-free access to the integrated web server**

✔ **Also available in a longlife version (VMH4L) with increased battery operating time at slightly higher weight**

Available in the colors olive and sand

Flexible application

The exchangeable search coils allow an easy and flexible application optimization

Search coil VS20, Ø 20 cm
Search coil VS25, Ø 25 cm

The VS20 and VS25 are the standard search coils for the detection of objects with low metal content.

UXO search coil VS30, Ø 30 cm

The UXO search coils are suitable for finding submunitions, UXO and larger metal objects. Basically, the larger the diameter of the search coil, the greater the maximum detection depth for large objects. For the detection of smaller objects UXO search coils are therefore of limited use only.

UXO search coil VS60, Ø 60 cm

Stick probe VSP4

The extremely thin stick probe is particularly suited for searching for metal parts in areas that are difficult to access (e. g. dense vegetation or cavities between rocks).

Wireless communication

Bluetooth® and Wi-Fi interface to integrated web server for device settings and updates

✔ **modern browser based user interface for simple operation – from smartphones to desktop computers**

✔ **maximum security through password protection**

✔ **management and download of saved GNSS waypoints as raw data (Raw) or for viewing in Google Earth (KML)**

✔ **firmware update for updating the detector in just a few steps**

VMH4-VS20 – Data Sheet
Technical Data and Features

TECHNICAL DATA

Type	VMH4-VS20	VMH4L-VS20
Sensor	Active search coil Search coil VS20: Ø 20 cm (Ø 7.87 in)	
Alarm signal	Visual (LED)/audio/vibration	
Watertight	IP68 (5 m, 1 h at 20 °C) Search coils (additionally 1 m, 8 h at 20 °C)* *Search coils are suitable for longer detection in shallow waters.*	
Dimensions*	Backpack – Standard 53 x 36 x 16.5 cm (20.87 x 14.17 x 6.50 in) Case 56.5 x 46 x 21 cm (22.24 x 18.11 x 8.27 in) *Tolerance ± 3 %*	
Ambient conditions	In accordance with MIL-STD-810G (501.5-I,II, 502.5-I,II, 503.5, 506.4, 512.4, 514.6-C-II, 516.6)	
Ambient temperature	-31°C – + 63°C (-24°F – +145°F)	
Storage temperature	-51°C – +71°C (-60°F – +160°F)	
Weight*	Detector with/without standard battery 2.47 kg (5.45 lbs) / 2.06 kg (4.54 lbs) Basic package – Detector in backpack including standard scope of delivery 3.78 kg (8.33 lbs) Basic package in case 8.28 kg (18.25 lbs) *Tolerance ± 10 %*	Detector with/without standard battery 2.60 kg (5.73 lbs) / 2.06 kg (4.54 lbs) Basic package – Detector in backpack including standard scope of delivery 3.91 kg (8.62 lbs) Basic package in case 8.41 kg (18.54 lbs) *Tolerance ± 10 %*
Disposable/ rechargeable battery	3 x Mono LR20 1.5 V alkaline battery – Standard 3 x Mono HR20 1.2 V NiMH rechargeable battery	4 x Mono LR20 1.5 V alkaline battery – Standard 4 x Mono HR20 1.2 V NiMH rechargeable battery
Disposable/rechargeable battery operating time*	Alkaline batteries: About 16 h NiMH rechargeable batteries (10,000 mAh): About 18 h *Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.*	Alkaline batteries: About 22 h NiMH rechargeable batteries (10,000 mAh): About 25 h *Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.*

FEATURES

Internal rechargeable battery

Exchangeable search coil

Bluetooth® interface for wireless data transfer

Wi-Fi for wireless data transfer

Automatic soil compensation for an effectiv false alarm reduction in mineralized soils

Integrated webserver for configuration, updates and data exchange

Integrated GNSS receiver

Detection of IEDs

Detection of cables and wires

Subject to changes that serve technical progress.

VMH4-VS25 – Data Sheet

Technical Data and Features

TECHNICAL DATA

Type	VMH4-VS25	VMH4L-VS25
Sensor	Active search coil Search coil VS25: Ø 25 cm (Ø 9.84 in)	
Alarm signal	Visual (LED)/audio/vibration	
Watertight	IP68 (5 m, 1 h at 20 °C) Search coils (additionally 1 m, 8 h at 20 °C)* *Search coils are suitable for longer detection in shallow waters.*	
Dimensions*	Backpack – Standard 53 x 36 x 16.5 cm (20.87 x 14.17 x 6.50 in) Case 56.5 x 46 x 21 cm (22.24 x 18.11 x 8.27 in) *Tolerance ± 3 %*	
Ambient conditions	In accordance with MIL-STD-810G (501.5-I,II, 502.5-I,II, 503.5, 506.4, 512.4, 514.6-C-II, 516.6)	
Ambient temperature	-31°C – + 63°C (-24°F – +145°F)	
Storage temperature	-51°C – +71°C (-60°F – +160°F)	
Weight*	Detector with/without standard battery 2.55 kg (5.62 lbs) / 2.14 kg (4.72 lbs) Basic package – Detector in backpack including standard scope of delivery 3.86 kg (8.51 lbs) Basic package in case 8.36 kg (18.43 lbs) *Tolerance ± 10 %*	Detector with/without standard battery 2.68 kg (5.91 lbs)/2.14 kg (4.72 lbs) Basic package – Detector in backpack including standard scope of delivery 3.99 kg (8.80 lbs) Basic package in case 8.49 kg (18.72 lbs) *Tolerance ± 10 %*
Disposable/ rechargeable battery	3 x Mono LR20 1.5 V alkaline battery – Standard 3 x Mono HR20 1.2 V NiMH rechargeable battery	4 x Mono LR20 1.5 V alkaline battery – Standard 4 x Mono HR20 1.2 V NiMH rechargeable battery
Disposable/rechargeable battery operating time*	Alkaline batteries: About 16 h NiMH rechargeable batteries (10,000 mAh): About 18 h *Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.*	Alkaline batteries: About 22 h NiMH rechargeable batteries (10,000 mAh): About 25 h *Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.*

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FEATURES

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Bluetooth® interface for wireless data transfer

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Detection of cables and wires

VMH4-VS20, olive – Scope of delivery

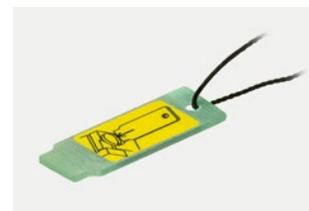## Basic package | VMH4-VS20 (Item No. 2005010000)

Metal Detector VMH4, olive

Search coil VS20, Ø 20 cm, olive
Item No. 2904090010

Backpack VMH4, olive
Item No. 8905010000

Adjustment plate for brake screw
Item No. 2805010000

Alkaline battery 1.5 V Mono LR20, 3 ea.
Item No. 5910001006S3

Operation manual VMH4
Item No. 8905010270_EN

Field manual VMH4
Item No. 8905010280_EN

Packing sketch VMH4
Item No. 8905010290

USB flash drive with versions of other languages in PDF format

Also available in a longlife version as VMH4L-VS20 (Item No. 2005010020)

It offers an increased battery operating time at a slightly higher weight
by using four disposable/rechargeable batteries.

Alkaline battery 1.5 V Mono LR20, 4 ea.
Item No. 5910001006S4

VMH4-VS20, sand – Scope of delivery
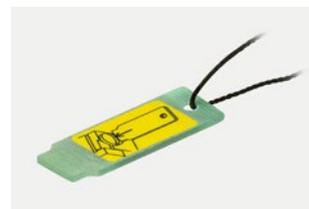
Basic package | VMH4-VS20 (Item No. 2005010000SND)

Metal Detector VMH4, sand

Search coil VS20, Ø 20 cm, sand
Item No. 2904090010SND

Backpack VMH4, sand
Item No. 8905010000SND

Adjustment plate for brake screw
Item No. 2805010000

Alkaline battery 1.5 V Mono LR20, 3 ea.
Item No. 5910001006S3

Operation manual VMH4
Item No. 8905010270_EN

Field manual VMH4
Item No. 8905010280_EN

Packing sketch VMH4
Item No. 8905010290

USB flash drive with versions of other languages in PDF format

Also available in a longlife version as VMH4L-VS20 (Item No. 2005010020SND)

It offers an increased battery operating time at a slightly higher weight
by using four disposable/rechargeable batteries.

Alkaline battery 1.5 V Mono LR20, 4 ea.
Item No. 5910001006S4

VMH4-VS25, olive – Scope of delivery
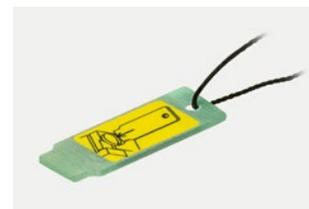
Basic package | VMH4-VS25 (Item No. 2005010050)

Search coil VS25, Ø 25 cm, olive
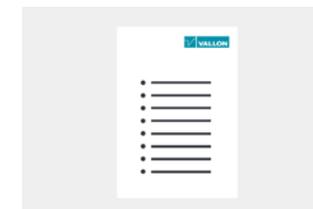Item No. 2904090025

Backpack VMH4, olive
Item No. 8905010000

Adjustment plate for brake screw
Item No. 2805010000

Alkaline battery 1.5 V Mono LR20, 3 ea.
Item No. 5910001006S3

Operation manual VMH4
Item No. 8905010270_EN

Metal Detector VMH4, olive

Field manual VMH4
Item No. 8905010280_EN

Packing sketch VMH4
Item No. 8905010290

USB flash drive with versions of other languages in PDF format

Also available in a longlife version as VMH4L-VS20 (Item No. 2005010030)

It offers an increased battery operating time at a slightly higher weight
by using four disposable/rechargeable batteries.

Alkaline battery 1.5 V Mono LR20, 4 ea.
Item No. 5910001006S4

VMH4-VS25, sand – Scope of delivery
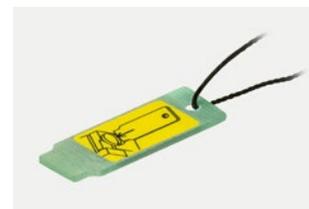
Basic package | VMH4-VS25 (Item No. 2005010050SND)

Search coil VS25, Ø 25 cm, sand
Item No. 2904090025SND

Backpack VMH4, sand
Item No. 8905010000SND

Adjustment plate for brake screw
Item No. 2805010000

Alkaline battery 1.5 V Mono LR20, 3 ea.
Item No. 5910001006S3

Operation manual VMH4
Item No. 8905010270_EN

Metal Detector VMH4, sand

Field manual VMH4
Item No. 8905010280_EN

Packing sketch VMH4
Item No. 8905010290

USB flash drive with versions of other languages in PDF format

Also available in a longlife version as VMH4L-VS20 (Item No. 2005010030SND)

It offers an increased battery operating time at a slightly higher weight
by using four disposable/rechargeable batteries.

Alkaline battery 1.5 V Mono LR20, 4 ea.
Item No. 5910001006S4

Accessories

Metal Detector VMH4

Case VMH4, olive
Item No. 2905010050

Search coil VS20, Ø 20 cm, olive
Item No. 2904090010

Search coil VS25, Ø 25 cm, olive
Item No. 2904090025

UXO search coil VS30, Ø 30 cm, olive
Item No. 2904090200

Bag UXO search coil VS30, olive
Item No. 8904090890

UXO search coil VS60, Ø 60 cm, olive
Item No. 2904090210

Bag UXO search coil VS60, olive
Item No. 8904091330

Case VMH4, sand
Item No. 2905010050SND

Search coil VS20, Ø 25 cm, sand
Item No. 2904090010SND

Search coil VS25, Ø 25 cm, sand
Item No. 2904090025SND

UXO search coil VS30, Ø 30 cm, sand
Item No.. 2904090200SND

Bag UXO search coil VS30, sand
Item No. 8904090890SND

UXO search coil VS60, Ø 60 cm, sand
Item No. 2904090210SND

Bag UXO search coil large, sand
Item No. 702360002SND

Stick probe VSP4
Item No. 2904090230

Accessories

Metal Detector VMH4

Headphone single-sided VMF4/VMH4/VMC4
Item No. 2904090480

Headphone single-sided with cover for the second ear VMF4/VMH4/VMC4
Item No. 2904090450

On-ear headphone single-sided VMF4/VMH4/VMC4
Item No. 2904090090

Data cable VMF4/VMH4/VMC4
Item No. 5110307076

Charging cable VMF4/VMH4/VMC4
Item No. 2504090071

Power supply adapter 100-240V including travel adapter AUS/UK/US
Item No. 2905001067

External battery charger 100-240V/50-60Hz, 12V
Item No. 2909990847

Alkaline battery 1.5 V Mono LR20
Item No. 5910001006

Rechargable battery NiMH 1,2 V Mono HR20/10.000 mAh
Item No. 5920001006

VALLON – A strong Partner

Experience is irreplaceable

As a family-run business from Eningen in Germany we became a global player within the field of explosive ordnance detection and the assessment of contaminated sites. All our activities focus on providing our customers with the best product for the respective application.

✔ GUIDANCE

From the initial contact to the selection of the optimal detector system and to the point of the professional start of operation – VALLON accompanies the complete process and supports you in a competent and professional manner.

✔ DETECTORS

Our product portfolio includes efficient solutions for detecting mines, improvised explosive devices (IEDs) and unexploded ordnance (UXO) – for the use on land, underwater and in boreholes.
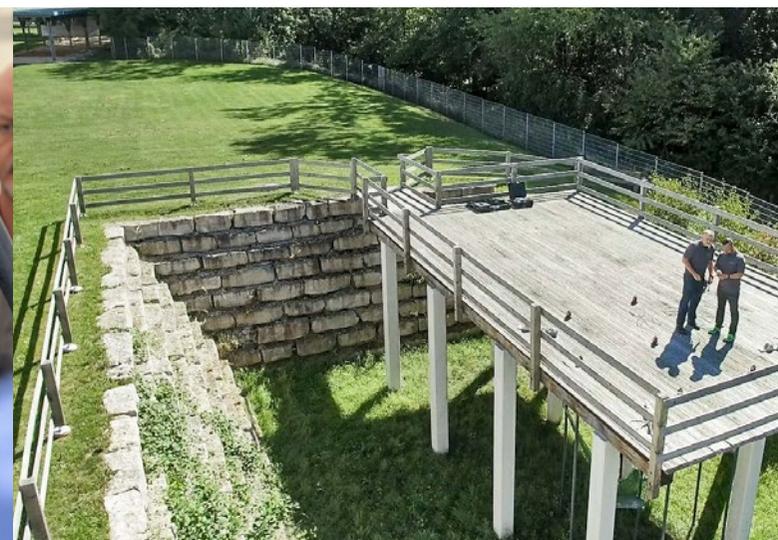
✔ SOFTWARE

With the EVA4mobile® and the EVA4ALL® VALLON offers powerful software for data acquisition, evaluation and documentation. The firmware of VALLONs fourth generation of metal detectors is subject to continuous further development and can be adapted to satisfy specific customer requirements.

✔ TRAINING

In order to optimally prepare the user for their daily work VALLON offers custom-tailored training. The training courses can take place upon agreement on site or directly at VALLON in Eningen, Germany.

THE PATH TO BECOMING A GLOBAL PLAYER

Since 2016, VALLON has impressed customers with improved generations of its innovative developments. The new benefits include lower weight and greater compactness for easier transport and simpler firmware upgrades that now enable customer-specific application optimization.

Learn more under
www.vallon.de/en/history

Always up-to-date!
@vallon_gmbh

OVER 50 YEARS OF
Excellence