

Metal Detector

 [vallon.de](http://vallon.de)

# VMF4-VS20

## VMF4-VS25

Compact 4th Generation Metal Detector  
with Exchangeable Search Coil



*Searching with Excellence*



# VMF4 – Compact Metal Detector

## Compact 4th Generation Metal Detector with Exchangeable Search Coil

The foldable VMF4 metal detector has tiny packaging dimensions and offers the same excellent ergonomics as the VMH4 metal detector. It is ideal for both humanitarian demining and military mine clearance. This applies to all soils and shallow waters in a wide variety of conditions.

It demonstrates its outstanding capabilities in detection 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. 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 VMF4 metal detector is also available in a longlife version as VMF4L. It offers an increased battery operating time at a slightly higher weight by using four disposable/rechargeable batteries

- ✓ Ergonomically optimized for long-term operation in the humanitarian demining and military mine clearance
- ✓ Foldable metal detector with small packing dimensions
- ✓ Flexible application optimization thanks to exchangeable search coils
- ✓ Detection of material and wires with low conductivity
- ✓ 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 (VMF4L) with increased battery operating time at slightly higher weight



# 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








# VMF4-VS20 – Data Sheet

## Technical Data and Features

### TECHNICAL DATA

Type	VMF4-VS20	VMF4L-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)* <i>*Search coils are suitable for longer detection in shallow waters.</i>	
Dimensions*	Backpack – Standard: 45 x 28 x 12 cm (17.71 x 11.02 x 4.73 in) Case: 46.5 x 35.5 x 17 cm (18.31 x 13.98 x 6.69 in) <i>*Tolerance ± 3 %</i>	
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 2.46 kg (5.42 lbs) / 2.05 kg (4.52 lbs) Basic package – Detector in backpack including standard scope of delivery 3.58 kg (7.89 lbs) Basic package in case 6.33 kg (14.0 lbs) <i>*Tolerance ± 10 %</i>	Detector with/without standard battery 2.59 kg (5.71 lbs) / 2.05 kg (4.52 lbs) Basic package – Detector in backpack including standard scope of delivery 3.71 kg (8.18 lbs) Basic package in case 6.46 kg (14.24 lbs) <i>*Tolerance ± 10 %</i>
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 <i>*Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.</i>	Alkaline batteries: About 22 h NiMH rechargeable batteries (10,000 mAh): About 25 h <i>*Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.</i>

### FEATURES

-  Internal rechargeable battery
-  Exchangeable search coil
-  Bluetooth® interface for wireless data transfer
-  Wi-Fi for wireless data transfer
-  Automatic soil compensation for an effective 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








# VMF4-VS25 – Data Sheet

## Technical Data and Features

### TECHNICAL DATA

Type	VMF4-VS25	VMF4L-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)* <i>*Search coils are suitable for longer detection in shallow waters.</i>	
Dimensions*	Backpack – Standard: 45 x 28 x 12 cm (17.71 x 11.02 x 4.73 in) Case: 46.5 x 35.5 x 17 cm (18.31 x 13.98 x 6.69 in) <i>*Tolerance ± 3 %</i>	
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 2.54 kg (5.6 lbs) / 2.13 kg (4.7 lbs) Basic package – Detector in backpack including standard scope of delivery 3.66 kg (8.07 lbs) Basic package in case 6.41 kg (14.13 lbs) <i>*Tolerance ± 10 %</i>	Detector with/without standard battery 2.67 kg (5.89 lbs) / 2.13 kg (4.7 lbs) Basic package – Detector in backpack including standard scope of delivery 3.79 kg (8.35 lbs) Basic package in case 6.54 kg (14.42 lbs) <i>*Tolerance ± 10 %</i>
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 <i>*Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.</i>	Alkaline batteries: About 22 h NiMH rechargeable batteries (10,000 mAh): About 25 h <i>*Ambient temperature of about 20 °C, LR20: Varta Industrial, HR20: NiMH rechargeable batteries.</i>

### FEATURES

-  Internal rechargeable battery
-  Exchangeable search coil
-  Bluetooth® interface for wireless data transfer
-  Wi-Fi for wireless data transfer
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-  Detection of IEDs
-  Detection of cables and wires

# VMF4-VS20, olive – Scope of delivery

Basic package | VMF4-VS20 (Item No. 2004090000)



Metal Detector VMF4, olive



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



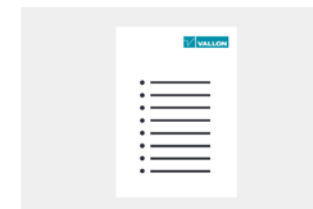
Backpack VMF4, olive  
Item No. 8904090515



Test piece with adjustment plate for  
brake screw  
Item No. 2909990733



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



Operation manual VMF4  
Item No. 8904090530



Field manual VMF4  
Item No. 8904090540



Packing sketch VMF4  
Item No. 8904090520

Also available in a longlife version as VMF4L-VS20 (Item No. 2004090010)

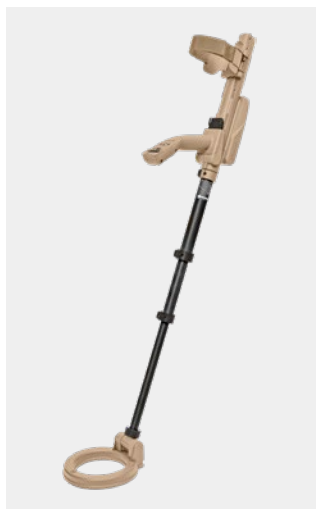
It offers an increased battery operating time at a slightly higher weight by using four disposable/rechargeable batteries.



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

# VMF4-VS20, sand – Scope of delivery

Basic package | VMF4-VS20 (Item No. 2004090000SND)



Metal Detector VMF4, sand



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



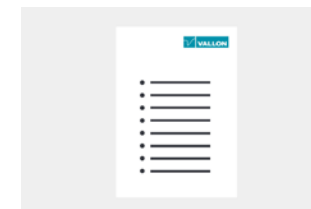
Backpack VMF4, sand  
Item No. 8904090515SND



Test piece with adjustment plate for  
brake screw  
Item No. 2909990733



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



Operation manual VMF4  
Item No. 8904090530



Field manual VMF4  
Item No. 8904090540



Packing sketch VMF4  
Item No. 8904090520

Also available in a longlife version as VMF4L-VS20 (Item No. 2004090010SND)

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



# VMF4-VS25, olive – Scope of delivery

Basic package | VMF4-VS25 (Item No. 2004090050)



Metal Detector VMF4, olive



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



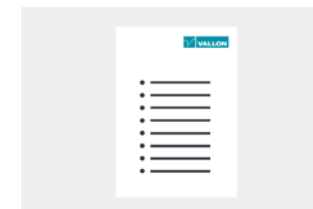
Backpack VMF4, olive  
Item No. 8904090515



Test piece with adjustment plate for  
brake screw  
Item No. 2909990733



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



Operation manual VMF4  
Item No. 8904090530



Field manual VMF4  
Item No. 8904090540



Packing sketch VMF4  
Item No. 8904090520

Also available in a longlife version as VMF4L-VS25 (Item No. 2004090020)

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

# VMF4-VS25, sand – Scope of delivery

Basic package | VMF4-VS25 (Item No. 2004090050SND)



Metal Detector VMF4, sand



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



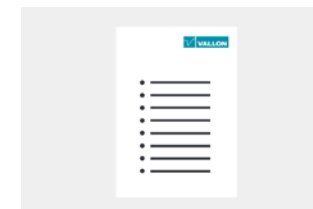
Backpack VMF4, sand  
Item No. 8904090515SND



Test piece with adjustment plate for  
brake screw  
Item No. 2909990733



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



Operation manual VMF4  
Item No. 8904090530



Field manual VMF4  
Item No. 8904090540



Packing sketch VMF4  
Item No. 8904090520

Also available in a longlife version as VMF4L-VS25 (Item No. 2004090020SND)

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 VMF4



Case VMF4, olive  
Item No. 2904090125



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 VMF4, sand  
Item No. 2904090125SND



Search coil VS20, Ø 20 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 VMF4



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



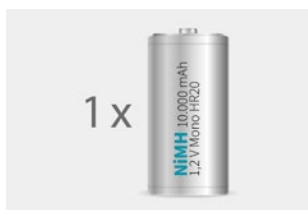
Power supply adapter 100-240V  
including travel adapter AUS/UK/US  
Item No. 2905001067



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



Alkaline battery 1.5 V Mono LR20  
Item No. 5910001006



Rechargeable 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.

### ✓ SOFTWARE

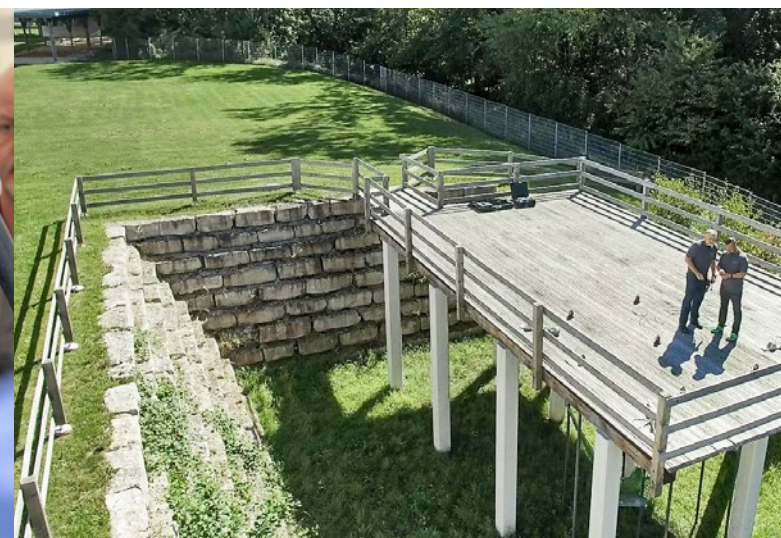
With the EVA4mobile® and the EVA4ALL® VALLON offers powerful software for data acquisition, evaluation and documentation. The firmware of VALLONs fourth generation of metal detectors is subject to continuous further development and can be adapted to satisfy specific customer requirements.

### ✓ 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.

### ✓ 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](http://www.vallon.de/en/history)



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