Pneumatic Rail System (PRS)

Exhaust extraction system for emergency stations



Pneumatic Rail System – PRS, is a fully automatic, high capacity exhaust extraction system for up to 4 emergency vehicles per bay. 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 nozzles.

- Capacity up to 4 vehicles per system
- Normal exit speed up to 25 km/h, 15 mph
- For back-in or drive-through vehicles
- Safety coupling in case of faulty operation
- Nozzles to suit various types of vehicles

| Product name | Pneumatic Rail System (PRS) | |
|--------------|---|--|
| Installation | Indoor | |
| Note | Complete Nozzle kit (8) with Nozzle, Lower extraction hose, Lower integrated pneumatic air hose and Safety coupler (male 9b). | |

CE

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

Pneumatic Rail System (PRS)

| Image | Description | Diameter, hose (mm) | Hose length (m) | Model |
|-------|--|---------------------|-----------------|-----------|
| To | Pneumatic suction unit 920/1500 with NTP hose | 100 | 5 | 20913820 |
| T | Pneumatic suction unit 920/1500 | 100 | 5 | 20913920 |
| 1 | Pneumatic suction unit 920/1500 | 150 | 5 | 20918320 |
| | Nozzle kit for exhaust pipe ø 50 - 85 mm, Grip length 100 mm, with NR-CP hose | 100 | 1 | 20869061* |
| | Nozzle kit for exhaust pipe ø 70 - 125 mm, Grip length 120 mm, with NR-CP hose | 100 | 1 | 20869161* |
| | Nozzle kit for exhaust pipe ø 50 - 85 mm, Grip length 100 mm, with PUR hose | 100 | 1 | 20868061* |
| | Nozzle kit for exhaust pipe ø 70 - 125 mm, Grip length 120 mm, with PUR hose | 100 | 1 | 20868161* |

*Complete Nozzle kit (8) with Nozzle, Lower extraction hose, Lower integrated pneumatic air hose and Safety coupler (male 9b).



Pneumatic Rail System (PRS)

| | Accessory | Part No |
|----|------------------------------------|------------|
| | Top outlet Ø200 for 920 | 20374246 |
| | Radio transmitter vehicle GHz | 20376723 |
| | Radio Receiver GHz | 20376724 |
| | Handheld radio transmitter GHz | 20376725 |
| | compressed air filter aut. 0.1bar | 20375252* |
| 5 | Tail pipe stop 50-90mm/2-3.5" | 20375139 |
| 5. | Tail pipe stop 90-130mm/3.5-5" | 20375140 |
| 5 | Tail pipe stop 120-180mm/5,1-7,1" | 20375456 |
| | Trolley return unit 920/1500 | 20801144 |
| | Exhaust rail 920 L = 5.0 m (17′) | 20916120** |
| | Exhaust rail 920 L = 12.5 m (41′) | 20916420** |
| | Exhaust rail 920 L = 22.5 m (74′) | 20916820** |
| | Exhaust rail 920 L= 10.0 m (33′) | 20916320** |
| | Exhaust rail 920 L= 25.0 m (82′) | 20916920** |
| | Exhaust rail 920 L= 27.5 m (90′) | 20917020** |
| | Exhaust rail 920 L= 20.0 m (66′) | 20916720** |
| | Exhaust rail 920 L= 30.0 m (99′) | 20917120** |
| | Exhaust rail 920 L = 7.5 m (25´) | 20916220** |
| | Exhaust rail 920 L = 17.5 m (57′) | 20916620** |
| | Exhaust rail 920 L = 35.0 m (115′) | 20917220** |
| | Exhaust rail 920 L= 15.0 m (50′) | 20916520** |
| | End stop Complete | 20373836 |

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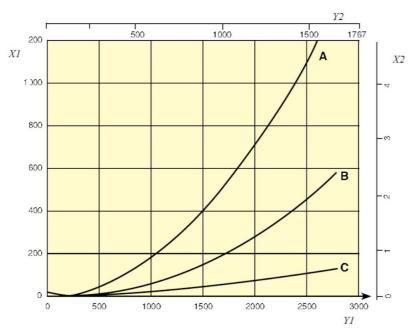
Pneumatic Rail System (PRS)

| Accessory | Part No |
|---|----------|
| Pneu. ø 8/6 spiral hose ø 150 lenght 50 m | 20912720 |
| Wire kit for pneum. spiral hose | 20912920 |

*Compressed air filter must be used acc. to DIN ISO 8573-1, class 5/5/4 **Complete with suspension parts, joint connectors, rubber seals, end covers and end stops.



Pneumatic Rail System (PRS)



Pressure drop 920 Rail

X1= Pressure, Pa

Y1 = Air flow, m3/h

X2 = Pressure, in. w.g.

Y2 = Airflow, CFM

A= Top connection, Ø200 mm

B= Side connection, Ø160 mm

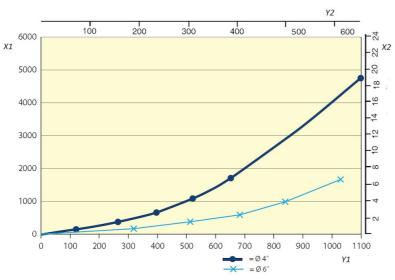
C= Rail 920, per metre (Pa/m)

Airflow recommendations:

Car: 400 - 600 m³/h (235 - 350 cfm)

Truck/Bus: 1000 - 1200 m³/h (590 - 700 cfm)

Pneumatic Rail System (PRS)



Pressure drop pneumatic suction unit North American versions

X1= Pressure, Pa

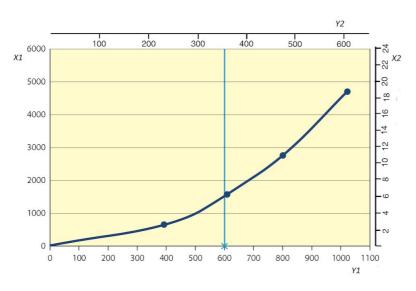
Y1 = Air flow, m3/h

X2 = Pressure, in. w.g.

Y2 = Airflow, CFM



Pneumatic Rail System (PRS)



Pressure drop pneumatic suction unit international version, ø 4"

X1= Pressure, Pa

Y1 = Air flow, m3/h

X2 = Pressure, in. w.g.

Y2 = Airflow, CFM