

Exhaust Rail Alu 150/250 Straight

An advanced exhaust extraction system for vehicles in motion



1. Extraction trolley
2. Hose
3. Nozzle
4. Automatic disconnection
5. Balancer with built-in friction brake
6. Rail

ALU 150/250 is an advanced exhaust rail system for high frequency use, developed to meet the requirements from e.g. vehicle manufacturers and inspection centers. The ALU 150/ 250 offers a large number of features, such as automatic return of extraction units on a separate track (see ALU FLOWLINE), automatic disconnection of nozzles, and motorized hose hoists, make nozzle connection the only manual task. Combinations with automatic return in the suction rail can also be used in e.g. Heavy goods vehicle installations where only on vehicle is served at the time. NB! When using a straight rail solution one hydraulic limit stop (see accessories) must be attached in the end of the rail system.

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



Product range

Straight exhaust rail ALU 150 incl. suspension brackets	Part no.
Length 2.5 m	20900510
Length 5 m	20900610
Length 7.5 m	20900710
Length 10 m	20900810
Length 12.5 m	20900910
Length 15 m	20901010
Length 17.5 m	20901110
Length 20 m	20901210
Length 22.5 m	20901310
Length 25 m	20901410
Length 27.5 m	20901510
Length 30 m	20901610
Length 35 m	20901710
Length 40 m	20901810
Length 45 m	20901910
Length 50 m	20902010
<i>For lengths > 50 m, please contact your Nederman dealer.</i>	

Straight exhaust rail ALU 250 incl. suspension brackets	Part no.
Length 2.5 m	20910510
Length 5 m	20910610
Length 7.5 m	20910710
Length 10 m	20910810
Length 12.5 m	20910910
Length 15 m	20911010
Length 17.5 m	20911110
Length 20 m	20911210
Length 22.5 m	20911310
Length 25 m	20911410
Length 27.5 m	20911510
Length 30 m	20911610
Length 35 m	20911710
Length 40 m	20911810
Length 45 m	20911910
Length 50 m	20912010
<i>For lengths > 50 m, please contact your Nederman dealer.</i>	

Extraction unit, manual disconnection*

Vehicle	Hose dia, mm**	Hose length, mm	Nozzle included	Part No.
LCV / HCV	150	7.5	Rubber (20805961)	20902610

* Delivered with trolley, balancer, exhaust hose and nozzle.
 ** Hose type NR-CP

Extraction unit, automatic disconnection*

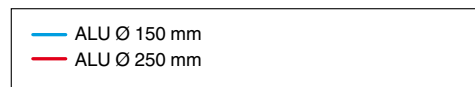
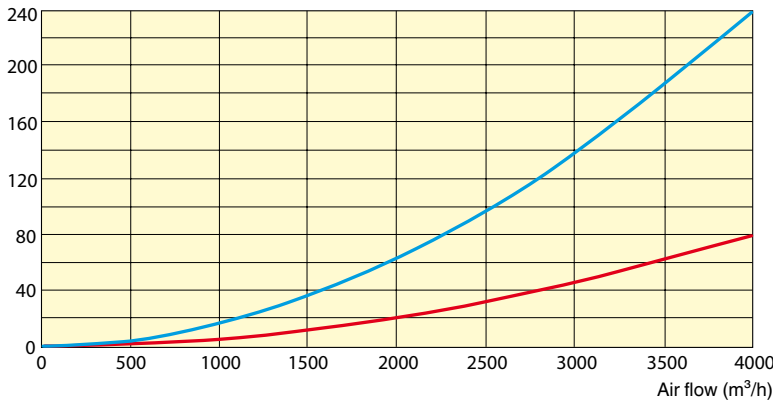
Vehicle	Hose dia, mm**	Hose length, mm	Nozzle included	Part No.
Car	100	5	Rubber (20806161)	20900310
LCV / HCV	150	5	Rubber (20806561)	20900410
LCV / HCV	150	7.5	Rubber (20806561)	20902710

* Delivered with trolley, balancer, exhaust hose and nozzle.
 ** Hose type NR-CP

Pressure drop in rails, trolleys and accessories

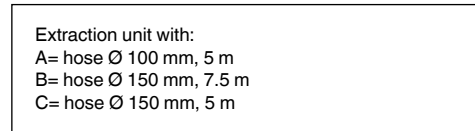
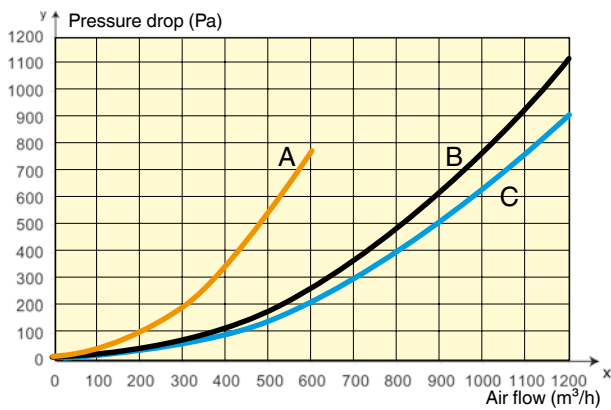
Pressure drop rail

Pressure drop (Pa)



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

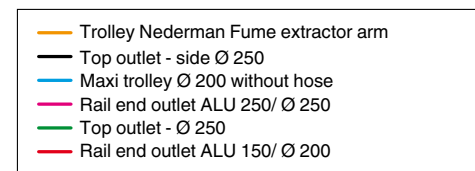
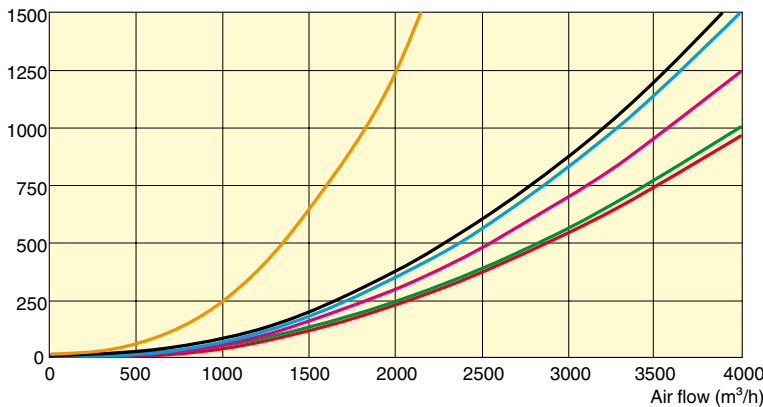
Pressure drop extraction units



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

Pressure drop accessories

Pressure drop (Pa)



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

Recommended air flow for engines running at normal speed:

Passenger car: Ø100 mm hose 400 m³/h (235 cfm)
 LCV: Ø150 mm hose 1000 m³/h (590 cfm)
 HCV: Ø150 mm hose 1000 - 1200 m³/h (590-700 cfm)

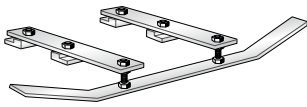
Please note that the pressure drop diagram only apply to the kit, extraction unit and connectors. To calculate the fan needed, you must include the pressure drop from the duct system as well.

Accessories

Accessories	Part no.
Automatic disconnection device ALU 150/250	20940810
Hydraulic limit stop for ALU150/250	20941410
Top outlet, vertical Ø 250 mm	20940410
Top outlet, side Ø 250 mm	20940510
End outlet ALU 150 Ø 200 mm	20940610
End outlet ALU 250 Ø 250 mm	20940710
Suspension bracket (5 pcs)	20940110
Wall bracket, length 0.6 m	20947510
Wall bracket, length 1.5 m	20947610
Additional stiffener for Rail ALU 150/250, 10 pcs	20941110
Extraction trolley Maxi, Ø 200 mm, for high flow applications, ~3000 m³/h	20940310
Extraction trolley for Nederman fume extractor	20940210

Automatic disconnection device ALU 150/250

Used together with the extraction unit with automatic disconnection. To be attached at disconnection point on rail.



Part no. 20940810

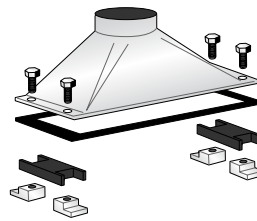
ALU hydraulic stop



Part no. 20941410

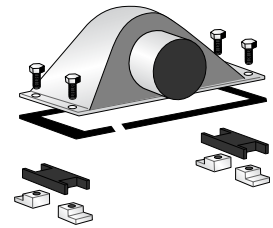
Fan connection cone

For connecting the rail to the fan.
Top outlet Ø 250 mm



Part no. 20940410

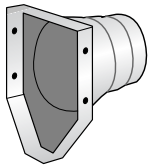
Top outlet side Ø 250 mm



Part no. 20940510

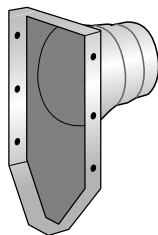
Rail end outlet

Rail end outlet Ø 200 mm for ALU 150



Part no. 20940610

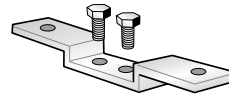
Rail end outlet Ø 250 mm for ALU 250



Part no. 20940710

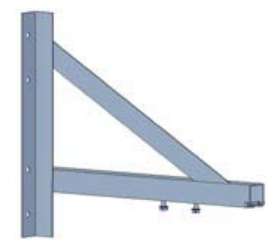
Suspension brackets

Maximum length between the suspension brackets is 4 m



Part no. 20940110

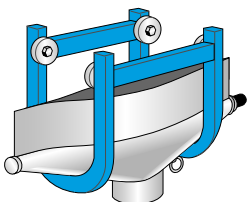
Wall bracket



Length 0.6 m: Part no. 20947510
Length 1.5 m: Part no. 20947610

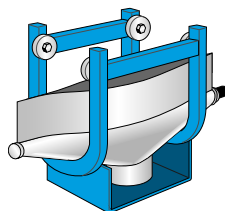
Trolleys

Maxi trolley, for high flow applications, 3000 m³/h



Part no. 20940310

Trolley for Nederman fume extractor



Part no. 20940210

Balancer support

for Maxi trolley



Part no. 20941210

Fan connection alternatives

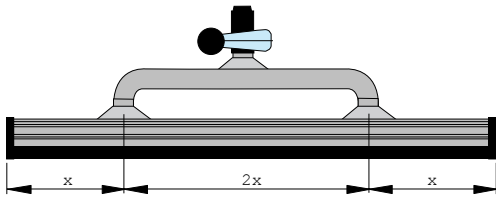
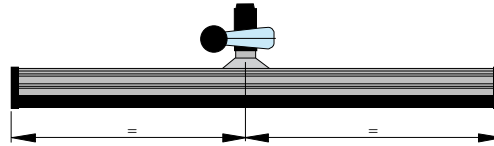
Depending on the length of rail and number of extraction units on the rail, there are different connection alternatives and suitable fans to choose.

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.

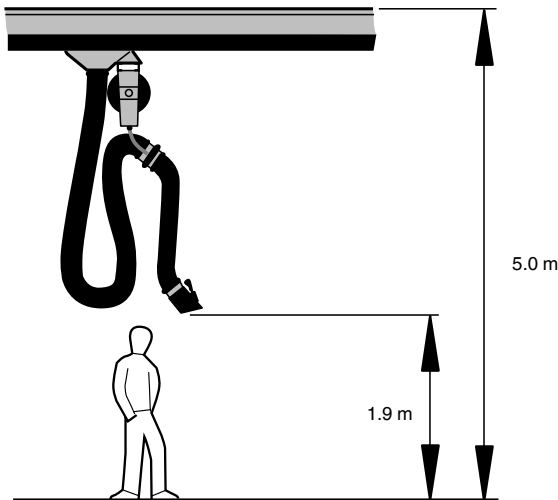
Dimensions



Exhaust rail



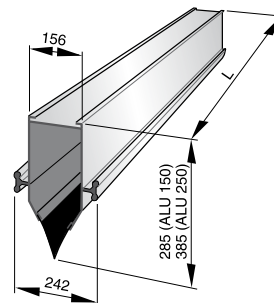
Recommended height for mounting



Straight exhaust rail

- Extraction volume up to 1200 m³/h (700 cfm) per extraction unit.
- Length of track: 2.5 m – 50 m (8.2 - 164 ft.).
- Cross sectional area: ALU 150=290 cm² (36 in²)
ALU 250=430 cm² (67 in²)
- Sealing lips material: EPDM rubber, delivered in coils according to track length.
- Inner end cover: Sheet metal, galvanised
- Weight: ALU 150=13.2 kg/m (9.7 lb/ft) incl. lip seals.
ALU 250=16 kg/m (11 lb/ft) incl. lip seals.
- Heat resistance: 150°C.
- The rail comes in lengths from 2.5 m to 50 m (8.2-164 ft.) (for lengths > 50 m (164 ft.), please contact your Nederman dealer), delivered in 5.0 m (16.4 ft.) and/or 2.5 m (8.2 ft.) sections.
Each delivery includes rubber lips, joint connectors, brackets, limit stops and end covers. Extension kits are available.

Rail profile dimension



Environmental data

Soundlevel	The product, excluding fan, does not generate any sound.
Recycling level	100 %.
Energy consumption	The product, excluding fan, does not consume any energy.