

EXTRACTION ARMS



# PR

Flexible extraction arm for industrial environments with many key advantages



**FUMEX**  
PURE ADVANTAGE



### Product properties

- Unique manoeuvrability
- Exceptional positional stability
- Air-tight damper
- FUMEX Q-MaiD™ quick hose connection
- External support arms for lowest possible pressure drop
- Dual gas springs to counterbalance the weight of the arm
- Hose (dimension & quality) to match area of use
- Hood designed for maximum extraction efficiency and optimal capture performance

# Flexible extraction arm with many key advantages

**FUMEX PR** - the most adaptable industrial extraction arm on the market, designed to effectively cleanse the work environment of airborne contaminants. User-friendly, practical and durable design with external aluminium support arms and a hood with exceptional capture performance.

FUMEX PR is available in the lengths 1500 / 2000 / 3000 / 4000 / 5000 / 7000 / 9000 / 11000 mm, and the dimensions Ø100 / 125 / 160 mm.

**Q** quick  
**M** maintenance  
**A** assembling  
**I** installation  
**D** dismantling

## What is FUMEX Q-MaiD™?

FUMEX Q-MaiD™ is a quick connection system that simplifies maintenance, assembly, installation and disassembly.

Unique manoeuvrability, exceptional positional stability, and hood with exceptional capture performance.

## Lowest possible pressure drop

The external design, with gas springs for counter-balance, provides both flexibility and positional stability, as well as the lowest possible pressure drop with little risk of blockage. Compared to extraction arms with internal support arms and joints, the PR has approximately 50 % lower pressure drop, and the hose is significantly easier to clean.

## External support arms with dual gas springs

Externally mounted support arms are always preferable to extraction arms with the load-bearing components fitted inside the suction tube. Primarily because this always provides the lowest possible pressure drop, but also because external support arms make the friction joints more easily accessible for adjustments. The support arm is also made of aluminium, helping to reduce the weight of the extraction arm.

## Accessories

Accessories include an extension hose as well as LED lighting and switches for controlling the fan/damper.

# PR available in three versions



## PR STD

The standard version. Brackets in powder-coated steel. Support arms in anodised aluminium and joints in anthracite grey PA6 & PP. **FUMEX Q-MaId™** quick hose connection. Air-tight damper. Hood designed in accordance with EU standards. Injection moulded in anthracite grey PA6 with hood guard in anodised aluminium. Hose in dark blue PVC-coated polyamide fabric.

## PR CR

Designed for the extraction of corrosive gases. White brackets in powder-coated steel. Support arms in anodised aluminium and joints in white PA6 & PP. **FUMEX Q-MaId™** quick hose connection. Air-tight damper. White hood with anthracite grey handle in PP and black hood guard in PE. Stainless steel screws. Fasteners coming into contact with the extracted air in corrosion-resistant material. Hose in white PE-coated polyamide fabric.

## PR WHITE

White brackets in powder-coated steel. Support arms in anodised aluminium and joints in white PA6 & PP. **FUMEX Q-MaId™** quick hose connection. Air-tight damper. White hood with anthracite grey handle, injection moulded in PP with hood guard in anodised aluminium. Hose in white PVC-coated polyamide fabric.

## Also available in ATEX

See separate product sheet or scan the QR code.





## Optimised hood design

The hood is designed for maximum extraction efficiency. This makes it ideal for capturing welding fumes and other hot contaminants. For isothermal (non-hot) contaminants, extraction efficiency can be further improved by taking advantage of the Coanda effect.

## Optimise hood position

For optimal results from the extraction arm, it is important to leverage the extractor's flexibility to get as close as possible to the contaminant. A good rule of thumb is a distance of 2–3 times the diameter of the extraction arm's suction tube. Then the extraction arm (at the recommended airflow) remains highly efficient even when the ambient environment is disturbed.

## Always choose a low pressure drop

A low pressure drop always saves energy. A low pressure drop also produces less noise, reduces the risk of annoying ventilation sounds and can more easily be combined with other extractors in the same system.

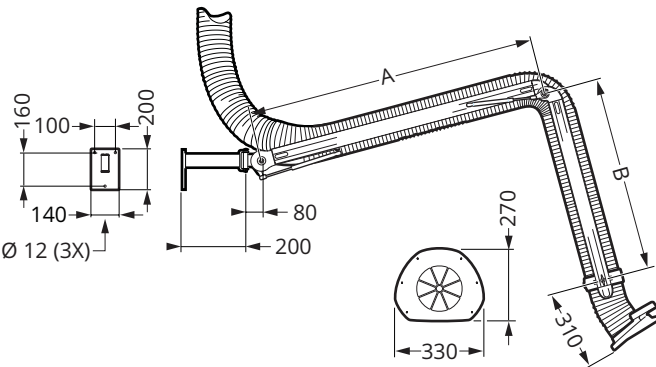
## The Coanda effect

The Coanda effect is the phenomenon whereby isothermal air currents (non-hot) tend to follow a solid, smooth surface, such as a table or a bench, rather than flow freely through the room.



# Dimensional drawing (mm)

## PR 1500/2000/3000

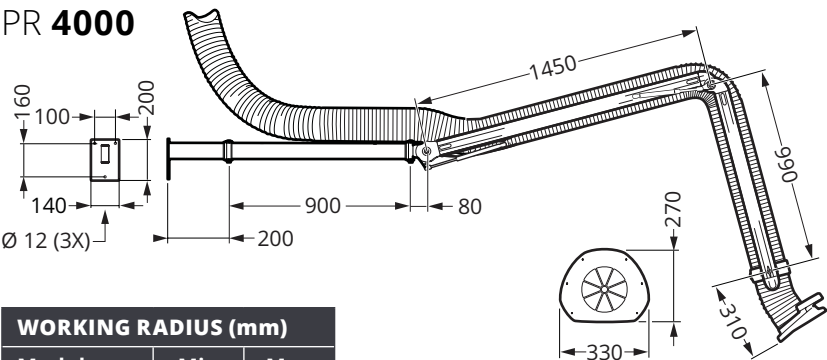


DIMENSIONS (mm)		
Model	A	B
PR 1500	420	490
PR 2000	950	490
PR 3000	1450	990

WORKING RADIUS (mm)		
Model	Min	Max
PR 1500 <sup>1</sup>	250	1000
PR 2000 <sup>2</sup>	350	1450
PR 3000 <sup>2</sup>	0	2700

<sup>1</sup> At 1800 mm installation height and 750 mm working height.  
<sup>2</sup> At 2100 mm installation height and 750 mm working height.

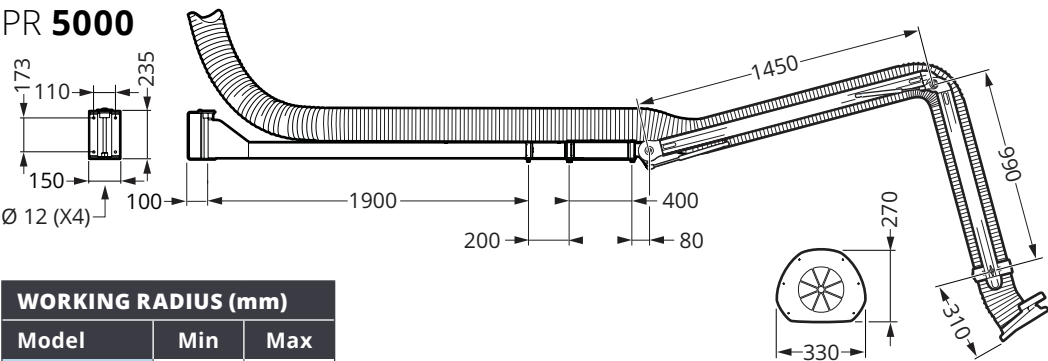
## PR 4000



WORKING RADIUS (mm)		
Model	Min	Max
PR 4000 <sup>1</sup>	900	3600

<sup>1</sup> At 2100 mm installation height and 750 mm working height.

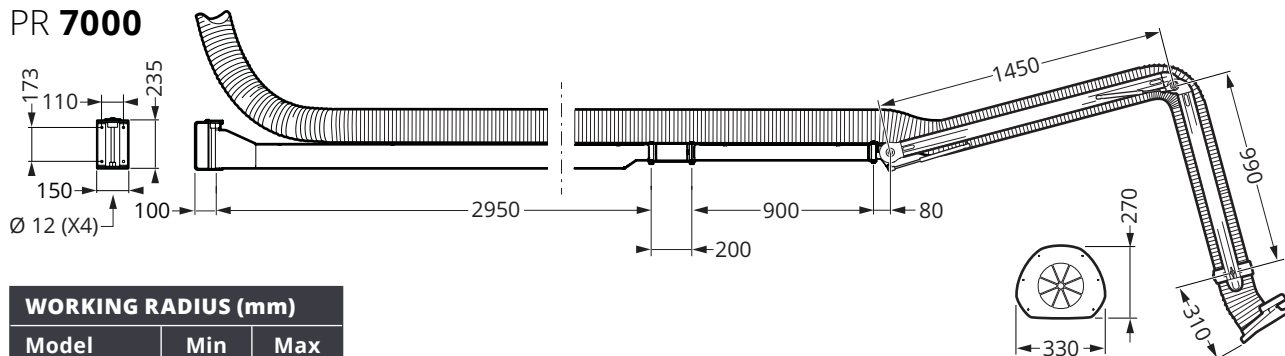
## PR 5000



WORKING RADIUS (mm)		
Model	Min	Max
PR 5000 <sup>1</sup>	0	4750

<sup>1</sup> At 2500 mm installation height and 750 mm working height.

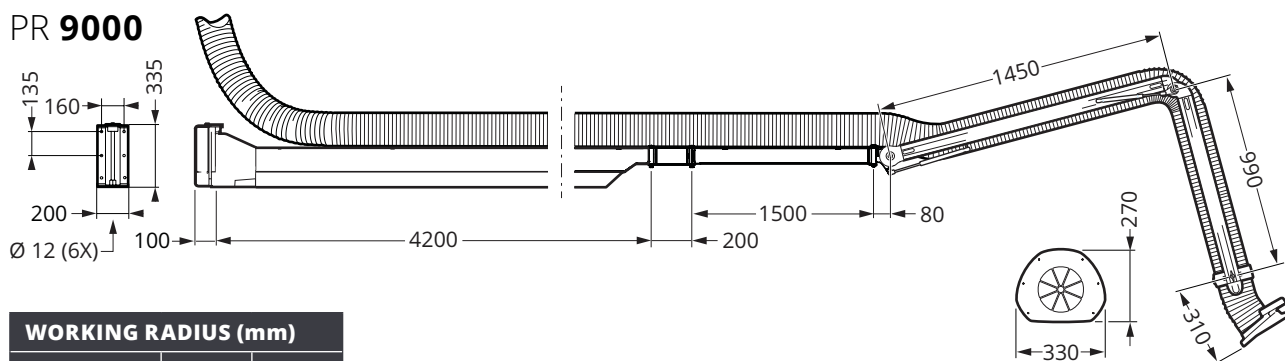
## PR 7000

**WORKING RADIUS (mm)**

Model	Min	Max
PR 7000 <sup>1</sup>	0	6400

<sup>1</sup> At 2500 mm installation height and 750 mm working height.

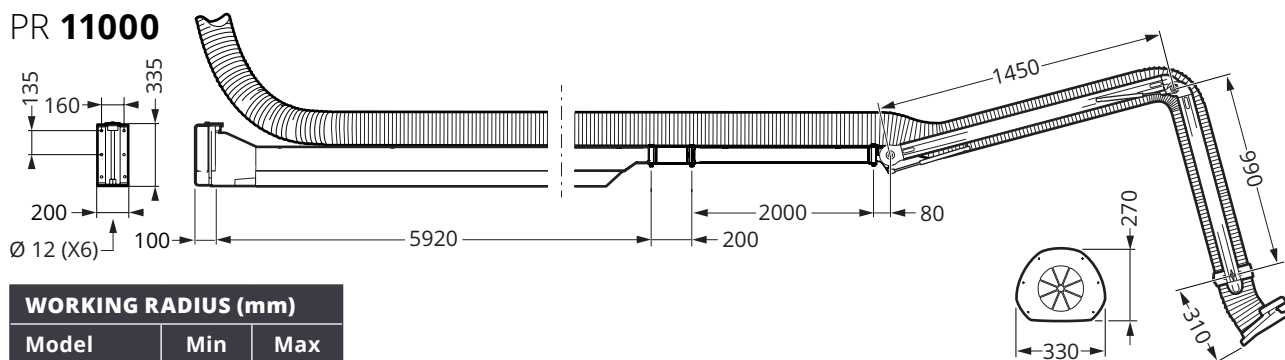
## PR 9000

**WORKING RADIUS (mm)**

Model	Min	Max
PR 9000 <sup>1</sup>	200	8150

<sup>1</sup> At 2500 mm installation height and 750 mm working height.

## PR 11000

**WORKING RADIUS (mm)**

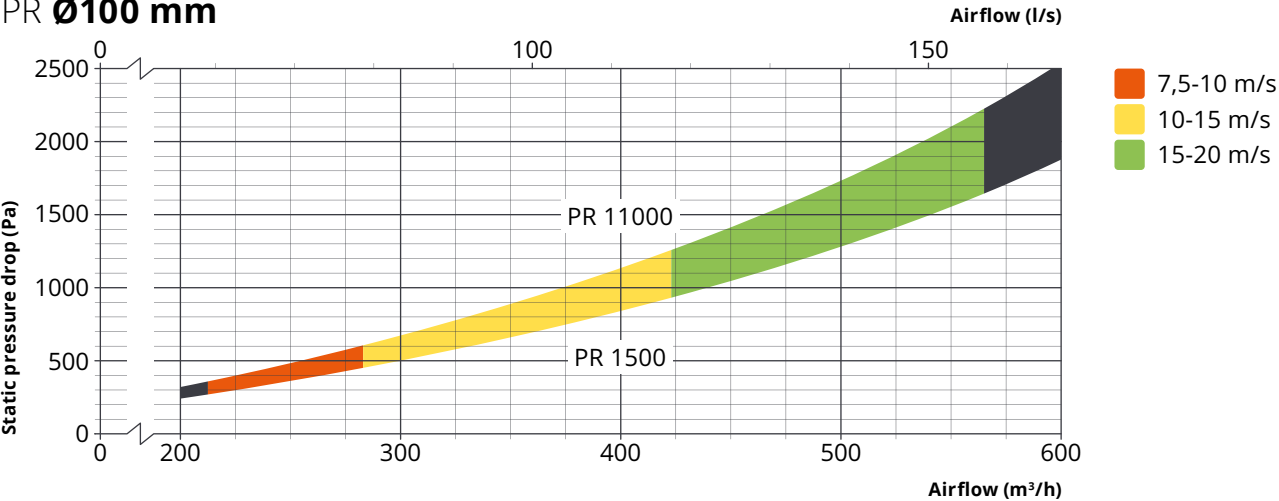
Model	Min	Max
PR 11000 <sup>1</sup>	1450	10400

<sup>1</sup> At 2500 mm installation height and 750 mm working height.

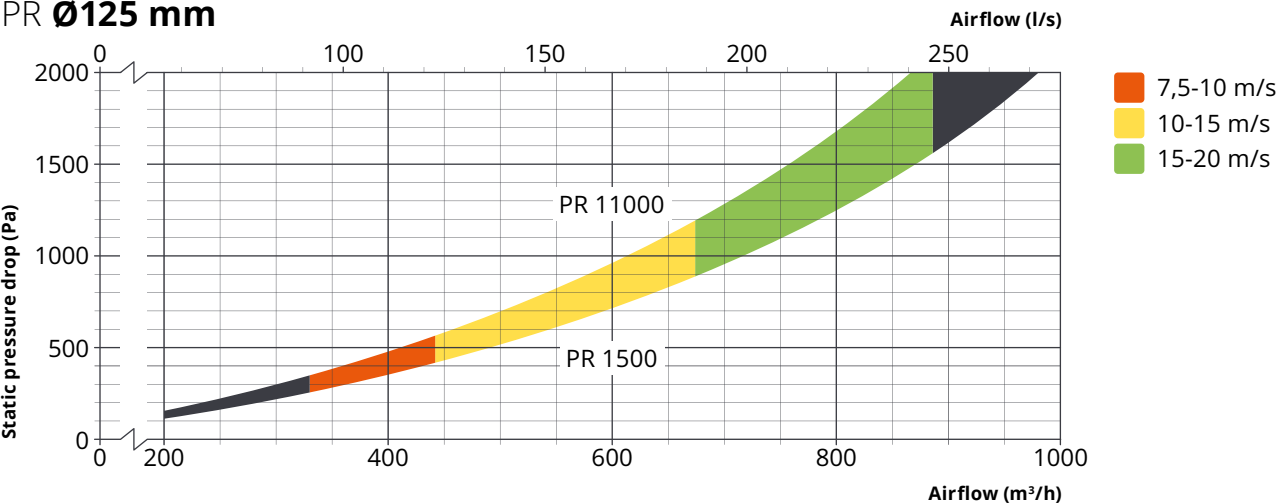
# Pressure drop diagram

The pressure drop varies depending on the positioning of the extraction arm. Measurement of pressure drop is made with the extraction arm positioned according to the dimensional drawing on pages 6 & 7.

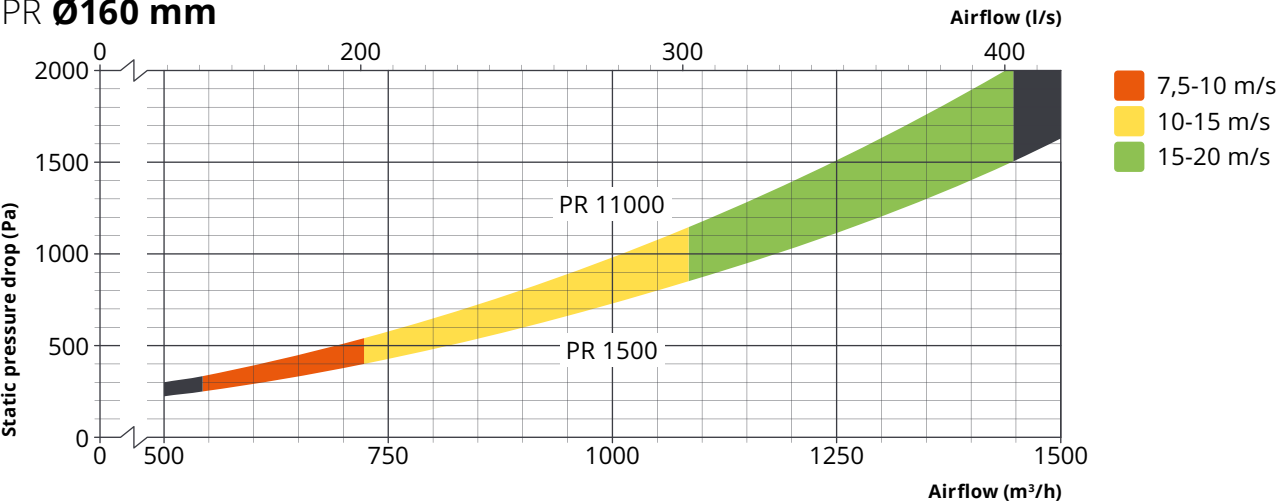
## PR Ø100 mm



## PR Ø125 mm



## PR Ø160 mm



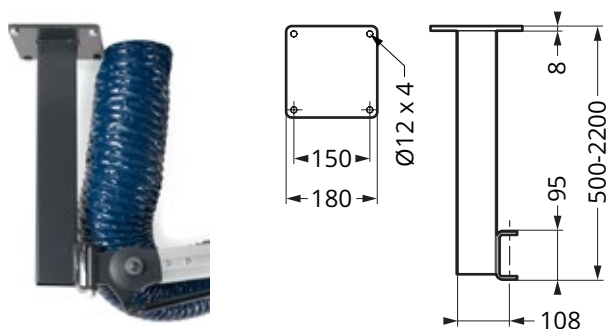


## Brackets (ceiling/floor)

FUMEX PR includes a wall bracket as standard. The following fixtures are available for mounting on ceilings and floors.

### PTX

Ceiling and floor bracket. 180° of rotation.  
Suitable for PR 1500/2000/3000/4000.

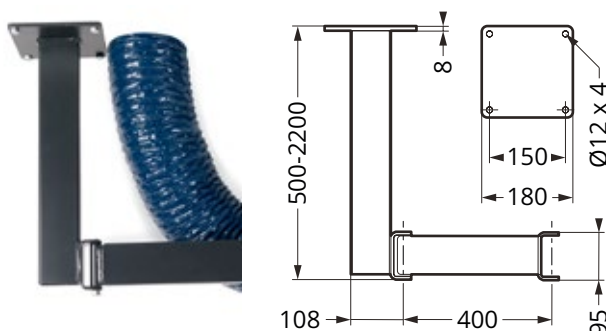


PTX	500	1000	1500	2000	2200 <sup>1</sup>
Length (mm)	500	1000	1500	2000	2200
Weight (kg)	5	7,5	10	12,7	14

<sup>1</sup> Floor bracket

### PTX 180

Ceiling and floor bracket. 360° of rotation.  
Suitable for PR 1500/2000/3000/4000.

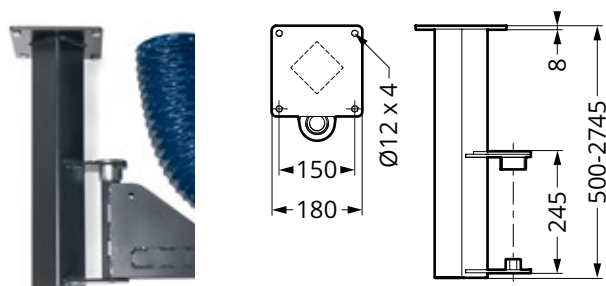


PTX 180	500	1000	1500	2000	2200 <sup>1</sup>
Length (mm)	500	1000	1500	2000	2200
Weight (kg)	6,7	9,3	12	14,5	15,5

<sup>1</sup> Floor bracket

### PTZ

Ceiling and floor bracket. 180° of rotation.  
Suitable for PR 5000/7000.



PTZ	500	1000	1500	2000	2500 <sup>1</sup>
Length (mm)	500	1000	1500	2000	2500
Weight (kg)	7,6	12	16,6	21,2	25,7

<sup>1</sup> Floor bracket

### PRSV

Complete swivel kit for PTX. Provides 360° of rotation. Supplied with the necessary fixtures and fittings. Suitable for PR 1500/2000/3000.



## Accessories



### PUSH BUTTON **PR S**

Push button for controlling the fan and/or damper. Including cable routing.



### WORK LIGHTING **PR LS**

Work lighting (LED). Dimmable with adjustable positioning. Built-in push button with LED-indicator for controlling the fan and/or damper. Including cable routing.

Power supply via separate transformer or control unit.

#### Technical data - LED

Power: .....5 W  
Luminous flux: .....500 lm<sup>1</sup>  
Light exchange: .....110 lm/W  
Colour temperature: .....4000 K

<sup>1</sup> Dimmable 100 - >10 %



### POWER SUPPLY **ST 24**

LED power supply unit.

#### Technical data - ST 24

Primary voltage: .....100-240 VAC  
Secondary voltage: .....24 VDC  
Frequency: .....50/60 Hz  
Output current: .....340 mA  
Power: .....8,16 W

### Power supply and control

PR S/LS requires separate power supply and control. It can both be powered and controlled via Fumex control units **S200/24 / S400 / S600**.

If only LED lighting is used, it can alternatively be powered by the **ST 24** DC PSU.

Talk to your dealer or directly with Fumex and find your optimal solution.

**EXTENSION HOSE PFS 4000/8000**

With magnetic nozzle and quick coupling suitable for PR arm. Available in the lengths 4000 and 8000 mm. Suitable for PR dimensions Ø125 and 160 mm.

**FRICTION BRAKE PR 100-6340**

Suitable for PR with bar. A friction brake is used to make the extraction arm even easier to position while ensuring that it stays in place. Mounted under the wall bracket swivel.

Included as standard with PR 9000/11000 and available as an accessory for PR 5000/7000.

**Get the right accessories**

When ordering accessories for your FUMEX product, it is important that you specify your product model and version when placing your order. Talk to your dealer or Fumex sales staff to ensure the best service.

**SWIVEL HOOD PRH 800**

Hood with 360° swivel function. Enables a larger working area, such as when welding. Inserted into the PR hood with 2 internal fasteners to ensure that it is firmly attached. Supplied with the necessary fixtures and fittings. Suitable for PR 2000-11000, dimension Ø160 mm.

**GLAZIER'S HOOD PRG**

Glazier's hood with suction channel around the outside edge. Enables a larger working area, such as when gluing and joining glass. Supplied with the necessary fixtures and fittings. Replaces the standard hood. Suitable for PR 2000-11000, dimension Ø160 mm.

**SPARK TRAP PR ST**

Protects the extraction arm from large particles and reduces the risk of sparking. Mounted on the extraction arm's suction nozzle.





Application for lab



Concrete works



Application for lab



Sandblasting

## Wide Range of Applications

**FUMEX PR** is not limited to welding and industrial environments, as many might believe. PR can be used in a wide range of work environments for a variety of tasks. See examples of different environments in the table of recommended airflow rates below.

### Recommended airflow

Activity	Dimension (mm)	Airflow	
<b>Welding (general)</b>	Ø125	800 m³/h	222 l/s
<b>Welding (heavy)</b>	Ø160	1000 - 1400 m³/h	278 - 389 l/s
<b>Industrial gases and particles</b>	Ø100	250 - 450 m³/h	69 - 125 l/s
	Ø125	500 - 800 m³/h	139 - 222 l/s

## Specifications

### Form of delivery

The extraction arm is delivered partially assembled with a wall bracket for easy installation.

### Surface finish

Aluminium parts:..... Anodised

Steel parts:..... Black oxide, chromate conversion or powder coated

Plastic components: ..PA6, PA6 30% GF, PE, PP 30%, GF, TPE

### Weight (excl. hose)

#### Model..... Weight (kg)

PR 1500:.....	9
PR 2000:.....	10
PR 3000:.....	12
PR 4000: .....	15
PR 5000:.....	23
PR 7000: .....	37
PR 9000:.....	52
PR 11000:.....	64

### Hose

#### PR STD (blue) / WHITE

Material:..... PVC-coated polyamide fabric with fully embedded spring steel coil

Properties: ..... Flame-resistant, suitable for welding and flue gases

Temperature range:.. -10°C to +90°C

Dimensions (Ø): ..... 100/125/160 mm

#### PR CR

Material:..... PE-coated polyamide fabric

Properties: ..... Flame-resistant, suitable for welding and flue gases

Temperature range:.. -10°C to +90°C

Dimensions (Ø): ..... 100/125/160 mm

### Other hose qualities?

Hose qualities that can withstand aggressive chemicals and other specific hose requirements can be met upon request. Please contact Fumex.

EXTRACTION ARMS • VEHICLE EXHAUST EXTRACTION • FANS • FILTERS • CURTAINS • CONTROLS

# FUMEX

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