

# EXHAUST RAIL ALU 150/250

An advanced exhaust extraction system for vehicles in motion

## Rail

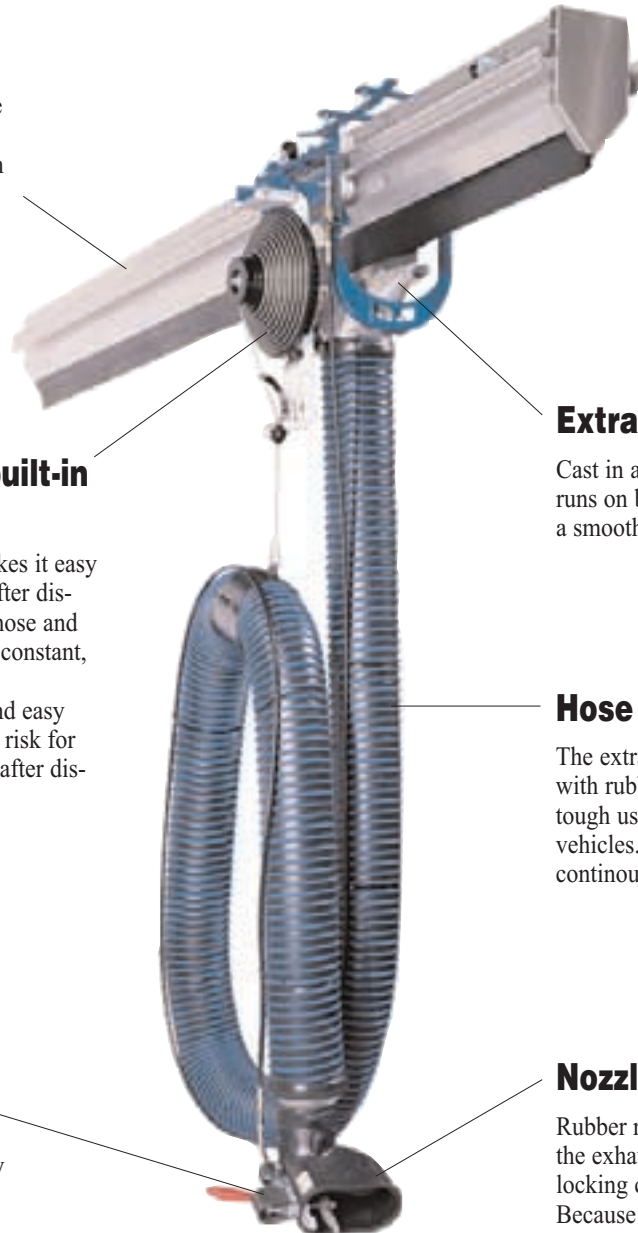
Continuous rail available in two sizes. Made of non-corrosive aluminium with sealing lips in neoprene.

## Balancer with built-in friction brake

Nederman's balancer makes it easy to pull down the hose. After disconnection, the exhaust hose and nozzle are lifted up with constant, controlled pulling power. This ensures a smooth and easy return and minimises the risk for the hose swinging about after disconnection.

## Automatic disconnection

Mechanically operated by a bowden wire. This construction gives the best precision and reliability.



## Extraction trolley

Cast in aluminium. The trolley runs on ball bearings to ensure a smooth run.

## Hose NR-CP

The extraction unit is supplied with rubber hose intended for tough use. Can be run over by vehicles. Manages 150°C at continuous use.

## Nozzle

Rubber nozzle, easily fixed to the exhaust pipe with self-locking clamping device. Because the nozzle is not tight-fitting, ambient air is also captured which lowers the temperature of the exhaust fumes. This increases the life-time expectancy of the hose.

- High quality components
- Two standard rail sizes
- Complete program of accessories for extraction units

Improving your workspace

# ASSORTMENT

## STRAIGHT EXHAUST RAIL

The exhaust hose is mounted on a mobile extraction trolley in a rail that also functions as a ventilation duct. The hose and nozzle are automatically lifted up by a balancer so they are out of the way when not in use. You pull down the hose, connect it to the exhaust pipe with help of the nozzle and the vehicle is ready to drive.

You can choose between different hose dimensions and manual or automatic disconnection. The nozzles suit all types of exhaust pipes and sit safely because they are squeezed on with a self-locking clamping device. The nozzles are rubber sealed to protect the vehicle surface.

## EXHAUST RAIL WITH RETURN TRACK

When supplementing the exhaust rail with a return track you have the possibility of serving several vehicles on a line. The extraction unit follows the vehicle because the nozzle is attached to the exhaust pipe. At the end of the exhaust rail the extraction unit leaves the extraction rail and can later be pushed back manually through the return track to be connected to another vehicle.

Even for this system there is a nozzle that automatically disconnects from the exhaust pipe when the vehicle leaves the building.

## 1. Choose an extraction unit\*

\* Delivered with trolley, balancer, exhaust hose and nozzle.

### MANUAL DISCONNECTION • HOSE TYPE NR-CP

<b>Engine speed:</b> Normal	Part No.	Hose dia. mm	Hose length m	Nozzle
<b>Vehicle:</b> Car	20900110	100	5	Rubber (20805561)
<b>Vehicle:</b> LCV / HCV	20900210	150	5	Rubber (20805961)

### AUTOMATIC DISCONNECTION • HOSE TYPE NR-CP

<b>Engine speed:</b> Normal	Part No.	Hose dia. mm	Hose length m	Nozzle
<b>Vehicle:</b> Car	20900310	100	5	Rubber (20806161)
<b>Vehicle:</b> LCV / HCV	20900410	150	5	Rubber (20806561)

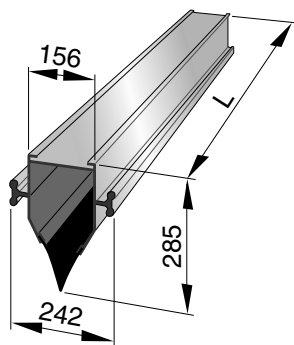
## 2. Choose exhaust rail

### STRAIGHT EXHAUST RAIL ALU 150

The exhaust rail consists of extruded aluminium profiles (2,5 and 5 m), sealing lips of neoprene, connectors to join the rail pieces together, as well as aluminium end covers and stops for the extraction unit.

Weight: 11 kg per metre rail.

Part No.	m	Part No.	m
20900510	2.5	20901610	30.0
20900610	5.0	20901710	35.0
20900710	7.5	20901810	40.0
20900810	10.0	20901910	45.0
20900910	12.5	20902010	50.0
20901010	15.0	20902110	60.0
20901110	17.5	20902210	70.0
20901210	20.0	20902310	80.0
20901310	22.5	20902410	90.0
20901410	25.0	20902510	100.0
20901510	27.5		

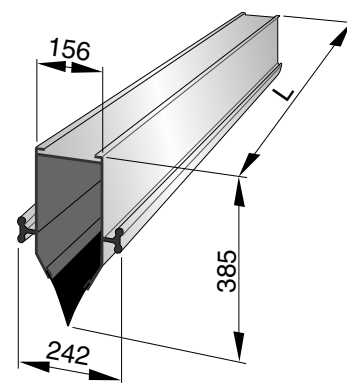


### STRAIGHT EXHAUST RAIL ALU 250

The exhaust rail consists of extruded aluminium profiles (2,5 and 5 m), sealing lips of neoprene, connectors to join the rail pieces together, as well as aluminium end covers and stops for the extraction unit.

Weight: 16 kg per metre rail.

Part No.	m	Part No.	m
20910510	2.5	20911610	30.0
20910610	5.0	20911710	35.0
20910710	7.5	20911810	40.0
20910810	10.0	20911910	45.0
20910910	12.5	20912010	50.0
20911010	15.0	20912110	60.0
20911110	17.5	20912210	70.0
20911210	20.0	20912310	80.0
20911310	22.5	20912410	90.0
20911410	25.0	20912510	100.0
20911510	27.5		



### STRAIGHT EXHAUST RAIL ALU 150 WITH RETURN TRACK

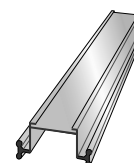
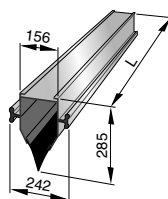
The exhaust rail consists of extruded aluminium profiles (2,5 and 5 m), sealing lips of neoprene, and connectors to join the rail pieces together.

Complete straight rail profiles (2,5 and 5 m), connectors to join the rail pieces together, for return track.

Bends ordered separately, see next page.

Weight: 7 + 11 kg per metre rail.

Part No.	m	Part No.	m	Part No.	m	Part No.	m
20920510	2.5	20921110	17.5	20921610	30.0	20922110	60.0
20920610	5.0	20921210	20.0	20921710	35.0	20922210	70.0
20920710	7.5	20921310	22.5	20921810	40.0	20922310	80.0
20920810	10.0	20921410	25.0	20921910	45.0	20922410	90.0
20920910	12.5	20921510	27.5	20922010	50.0	20922510	100.0
20921010	15.0						

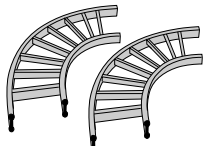


# 3. Choose accessories

## 90° BEND FOR RETURN TRACK

Connects the exhaust rail with the return track.  
Inner radius 1200 mm.

Part No. 20940910

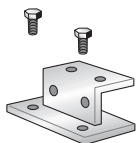


Connection kit, to connect 90° bend with straight rail ALU150.

Part No. 20941010

## SUSPENSION BRACKETS

Maximum length between the suspension brackets is 4 m.



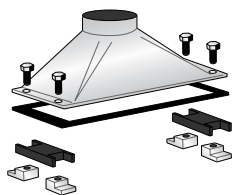
Part No. 20940010



Part No. 20940110

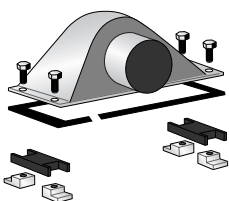
## CONNECTION CONE

For connecting the rail to the fan.



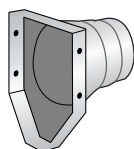
Outlet Ø250 mm

Part No. 20940410



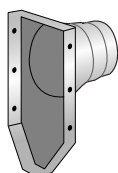
Outlet Ø250 mm

Part No. 20940510



Outlet rail end Ø200 mm  
for ALU150

Part No. 20940610



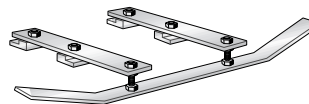
Outlet rail end Ø250 mm  
for ALU250

Part No. 20940710

## AUTOMATIC DISCONNECTION DEVICE

Used together with the extraction unit with automatic disconnection.

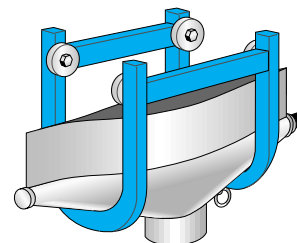
Part No. 20940810



## TROLLEYS

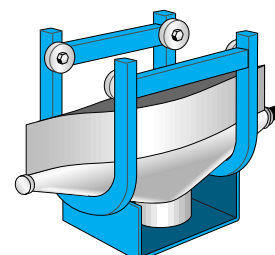
Maxi trolley, for high flow application, ~ 3000 m<sup>3</sup>/h

Part No. 20940310



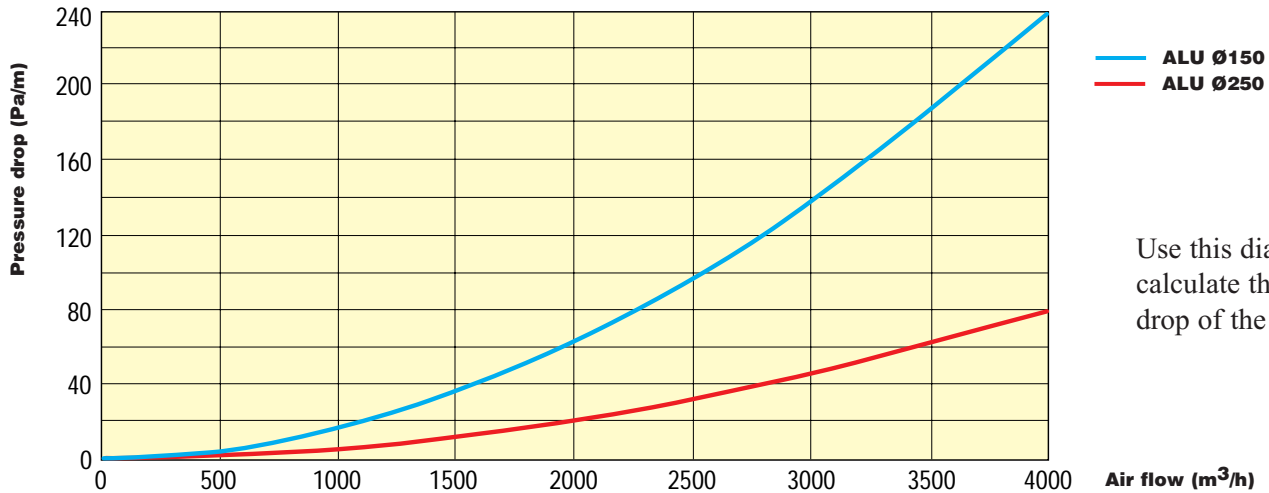
Trolley for Nederman® smoke extractor

Part No. 20940210



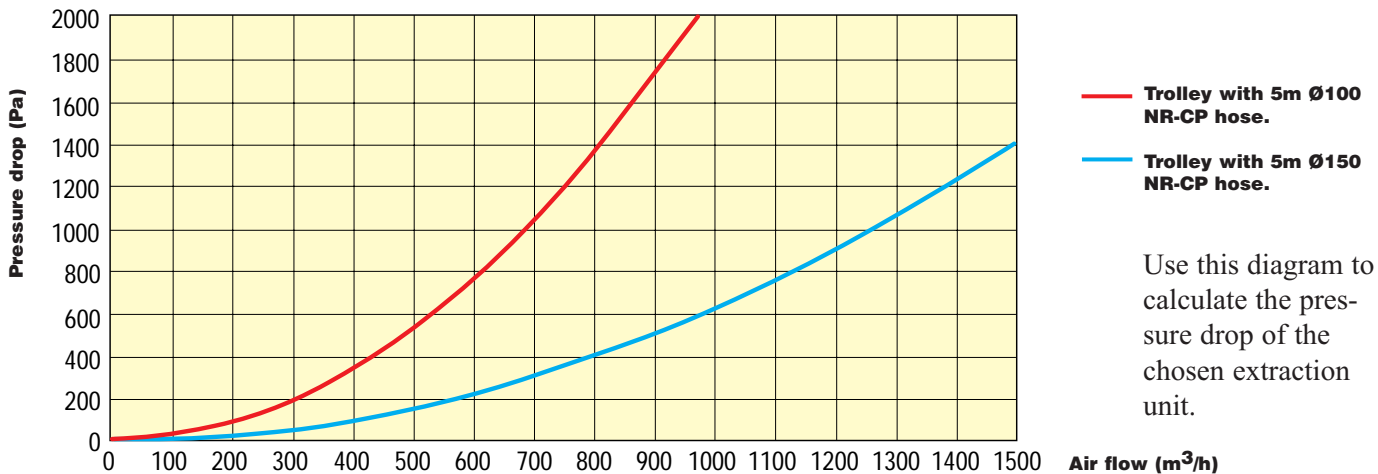
# PRESSURE DROP

## Pressure drop - Rails



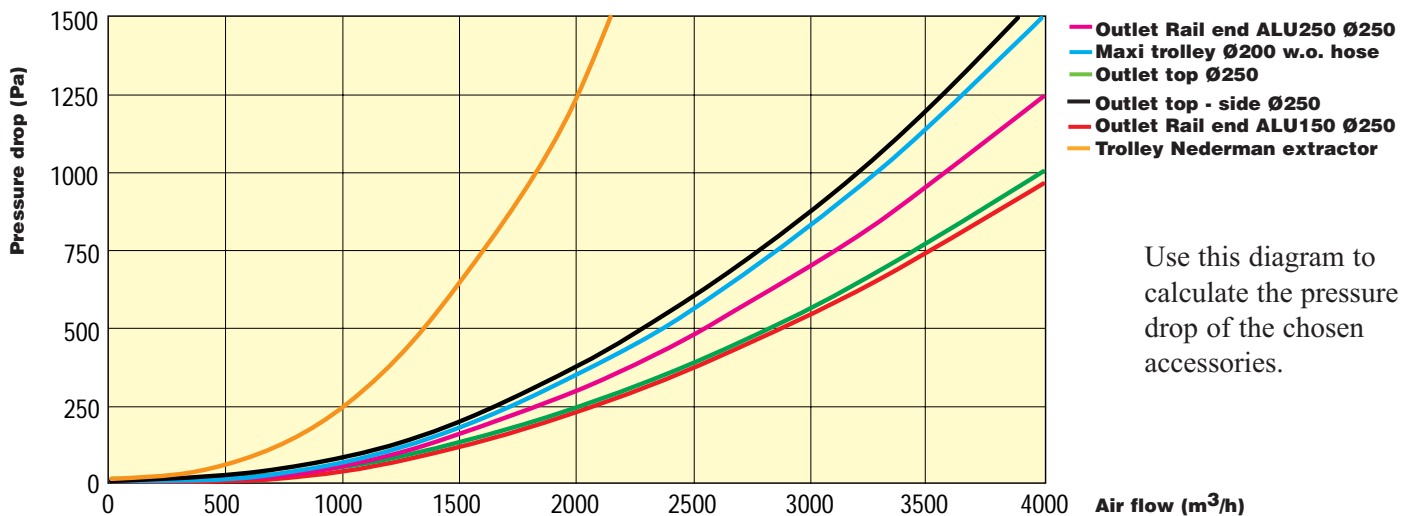
Use this diagram to calculate the pressure drop of the rail.

## Pressure drop - Trolleys



Use this diagram to calculate the pressure drop of the chosen extraction unit.

## Pressure drop - Accessories



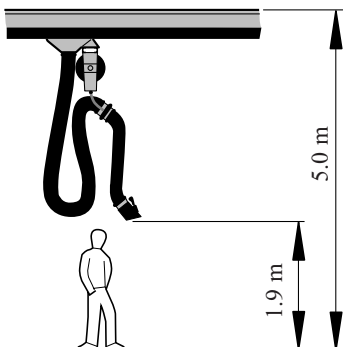
Use this diagram to calculate the pressure drop of the chosen accessories.

Recommended air flow for engines running at normal speed:  
 Private car: Ø100 mm hose 400 m³/h  
 LCV: Ø150 mm hose 1000 m³/h.  
 HCV: Ø150 mm hose 1000 – 1200 m³/h.

Please note that the pressure drop diagram only apply to the kit, extraction unit and connectors. To calculate the fan needed, you must include the pressure drop from the duct system as well.

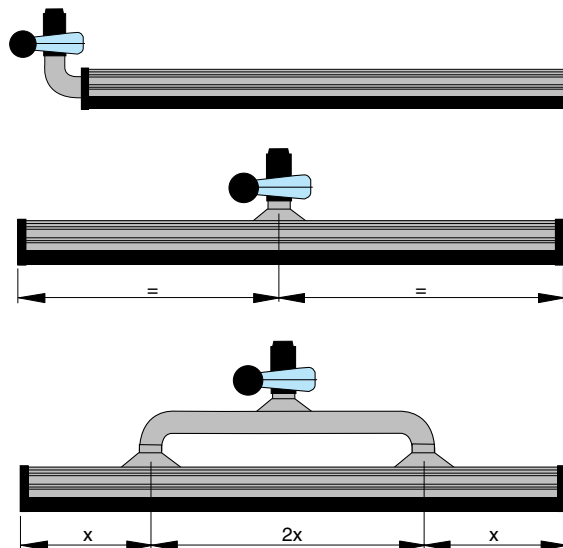
# ASSEMBLY

## RECOMMENDED HEIGHT FOR MOUNTING



## CONNECTION ALTERNATIVES

Depending on the length of rail and number of extraction units on the rail, there are different connection alternatives and suitable fans to choose. The fan should be placed outdoors to give negative pressure in all the indoor channels. The negative pressure should not exceed 2000 Pa. If this happens, the extraction trolley becomes sluggish.



- **Sound level:** The product, excluding fan, does not generate any sound
- **Recycling level:** For further information please contact your dealer
- **Energy consumption:** The product, excluding fan, does not consume any energy

**CE** This product is designed to meet the requirements of the relevant EC-directives and is labelled accordingly.

**Nederman**<sup>®</sup>  
Improving your workspace

Rights reserved for modification of design and measurements.

Manufacturer:  
**AB Ph. Nederman & Co**  
Sydhamnsgatan 2  
SE-252 28 Helsingborg, Sweden  
www.nederman.com

Tel.: Int. +46 42 18 87 00  
Fax: Int. +46 42 14 79 71  
E-mail: support@nederman.se  
Accredited to ISO 9001 and ISO 14001

The majority of Nederman's products are manufactured within ISO 9001 and ISO 14001-certified Quality- and Environmental system. For more detailed information please contact us.