

MOTORIZED EXHAUST REEL (MER)

VEHICLE HOSE EXHAUST REEL

The Motorized Exhaust Reel (MER) is the ideal solution for truck, bus and construction off-road vehicle workshops with high ceilings and heavy high-temperature hoses. The rugged strength of the MER gives an extra margin for these applications, specifically if hoses are frequently raised and lowered.

MER provides the best lifting capacity of all the Plymovent hose reels. MER's power margin and strong transmission are designed to withstand heavy usage, thus ensuring long, reliable and trouble-free performance for many years.

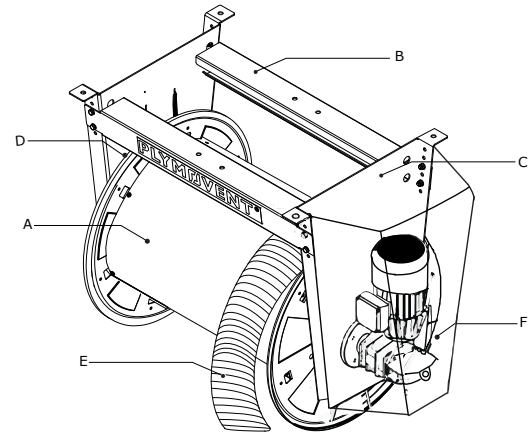
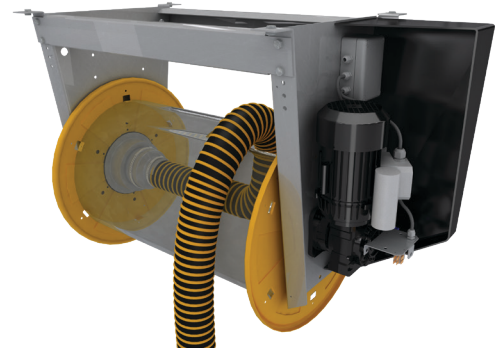
APPLICATIONS

The MER provides a gear motor system that lifts the heaviest exhaust hose and nozzle. A standard overload relay and circuit breaker protect the mechanism from accidental strain.



SPECIFICATIONS

■ Motor type			
Rated voltage	120V	230 or 460V	575V
No. of phases	1 ph	3 ph	3 ph
Frequency	60Hz	60 Hz	60 Hz
Output	0.75 HP (0,55 kW)	0.75 HP (0,55 kW)	0.75 HP (0,55 kW)
Motor RPM	1080 rpm	900 / 1080 rpm	920 rpm
Uncoiling speed (with gearbox 1:70)	15 rpm	13 / 15 rpm	15 rpm
■ Lifting Capacity			
Maximum load (hose and nozzle): Three phase: 50 kg (110 lbs) Single phase: 34 kg (75 lbs)			
■ Installation			
On ceiling, wall or boom Note: For 200 mm (8 in.) model, boom is not available.			
■ Model Range			
Order Hose Mounting Kits as required. See below. • MER 850 and 1050 for 4-6 in. (100-150 mm) hoses Note: MAP kits are not needed for MER 1250-200 hose reel.			
■ Order information			
Article no.: see remaining specifications			
Number/package: 1 (Bolted on Skid)			
■ Hose Mounting Kits (MER 850 and -1050)			
MAP-100	4 in. (100 mm) hose		
MAP-125	5 in. (125 mm) hose		
MAP-150	6 in. (150 mm) hose		



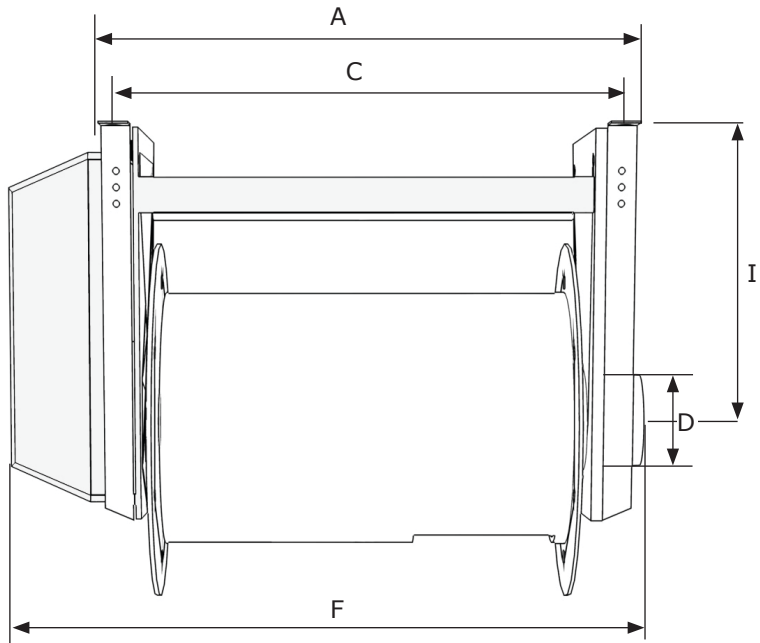
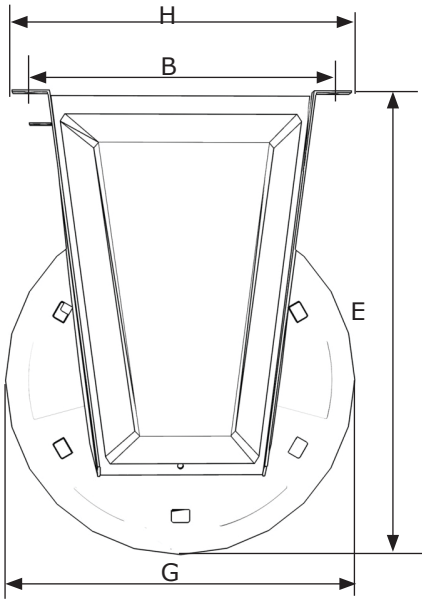
CONSTRUCTION

- A. Hose reel drum provides a secure and space-friendly storage location for the hose:
 - smooth, zinc-plated drum on which the hose rolls;
 - drum end plates are powder-coated yellow.
- B. Console - zinc-coated steel frame provides support and strength for longevity and robustness.
- C. A-frame - primed and powder-coated steel.
- D. Adapter Ø 6 in. (150 mm) to fan or central exhaust system.
- E. Hose - not included.
- F. Electrical junction box and motor - for landing wires and connection of control equipment; includes a reliable self-locking bevel gear drive, limit switches and thermal overload protection.

DIMENSIONS (NOMINAL)			
	MER-850	MER-1050	MER-1250-200
A	40.5 in. (1030 mm)	48.4 in. (1230 mm)	56.3 in. (1430 mm)
B	19.7 in. (500 mm)	19.7 in. (500 mm)	20.7 in. (525 mm)
C	38.3 in. (974 mm)	46.2 in. (1174 mm)	54 in. (1374 mm)
D	Ø 6.3 in. (160 mm)	Ø 6.3 in. (160 mm)	Ø 8 in. (200 mm)
E	31 in. (790 mm)	31 in. (790 mm)	44 in. (1117 mm)
F	48.4 in. (1230 mm)	56.3 in. (1430 mm)	63.8 in. (1620 mm)
G	23.6 in. (600 mm)	23.6 in. (600 mm)	28.9 in. (735 mm)
H	21.7 in. (552 mm)	21.7 in. (552 mm)	22.7 in. (577 mm)

Note: Maximum hose length depends of hose diameter. Refer to this chart for specifications.

Note: For US and Canada MER 4-6 in. hoses (100-150 mm) models, a 6 in. to 6.25 in. duct connection reducer is provided.



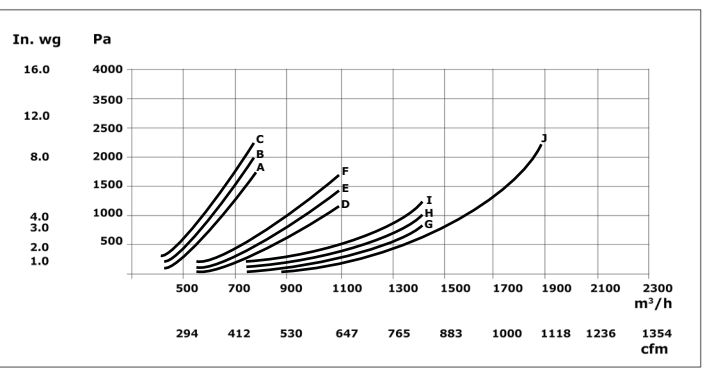
PRESSURE LOSS

The diagrams to the right show the pressure loss in the hose reels at different airflows. The top chart shows pressure loss in uncoiled position only. See Airflow Volume: General Guidelines on the next page.

Recommended Airflows:

See Airflow Guidelines on next page.

- A. Ø 4 in. (100 mm), length 25 ft (7,5 m)
- B. Ø 4 in. (100 mm), length 33 ft (10 m)
- C. Ø 4 in. (100 mm), length 41 ft (12,5 m)
- D. Ø 5 in. (125 mm), length 25 ft (7,5 m)
- E. Ø 5 in. (125 mm), length 33 ft (10 m)
- F. Ø 5 in. (125 mm), length 41 ft (12,5 m)
- G. Ø 6 in. (150 mm), length 25 ft (7,5 m)
- H. Ø 6 in. (150 mm), length 33 ft (10 m)
- I. Ø 6 in. (150 mm), length 41 ft (12,5 m)
- J. Ø 8 in. (200 mm), length 41 ft (12,5 m)



AIRFLOW VOLUME: GENERAL GUIDELINES		
Vehicles Served	cfm (m³/h)	Hose Diameter
Automobile	270-300 (460-510)	4 in. (100 mm)
Motorcycle	600-650 (1020-1105)	6 in. (150 mm)
Trucks (Public Works, Rental Fleets, etc.)	500-550 (850-935)	5 in. (125 mm)
Heavy Duty Trucks	650-800 (1020-1360)	6 in. (150 mm)
Off-Road (Constr., Compressor Tests, etc.)	1000-1400 (1700-2400)	8 in. (200 mm)

Note: Make sure the weight of the hose and tailpipe adapter selected do not exceed the MER lifting capacity.

ACCESSORIES

Hose Types:

EG2 - High quality fabric composite hose designed for exhaust gas temperatures of 350°F (177°C) continuous. Spike temperature capability: 400°F (205°C). Recommended for areas that service cars and light trucks.



EF2 - High quality fabric composite hose designed for exhaust gas temperatures of 570°F (300°C) continuous. Spike temperature capability: 660°F (350°C). Recommended for areas that service heavy trucks and off-road vehicles.



Other hoses are available. Consult Plymovent for additional data and details.

Nozzles:

See separate data sheet for nozzles.



Fans:

See separate data sheets for F-Series and TEV fans.



Hose Mounting Kit:

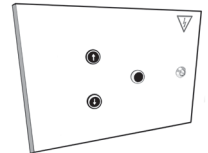
Kits includes U-clamp, reducer and edge protection.



REMAINING SPECIFICATIONS			
Prod.no.	Hose Diameter	Maximum Hose Length	Weight without Hose
MER-850-100	Ø 4 in. (100 mm)	46 ft (14 m)	137 lbs (62 kg)
MER-850-125	Ø 5 in. (125 mm)	41 ft (12,5 m)	137 lbs (62 kg)
MER-850-150	Ø 6 in. (150 mm)	33 ft (10 m)	137 lbs (62 kg)
MER-1050-125	Ø 5 in. (125 mm)	46 ft (14 m)	150 lbs (70 kg)
MER-1050-150	Ø 6 in. (150 mm)	41 ft (12,5 m)	150 lbs (70 kg)
MER-1250-200	Ø 8 in. (200 mm)	41 ft (12,5 m)	165 lbs (75 kg)

Up/Down Switch Options:

MER includes a standard control box with up/down buttons. Optionally, you can choose a hanging pendant or wireless remote.



Fan Mounting Kit:

Direct mount fans to hose reels are available: Plymovent fans include FUA-1800 to 2700 models, selected for the required airflow and static pressure. Not available for MER-1250-200 version. Consult Plymovent or your authorized distributor for details.



Micro Switch MSR-24/2:

Used for fan start/stop and damper operation signal.



Fan Starters:

Allows remote start of fan from hose reel. Choose from SA-24, ES-90, and DCV, including magnetic coil contractors, overload, transformer and fuses. UL/CE CSA Listed.



Motor-driven Damper:

MD-160 or 200: Motorized damper 160 or 200 mm (Ø 6.3 or 8 in.). Power supply 24 VAC.



Transformer TR-24:



Transformer 115/230 to 24 volt to supply motor-driven dampers when no other control equipment is used.



PLYMOVENT
clean air at work

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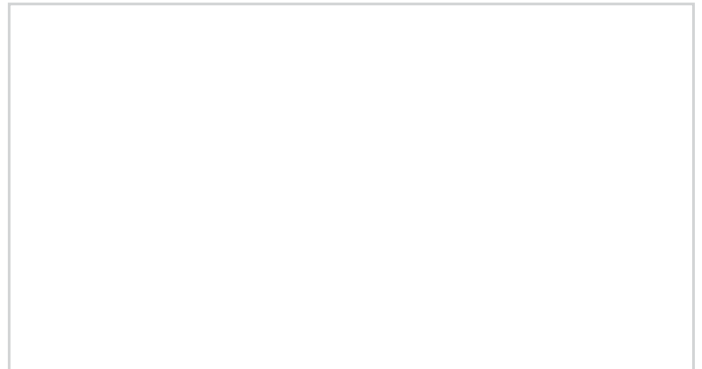
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Plymovent Corp. is ISO 9001:2015 Certified.



Plymovent Authorized Distributor:



Product type	MER™
Article no.	see remaining specifications
Product category	hose reels
Version	300119/1

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