

RIV 20/15 with One Seven® system Type: "OS 3100 E" Unimog chassis

...worldwide for fire and rescue!



The RIV 20/15 on Unimog chassis with 1,500 l water tank, a 2,000 l pump and the highly efficient
One Seven® compressed air foam system type
"OS 3100 E" is developed as Rapid Intervention
Vehicle for firefighting and technical rescue,
especially for city centres with streets which are
difficult to access and for complicated terrain.
The vehicle is built on the all-terrain Unimog chassis
U 400.



The body is made of light metal aluminium profiles. This flexible modular design allows modifications in the equipment compartments.

The firefighting truck RIV is equipped with two smooth-running aluminium shutters on each side. These shutters as well as the rear shutter are locked against accidental opening.

The cabin accomodates a crew of 1+2 persons.

















 $Side \ view \ of \ the \ equipment \ compartments \ 2 \ and \ 4 \ with \ One \ Seven^{\circ} \ fast \ attack \ reel, \ generator \ and \ firefighting \ equipment$



Side view of the equipment compartments 1 and 3 with technical rescue equipment and One Seven® fast attack reel

Equipment

The heavy equipment of the RIV Unimog is stored at the vehicle's lower compartments and the light equipment is stored on the upper levels.

This way of loading benefits the vehicle's centre of gravity and facilitates the safe removal of equipment.

The main attention had been paid to the clear separation of the equipment.

The roof is accessible and coated with anti-skid aluminium chequer plate.

The roof can be accessed by a folding ladder at the rear.

Steps and deep-drawn equipment compartments

Deep-drawn equipment compartments between the axles enable an easy removal of heavy equipment. The folding steps are anti-skid designed.





Rear view with aluminium ladder

Front winch type: HY T 60 with the following equipment:

- · drum winch with 40 m rope length
- · traction force 6 tons at a rope length of 7.5 m
- mechanical drum coupling for the fast unwinding of the empty rope
- · traction force limitation by overpressure valve
- cable remote control unit with a cable length of 5 m



Front winch HY T 60

Rear axle steering (all-wheel steering)

Vehicles with all-wheel steering will mainly be used where possible small turning circle diameters should be reached (extremely narrow streets).

The all-wheel steering can be variously designed:

 Front and rear wheels steer in opposite direction (smallest turning circle),



2. The rear wheels steer in the same direction than the front wheels (crab wise movement)



It is possible to chose both methods via a switch which is integrated into the dashboard.



Example: (2) Front and rear wheels both steered in the same direction

Pneumatical light mast

The pneumatical light mast can be electrically turned and tilted. It is equipped with $2 \times 1,000 \, \text{W}$ halogen headlights with protective grates. The light mast can be controlled by an electrically remote control unit with 4 m helix cable.



Pneumatical light mast 3,410 mm extendible in 4 sections

Fast attack installation

The RIV 20/15 Unimog has two fast attack installations mounted on left hand and right hand side which can both be used either for the operation with water or with compressed air foam. The reels are each equipped with a 60 m stable hose and they are electrically driven.



One Seven® fast attack reel mounted on either side

Compressed air foam system type: "OS 3100 E"

The vehicle is equipped with the state of the art One Seven® compressed air foam system.

This One Seven® compressed air foam system has two 1.5" (C) and two 2.5" (B) outlets. One 2.5" (B) outlet is mounted at the rear beneath the body and one 2.5" (B) outlet is positioned at the front of the firefighting truck RIV 20/15.

The programmable logic controller (PLC) guarantees a comfortable and easy operation.



Control panel OS 3100 E and pump control panel

The performance data for wet and dry foam are each preset at optimum conditions.

The operator can chose the required foam (dry/wet) by pressing a button. All control valves of the system will be pneumatically activated.

No readjustment of the foam quality is required.

SCBA storage

The extendible SCBA storage grants tp put on the SCBA gear in a comfortable way.



SCBA storage

Technical data:	
Chassis	MB Unimog U 400
Wheelbase	3,600 mm
Engine performance	177 HP (130 kW)
Crew	2+1
Allowed gross vehicle	approximately
weight	12,000 kg
Total length	5,620 mm
Total width	2,200 mm
Total height	3,010 mm
Water tank	1,500
Foam concentrate tank	200 l - two-chamber
	system (150 l + 50 l)
Hydraulical front winch	HY T 60
6 tons	
Built-in pump	FPN 10-2000
One Seven® system	OS 3100 E
	two 1.5" (C) and two
	2.5" (B) outlets
Pneumatical light mast	2 x 1,000 W, electrically
	turning and tilting

