



**CITY OF WASHINGTON, ILLINOIS**  
**City Council Consent Agenda Communication**

**Meeting Date:** June 16, 2025

**Prepared By:** Dennis Carr, P.E. – City Engineer

**Agenda Item:** Approve Purchase Authorization – Fire Department Exhaust System

**Explanation:** The Fire Department requested quotes for the replacement of their Vehicle Exhaust System. The system is out of production and does not work anymore. They have attempted to get other companies to repair it, but have not been successful with finding anyone.

They requested quotes from three different firms. After viewing the setup, only two were able to quote both material and installation. The third requested the FD have their own HVAC contractor install it. Magnegrip and Plymovent were the two firms that put in quotes and both were within about \$3,000 of each other.

Plymovent - \$110,277.00

Magnegrip - \$113,113.00

**Fiscal Impact:** This is an unbudgeted expense, but staff feels we will be able to make the general fund be able to absorb it through projects coming in under budget.

**Recommendation Summary:** Staff recommends the approval to purchase and install the Plymovent System for \$110,277.00

**Action Requested:** Approval to purchase.



# Request For Proposal

## Diesel Exhaust Source Capture System

Washington Fire Department  
Adam Fuller

---

### Hastings Air Energy Control, Inc. – Corporate Headquarters

5555 S Westridge Drive, New Berlin, WI 53151 | p: 262.364.0500 | f: 262.364.0550 | [www.hastingsair.com](http://www.hastingsair.com)

#### Minnesota Office

3809 Chandler Drive NE  
Minneapolis, MN 55418

#### Michigan Office

32778 W 8 Mile Rd, Suite B  
Farmington, MI 48336

#### Illinois Office

28835 Herky Drive, Unit #115  
Lake Bluff, IL 60044

#### Ohio Office

4926 Logsdon Meadow Drive  
Liberty Township, OH 40511



**CAGE code:**  
1S358

**DUNS #:**  
023159494

**NAICS Code:**  
333413 811310  
334513 811210  
333992 541330

**SAM:**  
HASTINGS AIR-ENERGY  
CONTROL, INC.  
UE ID: ZM3QAKRU6YD3



# CAPABILITIES FIRE-RESCUE

## HASTINGS AIR ENERGY CONTROL

Provides effective solutions for fire and rescue stations with our vehicle exhaust removal systems. We are dedicated to achieving optimal fire station air quality by providing an exhaust removal system with user-friendly features, and design systems that fit the unique needs of each firehouse. Our systems reduce firefighter exposure to carcinogens and improve housekeeping.

## PRODUCTS

- Sliding Balancer Track System - SBT
- Straight Rail System- STR
- Vertical Straight Rail System - VSR
- Exhaust Hose Reels
- Portable Source Collection Systems
- Hoses and Nozzles
- Ambient Systems (GVAP)
- Portable Dust Collectors

## SERVICES

- Facility Assessment
- Engineering Studies
- Custom Designs
- Installation
- Service & Maintenance

## PAST PERFORMANCE

Our experts work closely with fire and rescue teams across the country to understand process ventilation requirements to provide high quality, comprehensive, reliable, and cost - effective systems for the removal of vehicle exhaust. Our systems are designed to meet or exceed health & safety standards that reduce firefighter exposures to carcinogenic contaminants. We are committed to educating our staff and customers on compliance with industry regulations and standards.

## GOVERNMENT

- US Navy
- US Air Force
- US Coast Guard
- Kratos Defense

## FIRE STATIONS

- Dearborn Heights
- Milwaukee
- Ann Arbor
- Salem OH
- Indianapolis
- Chicago

## REGULATORY

- OSHA
- NIOSH
- ACGIH
- NPPA
- AFG
- EPA

## DIFFERENTIATORS

Our real point of difference is the ability to collaborate with customers and partners, such as Plymovent, to provide custom solutions, suited to meet different application needs.

- Close relationships with top-tier vendors for reliable equipment
- Experienced Project Managers & Engineering team
- Documented quality control installation
- Experienced Service Team



**HASTINGS**  
air energy control, inc.

Hastings Air Energy Control, Inc. Corporate Headquarters  
5555 S. Westridge Drive New Berlin, Wisconsin 53151

Hsstingsair.com | 262-364-0500



**HASTINGS**  
air energy control, inc.  
*creating a cleaner workplace*

Prepared For: Adam Fuller  
Prepared by: Dean Havnen  
Date: 6/3/2025

## Proposal for Washington Fire Department - Plymovent Vehicle Exhaust Extraction System for (10) Apparatus Connections

---

### Hastings Core Focus:

Providing innovative solutions that create healthier lives for workers and energy savings for employers.



Engineered Solutions  
Down & Backdraft Tables  
Vehicle Exhaust Systems  
Replacement Filters & Parts

Dust / Wet Collectors  
Air Filtration Products  
Ventilation Equipment  
Industrial Vacuum Systems

Automation & Energy Controls  
Remote Monitoring Access  
Installation & Service  
Industrial Flex Hose

**Experience + Service = Results**

---



**HASTINGS®**  
air energy control, inc.  
*creating a cleaner workplace*

P: 800.236.8450 / 262.364.0500  
F: 800.260.9199 / 262.364.0550  
hastingsair.com

Proudly Serving our Customers Nationally and throughout North America

**Bill To:**

Washington Fire Dept  
200 North Wilmore Road

Washington, IL 61571

**Ship To:**

Washington Fire Dept  
200 North Wilmore Road

Washington, IL 61571

Date: 6/3/2025

Salesperson: Dean Havnen

Quote: QUO-40411-Y0S8M1

Expires: 12/3/2025

### Quote Per Request

The proposal includes the design, manufacture and installation of a vehicle exhaust extraction system which allows ten (10) vehicles with under carriage exhaust to be connected.

Base price is for a single blower option.

Adder for (2) blowers to create (2) separate systems noted below.

### Scope

System includes:

- (10) 30ft track systems complete
- All support hardware & bracing
- (1) 10hp exhaust fan complete with silencer & back-draft damper.
- (1) Control panel and low voltage control sensors for system activation
- Demo of the existing system
- All mechanical installation and electrical line voltage wiring included.

System warranty is 5 YEARS PARTS and LABOR on all system components and 10 YEAR on all aluminum extrusions.

### Owner Responsibilities

Tailpipe modifications of the apparatus for the mounting of the conical tailpipe adapters to be provided by owner/ others.

Part #	Description	Qty
VE-SBTA-30TP	SBTA-30 Track pack. Includes: Track, endstops, splices, Joiner Plates, Security Bolts, Tape, Labels	10.0
VE-SBTA-MG-UH304	SBTA UPPER HOSE PACK - MAGNETIC GRABBER. 4" ST HOSEPACK FOR 30' TRACK INCLUDES: UPPER HOSE, RISER BRACKET, HOSE CLAMPS, METAL SADDLE, TROLLEY & BALANCER.	10.0
VE-XX-MH410	SBTA. STRA. VSRX MID HOSE PACK 4" ST HOSE X 10' INCLUDES HOSE & CLAMPS	10.0





**HASTINGS®**  
air energy control, inc.  
*creating a cleaner workplace*

P: 800.236.8450 / 262.364.0500  
F: 800.260.9199 / 262.364.0550  
hastingsair.com

Proudly Serving our Customers Nationally and throughout North America

VE-SBTA-MG-LH54HTBA	SBT LOWER HOSE PACK - MAGNETIC GRABBER (MG) BLACKARMOUR (BA) 5", HIGH TEMP (HT) HOSE 4", SAFETY DISCONNECT HANDLE (SDCH) LOWER ASSEMBLY, SBTA	10.0
FAN-086N	TEV Fan, 10 Hp, 3450 Rpm, 208-230/460V, 3Ph, 60Hz, Tefc Motor. Upblast vertical discharge configuration	1.0
ADAP-037	Rectangular To Round (16" Dia Male Fitting) Transition For Tev 7 Series Fans	1.0
DAMP-046A	Damper - Backdraft - 12"	1.0
SIL-12A	Silencer - 12" - 12x16x36	1.0
DAMP-068	Damper, Backdraft, 4" BDD/One per drop	10.0
VE-CP-040	Control operation system for 10HP-208V-240V 3PH 26 AMP	1.0
ADAP-126TG	Topgrade stainless steel tailpipe adapter (TPA) 6", for Magnetic Grabber (MG) 5"	10.0
SEN-002	Engine Pressure Sensor Assembly w/ear clips	10.0
VE-LEG-LP1	Sq Alumn Leg Tube, 1.2" Sq. X 16' Long, Extruded Alumn, Field Cut To Req'D Length	15.0
VE-LEG-MKF	Vertical Leg Mount Kit	30.0
VE-WRK-R08	Wireless Receiver w/3 relays, 2400 MHZ with enclosure.	1.0
VE-WRK-T09	Transmitter, Remote, 2.4 GHZ w/spade lugs	10.0
VE-WRK-T10	Transmitter, remote, Dual Ignition, 2400 MHZ wired.	10.0
INST-M	Mechanical installation to include: mounting & bracing of the equipment, all exhaust ducting, mounting of the exhaust fan & control panel and all control wiring.	1.0
INST-E	Electrical line voltage wiring of (1) 10hp exhaust fan & (1) control panel.	1.0
PD	Per Diem	1.0
FRT	Freight	1.0
LIFT	Lift Usage Charges	1.0

**Total Base Price: \$101,221.00**

**Total for (2) Blower System: \$110,277.00**



**HASTINGS®**  
air energy control, inc.  
*creating a cleaner workplace*

P: 800.236.8450 / 262.364.0500  
F: 800.260.9199 / 262.364.0550  
hastingsair.com

Proudly Serving our Customers Nationally and throughout North America

**Bill To:**

Washington Fire Dept  
200 North Wilmore Road

Washington, IL 61571

**Ship To:**

Washington Fire Dept  
200 North Wilmore Road

Washington, IL 61571

Date: 6/3/2025

Salesperson: Dean Havnen

Quote: QUO-40411-Y0S8M1

Expires: 12/3/2025

NOTE: Shipping and Tax are NOT INCLUDED.

I have read the terms page, a single, separate page from the pricing,  
and I accept the terms and conditions of this quotation.

Signed: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Terms:

\_\_\_\_\_ Prepay - 3% Discount:  
\_\_\_\_\_ Net 30 Days from Shipment  
\_\_\_\_\_ Visa/Mastercard/Discover

Purchase Order # \_\_\_\_\_

***Thank you for considering Hastings.***

***Please remit to:***

**Hastings Air-Energy Control, Inc.  
5555 S. Westridge Drive  
New Berlin, WI 53151-7900**

**TERMS:**

Freight for equipment is FOB destination. Hastings will deliver with our truck. Future parts or filter orders will ship prepaid and add.

Normal delivery is 10 to 12 weeks after receipt of confirming purchase order or prepayment check.

Warranty is per manufacturer specifications. Contact representative for more details.

Payment terms are 3% discount for 100% prepayment with the order, or 40% with order net 30 from date of start up. Payment terms discount (3%) does not apply if the payment is made with a credit card. A 1½% per month finance charge will be assessed on all invoice balances outstanding past 30 days.

For credit card payments over 5,000.00 dollars, a 3% service charge will be added. If multiple payments are made to an order, the 3% service charge will not be avoided when the total credit card payments to the order exceed 5,000.00 dollars.

Price does not include sales tax and any applicable tariffs, duties, taxes, or other fees imposed by customs or other authorities in connection with the importation of the goods are the sole responsibility of the customer. This quote does not include payment or reimbursement for such tariffs, duties, or taxes. Failure to pay such fees in a timely manner may result in delays, additional charges, and other penalties, for which Hastings will not be held liable. Please provide municipality's tax exemption certificate.

**BACK IN**  
SYSTEMS



**PLYMVENT®**  
Exhaust Removal Systems





## BACK IN SYSTEMS

*The Sliding Balancer Track System (SBT) has set the standard in vehicle emissions control for fire and emergency response vehicles around the world.*

The PlymoVent® SBT system is the preferred system for back-in and drive through apparatus bays, and is designed to connect to any motor vehicle tailpipe while capturing virtually 100% of the exhaust emissions. Plus, it's a fully automatic system, including fan activation and system disconnect from the exiting vehicle. All that is required is a one-step connection to the vehicle's tailpipe as it enters the station. If you are looking for an exhaust removal system that you can connect at the door and have it automatically disconnect when you leave, the SBT is right for your application.

### KEY SBT SYSTEM ADVANTAGES:

- ❑ Models handle up to 60-foot deep back-in bays
- ❑ Auto-disconnect at the exit door
- ❑ Attach the Grabber® from the vertical position
- ❑ No minimum or maximum exit speed
- ❑ Aluminum track: light-weight and strong
- ❑ End stops with rubber shock absorbers take up kinetic energy from trolleys
- ❑ Adjustable release points depending on the exit speed of the vehicle
- ❑ Pre-fitted yellow/black extraction hose
- ❑ Virtually 100% source capture through a unique automatic Grabber nozzle; available to fit all emergency response vehicle tailpipe sizes
- ❑ Automatic start-stop of fan by an exhaust sensor
- ❑ Safety disconnect coupling; fail safe system, easily re-connectable
- ❑ Suitable for existing fire stations and new design-built stations

# PLYMOVENT®

Exhaust Removal Systems

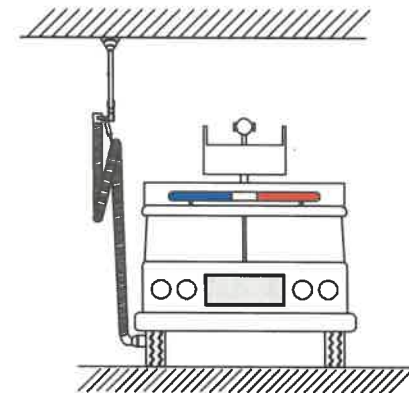
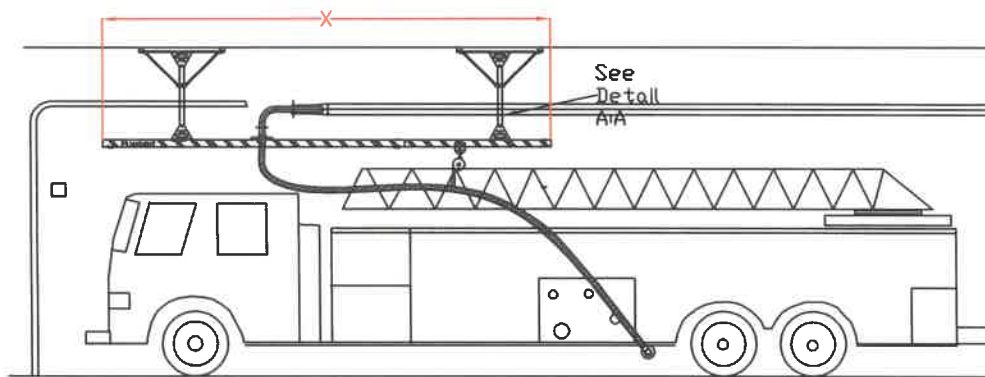
### PlymoVent North America:

**USA:** 115 Melrich Road, Cranbury, NJ 08512  
(P) 800.644.0911 ■ (P) 609.395.3500 ■ (F) 609.655.0569

**Canada:** 24-1200 Aerowood Drive, Mississauga, ON L4W 2S7  
(P) 800.465.0327 ■ (P) 905.564.4748 ■ (F) 905.564.4609

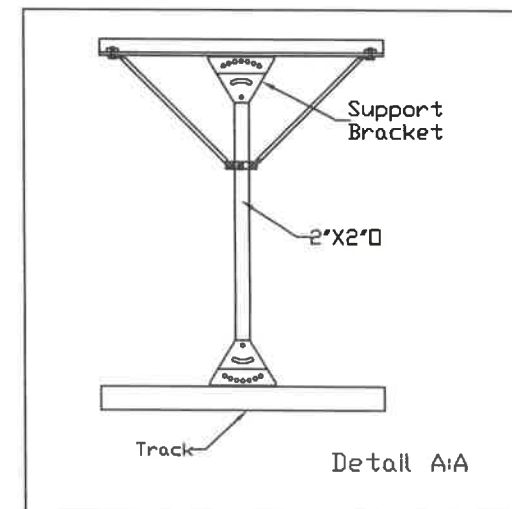
[www.plymoventfire.com](http://www.plymoventfire.com)

©2008 PlymoVent®. PlymoVent® and Grabber® are registered trademarks of PlymoVent.



System Specifications

Type*	Length (x)	Number of legs**	Weight(lbs)	Maximum Reach Based On Track Mounting Height Of:			
				12' High 5' From Door	13' High 6' From Door	14' High 7' From Door	Qty.
SBTA 21 B	19'	2	70	25'	26'	27'	10
SBTA 31 B	28.5'	3	100	34.5'	35.5'	36.5'	
SBTA 42 B	38'	4	158	44'	45'	46'	
SBTA 52 B	47.5'	5	177	53.5'	54.5'	55.5'	
SBTA 62 B	57'	6	191	63'	64'	65'	
Type*	Length (x)	Number of legs**	Weight(lbs)	Apparatus Bay Maximum Length Based On Track Mounting Height Of:			
				12' High 5' From Door	13' High 6' From Door	14' High 7' From Door	Qty.
SBTA 41 D	38'	4	120	46'	48'	50'	
SBTA 42 D	38'	4	158	46'	48'	50'	
SBTA 51 D	47.5'	5	139	55.5'	57.5'	59.5'	
SBTA 52 D	47.5'	5	177	55.5'	57.5'	59.5'	
SBTA 61 D	57'	6	153	65'	67'	69'	
SBTA 62 D	57'	6	191	65'	67'	69'	



Notes:

1. System support method: See Detail A/A
2. System location: See Table
3. System Temperature resistance:  
400°F continuous/500°F Intermittent
4. Rail material: Aluminum

\*B=Back In system  
D=Drive Thru system

\*\*Approximately one leg is needed for every 10' of length (x)

Disclaimer: The intended use of this drawing is to provide general equipment dimensions. The information provided is confidential and proprietary to Plymovent NA and is not to be recreated, modified and/or otherwise distributed without written consent of Plymovent NA. There are no expressed or implied warranties concerning the accuracy, completeness, reliability, or usability of this information. Use of this or any Plymovent NA drawing, for purposes other than its intended use is unlawful and actions may be taken against the violating party(ies).

Job name:

DWG BY: JP

Revision: 1

Rev. date: 2/27/09

Engineer:

**PLYMOVENT NORTH AMERICA**  
115 MELRICHD ROAD CRANBURY N.J.  
TEL: (609)395-3500 FAX:(609)655-0919  
WWW.PLYMOVENT.COM

Customer:

SBTA

## TEV (60Hz)

### TEV-359/3110/559/585/745/768

The TEV is a central extraction fan that is equipped with a lightweight aluminium impeller, making it suited to exhaust gases, volatile fumes and dust. Matched inlet and outlet areas, together with optimized impellers, ensure even airflow, high capacity and low noise level.

The fan is intended and designed for mounting filter units and vehicle exhaust extraction systems. The fan is rated for outdoor use.

#### APPLICATIONS

The TEV fans are intended to be used for the following applications:

- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding
- vehicle exhaust extraction systems



Do **not** use the TEV fans for the following applications or in the following circumstances:

- aluminium laser cutting
- extraction of aggressive fumes and gases (e.g. from acids, alkaline or soldering paste containing lithium)
- extraction of hot gases exceeding 176°F (80°C) continuously
- grinding aluminium and magnesium
- flame spraying
- extraction of cement, saw dust, wood dust, etc.
- explosive environments or explosive substances/gases



#### SPECIFICATIONS

##### Physical dimensions and properties

Material:	<ul style="list-style-type: none"> <li>• impeller</li> <li>• housing</li> </ul>	<ul style="list-style-type: none"> <li>• aluminum</li> <li>• powder coated galvanized sheet metal</li> </ul>
-----------	---	--

Color housing	basalt gray (RAL 7011)
---------------	------------------------

Motor design	NEMA
--------------	------

Fan type	centrifugal, up blast
----------	-----------------------

Impeller	backward inclined
----------	-------------------

Discharge position	90° rotatable
--------------------	---------------

Design conditions	68°F (20°C) at sea level
-------------------	--------------------------

Max. airflow temperature	176°F (80°C) continuously
--------------------------	---------------------------

##### Performance

Max. starts/stops per hour	20 (1ph); 30 (3ph)
----------------------------	--------------------

##### Ambient conditions

Operating temperature:	<ul style="list-style-type: none"> <li>• min.</li> <li>• nom.</li> <li>• max.</li> </ul>	<ul style="list-style-type: none"> <li>• -4°F (-20°C)</li> <li>• 68°F (20°C)</li> <li>• 176°F (80°C)</li> </ul>
------------------------	--	---

Max. relative humidity	80%
------------------------	-----

Storage conditions	<ul style="list-style-type: none"> <li>• -4 to 176°F (-20 to 80°C)</li> <li>• relative humidity max. 80%</li> </ul>
--------------------	---



#### Options and accessories

##### Outlet transition from rectangular to round

• TOL-250	• TEV-359/3110
• TOL-315	• TEV-559/585
• TOL-400/500	• TEV-745/768

##### Soft connection for noise and vibration free connection to duct (to be installed with inlet and outlet transition TOL)

• SC-200	• TEV-359/3110 (inlet)
• SC-250	• TEV-359/3110 (outlet)
	• TEV-559/585 (inlet)
• SC-315	• TEV-559/585 (outlet)
	• TEV-745/768 (inlet)
• SC-400	• TEV-746/768 (outlet)

##### Vibration dampers to isolate noise and vibration

• TEV-AV/35	• TEV-359/3110/559/585
• TEV-AV/79	• TEV-745/768

##### Set consisting of TOL, 2 x SC and TEV-AV (not available in North America)

• TEV-KIT/3	• TEV-359/3110
• TEV-KIT/5	• TEV-559/585
• TEV-KIT/7	• TEV-745/768

#### Scope of supply

Extraction fan

#### Shipping data

Number/package	1
----------------	---

#### APPROVALS/CERTIFICATES

	Compliance with CE directives
	Directive 2011/65/EC (RoHS) valid as of 8 June 2011
	Plymovent certifies that the products shown herein are licensed to bear the AMCA Seal. The ratings shown comply with the requirements of the AMCA Certified Ratings Program. Plymovent are rated AMCA type B
	Certified motor
	Certified motor



# ARTICLE NUMBERS, WEIGHTS AND PACKING DIMENSIONS

Fan type	Connection voltage	Article number	Weight		Packing dimensions
			Net lbs (kg)	Gross* lbs (kg)	
<b>TEV-359</b>	115/208-230V/1ph/60Hz	0000102927	114.6 (52)	142 (64,4)	31.5 x 39.4 x 31.5 in. (80 x 100 x 80 cm)
	208-230/460V/3ph/60Hz	0000102928	105.8 (48)	135.6 (61,5)	31.5 x 39.4 x 31.5 in. (80 x 100 x 80 cm)
	575V/3ph/60Hz	0000102929	117.9 (53,5)	147.7 (67)	33.5 x 29.5 x 31.5 in. (85.1 x 74,9 x 80 cm)
<b>TEV-3110</b>	208-230/460V/1ph/60Hz	0000102930	120.2 (54,5)	134.5 (61)	31.5 x 39.4 x 31.5 in. (80 x 100 x 80 cm)
	208-230/460V/3ph/60Hz	0000102931	117.9 (53,5)	137.8 (62,5)	25.6 x 32.3 x 31.1 in. (65 x 82 x 79 cm)
	575V/3ph/60Hz	0000102932	116.4 (52,8)	140 (63,5)	33.5 x 29.5 x 31.5 in. (81,5 x 75 x 80 cm)
<b>TEV-559</b>	208-230/460V/1ph/60Hz	0000102933	214.7 (97,4)	238.1 (108)	31.5 x 39.4 x 37.8 in. (80 x 100 x 96 cm)
	208-230/460V/3ph/60Hz	0000102934	206.3 (93,6)	221.6 (100,5)	31.5 x 39.4 x 37.4 in. (80 x 100 x 95 cm)
	575V/3ph/60Hz	0000102935	218.3 (99)	244.3 (110,8)	33.5 x 29.5 x 37.4 in. (81,5 x 75 x 95 cm)
<b>TEV-585</b>	208-230/460V/1ph/60Hz	0000102936	207 (94)	237.0 (107,5)	31.5 x 39.4 x 37.8 in. (80 x 100 x 96 cm)
	208-230/460V/3ph/60Hz	0000102937	203.9 (92,5)	223.8 (101,5)	25.6 x 32.3 x 37.4 in. (65 x 82 x 95 cm)
	575V/3ph/60Hz	0000102938	192.9 (87,5)	222.7 (101)	33.5 x 29.5 x 37.4 in. (81,5 x 75 x 95 cm)
<b>TEV-745</b>	208-230/460V/1ph/60Hz	0000102939	330.7 (150)	363.8 (165)	31.5 x 47.2 x 49.2 in. (80 x 119,2 x 125 cm)
	208-230/460V/3ph/60Hz	0000102940	328.4 (149)	377.0 (171)	31.9 x 47.2 x 44.9 in. (81 x 119,2 x 114 cm)
	575V/3ph/60Hz	0000102941	339 (147)	353.8 (160,5)	31.9 x 47.2 x 49.2 in. (81 x 119,2 x 125 cm)
<b>TEV-768</b>	208-230/460V/3ph/60Hz	0000102942	392.1 (177,9)	442.0 (200,5)	31.9 x 47.2 x 49.2 in. (81 x 119,2 x 125 cm)
	575V/3ph/60Hz	0000102943	392.1 (177,9)	442.0 (200,5)	31.9 x 47.2 x 49.2 in. (81 x 119,2 x 125 cm)

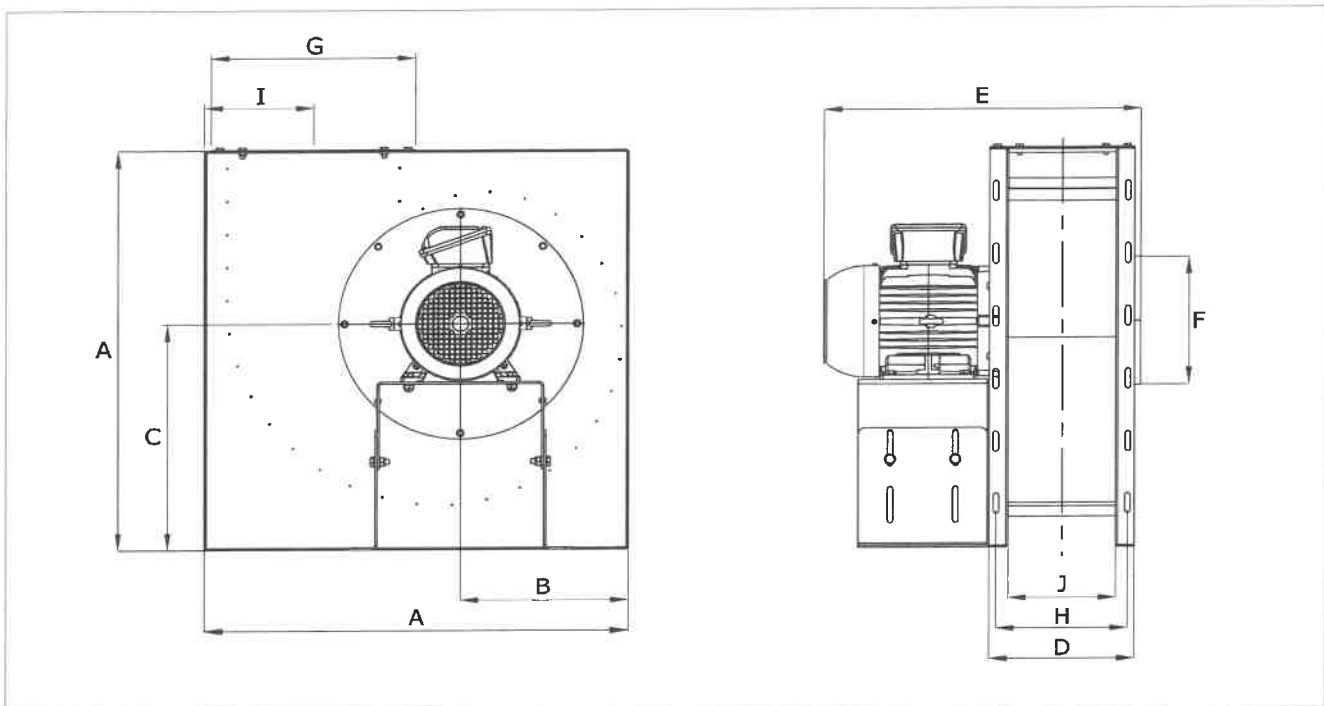
\*Gross weight = includes packaging



TEV fans are enclosed in a cardboard box and bolted, as well as metal strapped, to a wooden skid.

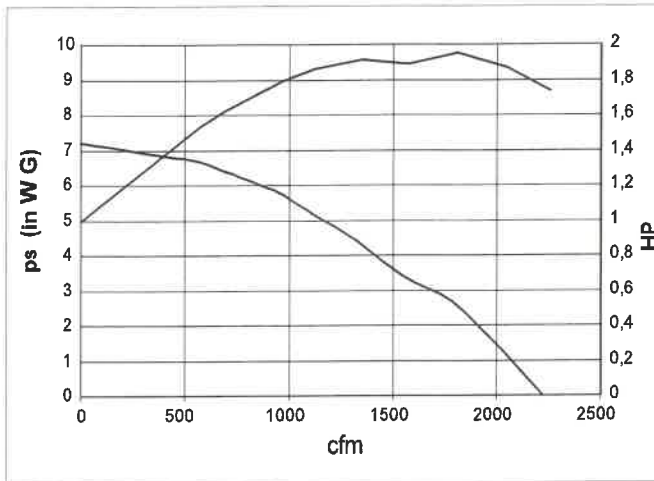


## DIMENSIONS

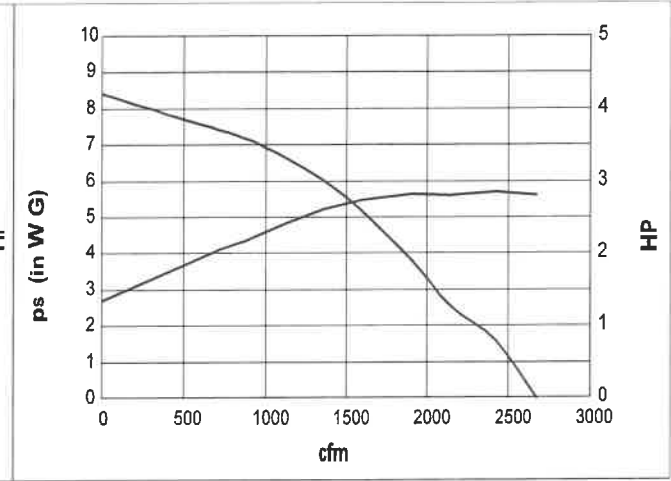


		TEV-359   TEV-3110		TEV-559   TEV-585		TEV-745   TEV-768	
		in.	mm	in.	mm	in.	mm
A		25.2	640	30.9	785	38.6	980
B		10.5	267	12.2	310	15.8	402
C		14.0	355	17.5	444	23.7	603
D		9.1	230	10.6	270	11.4	290
E	1~ motor	20.6	524	26.8	681	27.0	686
	3~ motor	19.4	494	26.7	678	27.1	688
F		Ø 7.9	Ø 200	Ø 9.8	Ø 250	Ø 12.4	Ø 315
G		12.3	312	15.0	380	18.1	460
H		8.0	204	9.6	244	10.4	264
I		6.4	163	8.0	202	9.5	242
J		6.3	160	7.9	200	8.7	220

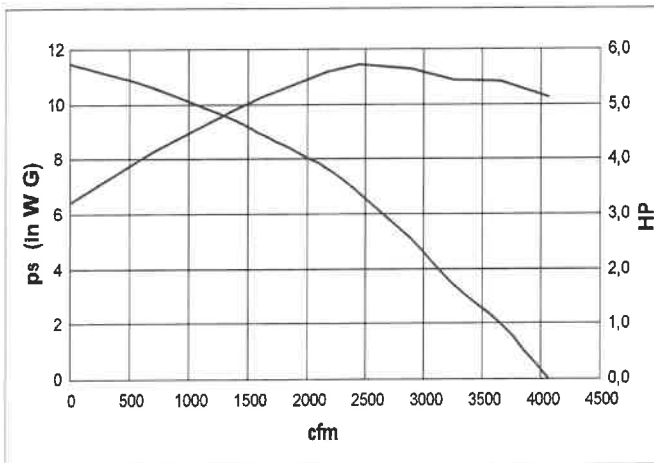
## PRESSURE DROP



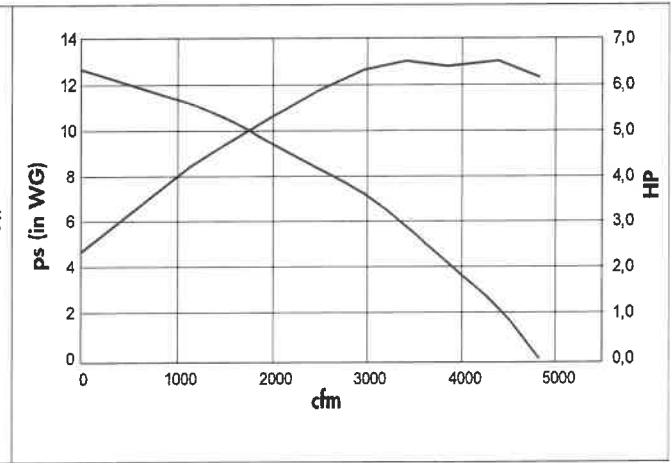
TEV-359



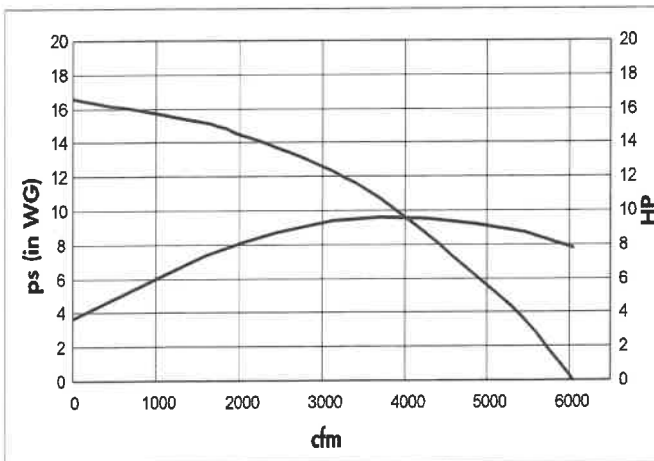
TEV-3110



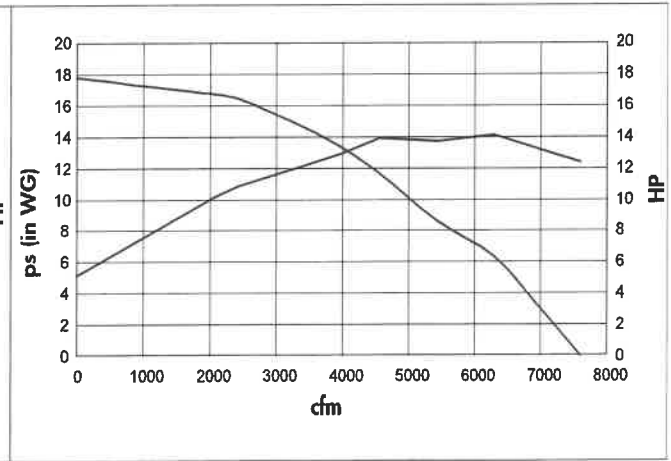
TEV-559



TEV-585



TEV-745



TEV-768

**MOTOR SPECIFICATIONS TEV-359 | TEV-3110 | TEV-559**

	TEV-359			TEV-3110			TEV-559		
Power	<b>2 HP (1,5 kW)</b>			<b>3 HP (2,2 kW)</b>			<b>5 HP (3,7 kW)</b>		
Energy efficiency (NEMA)	<b>premium</b>			<b>premium</b>			<b>premium</b>		
Rated voltage	<b>115/208-230V</b>	<b>208-230/460V</b>	<b>575V</b>	<b>208-230</b>	<b>208-230/460V</b>	<b>575V</b>	<b>208-230</b>	<b>208-230/460V</b>	<b>575V</b>
No. of phases	<b>1ph</b>	<b>3ph</b>	<b>3ph</b>	<b>1ph</b>	<b>3ph</b>	<b>3ph</b>	<b>1ph</b>	<b>3ph</b>	<b>3ph</b>
Frequency	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>
Frame	56C	56C	56C	145T	145T	56C	184TC	184TC	184TC
Poles	2	2	2	2	2	2	2	2	2
Rated speed	3450 rpm	3480 rpm	3600 rpm	3490 rpm	3460 rpm	3480 rpm	3500 rpm	3515 rpm	3485 rpm
Slip	Not Listed	Not Listed	3.47%	Not Listed	Not Listed	3.33%	Not Listed	Not Listed	3.19%
Rated current	20/11.4-10 A	5.2-4.8/2.4 A	3.10 A	14.38-13 A	8.8-8/4 A	3.01 A	21.89-19.8 A	13.26-12/6 A	4.72 A
L. R. Amperes	64.40 A	26.00 A @460V	16.1 A	100 A @230V	41 A @460V	25.6 A	153 A @230V	47 A @230V	35.9 A
II/In	Not Listed	Not Listed	Not Listed	7.0 Code J	8.1 Code J	8.1 Code J	7.8 Code J	7.5 Code H	7.5 Code H
No load current	94.5 A @230V	.95 A @460V	0.829 A	4.93 @230V	1.90 A @460V	1.12 A	8.00/4.00 A	4.40/2.20 A	1.76 A
Rated torque	3.00 ft-lbs (4.07 Nm)	3.02 ft-lbs (4.09 Nm)	3.02 ft-lbs (4.09 Nm)	4.5 ft-lbs (6.10 Nm)	4.55 ft-lbs (6.17 Nm)	4.55 ft-lbs (6.17 Nm)	7.52 ft-lbs (10.2 Nm)	7.52 ft-lbs (10.2 Nm)	7.52 ft-lbs (10.2 Nm)
Locked rotor torque	250%	360%	229%	302%	399%	270%	216%	213%	229%
Breakdown torque	260%	433%	380%	230%	360%	360%	260%	350%	350%
Design	L	L	A	L	B	A	L	A	B
Insulation class	F	F	F	F	F	F	F	F	F
Temperature rise	90 @100% load	46 @100% load	80 K	80 @100% Load	80 K	80 K	71 @100% Load	55 @100%	80 K
Locked rotor time	90.0 F @FL	17 s (hot)	11 s (hot)	Not Listed	Not Listed	6 s (hot)	Not Listed	Not Listed	25 s (hot)
Service factor	1	1.15	1.15	1	1.15	1.15	1.15	1.25	1.25
Duty cycle	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	S1
Ambient temperature	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)
Altitude	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level
Enclosure	IP43 (TEFC)	IP43 (TEFC)	IP55 (TEFC)	IP55 (TEFC)	IP55 (TEFC)	IP55 (TEFC)	IP55 (TEFC)	IP55 (TEFC)	IP55 (TEFC)
Mounting	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	B34T
Rotation	both	both	both	both	both	both	both	both	both
Preferred preset rotation direction	CCW, seen from drive end side			CCW, seen from drive end side			CCW, seen from drive end side		
Approx. weight	45 lb (20,41 kg)	35 lb (15,88 kg)	32.3 lb (14,65 kg)	57 lb (25,85 kg)	40.5 lb (18,37 kg)	106 lb (48,08 kg)	100 lb (45,36 kg)	100 lb (45,36 kg)	Not Listed
Moment of inertia	Not Listed	Not Listed	0.0963 sq.ft. lb (0.0133 kgm <sup>2</sup> )	Not Listed	Not Listed	0.1279 sq.ft. lb (0.0177 kgm <sup>2</sup> )	Not Listed	Not Listed	0.2233 sq.ft.lb (0.0309 kgm <sup>2</sup> )
Sound pressure level (global)	Not Listed	Not Listed	68.0 dB(A)	Not Listed	Not Listed	68.0 dB(A)	Not Listed	Not Listed	69.0 dB(A)
Foundation loads: • max. traction • max. compression	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Load: 100% • Power factor • Efficiency	87.0% 73%	87.1% 88.4%	90.0% 80.0%	91.0 % 82.4 %	81.0% 86.9%	90.0% 81.5%	98% 82.5%	89.5% 88.5%	89% 88.5%
Load: 75% • Power factor • Efficiency	81.7% 72.9%	86.7 % 82.1%	86% 78.5%	88.2% 81.3%	79.2% 85.6%	86.0% 81.5%	98.1% 81.3%	87.5% 89.1%	85.0% 88.5%
Load: 50% • Power factor • Efficiency	71.8% 71%	85.5% 72.2%	76% 75.5%	81% 77.4%	67.6% 83.2%	76% 80%	97.8% 77.4%	81.1% 87.9%	76% 86.5%

**MOTOR SPECIFICATIONS TEV-585 | TEV-745 | TEV-768**

	TEV-585			TEV-745			TEV-768	
Power	<b>7.5 HP (5,5 kW)</b>			<b>10 HP (7,5 kW)</b>			<b>15 HP (11 kW)</b>	
Energy efficiency (NEMA)	<b>premium</b>			<b>premium</b>			<b>premium</b>	
Rated voltage	<b>208-230V</b>	<b>208-230/460V</b>	<b>575V</b>	<b>208-230V</b>	<b>208-230/460V</b>	<b>575V</b>	<b>208-230/460V</b>	<b>575V</b>
No. of phases	<b>1ph</b>	<b>3ph</b>	<b>3ph</b>	<b>1ph</b>	<b>3ph</b>	<b>3ph</b>	<b>3ph</b>	<b>3ph</b>
Frequency	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>	<b>60Hz</b>
Frame	213TC	213TC	213/5TC	215TC	215TC	213/5TC	254Tc	254/6TC
Poles	2	2	2	2	2	2	2	2
Rated speed	3465 rpm	3450 rpm	3520 rpm	3500 rpm	3535 rpm	3520 rpm	3545 rpm	3530 rpm
Slip	3.06%	3.19%	2.22%	Not Listed	Not Listed	2.22%	Not Listed	1.95%
Rated current	36-32 A	19.68-17.8/8.9 A	7.01 A	44-41.5 A	26.1-23.6/11.8 A	9.28 A	39.25-35.5/17.8 A	13.8 A
L. R. Amperes	189 A 230V	63.5A @460V	50.5 A	249 A @230V	80A @460V	66.8 A	114 A @460V	92.2 A
II/In	7.8 Code J	8.2 Code J	8.2 Code J	6.8 Code G	7.2 Code H	7.2 Code H	7.6 Code H	7.6 Code H
No load current	8.36 A	3.20 A @460V	2.16 A	9.00 @230V	3.5 A @460V	2.72 A	6.50 A @460V	4.80 A
Rated torque	11.30 ft-lbs (15.30 Nm)	11.10 ft-lbs (15.05 Nm)	11 ft-lbs (14.91 Nm)	15 ft-lbs (20.33 Nm)	14.9 ft-lbs (20.20 Nm)	14.7 ft-lbs (19.93 Nm)	22.2 ft-lbs (30.10 Nm)	22 ft-lbs (29.83 Nm)
Locked rotor torque	280%	270%	270%	220%	210%	210%	240%	240%
Breakdown torque	165%	216%	210%	173%	201%	220%	167%	220%
Design	L	B	B	L	B	B	B	B
Insulation class	F	F	F	F	F	F	F	F
Temperature rise	80 @100% Load	80 K	80 K	85 @100% Load; 115 @115% Load	85 @100% Load; 115 @115% Load	80 K	85 @100% Load; 115 @115% Load	80 K
Locked rotor time	8 s (hot)	Not Listed	Not Listed	Not Listed	Not Listed	24 s (hot)	14 s (hot)	25 s (hot)
Service factor	1	1.15	1.15	1	1.15	1.25	1.15	1.25
Duty cycle	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Ambient temperature	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)	-4°F to 176°F (-20°C to +80°C)
Altitude	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level	3280 ft (1000 m) above sea level
Enclosure	IP43 (TEFC)	IP43 (TEFC)	IP55 (TEFC)	IP43 (TEFC)	IP43 (TEFC)	IP55 (TEFC)	IP55 (TEFC)	IP55 (TEFC)
Mounting	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1	Rigid/F1
Rotation	both	both	both	both	both	both	both	both
Preferred preset rotation direction	CCW, seen from drive end side			CCW, seen from drive end side				
Approx. weight	150 lbs (68.04 kg)	160 lbs (72.57 kg)	156 lbs (70.76 kg)	152 lbs (68.95 kg)	175 lbs (79.37 kg)	174 lbs (78.93 kg)	208 lbs (94.35 kg)	260 lbs (118 kg)
Moment of inertia	Not Listed	Not Listed	0.4665 sq.ft. lb (0.0645 kgm <sup>2</sup> )	Not Listed	Not Listed	0.6362 sq.ft. lb (0.0880 kgm <sup>2</sup> )	Not Listed	1.26 sq.ft.lb (0.1742 kgm <sup>2</sup> )
Sound pressure level (global)	Not Listed	69.0 dB(A)	69.0 dB(A)	Not Listed	72.0 dB(A)	72.0 dB(A)	72.0 dB(A)	72.0 dB(A)
Foundation loads: • max. traction • max. compression	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Load: 100% • Power factor • Efficiency	93.5% 81.5%	87% 92.2%	88% 89.5%	93.2% 83.8%	87% 91.7%	90% 90.2%	87% 91%	88% 91%
Load: 75% • Power factor • Efficiency	90.4% 77.8%	83% 89.5%	84% 89.5%	92.9% 83.9%	92.4% 86.9%	87% 90.2%	83.5% 91.0%	85% 91%
Load: 50% • Power factor • Efficiency	87% 80%	74.5% 86.5%	75% 87.5%	90.3% 81.3%	78.5% 91.7%	79% 89.5%	70.5% 90.6%	77% 89.5%



## NOISE LEVEL

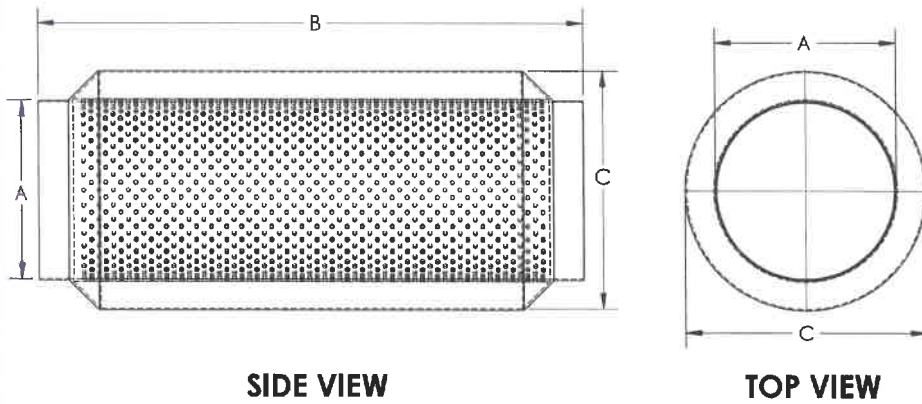
	Static pressure (in. WG)	Noise level in dB(A)			
		at 3.3 ft (1 m)	at 6.5 ft (2 m)	at 9.8 ft (3 m)	at 13.1 ft (4 m)
TEV-359	0	84	78	74	72
	1	83	77	73	71
	2	82	76	72	70
	3	82	76	72	70
	4	80	74	70	68
TEV-3110	0	87	81	77	75
	1	86	80	76	74
	2	86	80	76	74
	3	86	80	76	74
	4	86	80	76	74
TEV-559	0	88	82	78	76
	1	89	83	79	77
	2	89	83	79	77
	3	89	83	79	77
	4	88	82	78	76
	5	88	82	78	76
TEV-585	0	95	89	85	83
	1	95	89	85	83
	2	94	88	84	82
	3	94	88	84	82
	4	93	87	83	81
	5	92	86	82	80
TEV-745	0	92	86	82	80
	2	91	85	81	79
	4	90	84	80	78
	6	89	83	79	77
	8	89	83	79	77
TEV-768	0	97	91	87	85
	2	96	90	86	84
	4	95	89	85	83
	6	95	89	85	83
	8	95	89	85	83

### Authorized Plymovent Distributor:

Product type **TEV (60Hz)**  
Article no. refer to tables  
Product category extraction fans  
Version 12DEC22/E

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)

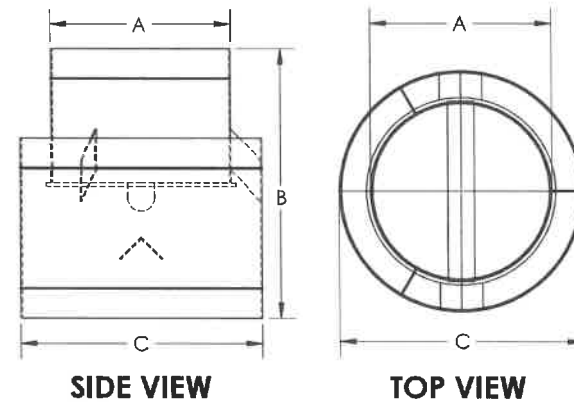
## SILENCER



SILENCER DIMENSIONAL DATA			
	Ø 12"	Ø 8"	Ø 6"
A	12"	8"	6"
B	36.25"	30.25"	30.25"
C	16"	12"	10"



## RAIN CAP



RAIN CAP DIMENSIONAL DATA			
	Ø 12"	Ø 8"	Ø 6"
A	11.875"	7.875"	5.875"
B	18"	14"	12"
C	17"	11"	8"



DO NOT SCALE DRAWING

**CONFIDENTIAL**  
**\*\*PROPERTY OF HASTINGS AIR ENERGY CONTROL INC.\*\***  
**DO NOT DUPLICATE WITHOUT AUTHORIZATION**

DISCLAIMER: THE DRAWING CONTAINS INFORMATION WHICH IS CONFIDENTIAL AND PROPRIETARY, AND MUST BE KEPT CONFIDENTIAL AND NOT BE DISCLOSED, REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN AUTHORIZATION FROM HASTINGS AIR ENERGY CONTROL INC. ANY UNAUTHORIZED DISCLOSURE OR REPRODUCTION OF THIS INFORMATION IS STRICTLY PROHIBITED. THIS INFORMATION IS UNCLASSIFIED AND IS NOT SUBJECT TO THE E.O. 13526 DECLASSIFICATION SCHEDULE.

HASTINGS AIR ENERGY CONTROL INC.  
 5555 South Widgee Ave  
 New Braunfels, TX 78131-7900  
 P: 800.234.8450  
 F: 800.240.9199

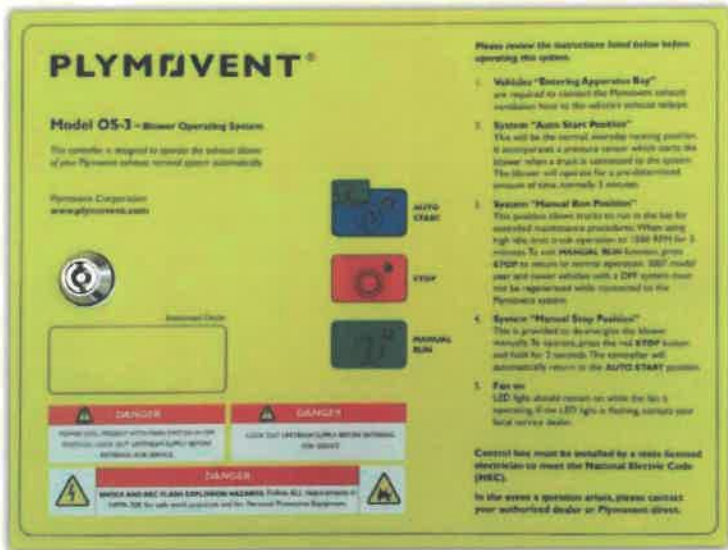


SILENCER  
 RAIN CAP  
 DIMENSIONAL  
 DATA

REV	DATE	DESCRIPTION
1	1/14/2014	Issue for production

Drawn by:	JE	Scale:	Sheet #:
Checked by:			1 of 1
Job #:			

## OS-3 AUTOMATIC SYSTEM CONTROL



# PLYMOVENT®

## TECHNICAL DESCRIPTION

BSAB no: T0.7  
Ser.no: OS-3 II  
Date: Oct-11  
Replace: Jan-11

### BLOWER OPERATING SYSTEM: OS-3 II

© Copyright 2008: All rights reserved. All information within this printed matter may not be reproduced, handed over, copied, xeroxed or translated into another language in any form or means without written permission from Plymovent AB. Plymovent AB reserves the right to make design changes.



#### Area of use:

OS-3 is an energy saving control unit, which together with pressure sensor and temperature sensor makes a fully automatic system for the control of Plymovent's vehicle exhaust fans.

#### Delivery:

The control unit, OS-3, is delivered complete with functions for manual and automatic start/stop of the exhaust fan.

NOTE! The control unit, OS-3, is delivered without cable for field wiring. Cables for field wiring must apply to UL and NEC.

#### General information:

OS-3 controller is designed to be used for control of exhaust fans in vehicle exhaust systems, with or without particle filtration system. The controller can be set for both manual and automatic control of the fan. Depending on the system, different sensors for start/stop function can be used. Mainly two types of sensors will be used; pressure sensor to detect pressure difference in systems and temperature sensors to detect temperature level in the system. The OS-3 control box also includes an alarm device, which can be used for status control of the airflow in the exhaust system. A built in "after running time" function will secure that toxic gases in the duct system will be exhausted out of the ducting before the fan stops. The after running time can easily be adjusted between 7 sec. to 6 minutes.

#### Method of operation:

When the control unit is set into "automatic" mode, the exhaust fan is started by a signal from an externally mounted pressure or/and temperature sensor. Normally the system is activated by the pressure sensor and kept running by the temperature sensor.

#### Pressure sensor:

The pressure sensor reacts on increasing pressure (positive pressure) which occurs in the system when a vehicle is starting up. The pressure sensor is adjustable to fit all engine sizes.

#### Temperature sensor:

The temperature sensor will detect the increasing temperature which occurs in the system when a vehicle is running. The temperature sensor is adjustable to fit all engine sizes.

#### Automatic mode:

When the engine is turned on, the pressure sensor reacts and forwards a signal to the control unit. The control unit is then starting the exhaust fan. The fan stops after the pre-adjusted after run time is out.

#### Manual mode:

When the control unit is set in manual mode the exhaust fan is running continuously.

#### Stop mode:

When pressing the stop button, the fan will stop immediately and after a short period of time, 2-3 seconds, the controller will move into automatic mode. This built in function will prevent the risk of having exhaust gas leakage in the system due to operator error.

#### Alarm mode:

The alarm device will detect high pressure loss over the filter unit; when the "Fan on LED Light" flashes the pressure over the filter is too high. Filter needs to be replaced.

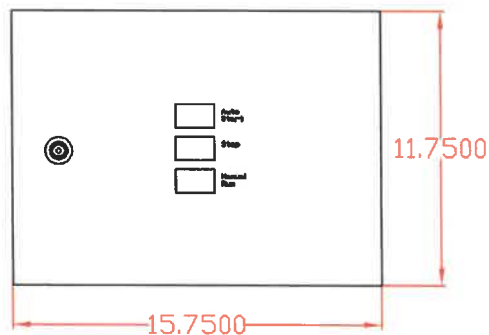


## DS-3 Control Box

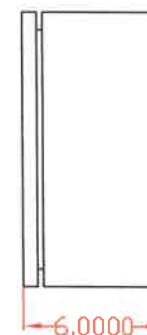
### SCOPE OF PRODUCTS AVAILABLE

HORSE POWER	VOLTAGE	PHASE	AMPERAGE
1	115 V	1 PH	12.8 A
1	208-230 V	1 PH	6.4 A
1	208 V	3 PH	3.2 A
1	460 V	3 PH	1.5 A
1.5	115 V	1 PH	17 A
1.5	208-230 V	1 PH	8.8 A
1.5	208 V	3 PH	4.3 A
1.5	460 V	3 PH	2 A
3	115 V	1 PH	N/A
3	208-230 V	1 PH	14.6 A
3	208 V	3 PH	8 A
3	460 V	3 PH	4 A
5	208-230 V	1 PH	22 A
5	208 V	3 PH	13 A
5	460 V	3 PH	6 A
7.5	208-230 V	1 PH	32 A
7.5	208 V	3 PH	19 A
7.5	460 V	3 PH	9 A
10	208-230 V	1 PH	40 A
10	208 V	3 PH	26 A
10	460 V	3 PH	12 A
15	208 V	3 PH	37.6 A
15	208-230 V	1 PH	36 A

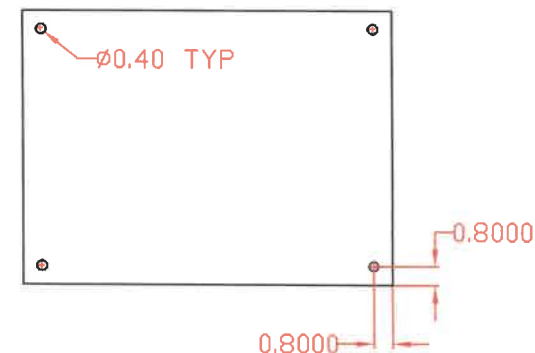
FRONT



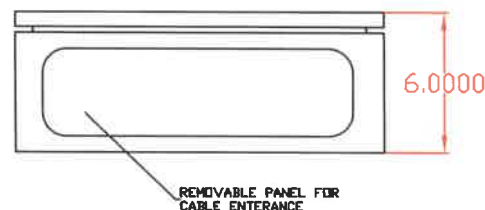
SIDE



MOUNTING DETAIL



BOTTOM



#### Notes:

1. UL CUL (cULus) 508A listed
2. Enclosure Material: Carbon Steel
3. Enclosure Color: RAL-9002 (Grey-White)
4. Enclosure Rating: NEMA 12
5. DS-3 Control Box can be set for both manual and automatic control of fan.
6. Wireless Receiver Input Contact: 24V
7. Filter Status Indicator Light on Front Panel
8. Fan Run-Time Counter Adjustable from 7 sec up to 7 min
9. Automatic mode will start the central fan via pressure or temperature sensor.

Job name:	DWG BY: JP	Revision: 4	Rev. date: 6/8/12
Engineer:	PLYMOVENT NORTH AMERICA 115 MELRICHD ROAD CRANBURY N.J. TEL: (609)395-3500 FAX: (609)655-0919 WWW.PLYMOVENT.COM		
Customer:	DS-3		

# PLYMOVENT OS-3 CONTROL PANEL FLOW CHART

## 4.4.3 Remote Alarm (optional)

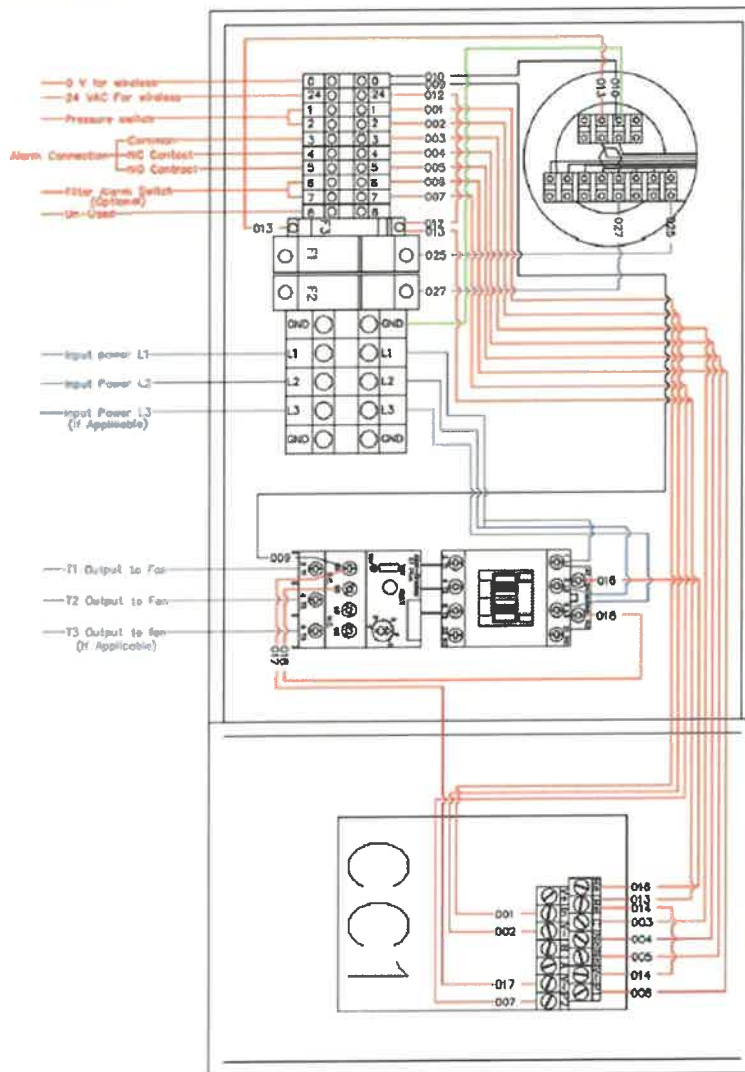
Terminals 3, 4, and 5 are a relay dry contact connection for a Building Automation System (BAS). Terminal block 3 provides the common connection, terminal 4 provides a normally closed contact connection and terminal 5 provides a normally open contact connection.

**NOTE:** Relay output is a dry contact potential free and will require additional control equipment depending on its use.

## 4.4.4 Pressure Switch (filter alarm)

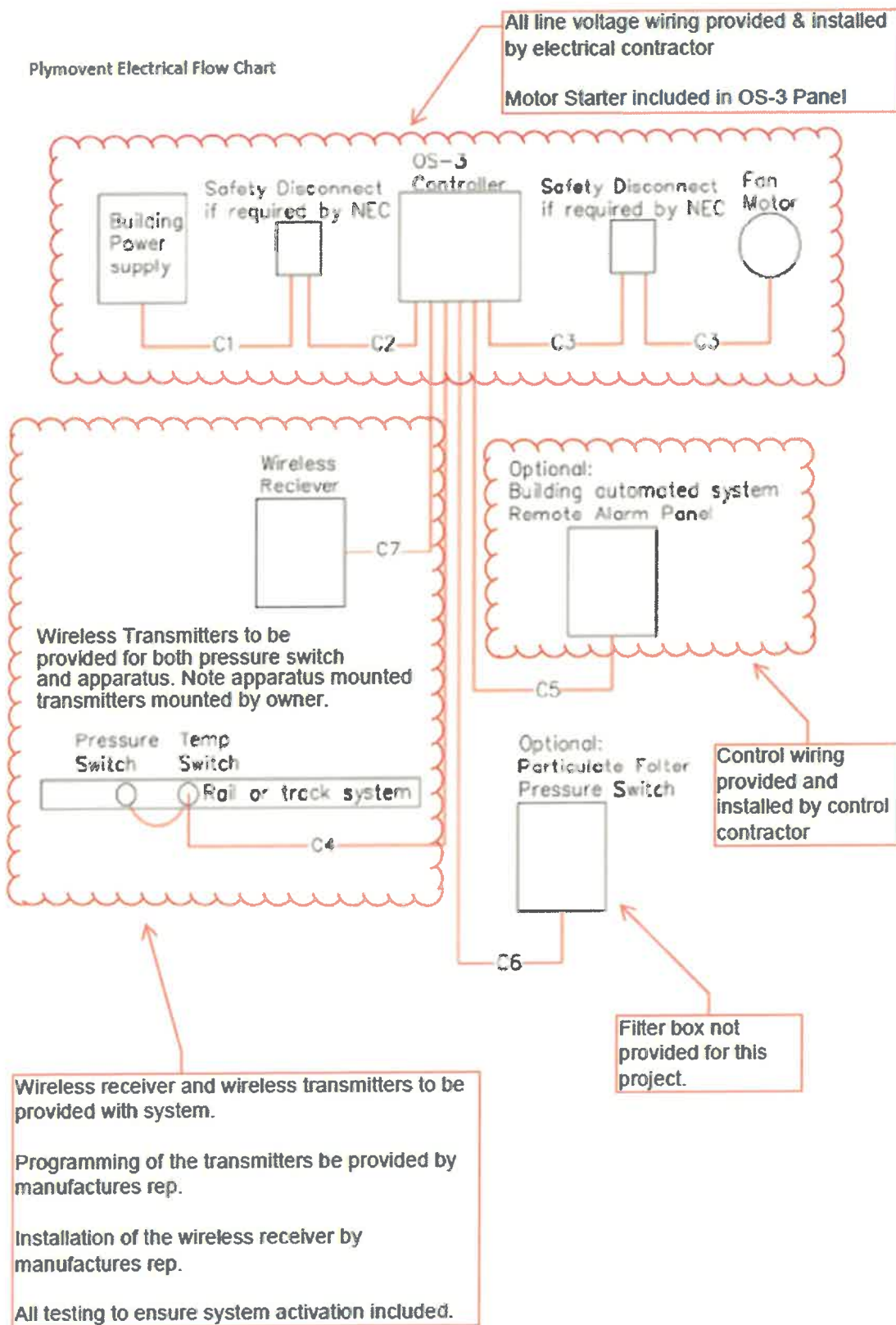
An exhaust ventilation particulate filter (such as the Plymovent Multi Smoke Filter) may be provided with an adjustable pressure indicator switch, which monitors the filter's useful life. Terminals 6 and 7 (potential free) are utilized to connect and operate the pressure indicator switch. When the filter becomes dirty, the pressure switch will send a signal to the control box and in-turn will flash the Fan On LED indicator light, located on the face of the OS-3 control panel, when the fan motor is running. Indicating a filter change is required.

Figure 1 Wiring Chart



**NOTES:** Ensure input voltage is within 8% of listed voltage on the transformer.  
If not Wire 027 to be adjusted to proper input Voltage  
L3 not present in single phase Control Boxes  
Output voltage from transformer not to exceed 27VAC

# PLYMOVENT OS-3 CONTROL PANEL FLOW CHART



## WIRELESS CONTROL UNIT

### TRANSMITTER/ RECEIVER 24 VOLT AC/DC

The Wireless Control Unit is designed to provide the flexibility, reliability and ease-of-use required for fire applications by starting the fan with the use of a wireless PC-500 connection.\* The Wireless Receiver and Transmitter system add-on is designed to meet all local laws for radio frequency use. This system allows simple and expandable wireless integration with all Plymovent control systems.

\*PC-500 has to be ordered separately.



### APPLICATIONS

The Wireless Control Unit is intended to be used for the following applications:

- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities.

### SPECIFICATIONS

Physical dimensions and properties	
Material	
• receiver	• plastic with transparant cover
• transmitter	• plastic
Colour	
• receiver	• grey
• transmitter	• black
Weight	
• receiver	• 900 gr (2 lbs)
• transmitter	• 80 gr (0.2 lbs) (incl. batteries 3V CR2032)
Dimensions	
• receiver	• 150 x 114 x 64 mm (6 x 4.5 x 2.5 in.)
• transmitter	• 60 x 38 x 13 mm (2.5 x 1.5 x 0.5 in.)
Performance	
Frequency	2,4 GHz
Response time	50 ms (typ.)
Number of functions / buttons	1 contact (by PC-500)
Number of active relays	1 (10A)
Working range	up to 100 m (328 ft)
Ambient conditions	
Operating temperature	5 to 40°C (41°F to 104°F)
Storage conditions	5 to 40°C (41°F to 104°F)
Electrical data	
Voltage	
• receiver	• 24V AC/DC
• transmitter	• 3V

Current consumption	
• receiver	• 20 mA standby (25 mA when the relay is active)
• transmitter	• 16 mA
Output power transmitter	48 mW
Product combinations	
OS-3	for fan start / stop
Scope of supply	
Receiver - Transmitter - Additional cable feed (receiver and transmitter have to be ordered separately)	
Order information	
Article number:	
• Wireless receiver	• 0000109864
• Wireless transmitter	• 0000109865
Number/package	1
Shipping data	
Gross weight	1,3 kg (2.9 lbs)
Packing dimensions	200 x 200 x 150 mm (7.9 x 7.9 x 5.9 in.)
Harmonized Tariff Code	84219990
Country of origin	United States
Approvals & certificates	
IP-68	Protective enclosure

Product type	Control Equipment
Article no.	see specifications
Product category	control equipment
Version	A

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)



## **WIRELESS IR SYSTEM SEQUENCE OF OPERATION**

The wireless system includes the following components:

- (1) Wireless Receiver that gets tied into the OS-3 control panel
- Wireless transmitters (one per vehicle connection/ drop)
- Standard pressure sensors (one per vehicle connection/drop)

The wireless system works just like the wired system as such it works off the pressure sensor for system activation:

- Each vehicle has a pressure sensor tied into a wireless transmitter
- The transmitter is either mounted on the internal crab assembly on the STRA system or mounted on the riser bracket on the SBTA system
- The pressure sensor wire taps are tied into the transmitter.
- Anytime the vehicle is started or reattached when backing into the station, the pressure sensor is pulled in (contacts closes) by the exhaust pressure being emitted by the vehicle.
- The pressure sensor then closes and a signal is generated by the wireless transmitter that is sent to the receiver mounted by the OS-3 control panel that activates the exhaust fan

That is the run down on the wireless & it is that simple.

The advantage for the wireless:

- More responsive system activation
- Eliminates electrical shorts in the wires
- Each transmitter is numbered & the receiver can inform the service tech on a faulty pressure sensor/ trouble code



**WIRELESS CONTROL UNIT**

## STEEL SADDLE

### STEEL SADDLE WITH LIFTING LUGS

The steel saddle is made from light weight steel and is a solid and sturdy elbow for lifting a 100 mm (4 in.) or a 125 mm (5 in.) hose. With the designed multi positionable lifting lugs the elbow can be balanced in different ways. The steel saddle lifts the hose and prevents it from shifting.



### APPLICATIONS

The steel saddle is intended to be used for the following applications:

- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities.

### SPECIFICATIONS

#### Physical dimensions and properties

Material	powdercoated steel
Weight	approx. 0,9 kg (2 lbs)
Colour	black (RAL 9005)

#### Ambient conditions

Operating temperature:	equals selected hose
------------------------	----------------------

#### Where used

Plymovent STR, SBT or VSRX railsystems

#### Scope of supply

Steel saddle

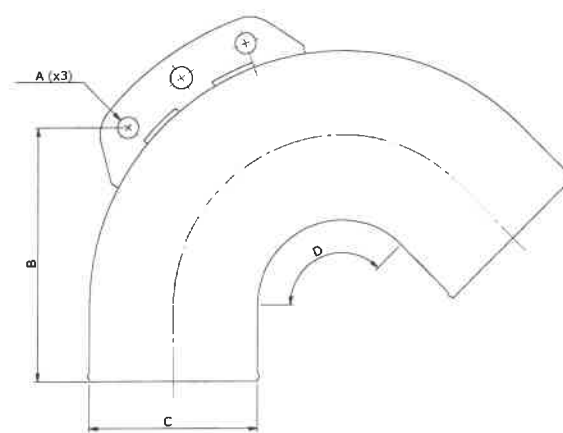
#### Order information

Article no.	see dimensions
Number/package	1

#### Shipping data

Gross weight	1 kg (2.2 lbs)
Packing dimensions	500 x 500 x 250 mm (20 x 20 x 10 in.)
Harmonized Tariff Code	84219990

### DIMENSIONS



	Art. no 0000114045	Art. no 0000114046
A	12,5 mm (0.5 in.)	12,5 mm (0.5 in.)
B	150 mm (6 in.)	170 mm (6.7 in.)
C	100 mm (4 in.)	125 mm (5 in.)
D	135°	135°

Product type	Steel saddle
Article no.	see dimensions
Product category	options and accessories
Version	300819/0

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)

## SAFETY DISCONNECT HANDLE

### HOSES AND NOZZLES

The Safety Disconnect Handle (SDCH) is used to facilitate the connection of the exhaust removal system in emergency and fire stations. The Safety Disconnect Handle connects the lower hose to the upper hose assembly. In the unlikely event the nozzle remains engaged as the vehicle exits the facility, the handle disconnects from the assembly to prevent damage to the system. It is designed to prevent the user from having to bend over to connect a Grabber® to the tailpipe; limiting the danger of exposure to exhaust emissions.

The Pneumatic SDCH includes an integrated pneumatic valve, when used in a magnetic system the valve area is covered.



Unit displayed is the Pneumatic version

### APPLICATIONS

The SDCH is intended to be used for the following applications:



- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities.

### SPECIFICATIONS

#### Physical dimensions and properties

Material	<ul style="list-style-type: none"> <li>• Housing</li> <li>• Inner flanges</li> </ul>	<ul style="list-style-type: none"> <li>• nylon PA6 (30%)</li> <li>• aluminum</li> </ul>
Colour	grey with yellow support colours	
Weights	<ul style="list-style-type: none"> <li>• SDCH</li> <li>• SDCH incl. mechanical air valve</li> </ul>	<ul style="list-style-type: none"> <li>• 1,5 kg (3.4 lbs)</li> <li>• 1,8 kg (3.8 lbs)</li> </ul>

#### Ambient conditions

Operating temperature:	<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<ul style="list-style-type: none"> <li>• -5°C (23°F)</li> <li>• 60°C (140°F)</li> </ul>
Max. relative humidity	80%	
Outdoor use allowed	no	
Storage conditions	<ul style="list-style-type: none"> <li>• -5°C to + 60°C (23-140°F)</li> <li>• relative humidity max. 80%</li> </ul>	

#### Where used

Plymovent railsystems

#### Scope of supply

SDCH | Build in air valve for pneumatic versions

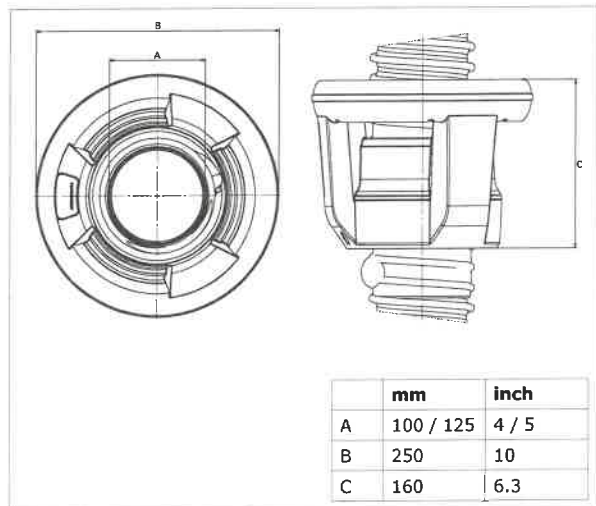
#### Order information

Article no.	see remaining specifications
Number/package	1

#### Shipping data

Gross weight	see remaining specifications
Packing dimensions	see remaining specifications
Harmonized Tariff Code	84219990
Country of origin	the Netherlands

### DIMENSIONS

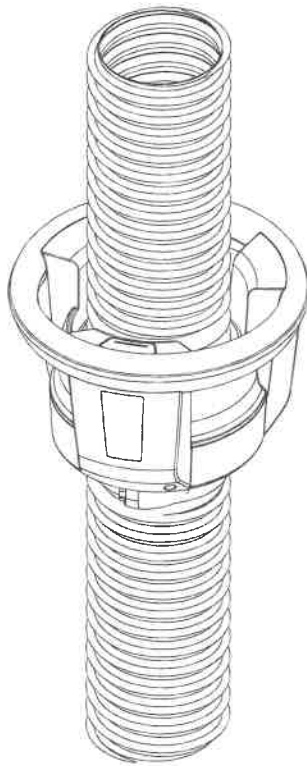


### APPROVALS/CERTIFICATES



PAHs free

#### FEATURES & BENEFITS



- Large grips, designed for ergonomic use, even with gloves on.
- Designed to prevent the user from having to bend over to connect a Grabber® to the tailpipe.
- Limiting the dangers of exposure to exhaust gasses.
- Accessible from every angle (360°).
- The interior is made from durable steel to withstand high temperatures.
- Maximum efficiency through uninterrupted airflow through the hose.
- Available for all Plymovent Pneumatic and Magnetic systems.

*The Safety Disconnect Handle Magnetic is displayed*

#### REMAINING SPECIFICATIONS

Article no.	Description	Gross weight	Dimensions
0000118348	Safety Disconnect Handle 100 mm (4 in.) magnetic	2 kg (4.4 lbs)	780 x 520 x 355 mm (30.7 x 20.5 x 14 in.)
0000118349	Safety Disconnect Handle 125 mm (5 in.) magnetic	2 kg (4.4 lbs)	780 x 520 x 355 mm (30.7 x 20.5 x 14 in.)
0000109765	Safety Disconnect Handle 100 mm (4 in.) pneumatic (incl. MFD valve)	2,3 kg (5 lbs)	780 x 520 x 355 mm (30.7 x 20.5 x 14 in.)
0000109766	Safety Disconnect Handle 125 mm (5 in.) pneumatic (incl. MFD valve)	2,3 kg (5 lbs)	780 x 520 x 355 mm (30.7 x 20.5 x 14 in.)

Product type	<b>Safety Disconnect Handle</b>
Article no.	see remaining specifications
Product category	SDCH
Version	180521/0

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)



## HIGH TEMPERATURE EXHAUST HOSE (HT)

### HOSES

Plymovent's market-leading High Temperature Exhaust Hose (HT) for Fire and EMS stations is a proprietary construction, with a high-quality synthetic fabric that can endure exhaust gas temperatures of up to 900°F (482°C) continuous in a properly designed system. Independent laboratory test results available upon request. The hose is flame and abrasion resistant. Upper, Mid and Lower hose packages available for Plymovent track and rail systems.

### APPLICATIONS

The HT is intended to be used for the following applications:



- Fire and emergency services stations with heavy-duty vehicles that generate high temperature hazardous exhaust fumes, such as 2007 and newer diesel vehicles that contain aftertreatment technologies such as a diesel particulate filter.

**Note:** For safety reasons vehicle regeneration should never be performed inside the Fire or EMS Station due to the high exhaust temperatures associated with DPF regeneration.

### SPECIFICATIONS

#### Physical dimensions and properties

Material	<ul style="list-style-type: none"> <li>• Hose wall</li> <li>• Spiral</li> <li>• Lower Hose</li> </ul>	<ul style="list-style-type: none"> <li>• proprietary multi-layer, high temperature synthetic fabric hose</li> <li>• spring steel wire helix and a high temperature synthetic wear strip for abrasion resistance</li> <li>• constructed with a proprietary, high-temperature, semi-rigid material to ensure proper operation with Grabbers</li> </ul>
----------	---	--

Diameters available 4 and 5 in. (100 and 125 mm)

#### Ambient conditions

Operating temperature	<ul style="list-style-type: none"> <li>• continuous: up to 900°F (482°C)</li> <li>• intermittent: up to 1050°F (566°C)</li> </ul>
-----------------------	---

#### Recommended lengths

Upper hose standard lengths are 6 ft, 12 ft, 14.5 ft, 17 ft, and 19 ft (1,8 m, 3,7 m, 4,4 m, 5,1 m, 5,8 m)

#### Product combinations

Track/Rail Systems	<ul style="list-style-type: none"> <li>• SBTA</li> <li>• STRA</li> <li>• VSRX</li> </ul>
Nozzles	<ul style="list-style-type: none"> <li>• Magnetic Grabber</li> <li>• Pneumatic Grabber</li> </ul>



#### Options and accessories

Balancer, hose saddle, hose clamps, nozzles (must be ordered separately)

#### Order information

Article no.	see remaining specifications
Number (package)	1

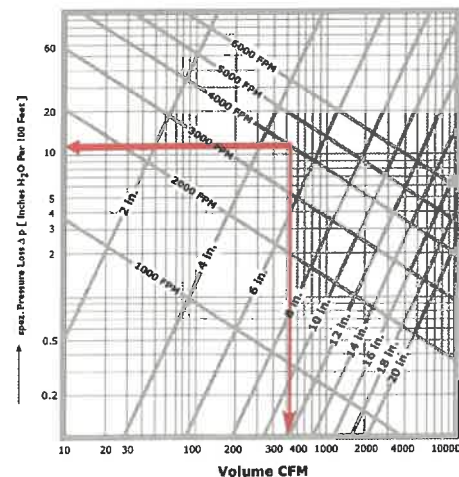
#### Shipping data

Gross weight	see remaining specifications
Country of origin	USA

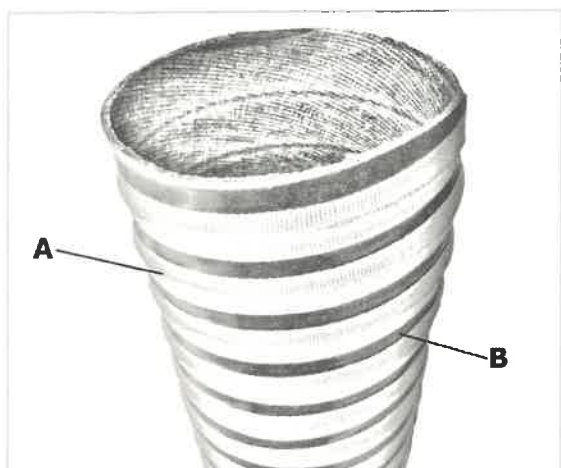
#### Recommended air speed

4000 to 4500 fpm (20,3 to 20,8 m/s).

### AIRFLOW



Example: for a 5 in. (125 mm) HT hose with airspeed of 4000 FPM (20 m/s), the static pressure loss w.g. per 100 feet is 11 in. and air volume is 350 CFM (10 m³/m).



## CONSTRUCTION:

- A. Internal spring steel wire helix with an external high temperature wear strip (yellow)
- B. High temperature synthetic outer layer provides additional abrasion protection (black)

## ACCESSORIES

### Balancer

The non-locking spring recoil balancer controls the point at which the Grabber disconnects from the tailpipe. As the hose attains its maximum reach, the balancer locking cable will bottom out, in turn pulling the nozzle from the moving vehicle's tailpipe.



### Safety Disconnect Handle

Plymovent's safety disconnect handle is ergonomically-designed for ease of use. The round handle has large grips so that it can be operated even while wearing gloves and can be reached from any angle. The operator does not have to bend over to connect the nozzle to the tailpipe, further reducing the risk of exposure to exhaust emissions.



## REMAINING SPECIFICATIONS

Art. no.	Dimensions	Length	Weight
<b>Upper Hose (single piece)</b>			
0000116367 710040-1	Ø 4 in. (100 mm)	6 ft (1,8 m)	3 lbs (3,9 kg)
0000116369 710041-1	Ø 4 in. (100 mm)	12 (3,7 m)	6 lbs (5,8 kg)
0000116371 710042-1	Ø 4 in. (100 mm)	14.5 (4,4 m)	7.3 lbs (3,3 kg)
0000116373 710043-1	Ø 4 in. (100 mm)	17 ft (5,1 m)	8.5 lbs (3,9 kg)
0000110175 710044-1	Ø 4 in. (100 mm)	19 ft (5,8 m)	9.5 lbs (4,3 kg)
0000110177 710045-1	Ø 5 in. (125 mm)	6 ft (1,8 m)	3.6 lbs (4,6 kg)
0000116379 710046-1	Ø 5 in. (125 mm)	12 (3,7 m)	7.2 lbs (3,3 kg)
0000116381 710047-1	Ø 5 in. (125 mm)	14.5 (4,4 m)	8.7 lbs (3,9 kg)
0000116383 710048-1	Ø 5 in. (125 mm)	17 ft (5,1 m)	10.2 lbs (4,6 kg)
0000116385 710049-1	Ø 5 in. (125 mm)	19 ft (5,8 m)	11.4 lbs (5,1 kg)
<b>Mid Hose</b>			
0000116346 710015-1	Ø 4 in. (100 mm)	10 ft (3 m)	5 lbs (2,3 kg)
0000116349 710016-1	Ø 5 in. (125 mm)	10 ft (3 m)	6 lbs (2,6 kg)
<b>Lower Hose</b>			
0000116342 710014-1	Ø 4 in. (100 mm)	2 ft (0,61 m)	1.4 lbs (0,6 kg)
0000116339 710013-1	Ø 5 in. (200 mm)	2 ft (0,61 m)	1.7 lbs (0,8 kg)



Plymovent Authorized Distributor:

Product type	HT™
Article no.	see remaining specifications
Product category	hoses
Version	020518/1

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)


## Magnetic Grabber®


A quick, easy and controlled connection for vehicle exhaust removal in fire stations





### Customer Service


● Online

 Hi there, how can I help you today?

What is new about this product? 

 The Magnetic Grabber is now available in **full stainless steel**, withstanding even the most harsh environments.

Great! Thank you! 

  Send



## Magnetic Grabber® The best choice for your fire station

Over the years, the Magnetic Grabber® has proven to be the best choice for your fire station. Combining the various benefits of the Magnetic Grabber® and the opportunity to have an easy to use professional Plymovent system in your station makes the decision an easy one.

### EASY TO OPERATE - "CLICK AND SEAL"

The conical design makes attaching the Magnetic Grabber® to the vehicle extremely user friendly. At the sound of a clear "click" you know you have a correctly "sealed" connection of the system to the vehicle, minimizing the danger of diesel exhaust emissions in the station. The strategically positioned magnets ensure a good connection to the vehicle, as well as a controlled automatic disconnect when the vehicle exits the station.

### FINEST MATERIALS FOR AN EXCEPTIONAL PRODUCT

The Magnetic Grabber® is extremely resistant to corrosion ensuring longevity, even in tough conditions. This unit is predominantly composed of stainless steel components and has proven to be the **#1 Grabber** in the market since decades.

The **TopGrade** Magnetic Grabber® is of a **full stainless steel** pedigree, to withstand even the most harsh imaginable environments.



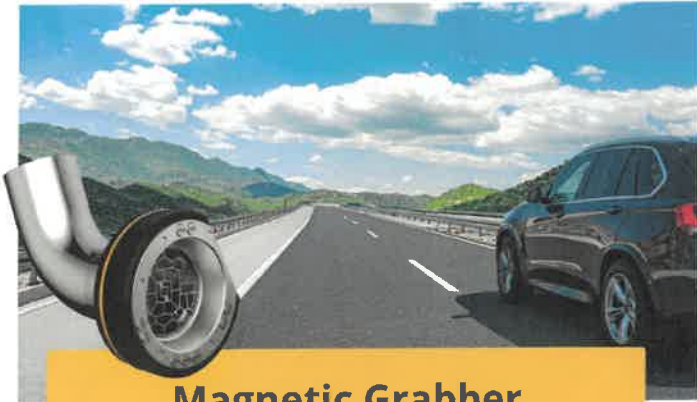
### Professional look and performance

Made out of stainless steel, the Magnetic Grabber® is easy to recognize, but also the functionality is what you can expect of a Plymovent system. With no obstructions in the hose, the system can remove dangerous diesel exhaust at its maximum capacity.

The proven Magnetic Grabber® system can be quickly attached to any vehicle equipped with the innovative Plymovent tailpipe connector. The tailpipe connector's ambient air intake also ensures the vehicle's exhaust temperatures are reduced thereby making the system safer to use.







## Magnetic Grabber

- ✓ Secure connection to the vehicle
- ✓ Virtually 100% source capture
- ✓ Click and seal concept
- ✓ Self-aligning nozzle
- ✓ Predominantly composed of stainless steel components

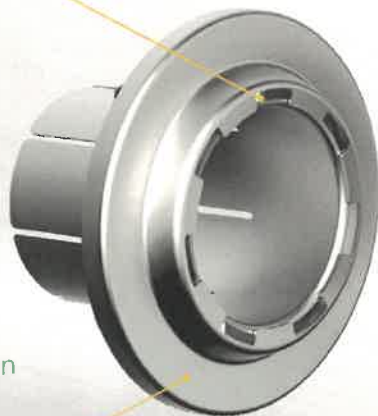


## TopGrade Magnetic Grabber

- ✓ Secure connection to the vehicle
- ✓ Virtually 100% source capture
- ✓ Click and seal concept
- ✓ Self-aligning nozzle
- ✓ Full stainless steel

### TopGrade Tailpipe Adapter (TPA)

The unique tailpipe adapter has ambient air-slots to allow air to cool down the exhaust gasses before these enter the hose system.

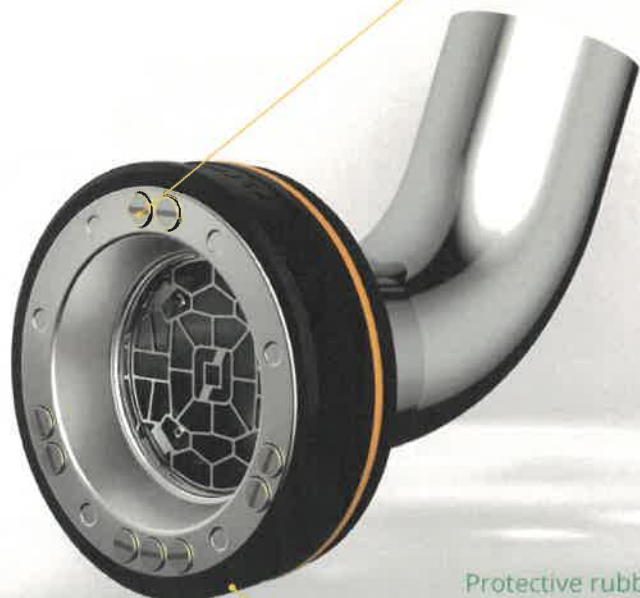


Unique conical design  
For soft release



### Easy connection

Strategically positioned magnets ensure a secure connection to the vehicle



Protective rubber  
Safety cover to avoid damage to vehicle and surroundings



**The Magnetic Grabber® is a patented vehicle exhaust removal device and winner of the red<sup>dot</sup> design award.**



Visit our product page



Get all the  
technical specifications



**red<sup>dot</sup>  
design award**

#### **We care about the air you breathe**

Plymovent is committed to ensuring a clean, safe and healthy working environment for everyone, everywhere. For that reason we design, manufacture and supply products, systems and services all over the world for the extraction and filtration of polluted indoor air.


We provide high-quality solutions to welders, metalworkers, firefighters, garage mechanics and many more workers at risk from a polluted workplace. Our products contribute significantly to a cleaner, safer and healthier workplace.


#### **Reach out to us, online or offline**

With over 130 locations all over the world, there is a Plymovent specialist nearby who can provide answers to all your questions regarding clean air. Visit our website to find your partner in Clean air at work.

#### **Plymovent Corp.**

5 Corporate Drive, Cranbury , NJ , 08512,  
United States

 +1 (609) 395 3500

 +1 (609) 655 0569

 [info.usa@plymovent.com](mailto:info.usa@plymovent.com)

## MAGNETIC GRABBER® TOPGRADE

### STAINLESS STEEL VEHICLE EXHAUST REMOVAL SYSTEM

The patented Magnetic Grabber® TopGrade is a stainless steel vehicle exhaust removal device, made to last in the harshest of environments. The Magnetic Grabber® nozzle aligns itself with the TPA TopGrade (tailpipe adapter) counterpart, due to their conical designs. The integrated magnets provide a quick and easy 'click and seal' connection, as well as a controlled disconnect.

The nozzle and tailpipe adapter are primarily used in Fire and Emergency Service Stations, where vehicles may be operated indoors for equipment checks or exiting the building on emergency calls.

Due to their corrosion resistance, the stainless steel Magnetic Grabber® TopGrade nozzle and Tailpipe Adapter are especially suitable in places with harsh winter conditions and aggressive road treatments.



### APPLICATIONS

The Magnetic Grabber® TopGrade is intended to be used for the following applications:



- To eliminate hazardous vehicle exhaust emissions with our vehicle exhaust capture and removal systems for the following segments: fire and emergency service stations as well as military facilities.

### SPECIFICATIONS

Physical properties	
Material	<ul style="list-style-type: none"> <li>Stainless steel</li> <li>EDPM rubber</li> </ul>
Color	<ul style="list-style-type: none"> <li>Silver</li> <li>Black</li> </ul>
Weight and dimensions	See remaining specifications
Ambient conditions	
Operating conditions	All ambient conditions allowed
Storage conditions	All ambient conditions allowed
Where used	
Magnetic Grabber® TopGrade Nozzle	All Plymovent rail systems: SBT, STR, MRP & VSRX
Tailpipe Adapter (TPA) TopGrade	All Plymovent Magnetic Grabber® nozzles
Scope of supply	
Matching nozzle and TPA to be ordered separately	
Options & accessories	
Magnetic Grabber options for all Plymovent rail systems: Sliding Balancer Track (SBT), Straight Rail (STR) Mini Rail Profile (MRP) & Vertical Stack Rail (VSRX).	
Tailpipe Adapters available for your vehicle's tailpipe size and Magnetic Grabber connection	
See remaining specifications for details	
Order information	
Article no.	See remaining specifications
Number/package	1
Shipping data	
Country of origin	Thailand
Harmonized Tariff Code	73269099

### FEATURES & BENEFITS

#### ✓ Stainless Steel Endurance

Corrosion proof to aggressive conditions such as brine or extreme weather.

#### ✓ Easy connect and forget

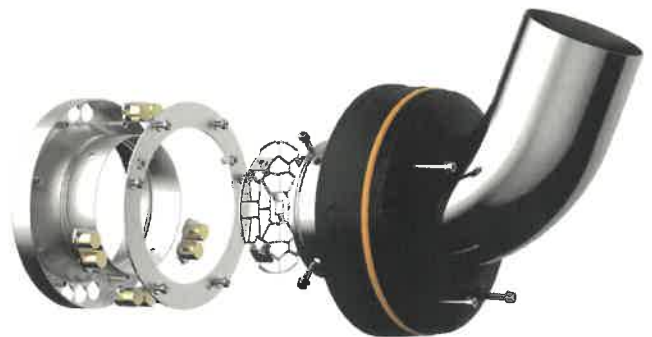
Self-aligning magnetic nozzle that clicks into place and releases on drive out.

#### ✓ Adjustable Ambient Air Inlets

Optimizes your system by fully matching the extraction demands.

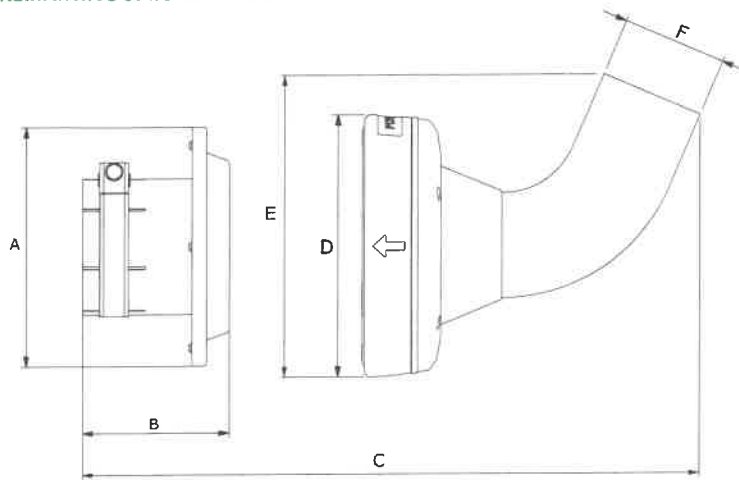
#### ✓ Compatible with Plymovent Systems

Options available to match to Plymovent nozzles, tailpipe adapters, and rail systems to create a flexible solution.





## REMAINING SPECIFICATIONS



### Magnetic Grabber® TopGrade

Art. no.	System	D	E	F	Weight	TPA Compatibility
0000304903	SBT 3 in. (75 mm)	7.5 in. (190 mm)	10.2 in. (260 mm)	4 in. (100 mm)	11 lbs (4.9 kg)	TPA 3 & 3.5 in. (75 & 90 mm)
0000304900	SBT 4 in. (100 mm)	8.3 in. (210 mm)	10.6 in. (270 mm)	4 in. (100 mm)	12 lbs (5.3 kg)	TPA 4 in. (100 mm)
0000303487	SBT 5>4 in. (125>100 mm)	9.9 in. (250 mm)	11.5 in. (290 mm)	4 in. (125 mm)	12 lbs (5.4 kg)	TPA 5, 6 & 7 in. (125, 150 & 175 mm)
0000304518	SBT 5>5 in. (125>125 mm)	9.9 in. (250 mm)	11.5 in. (290 mm)	5 in. (125 mm)	13 lbs (5.8 kg)	TPA 5, 6 & 7 in. (125, 150 & 175 mm)
0000304901	STR 3 in. (75 mm)	7.5 in. (190 mm)	10.2 in. (260 mm)	4 in. (100 mm)	11 lbs (4.9 kg)	TPA 3 & 3.5 in. (75 & 90 mm)
0000304897	STR 4 in. (100 mm)	8.3 in. (210 mm)	10.6 in. (270 mm)	4 in. (100 mm)	12 lbs (5.3 kg)	TPA 4 in. (100 mm)
0000303490	STR 5>4 in. (125>100 mm)	9.9 in. (250 mm)	11.5 in. (290 mm)	4 in. (125 mm)	12 lbs (5.4 kg)	TPA 5, 6 & 7 in. (125, 150 & 175 mm)
0000304517	STR 5>5 in. (125>125 mm)	9.9 in. (250 mm)	11.5 in. (290 mm)	5 in. (125 mm)	13 lbs (5.8 kg)	TPA 5, 6 & 7 in. (125, 150 & 175 mm)

### TailPipe Adapter TopGrade (TPA TopGrade)

Art. no.	A	B	C	Weight	Nozzle Compatibility
115100	3 in. (75 mm)	6.7 in. (170 mm)	15 in. (380 mm)	2.4 lbs (1.1 kg)	3 in. (75 mm) SBT / STR
115106	3.5 in. (90 mm)	6.7 in. (170 mm)	15 in. (380 mm)	2.4 lbs (1.1 kg)	3 in. (75 mm) SBT / STR
115101	4 in. (100 mm)	7.5 in. (190 mm)	16.8 in. (430 mm)	2.6 lbs (1.2 kg)	4 in. (100 mm) SBT / STR
117188	5 in. (125 mm)	9 in. (230 mm)	17.3 in. (440 mm)	3.7 lbs (1.7 kg)	5 in. (125 mm) SBT / STR
115103	6 in. (150 mm)	9 in. (230 mm)	18.5 in. (470 mm)	3.7 lbs (1.7 kg)	5 in. (125 mm) SBT / STR
115105	7 in. (175 mm)	9 in. (230 mm)	18.5 in. (470 mm)	4.2 lbs (1.9 kg)	5 in. (125 mm) SBT / STR

### Approx. Combined Weight

MG + TPA Combinations	SBT / STR
3 in. (75 mm)	13 lbs (6.0 kg)
3.5 in. (90 mm)	14 lbs (6.5 kg)
4 in. (100 mm)	14 lbs (6.5 kg)
5 in. (125 mm)	15 lbs (7.0 kg)
6 in. (150 mm)	16 lbs (7.5 kg)
7 in. (175 mm)	16 lbs (7.5 kg)

#### Products

#### Magnetic Grabber® TopGrade & Tailpipe Adapter TopGrade

#### Article no.

Refer to order information

#### Product category

Grabbers and Nozzles

#### Version

C

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)

#### Disclaimer

All reasonable measures have been taken to ensure the information is accurate and current. However, Plymovent cannot accept any liability for the accuracy or content of material in this document. Plymovent may change, delete or add information without notice. Please visit [www.plymovent.com](http://www.plymovent.com) to make sure you are using the most recent version.





clean air at work

## **WARRANTY**

### **Statement of Limited Warranty**

Seller warrants to the Buyer of all new products that it will be free of manufactured defects in workmanship and material.

This warranty is void if Seller finds that the product has been subjected to improper installation, improper care, service and maintenance or abnormal operations.

### **Warranty Period**

All standard warranty periods start from the date of shipping to the original Buyer or third party in which invoice and/or sales order number must be provided. Standard warranty period applies unless otherwise stated in a written agreement between Buyer and Seller at time of sale. Warranty periods are as follows:

#### **Standard Product**

##### **10 Year Conditional Warranty: Aluminum Rail Extrusions Only**

10 Year Conditional Warranty will be granted on standard Aluminum Extrusion(s) only by Seller in accordance with following: Seller receives completed Warranty Card from Buyer, that material received is in good condition, within 30 business days of material receipt. Warranty applies to Aluminum Rail Extrusion product only.

If completed Warranty Card is not received by Plymovent within 30 business days of material receipt, Plymovent's 5 Year Warranty on Standard Product will apply.

For Warranty Card, please contact Plymovent's Customer Service and/or Sales or go online to [www.plymovent.com](http://www.plymovent.com) under "contact us".

##### **5 Year Conditional Warranty: Standard Fire Systems Only**

5 Year Conditional Warranty will be granted by Seller in accordance with the following: Seller receives a completed Warranty Card from the Buyer, that material received is in good condition, within 30 business days of material receipt. Warranty applies to Fire product only and includes Exhaust Hoses used within Fire Systems only.

If completed Warranty Card is not received by Plymovent within 30 business days of material receipt, Plymovent's 3 Year Warranty on Standard Product will apply.

For Warranty Card, please contact Plymovent's Customer Service and/or Sales or go online to [www.plymovent.com](http://www.plymovent.com) under "contact us".



**DATE:** May 14, 2025

**PROPOSAL FOR:** Washington Fire Department  
200 North Wilmore Road  
Washington, IL 61571

**ATTENTION:** Adam Fuller

**PROJECT SCOPE:** MagneGrip will remove and dispose of existing Exhaustomatic Systems and provide and install a fully automatic MagneGrip® Extraction System for removal of apparatus exhaust emissions from start up to door threshold.

**EQUIPMENT, MATERIAL AND LABOR PRICE:**

**Station #1:**

Ten Drop MagneGrip® Source Capture System

Package Includes:

- (10) SFTMPRO-361 36' Sliding Flex Hose Track MagneGrip® PRO
- (2) CF361-5 MagneGrip® Exhaust Fan 5HP-1PH rated at 3300 CFM at 6" SP
- (2) 500178-08 Wireless Auto-Start Control Panel 5HP/208-230V/1PH
- (2) 500157-12 12" Up-blast Back Draft Damper Type Rain Cap
- Each Hose Assembly includes a 5" diameter high-temp upper hose section, a 1050-degree extreme high-temp 2' lower hose section with handle, a nozzle that attaches to the tailpipe adapter to contain 100% of exhaust emissions while providing ambient air to reduce exhaust temperatures, a tailpipe adapter assembly that provides easy connection and cool air induction.
- UL/CUL Wireless Auto-Start Control Panel with NEMA 4X enclosure to provide auto start/stop operation with adjustable timer, manual override switch, and wireless capability.
- Electrical wiring from available supply to control panel and exhaust fan, a safety disconnect for fan motor. Subpanels are excluded, if required, and any modifications required to bring service to code are excluded.
- Each Hose Assembly is provided with a transmitter and pressure sensor for automatic system.
- Tailpipe Modifications as required but limited to vehicle tailpipes from the muffler out. Rusted or Damaged Tailpipes are the responsibility of the Fire Department.
- Class 2 Spiral Duct, Fittings, and Hangers
- Adjustable Telescopic Support Legs to hang rail or track systems
- If Required, Wall Penetration for Fan Discharge (see Terms)
- Shipping to Job Site
- Removal & Disposal
- Labor & Material
- Start up and Training
- Equipment is 100% American Made by an ISO9001-2015 Company
- Women's Business Enterprise (WBE) Certified
- Women's Owned Small Business (WOSB) Certified

**PRICE Valid Through 8-15-25.....\$113,113.00**

**Budgetary PRICE.....\$130,239.00**





**TERMS:**

- Upon approval, please submit a signed copy of this proposal and a tax exemption certificate. Projects are invoiced per station upon shipment of equipment. Payment is due upon completion of the project.
- One MagneGrip® Tailpipe Adapter and installation is included with each hose drop assembly. All vehicles that require Tailpipe Adapters must be made available to MagneGrip technicians at the time of system installation. Additional adapters upon request. Call for pricing.
- MagneGrip provides wall penetration only for exhaust duct, if required. Roof penetrations, flashing, curbing and sealing will be at the customer's expense.
- Pricing includes standard permits and business licensing fees, if required. Price does not include any state, sales, or special taxes, engineered stamped drawings or services, seismic engineering, or electrical/structural load calculations.
- Electrical subpanels and modifications required to bring service to code are excluded if required unless otherwise indicated in the proposal.
- PRICE is valid for 90 days. BUDGETARY PRICE is for longer-term estimation.

**PRICE Valid Through 8-15-25.....\$113,113.00**

**Budgetary PRICE.....\$130,239.00**

**SUBMITTED BY:**



**Ted Piper**

Midwest Regional Sales Manager

Cell: 913-225-4035

Email: [Tpiper@magnetgrip.com](mailto:Tpiper@magnetgrip.com)

(Washington FD IL Two Fans Proposal 5-14-25)

**ACCEPTED BY:**

Company: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Print: \_\_\_\_\_ Title: \_\_\_\_\_

PO#, If Required: \_\_\_\_\_ Date: \_\_\_\_\_

