

## KOS-L, OBP/P – stationary extractor with balancer



### Purpose

The KOS-L self-tightening suction duct is designed for capturing the vehicle exhaust fumes by means of the mobile balancing extractor – type OBP/P which is displacing along the duct. The trolley displacement proceeds while the vehicle is pulling the hose with nozzle (clamped on the vehicle exhaust pipe).

### Structure

The KOS-L duct consists of steel segments of length: 1,25 and 2,5 m joined together to any required length, depending on the User's needs. Along the suction duct, displaces a trolley with balancer and hose with the nozzle clamped at the vehicle exhaust pipe. The trolley is equipped with a shut-off damper which opens and closes (when the hose is pulled down and lifted). Therefore it is possible to apply a smaller fan, in application where to one duct are installed two or more extractors, and the use coincidence factor is lower than 1. The trolley fitting piece is sliding under a rubber apron, covering the perforated side wall on the whole length of the duct. The vacuum created by extraction fan seals up the apron to the duct surface. The extractor is equipped with a balancer, (to provide smooth hose retraction) and a ratchet device fixing the hose at required operational length. Using the self-release nozzle – the release mechanism disconnects the nozzle while the extraction trolley reaches the duct end. Then


the hose with the nozzle returns to its home position. On the other hand, the non-self-release-nozzle ought to be disconnected manually and should be pulled slightly to activate the balancer, which lifts the hose up. Terminal rubber stoppers (fixed at the duct-ends) brake smoothly the trolley movement, while it reaches the duct ends. The recommended duct installing height is 4,3 m. The duct connection to the ventilation installation is possible to both the duct-ends as well as to duct side wall. KOS-L duct and OBP/P with hose Ø100 mm is adapted for cars, Ø125 mm for medium-size vehicles of admissible total weight – up to 3,5 t, Ø150 mm for trucks. Selection of the hose diameter is depended on the engine cubic capacity of the serviced vehicle and its rotations. For more precise selection contact KLIMAWENT S.A. As option, we offer radio control – for automatic fan start at the moment, when the hose with nozzle is pulled down. After the completed work, the extraction fan switches off upon time delay (see catalogue card RADIO CONTROL).

#### NOTE:

For standard applications, we recommend extractors equipped with hoses of thermal resistance 150°C (short duration 200°C). For application with Diesel engine vehicles, equipped with Diesel Particulate Filter – Euro 5, Euro 6 (as there high exhaust temperature can occur), we recommend extractors with hoses of increased thermal resistance (OBP/P/CF).

# KOS-L, OBP/P

## Mobile balancing extractor

	Type <sup>1</sup>	Part no.	Hose diameter [mm]	Hose length [m]	Recommended volume flow [m <sup>3</sup> /h]	Flow resistances [Pa]	Thermal resistance [°C]	Application <sup>4</sup>	Weight [kg]
	OBP/P-100-6	805034	100	6	400	900	150 <sup>2</sup>	SO	26,7
	OBP/P-100-6/CF	805058	100	6	400	900	300/150 <sup>3</sup>	SO	26,7
	OBP/P-125-6	805035	125	6	700	1000	150 <sup>2</sup>	SD	28,7
	OBP/P-125-6/CF	805059	125	6	700	1000	300/150 <sup>3</sup>	SD	28,7
	OBP/P-150-6	805036	150	6	1500	1700	150 <sup>2</sup>	SC	29,8
	OBP/P-150-6/CF	805060	150	6	1500	1700	300/150 <sup>3</sup>	SC	29,8
	OBP/P-125-9	805037	125	9	700	1300	150 <sup>2</sup>	SD	35,7
	OBP/P-125-9/CF	805061	125	9	700	1300	300/150 <sup>3</sup>	SD	35,7
	OBP/P-150-9	805038	150	9	1500	1900	150 <sup>2</sup>	SC	38,3
OBP/P-150-9/CF	805062	150	9	1500	1900	300/150 <sup>3</sup>	SC	38,3	

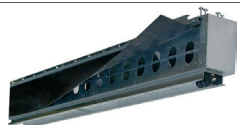
1. Prior to selection of appropriate extractor, please contact KLIMAWENT S.A.

2. Flexible hose of thermal resistance 150°C (short duration 200°C).



3. First hose section of length 2 m of thermal resistance 300°C (short duration 350°C), further hose section of thermal resistance 150°C (short duration 200°C).

4. SO - car, SD - medium-size vehicle, SC - truck.

## Self-tightening suction duct

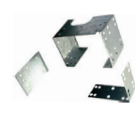

	Type	Part no.	Segment length [m]	Transverse dimensions [mm]	Cross-section [cm <sup>2</sup> ]	Unit weight [kg/m]	Segment weight [kg]	
	KOS-L		804K45	1,25	160x240	384	14,2	17,75
			804K46	2,5	160x240	384	14,2	35,5

## Connectors\*

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

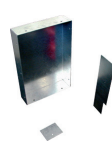
\* To connect the duct with the discharge ductwork.

## Duct ending set\*


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

\* To be installed at the beginning of the first duct segment and at the end of the last segment.

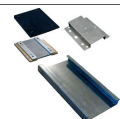
## Duct closing

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

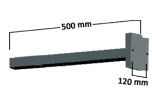
## Segment connector

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


## Duct hanger set

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

## Duct wall hanger

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

## Terminal rubber stopper

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

## Fans

Fans should be selected from separate catalogue cards, according to the flow efficiency and flow resistances.

## Nozzles

Nozzles and suction stands - for application with the exhaust extractor - are described on separate catalogue card and they are additional equipment.