

Miniflex

Portable Welding Fume Extractor

Lincoln Electric's new Miniflex is a portable, high vacuum, low volume system specifically designed for the removal and filtration of welding fumes. The Miniflex excels in performance, design and ease of handling. It can be completely disassembled in a matter of minutes for cleaning and maintenance. With an automatic start/stop function, the unit automatically turns on and off during welding. It can be used in confined spaces and other locations that are not accessible with other welding fume extractors. And with its standard set of wheels and optional wall-mounting bracket, it can be easily moved around or positioned off the work floor, out of the welder's working space.



Processes

Stick TIG MIG Flux-Cored Plasma

Advantage Lincoln

- Excellent quality product at an affordable price.
- Well thought-out, user-friendly design.
- Four-stage filtration system for higher efficiency.
- LongLife-H™ filter technique separates and retains small particles for maximum efficiency.
- Main filter with spark arrestor surface area: 130 ft² (12m²).
- Activated carbon filter (Optional) for improved filtration.
- Final filter: HEPA H12 Class.
- Filter efficiency: up to 99.97%.
- Two powerful motors: 1.2 hp each.
- Multiple extraction capacity settings:
 - Low: 94 CFM.
 - High: 135 CFM.
- Cable sensor allows automatic start/stop capability.
- Low noise level: 70dB(A) with nozzle extraction installed.
- Unlike competitive models, standard wheels and handle make it easy to roll the Miniflex around the shop.
- Weight: 33 lbs. (15 kg).
- One-year warranty on Miniflex unit, 30 day warranty on all consumables, such as filters, hoses, hose adapters.

Description

Extraction Capacity

LO: 94 CFM
HI: 135 CFM

Input

1
PHASE

50/60
Hz

Base Unit Includes

- 9 ft. (3m) cord (AWG 14) with 15 amp plug (NEMA 5-15)
- 8 ft. (2.5m) length x 1-3/4 in. (45mm) O.D. extraction hose
- LongLife-H main filter
- HEPA filter
- 2 spare sets of carbon brushes and seals for motors.

Recommended General Options

- Extraction Nozzles: EN 20 or EN 40
- Nozzle Kits: NKT or NKC
- Fume Exhaust Guns
- Extraction Hoses: 8 ft. (2.5m) long x 1-3/4 in. (45mm) O.D.
16 ft. (5m) long x 1-3/4 in. (45mm) O.D.
- Hose-to-Hose Adapter
- Hose Connection Outlet
- Activated Carbon Filter
- Wall Mounting Bracket

Order

K2376-1 Miniflex Portable Welding Fume Extractor

TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Input Current	Dimensions H x W in (mm)	Net Weight lbs (kg)
Miniflex	K2376-1	115V/1/50/60	15A	28-3/4 x 16-1/2 (730 x 420)	33 (15)

Weight and Design

Constructed out of synthetic components, the Miniflex is light-weight, at only 33 lbs. (15 kg), and impact resistant with a user-friendly design. With wheels and handle standard, the Miniflex can be easily rolled or carried around, unlike competitive models.

Four-Stage Filtration Process

The Miniflex has a four-stage filtration process. In stage one, as the air enters the system through an intake connection, it passes through a metal pre-separator in which heavier particulates and foreign material are captured. In stage two, the air passes from the pre-separator through the LongLife-H main filter where the welding fume particles are captured and deposited. In an optional stage three, after flowing through the LongLife-H filter and to prevent or neutralize the release of odors or smells back into the environment, the air flows through an (optional) activated carbon filter. In the final stage (stage four), the air flows through a HEPA filter (also known as High Efficiency Particulate Air), which will increase the Miniflex's filtration efficiency up to 99.97%.

LongLife-H filter

The unique design of the Miniflex's LongLife-H main filter has resulted in a very large filter surface area equaling 130 ft² (12m²). With such a large surface area, the filter has an extended life. The LongLife-H filter is designed to dispose of extracted welding fume deposits at the time of filter disposal, preventing deposits from being released during welding.

Cable Sensor

At the top of the Miniflex unit is an automatic start/stop button and a manual button. When the Miniflex is being operated in automatic mode, the unit automatically switches on as welder begins to weld, and automatically switches off approximately 15 seconds after welder stops welding. The result is less energy consumption and non-continuous noise. For the automatic start/stop function to work, the welder's work cable or power cable must be laid across the top of the Miniflex unit in the slotted groove with a sensor.

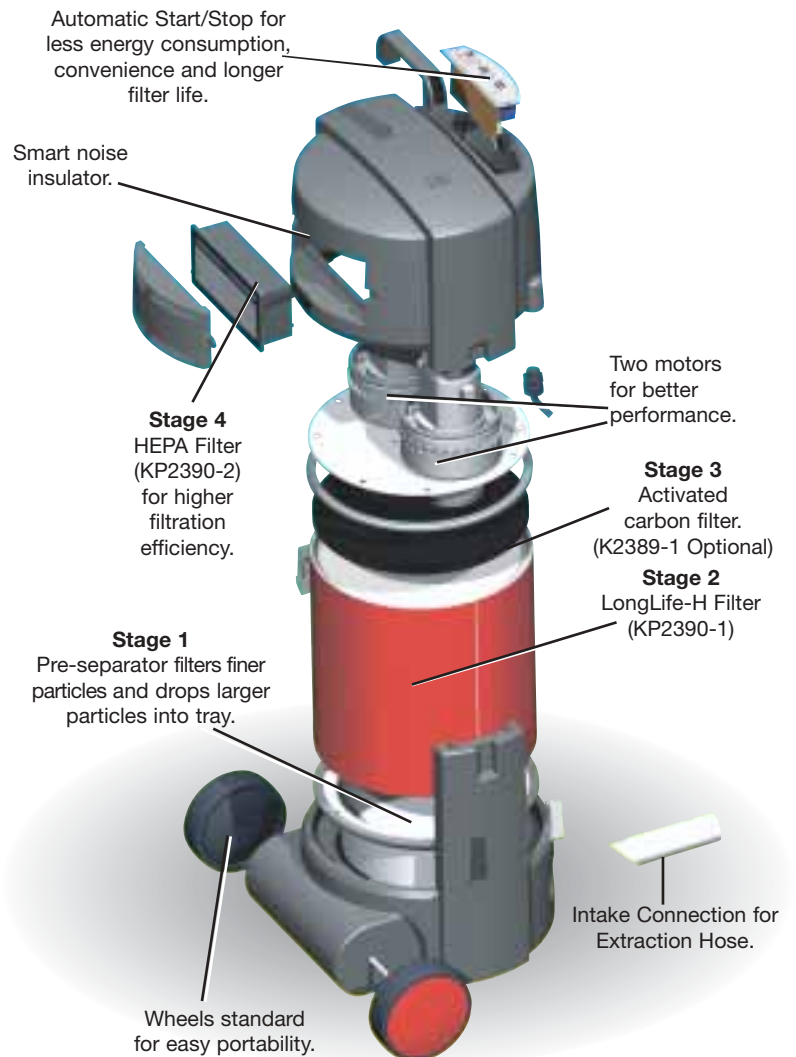
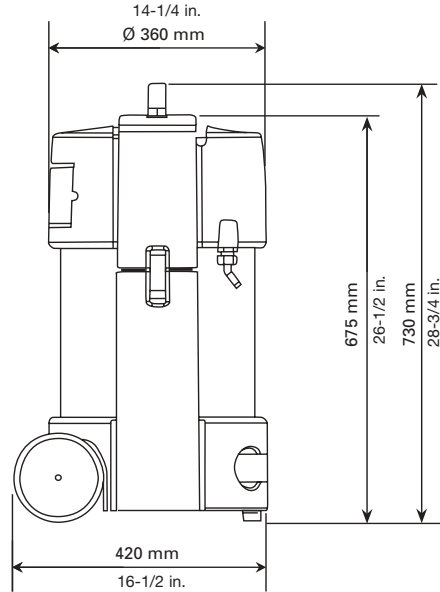
When the Miniflex is being operated in manual mode, the unit is continuously running.

Reduced Noise

Smart noise insulation around the air exhaust significantly reduces noise without overheating the motors. 70dB(A) with nozzle extraction installed.

Two Parallel Motors

The Miniflex is powered by two 1.2 hp motors allowing for sufficient extraction capacity under all conditions. At the top of the Miniflex unit is a high/low button. In high mode, both motors are working at 100% capacity, extracting 8122 ft³/hr (230m³/hr) of air. In low mode, both motors are working at 50% capacity, extracting 5650 ft³/hr (160m³/hr) of air. With both motors increasing and decreasing speed, the result is a continuously balanced system with reduced maintenance. The motors parallel positioning design reduces noise.



GENERAL OPTIONS



EN 20 Extraction Nozzle
The EN 20 nozzle is designed for a wide array of welding applications. With its funnel extraction opening and magnetic mounting stand, it gives the welder a great amount of versatility.
Order K2389-5



EN 40 Extraction Nozzle
The EN 40 nozzle is designed for stick electrode applications. With its L-shaped tube and an elongated slotted opening, the EN 40 nozzle is designed to coincide with the time it takes the welder to use one stick electrode. This design alleviates the welder from having to continuously reposition the nozzle. Magnetic mounting stand included.
Order K2389-6

NKT
K2389-3



NKC
K2389-4



Nozzle Kits
The NKT and NKC nozzle kits provide extraction capacity to standard welding torches. The NKT kit is for mounting the extraction hose on top of gun. The NKC kit is for circular extraction. Note: guns not included.
Order K2389-3 for NKT
Order K2389-4 for NKC



Fume Guns
To extract welding fumes, Lincoln Electric's 250XA-400XA Magnum fume guns and the 350A, 500A. 250A FCAW-SS fume guns can be connected to the Miniflex and its extraction hose.
For 250XA, 400XA Magnum Guns, see publication E13.10
For 350A, 400A, 250A FCAW-SS Guns, see publication E12.110



Other Nozzles
A variety of other nozzles can be specially adapted to unit. Contact your local Lincoln representative for more details.



GENERAL OPTIONS, CONT.

Extraction Hoses
For longer hose applications, flexible high temperature hoses with spring steel reinforcement are optional. Two optional hose dimensions are: 8 ft. (2.5m) x 1-3/4 (45mm) O.D. or 16 ft. (5m) length x 1-3/4 in. (45mm) O.D. The optional extraction hoses can be used to connect to or replace the already included hose with Miniflex base unit. To ensure effective performance level, it is recommended that a maximum hose length of 45 ft. (15m) be used with the Miniflex.
Order K2389-8
for 16 ft. x 1-3/4 in. hose
Order K2389-9
for 8 ft. x 1-3/4 in. hose



Hose-to-Hose Adapter
To connect hoses together, a 2 in. (50mm) hose-to-hose adapter screws over hose ends, providing a tight connection and seal.
Order K2389-10



Hose Connection Outlet
The hose connection outlet (HCH 45) can be used to exhaust or dispose of welding fume particles, for example when welding stainless steel or galvanized.
Order K2389-2



Activated Carbon Filter
To neutralize or prevent the recirculation of odors or smells into the environment, the optional FAC HV, activated carbon filter can be placed on top of the Miniflex's LongLife-H main filter.
Order K2389-1



Wall Mounting Bracket
The MBH wall-mounting bracket allows for the Miniflex to be placed off the work floor and on the wall, out of the welder's workspace.
Order K2389-7

MINIFLEX ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
MINIFLEX PORTABLE WELDING FUME EXTRACTOR	K2376-1		
EXTRA SET OF FILTERS			
LongLife-H Filter	KP2390-1		
HEPA Filter	KP2390-2		
RECOMMENDED GENERAL OPTIONS			
EN 20 Extraction Nozzle	K2389-5		
EN 40 Extraction Nozzle	K2389-6		
NKT Nozzle Kit	K2389-3		
NKC Nozzle Kit	K2389-4		
250XA, 400XA Magnum Guns	see publication E13.10		
350A, 500A, 250A FCAW-SS Guns	see publication E12.110		
16 ft. (5m) Extraction Hose	K2389-8		
8 ft. (2.5m) Extraction Hose	K2389-9		
Hose-to-Hose Adapter	K2389-10		
Hose Connection Outlet	K2389-2		
Activated Carbon Filter	K2389-1		
MBH Wall Mounting Bracket	K2389-7		
	TOTAL:		

Environmental Systems Family



CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

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