

## KOS-L/SSAK



### Purpose

The rail extraction system – type KOS-L/SSAK is designed for capturing the exhaust fumes emitted by vehicles of stable stationing place, for example fire-brigade depot, ambulance service and other emergency units – where absolute readiness for emergency vehicle exit is required. It can be applied for vehicles with side exhaust pipe or back exhaust pipe. In case when the exhaust pipe termination is placed underneath the vehicle – adequate additional pipe extension is needed.

### Structure

The exhaust system KOS-L/SSAK consists of:

- self-tightening suction duct KOS-L constructed of steel segments of length 2,5 or 1,25 m, connected together in the requested length depending on needs,
- trolley of the extractor,
- control unit assembly,
- duct suction fitting piece,
- ventilation hose,
- electromagnet assembly (supply 24 V),
- L-shape funnel.

Along the suction duct on rollers displaces a trolley (in a special execution, it is possible to apply two extraction trolleys displacing on one suction duct). The suction fitting piece of the trolley is sliding under the rubber apron, covering the perforated duct side wall in the whole length. The vacuum formed by extraction fan seals up the apron to the duct surface. Terminal stoppers (fixed at the duct-ends) are braking smoothly the trolley movement, while it reaches the duct ends. The duct connection to the ventilation

installation is possible to any of the duct ends as well as to duct side wall.

The recommended installing height of the duct is 4–4,5 m.

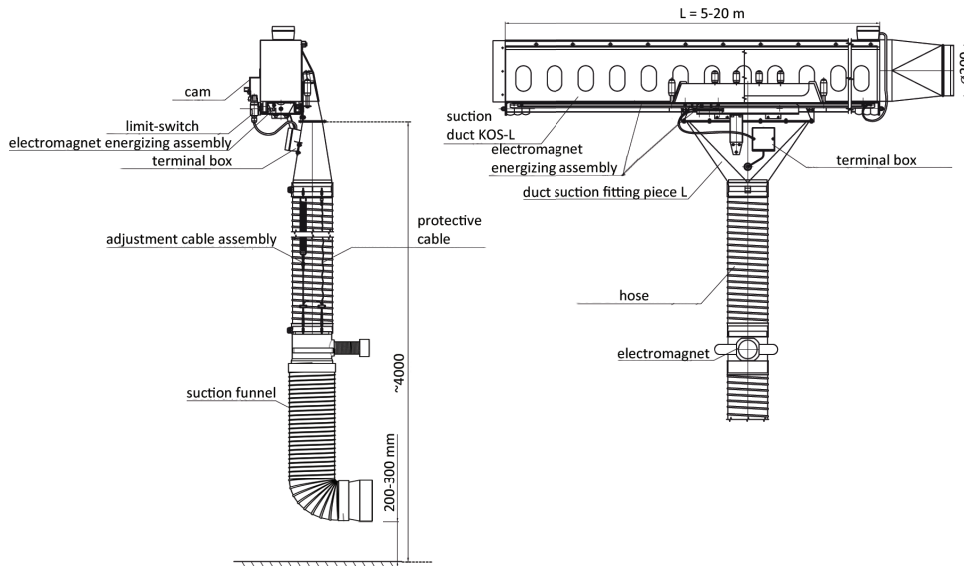
Along with the extraction trolley displaces the hose with an electromagnet anchor to attach it to the magnet gripper plate fixed on the side wall or rear wall of the carbody. The magnet gripper plate should be fixed on the carbody, at such a height that the suction funnel is hanging right opposite the vehicle exhaust pipe, (at a small distance), to provide safe funnel disconnection.

Inside the exhaust hose is a cable to energize the electromagnet. Energizing proceeds through the conductor strap (mounted on a support strap) and the duct corpus. The voltage is supplied, while the receiving cube in the trolley slides on the conductor strap.

At the moment, when the vehicle leaves the garage, the extraction trolley moves along the guide track. The end of the guide track is equipped with a limit-switch, disconnecting automatically the funnel electromagnet from the vehicle. Subsequently, the spring balancer, (inside the hose) lifts the hose and funnel to upper position.

It is recommended that the exhaust system works with the roof or flange-type fan. The extraction fan can be driven manually or by radio, by a radio transmitter. There are following elements of the electrical equipment: control unit ZE-SSAK, radio receiver and auxiliary controller (see catalogue card with elements of the control system). After the vehicle leaves the garage – the fan stops automatically. Upon re-entry, the fan is automatically started just before the vehicle enters the garage. User can adjust the time of delay when the fan is switched off.


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## Technical data

Type	Part no.	Recommended volume flow at the funnel [m³/h]	Flow resistances [Pa]	Hose		Inlet diameter of the funnel [mm]
				Internal diameter [mm]	Thermal resistance [°C]	
KOS-L/SSAK	804O55	1200-1500	1000-1300	150	200	170

## Self-tightening suction duct



	Type	Part no.	Segment length [m]	Transverse dimensions [mm]	Cross-section [cm²]	Unit weight [kg/m]	Segment weight [kg]
	KOS-L	804K45	1,25				160x240
	804K46	2,5	35,5				

## Connectors\*

Sort of the fitting piece	Type	Part no.	Diameter [mm]
	axial	KO 804K70	200
	universal connector	KTSU-200 804K79	200


\* To connect the duct with the discharge ductwork.

## Duct ending set\*

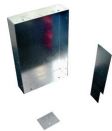
Sort of the ending	Type	Part no.	Remarks
	ZKL	804K76	left ending
	ZKP	804K77	right ending

\* Mounted at the beginning of the first segment and at the termination of the last segment.


## Rubber stopper

	Type	Part no.	Remarks
	ZG	804K31	Installed at the terminal positions of the duct.

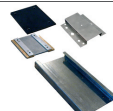
## Duct closing

Type	Part no.	Remarks
	ZK 804K87	To cover the duct end in a place where the axial connector is not used.

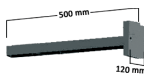
## Segment connector

Type	Part no.	Remarks
	ZSK 804K75	A set of elements to connect the two adjacent segments.

## Duct wall hanger

	Type	Part no.	Remarks
	ZWK	804K82	Used to connect the duct with the wall bracket.

## Wall bracket

	Type	Part no.	Remarks
	WPK-2	804K86	Used to install the duct to the wall or column.