Technical leaflet	Date/rev
150021 0	2010-04-08

Exhaust Rail System 920

Pneumatic system for vehicles in motion

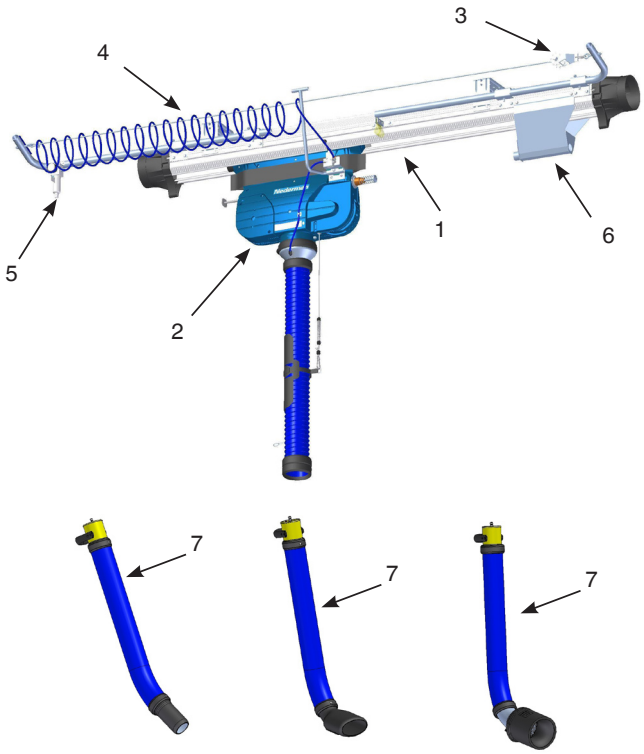
Pneumatic Rail System – PRS, is a fully automatic, exhaust extraction system for all types of vehicles. The system is based on a nozzle expanded by compressed air, fixing and sealing the nozzle tightly around the tail pipe.

PRS is supplied with a choice of different sized nozzles to fit the most common types of tail pipes. A quick coupler makes it easy to interchange the nozzle kits.

- For one vehicle per system
- Automatic disconnection of nozzle and safety devices

For drive-through vehicles

- Safety coupling in case of faulty operation
- Nozzles to suit all types of vehicles
- Grip for ergonomic handling



1. *Rail 920*
2. *Trolley and hose incl internal pneumatic hose and disconnection trigger*
3. *Wire kit*
4. *Pneumatic hose*
5. *Compressed Air filter*
6. *End Stop Complete*
7. *Nozzle kit*

Rail kit 920

Length, m	Part no.
5.0 / 16,4	916120
7.5 / 24.6	916220
10.0 / 32.8	916320
12.5 / 41.0	916420
15.0 / 49.2	916520
17.5 / 57.4	916620

Length, m	Part no.
20.0 / 65.6	916720
22.5 / 73.8	916820
25.0 / 82.0	916920
27.5 / 90.2	917020
30.0 / 98.4	917120
35.0 / 114.8	917220

For other rail lengths, please contact your local Nederman dealer

Main components (position)	Quantity	Part no.
Pneumatic suction unit 920/1500 VIM (2)	1	913820
Wire kit for pneumatic spiral hose (3)	1	912920
Pneumatic 8/6 spiral hose Ø150 L50 m (4)	1	912720
Compressed air filter * (5)	1	375252
End Stop Complete (6)	1	373836

Nozzle kit (7)				
Complete with Nozzle, Lower extraction hose, Lower integrated pneumatic air hose and Safety coupler				
Nozzle type	**Nozzle Ø mm /inch**	**Exhaust pipe Ø mm/inch**	**Length incl. hose m/ft**	**Part no.**
Circular	160 / 6.3	40-145 / 1.5- 5.9	1.0 / 3.2	867361
Internal	100/4	100-150 /4-6	1.0 / 3.2	867461
Oval	80 * 150	20-100 / 0.8-4	1.0 / 3.2	867561

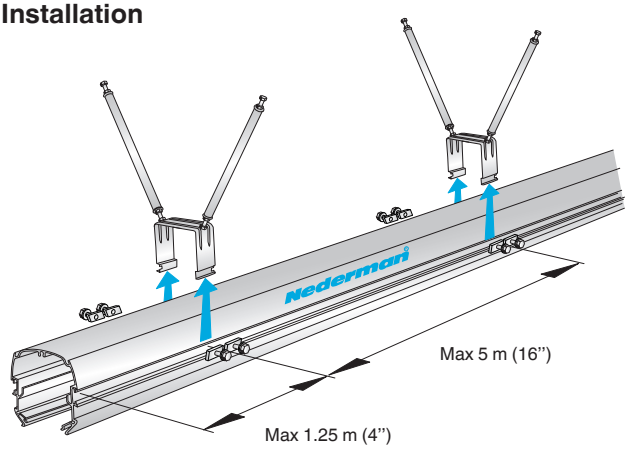
Accessories	Part no
Trolley return unit	801144

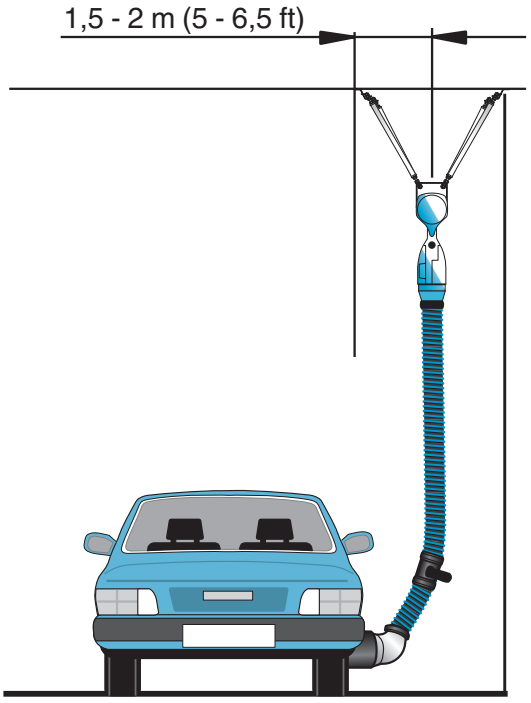
NB!

* Compressed air filter must be used acc. to DIN ISO 8573-1, class 5/5/4
For selection of Nederman fan and operational box, see separate brochure.
For North American part no., please contact Nederman Inc.

** Shock absorber is recommended for rail lengths 20 m / 66 ft or longer

Installation





* from the side of the garage opening

Length of rail, m	ft	Number of brackets
2.5 - 5.0	8.2 -16,4	2
7.5 - 10.0	24.6 - 32.8	3
12.5 -1 5.0	41.0 - 49.2	4
17.5 - 20.0	57.4 - 65.6	5
22.5 - 25.0	73.8 - 82.0	6
27.5 - 30.0	90.2 - 98.4	7
32.5 - 35.0	106.6 - 114.8	8

Technical specification

Exhaust rail	International
Material	Aluminium
Sealing lips	EPDM
Weight incl lips	6,8 kg/m, 29.1 lb/ft

Suction trolley with hose	International
Trolley	Glass-fibre composite
Hose	Rubber with steel helix, NR-B
Hose length	5 m, 16 ft 5 in
Hose diameter	100 mm, 4"
Hose suspension	rubber saddle
Temp. resitance	-40 to +150°C, -40 to +300°F
Total weight	17 kg, 33 lbs
Balancer lifting Force	150 N, 33,7 lbf

Suspension wire kit	International
Material	Steel/ PA
Lenght	35 m, 115 ft

Internal pneumatic air hose	International
Material, upper/lower	Teflon/PTFE
Length	5,6m, 18,4"
Temperature	+260°C, +500°F

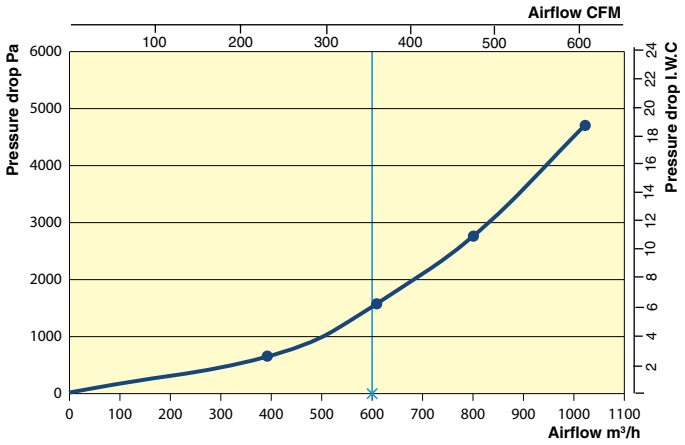
Filter regulator	
Supply pressure, max	6-8 bar (max 16 bar), 230 psi
System pressure	1 bar, 14.5 psi

Nozzle kit	Internal	Oval	Circular
Temp. Resistance	-40 to +150°C cont.		
Material Hose	Rubber with polyester helix, NR-CP		
Material Elbow	Chrome plated steel		
Hose Length	0,9 m		
Hose Dimension	Ø 100 mm		
Nozzle hood material	Rubber, internal Kevlar reinforced		
Weight complete nozzle kit	3,2kg/6,8lb	3,2kg/6,8lb	3,5kg/7,2lb

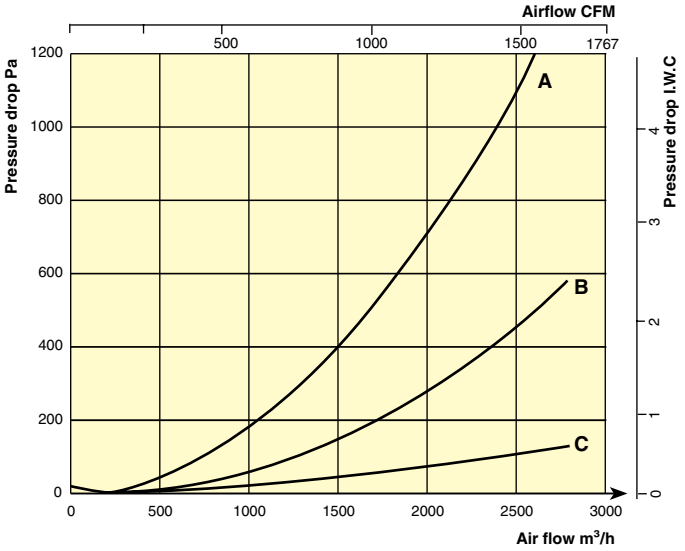
Safety coupler
Pneumatic valve. Composite handle for easy operation of hose. Manual switch for nozzle. Temperature +200°C / +392°F

Disconnection trigger		
Supply pressure	6 – 8 bar	87 – 116 psi
System pressure	1 bar	14.5 Psi

Pressure drop for complete suction unit



Pressure drop Rail 920

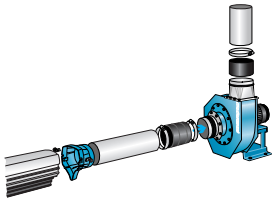


A= Top connection, Ø200 mm
B= Side connection, Ø160 mm
C= Rail 920, per metre (10 Pa/m ≈ 0.012 i.w.c /ft)

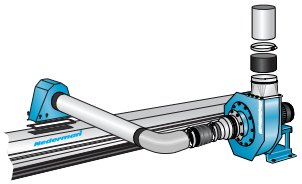
Environmental data

Recycling level	100 %

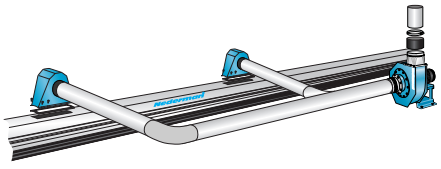
Fan connection alternatives



Side connection up to 1200 m³/h (707 cfm)
The end cover without lid can be used to connect the ducting to the fan. Connection Ø 160 mm (6,4 “) in sheet metal.



Top connection up to 2400 m³/h (1414 cfm)
A connection cone (accessory) is mounted on top of the rail. Connection Ø 200 mm (8”). A hole for the cone, size 85 x 450 mm (3.3” x 17.7”), must be made in the rail.



For more than 2400 m³/h (1414 cfm)
Top connection with two or more cones (option). Connection Ø 200 mm (8”).

KOMSA

KOMSA ITALIA s.r.l. - Via A. Moro, 18 - 40068 S. LAZZARO DI SAVENA (BO)
Tel. +39.051.625.55.33 +39. 051.625.60.61 Fax +39.051.625.51.88
Internet: www.komsa.it E-mail: info@komsa.it