

# - Straight Rail System

## **TECHNICAL DATA**

## **Unit specification**

STR is used for vehicles utilizing drive through apparatus bays and for bays where 2-4 vehicles are standing behind each other.

#### Material:

Aluminium profile.

#### Installation:

On ceiling or wall.

#### Maintenance:

Normal wear, no maintenance required. See owner's manual.

#### **Properties**

- Auto-disconnect at the exit door.
- Speed absorbing shock system.
- Front and rear door release.
- The system allows for up to four vehicles to stand in line.
- Automatic start-stop of fan by pressure sensor.
- Adjustable mounting supports.
- Unique pneumatic exhaust pipe connector, "Grabber®"; for different sizes of exhaust pipe.
- safety disconnect coupling; fail safe system easy reconnectable.

Prod.no	Aluminium track length, m / ft	Low friction rubber seal	Coiled airline m / ft	Wire m / ft	Closed end stop	Rail splice	Duct connection
STR-9	8.8 / 28.8	18 m / 57.2 ft	10 / 32	10 / 32	1 pc	1 pc	1 pc
STR-12	11.6 / 38.0	24 m / 76.8 ft	16 / 51	16 / 51	1 pc	1 pc	1 pc
STR-15	14.6 / 47.8	30 m / 96.0 ft	16 / 51	16 / 51	1 pc	2 pcs	1 pc
STR-18	17.4 / 57.0	36 m / 115.2 ft	25 / 80	25 / 80	1 pc	2 pcs	2 pcs
STR-21	20.4 / 66.8	42 m / 134.4 ft	25 / 80	25 / 80	1 pc	3 pcs	2 pcs
STR-24	23.2 / 76.0	48 m / 153.6 ft	25 / 80	25 / 80	1 pc	3 pcs	3 pcs
STR-27	26.2 / 85.8	54 m / 172.8 ft	31 / 99	31 / 99	1 pc	4 pcs	3 pcs
STR-30	29.0 / 95.0	60 m / 192.0 ft	31 / 99	31 / 99	1 pc	4 pcs	3 pcs



**RR-5,8** Aluminium profile



**RRBC** Closed end stop

**STR-MZ**Coiled airline storage magazine.



**RRIBC**Round rail industrial end stop.

RRS

Rail splice



**CA-, W-,** Coiled airline and wire.



**RRRS-X**Low friction rubber seal



**RRDC-200**Duct connection



**RRCE-160**Duct connection end stop



## **PRESSURE LOSS**

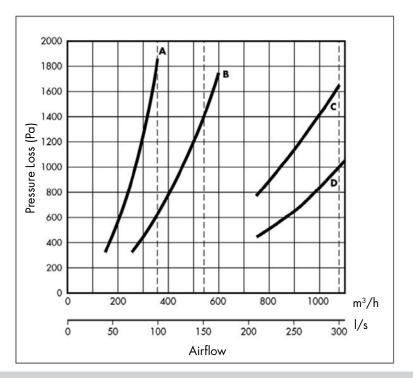
This diagram shows the pressure loss in crab and hose at different airflows and hose diameters.

A. Ø 75 mm / 3 inch
B. Ø 100 mm / 4 inch
C. Ø 125 mm / 5 inch
D. Ø 150 mm / 6 inch

#### Recommended airflows:

Chief and officer vehicle
Fire truck up to 10 l engine
Fire truck up to 16 l engine
Fire truck up to 24 l engine

360 m3/h ( 210 cfm)
720 m3/h ( 420 cfm)
1070 m3/h ( 630 cfm)
1800 m3/h ( 1060 cfm)



## **CRABS**

The crab is designed to travel in the STP profile and open the sealing lips at only the point where the exhaust crab is located at the time.

#### Automatic disconnect for Grabber® nozzles

Crab designed to work with a sealed type exhaust nozzle, which is disconnected automatically by a pneumatic uncoupling valve mounted on the crab assembly. Recommended for HPA-hose package and GVSA-Grabber® Vertical Stacker.

Prod.no	Hose connection
ICCA-100	Ø 100 mm/4"
ICCA-125	Ø 125 mm/5"
ICCA-150	Ø 150 mm/6"



## **HOSE PACKAGE**

The hose package consists of the following: exhaust hose with suspension halter, safety disconnect coupling and Grabber® nozzle.

Prod.no	Hose length	Hose connection	Grabber®
HPA-100-6-100	6 m / 19.7 ft	100 mm / 4"	100 mm / 4.0 "
HPA-100-6-120	6 m / 19.7 ft	100 mm / 4"	120 mm / 4.8"
HPA-100-6-160	6 m / 19.7 ft	100 mm / 4"	160 mm / 6.3"
HPA-125-6-160	6 m / 19.7 ft	125 mm / 5"	160 mm / 6.3"
HPA-100-10-120	10 m / 32.8 ft	100 mm / 4"	120 mm / 4.8"
HPA-100-10-160	10 m / 32.8 ft	100 mm / 4"	160 mm / 6.3"
HPA-160-10-160	10 m / 32.8 ft	160 mm / 6.3"	160 mm / 6.3"



## **SUSPENSIONS**

#### **Vertical Mounting Kit - MKV**

The suspension plate is adjustable for angled ceilings to adjust the pitch to vertical. Comes in sets to mount one support length. Maximum angle: 30°.

#### Horizontal Mounting Kit - MKH

The horizontal slide plate will allow adjustment away from or closer to the wall. Comes in sets for mounting one support suspension. Maximum angle: 30°.

#### Side Brace Kit

The side brace kit comes in three lengths: 500 mm/19.7", 750 mm/29.5" and 1800 mm/70.9". Each kit includes two braces and a clamp.

#### **Suspension Bracket Kit**

This is designed to mate with the mounting kits. It will slide the full length of the rail to line up with ceiling or wall beams.

#### Side Brace - SBK

The side brace comes in three length: 500 mm/19.7", 750 mm/29.5" and 1800 mm/70.9".

#### Side Brace Clamp Kit

This includes two aluminium brackets for one or two side braces.

#### SBT-SL

This is an aluminium profile, extremely strong but light-weight for easy mounting. The profile comes in 5.8 m/19 ft and is cut to fit your application. It is sold by the piece or in packs of 24 pcs for big jobs.



## **ACCESSORIES**

#### **Grabberstop**

Tail pipe adaptor and comes in the diameters from 75 mm - 150 mm / 3" - 6".

### PC-500

Pressure sensor for automatic exhaust fan start. A minimum of two sensors required per rail. To be used together with control unit, PCU-1000.

### PCU-1000

Automatic control unit for exhaust fan control. The exhaust fan can be manually controlled or automatically controlled by pressure sensor, PC-500.

#### ASE-12 E

Fully automatic, motorized damper, Ø 160 mm / 6.3", with built-in energy saver. Opens/closes in 10 - 15 seconds.

Adjustable delay 10 - 180 seconds.

See seperate data sheets.

#### **ECMSO**

Manual motorstarter with overload. 1 - 16 A, 230 - 690 VAC.



## PLYMIJVEN

PlymoVent Corp. 115 Melrich Road Cranbury, New Jersey 08512, USA Marley Way, Southam Road Tel. +1 (609) 395-3500 Banbury, OX16 2RA, England Fax. +1 (609) 655-0919 info@plymoventusa.com Year established: 1989

England PlymoVent Ltd Banbury, OX16 2RA, England Tel: +44 1295 25 93 11 Fax: +44 1295 27 17 50 info@plymovent.co.uk

PlymoVent Canada Inc. 24-1200 Aerowood Dr. Mississauga, ON L4W 257, Canada Tel: +1 (905) 564-4748 Fax: +1 (905) 564-4609 info@plymovent.ca

www.plymovent.com

## PlymoVent representative

