



# DOK-ING MV-8 KOMODO

## UNMANNED BREACHING SYSTEM

The MV-8 Komodo Unmanned Breaching System combines Rheinmetall's combat engineering expertise with DOK-ING's proven unmanned platform technologies and Pearson Engineering's breaching solutions. Designed for modern high-threat environments, the system enables remote breaching and obstacle reduction operations while significantly reducing risk to personnel.

### BASE PLATFORM

The highly modular MV-8 Komodo is designed for operations in high-risk and contested environments where reducing soldier exposure is mission critical. The unmanned platform is equipped with a fully integrated diesel-electric hybrid powertrain, high payload capacity, and open architecture for future autonomous enhancements. As a robust, all-terrain

and all-weather capable system, it combines mechanical performance, mission modularity, and digital control technology ready for the integration of Rheinmetall's PATH A-Kit, a proven autonomy solution that will, in the future, enable semi-autonomous and autonomous mission execution.

### MINEFIELD BREACHING SYSTEMS

For minefield breaching and clearance operations, the Komodo integrates Pearson Engineering's RCV-Pioneer Minefield Breaching Mission Payload. This payload employs a Full Width Mine Plough configured for smaller unmanned vehicles, designed to neutralize mines through mechanical ground displacement, creating clear and safe lanes through minefields. The safe lane is clearly identified through the use of Pearson Engineering's Lane Marking System (LMS).

### TECHNICAL DATA – DOK-ING MV-8 KOMODO

Vehicle Control	Remotely operated
Autonomy	Rheinmetall PATH A-Kit
Max. speed (limited)	55 km/h
Max. operating distance	2,500 M + Line of Sight / remote control
Hybrid System	Diesel-electric
Max. Power	350 kw / peak 600 kW
Dimensions (L x H x W)	5,53 m x 1,70 m x 2,57 m
Ground clearance	0,43 m
Max. weight (GVW)	15,500 kg
Payload Capacity	8,500 kg



**DOKING**



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ENGINEERING**



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### MINE CLEARING LINE CHARGE (PLOFADDER)

As an option in addition to the mine plough, Rheinmetall's Mine Clearing Line Charge could be mounted onto the system.

#### TECHNICAL DATA – PLOFADDER

Min. breach length	160 m
Min. breach width	9 m
Stand-off	80 m
Accuracy tolerance	Angle of 10°
Dimensions (L x H x W)	2,200 x 1,500 x 1,220 mm
Total weight including payload	max. 24 t
Explosive mass (NEQ)	560 kg
Operational temperature	-30 to +65°C
Firing modes	Fully automatic
Set-up time	< 1 min

### FUTURE AUTONOMOUS CAPABILITY

Future development phases will integrate Rheinmetall's PATH autonomy architecture, enabling advanced autonomous and semi-autonomous mission execution. Once integrated, this capability will enable:

- Autonomous waypoint navigation with real-time obstacle avoidance
- Follow-Me and resupply modes for convoy operation
- Leader-Follower functions with cooperative control of up to 10 vehicles
- AI-supported sensor fusion and situational awareness, ensuring mission safety and reliability in all conditions, including GNSS-denied environments

This upgrade path ensures the MV-8 Komodo remains a future-ready platform adaptable to evolving mission requirements.



### SUMMARY

The MV-8 Komodo delivers remote breaching capability for modern combat engineering forces, combining survivability, autonomy, and modular mission integration in one scalable platform. By removing soldiers from the breaching lane, the system significantly enhances operational survivability while maintaining mission effectiveness in high-threat environments. Through the cooperation of DOK-ING, Pearson Engineering, and Rheinmetall, the Unmanned Breaching System MV-8 Komodo combines field-proven mechanical design, advanced engineering payloads, and scalable autonomy technology – defining the next generation of combat engineering capabilities.