

# MOBILE GRAND VENTILATORS MGV L80 II



## THE COMPACT LARGE STRUCTURE FAN FOR TACTICAL VENTILATION OF FIRE SCENES



A real all-rounder. The MGV<sup>®</sup> L80 II offers the necessary performance for an effective ventilation of large structures like underground parking, schools, department stores, warehouses or workshops and is at the same time light-weight and compact.

# WE HAVE MORE THAN 29 YEARS OF EXPERIENCE IN THE VENTILATION OF FIRE SCENES!

### SAFETY AND SAVING HUMAN LIVES

Our Mobile Grand Ventilators ensure immediately better visibility and lower temperatures inside the burning object. Rescue and fire fighting operations can be handled quicker and safer. Effective ventilation clears the area in front of the fire from smoke and heat, thus increasing the chance for survival for trapped persons. In an emergency, the security squad can approach significantly faster.



#### WHEN IT WAS LAUNCHED IN 2010, THE MOBILE GRAND VENTILATOR L80 DEFINED A NEW CLASS AND CLOSED THE GAP BETWEEN LARGE MOBILE GRAND VENTILATORS AND PORTABLE HIGH-PERFORMANCE FANS.

The MGV L80 II has been completely reengineered. Especially the new toothed belt drive of the MGV L80 II B with a combustion engine ensures an improved intake air flow. The optimized aerodynamics result in an even higher performance compared to the previous model. All L80 II have an electrical tilt-device with a tilt range that is unrivaled in this class to adjust the ventilator perfectly to the constructional conditions of the entrance opening, especially for the ventilation of basements and underground garages.

For the ventilation of sensitive areas (e.g. hospitals or food industry), the MGV L80 II is the only large structure fan available with two powerful electric drives.

With the optional water mist system it is possible to cool down objects and hold down toxic gases. The fine water mist and the optimal dispersion of the water in the air stream creates an excellent heat absorption capacity.

# DIRECTED VENTILATION AND LESS DAMAGE

Positive pressure ventilation is not always possible due to the building structure or tactically not reasonable, if the smoke spread can't be controlled. The ventilation hose system allows to extract big amounts of polluted air and cooled down smoke and gases out of enclosed areas, even over a long distance. It offers also the potential for well-directed ventilation. Controlled ventilation helps to avoid smoke and heat damage. Downtime of production in case of a fire in a manufacturing plant or assembly building can be clearly reduced.





The toothed belt drive of the MGV<sup>®</sup> L80 II B and the high-quality motors of the Honda GX series enable maximum reliability and exceptional performance. In addition to the improved air flow to the propeller, the drive concept also optimized the size of the special GRP adapter for suction performance unmatched in this class. Despite its small dimensions, the L80 II B offers the performance for effective ventilation of large objects such as underground parking, schools, warehouses and workshops. It can be optimally adjusted to the constructional conditions of the entrance opening with its electrical tilt-device. The L80 II B is easily handled and fast in operation either with the compact one-axle trailer or the pushcart.



- POWERFUL
- EXTREME COMPACT
- MULTIFUNCTIONAL
- FOR EVERY FIRE SERVICE

	LSO II B
Max. air output effective	220.000 m³/h
Air output nominal	70.000 m³/h
Axial thrust	approx. 950 N
Max. air speed	38 m/s
Engine	Honda GX 690, 2-cyl4-stroke engine, air cooled
Engine power	16,5 kW
Propeller	fiber-glass reinforced polyamide
Drive mechanism	toothed belt
Shroud	fiber-glass reinforced plastics, clam-shell design
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Operation	control panel
Operation Water Mist System	, i i i i i i i i i i i i i i i i i i i
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Water Mist System	control panel
Water Mist System Nozzles	control panel          B         pcs. stainless steel ring
Water Mist System Nozzles Water output	control panel          B         pcs. stainless steel ring         170 l/min (7 bar)
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#### L80 II B **SPEED**



The enormously robust, specially developed single-axle trailer BIG 750 with galvanized steel frame, high-quality aluminum checker plate components, ergonomic handles and standard tilting device can be easily positioned and operated by one person. Many options are possible, from the lift- and rotation-device to the ventilation hose system and LED working lights for illuminating the scene of operation.

Tilt device electrical	
Tilt angle	+20°/-20°
Rotation device manual	
Rotation angle	± 100°
Lift device electrical	
Lift height	600 mm
Dimensions (l x w)	2.750 - 1.450 (1.650) mm
Height	1.900 - 2.200 mm
Gross vehicle weight	750 kg
Height adjustable drawbar	
Material box	
Support devices	
LED working lights	
Integrated battery charger	
Ventilation hose system	

additional options / accessories available

### L80 || B **CITY**

The pushcart has a four-wheel steering for a high maneuverability and an all-wheel brake with deadman handle for maximum stability and safety during operation. Therefore, it can be easily positioned and operated by one person. The tilt-device and optional lift-device increase the flexibility for different operational situations.



Tilt device electrical	
Tilt angle	+20°/-20°
Lift device electrical	
Lift height	600 mm
Dimensions (l x w)	1.200 x 1.050 mm
Height	1.750 - 1.970 mm
Weight	220 - 375 kg
Deadman all-wheel brake	•
Four-wheel steering	
Charging connection MagCode 12V	
LED working lights	
Integrated battery charger	

#### EASY HANDLING, COMPACT STORAGE



The MGV<sup>®</sup> L80 II E is driven by powerful electric motors. The variable airflow is regulated by an intuitive control panel and can be adjusted to the specific needs during the operation. With lowered speed the noise level of the L 80 II E is reduced essentially – up to 80%. Because of the absence of exhaust fumes it can be operated inside buildings. The high quality industrial electric motor is maintenance free and durable. With the innovative frequency control the performance of the drive is optimized, therefore the drive power is clearly higher than the nominal power of the motor. The L80 II E is available with two different powerful electric drives.

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- UP TO 195.000 m<sup>3</sup>/h
- NO EXHAUST FUMES
- UP TO 80% LESS NOISE
- LOW-MAINTENANCE

	L80    E11	L80    E16
Max. air output effective	140.000 m³/h	195.000 m³/h
Air output nominal	50.000 m³/h	70.000 m³/h
Max. air speed	30 m/s	43 m/s
Motor	three-phase motor 400V	
Drive power	11 kW	16 kW
Nominal motor power	7,5 kW	11 kW
Connecting plug	CEE 400 V 16 A	CEE 400 V 32 A
Propeller	fiber-glass reinforced polyamide	
Rpm at max. power	1.700 1/min	2.300 1/min
Shroud	fiber-glass reinforced plastics, clam-shell design	
Operation	control panel with display	
Water Mist System		
Nozzles	8 pcs. stainless steel ring	
Water output	170 l/min (7 bar)	
Ventilation Hose System		
Air output extraction mode	14.000 m³/h	19.000 m³/h
Diameter ventilation hose	600	) mm
Adapter	1 pcs. GRP incl. 2 m hose	
Mounting	intake side	
Length	14 m (standard pa	ckage), upgradeable

### L80 || E **CITY**



Tilt device electrical	
Tilt angle	-10° / +25°
Dimensions (l x w x h)	1.200 x 1.050 x 1.650 mm
Weight	220 kg / 270 kg
Deadman all-wheel brake	•
Four-wheel steering	
LED working lights	

The pushcart has a four-wheel steering and an all-wheel brake with deadman handle for maximum stability and safety during operation. The integrated tilt-device allows an easy and fast adjustment.

### L80 II E CITYQ



Tilt device electrical	
Tilt angle	+25°/-10°
Dimensions (l x w x h)	1.200 x 800 x 1.650 mm
Weight	220 kg
Deadman all-wheel brake	
Four-wheel steering	
Support device	
LED working lights	

Alternatively, the L80 II E can be positioned sideways on a pushcart in order to be transported place-savingly. An additional supporting leg guarantees maximum stability during operation.

#### PUSHCART ACCESSORIES



For transport of the ventilation hose system and additional accessories, various pushcarts are available. They can be constructed in flexible ways in order to lorry further equipment such as additional ventilation hoses, portable smoke blockers and the foam generator system FlexiFoam.

### \_\_\_\_ EST. 1991 \_\_\_\_ INNOVATION MADE IN GERMANY

BIG has itself excelled by introducing innovative products for ventilation of fire scenes since 1991. The BIG Mobile Grand Ventilators are leading the ventilation of large structures for more than 20 years. Our know-how and our experience of 29 years in sales, development and manufacturing of high performance fans for the fire service results in the constant redevelopment of our Mobile Grand Ventilators Made in Germany. High performance combined with perfect ergonomics and quality are the objectives for the engineering made by BIG.

Technical changes, misprints and errors excepted

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