

AERIAL LADDER

Firefighting with CAN

Rosenbauer presented the L27A-XS 3.0 aerial ladder with XS technology. The control system of the ladder comes with up to five CAN networks and enables equipping with latest floodlight and camera systems, for example.

The ladder is the latest product in the XS series and comes with a working height of 27,6 m. The abbreviation XS (meaning "extra small") refers to the construction of these aerial ladders with a tiltable cage boom and an inwardly offset swivel joint, which means that they can be used to their full extent even in very tight spaces, explained the company.

The operational radius can be placed up to 5,90 m from the structure and still offer full performance with maximum payload (five people in the cage), said the company. As a result, set-up mistakes at low rescue heights or horizontal escapes can be more compensated for, and the smaller distance can also be used tactically to ensure operations in tight spaces, they added. In addition, the ladder can handle building facades with its horizontal reach. This enables to set up and position, because it does not have to be moved or repositioned if several locations at different elevations need to be reached.



(Source: Rosenbauer)



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Control technology

As with all Rosenbauer aerial ladders in the XS series, the latest one is equipped with a third-generation control system. This provides around ten times more computing power than its predecessor, and meets both safety integrity level SIL 2, category 3, performance level D according to IEC 61508 (functional safety of electrical/electronic/programmable electronic safety-related systems), and machine directive EN 13849. The control with up to five CAN networks also offers connectivity to equip XS ladders with the latest floodlight and camera systems, auxiliary assistance systems, and automatic functions.

The product is built on a 2-axle chassis from Mercedes Benz (Atego 1527 F) with a total permissible weight of 15 tons. The ladder set consists of a five-part main boom with a tilting cage boom (4,35 m), featuring a horizontal-vertical outrigger with a

width of up to 4,80 m for a solid footing. Its basic firefighting equipment consists of the following: a permanently mounted aluminum tube in the upper ladder section, a water supply integrated into the cage structure, water curtain jet nozzles in the cage floor, and two monitors, which are stored in the equipment rooms and, when required, can be fitted to the cage water supply.

The first vehicle will be delivered to the La Rochelle fire department in France, complete with a bogie. Even when rotated 360°, the bogie does not protrude beyond the width of the vehicle's footprint, meaning that the turntable ladder can be positioned very close to a building or other obstacle.

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