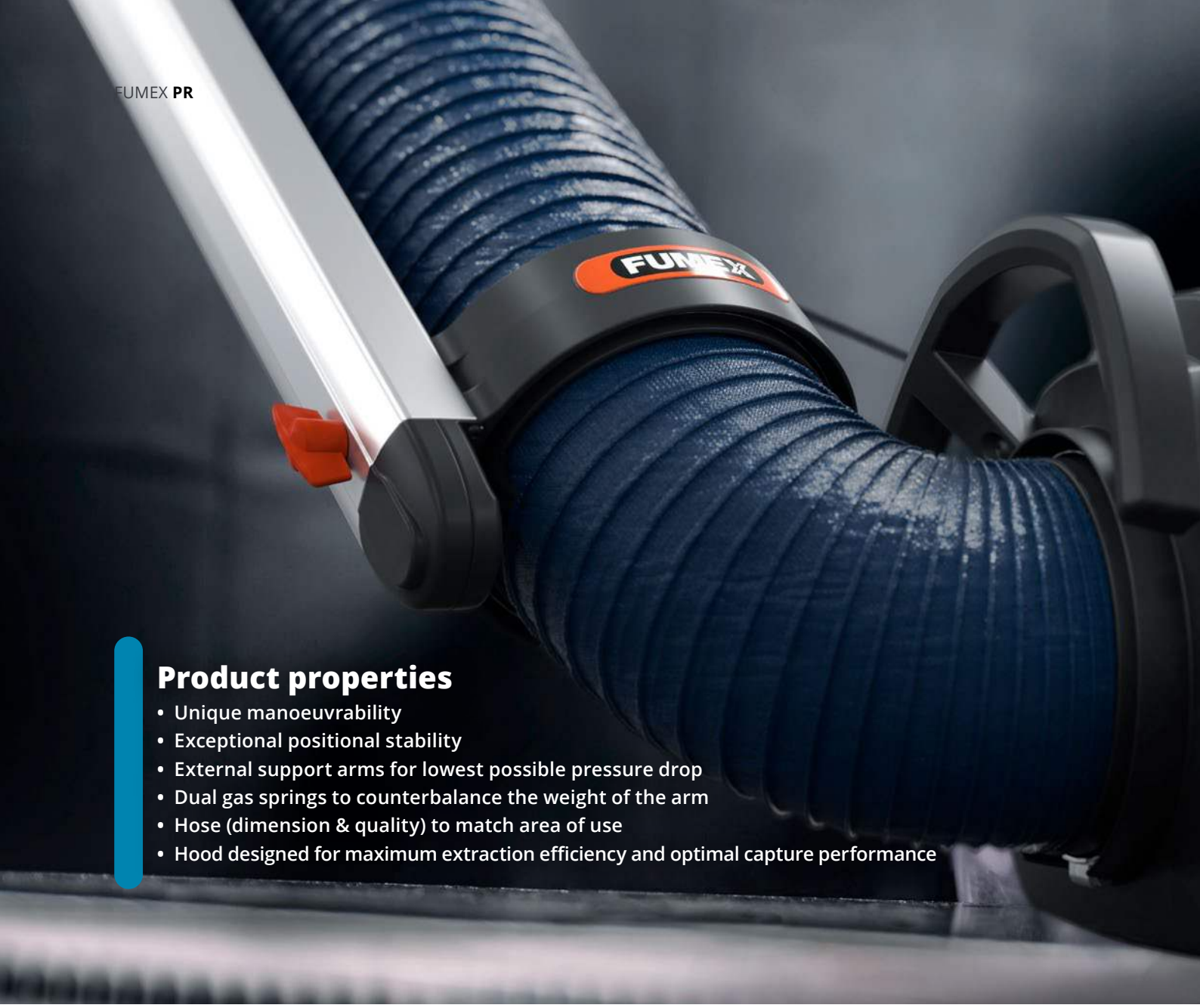
EXTRACTION ARMS

PR

Flexible extraction arm for industrial environments with many key advantages

FUMEX
PURE ADVANTAGE



Product properties

- Unique manoeuvrability
- Exceptional positional stability
- 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.

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. 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. 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. White hood with anthracite grey handle, injection moulded in PP with hood guard in anodised aluminium. Hose in white PVC.

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

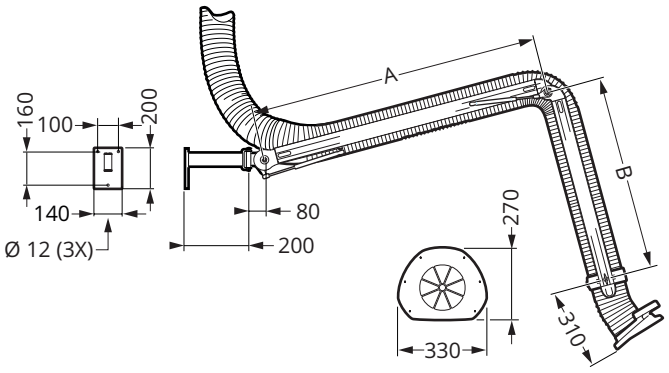
A low pressure drop always saves energy. A low pressure drop also produces less noise, reduces the risk of annoying ventilation sounds and can more easily be combined with other extractors in the same system.

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**

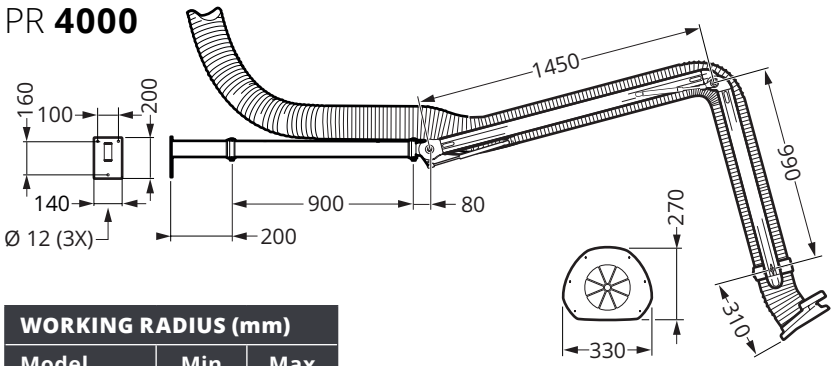


DIMENSIONS (mm)		
Model	**A**	**B**
PR 1500	420	490
PR 2000	950	490
PR 3000	1450	990

WORKING RADIUS (mm)		
Model	**Min**	**Max**
PR 1500[1]	250	1000
PR 2000[2]	350	1450
PR 3000[2]	0	2700

[1] At 1800 mm installation height and 750 mm working height.
[2] At 2100 mm installation height and 750 mm working height.

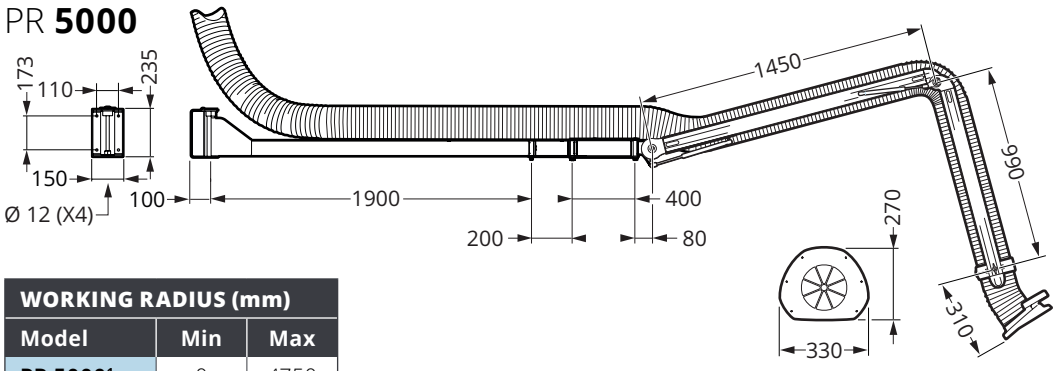
PR **4000**



WORKING RADIUS (mm)		
Model	**Min**	**Max**
PR 4000[1]	900	3600

[1] At 2100 mm installation height and 750 mm working height.

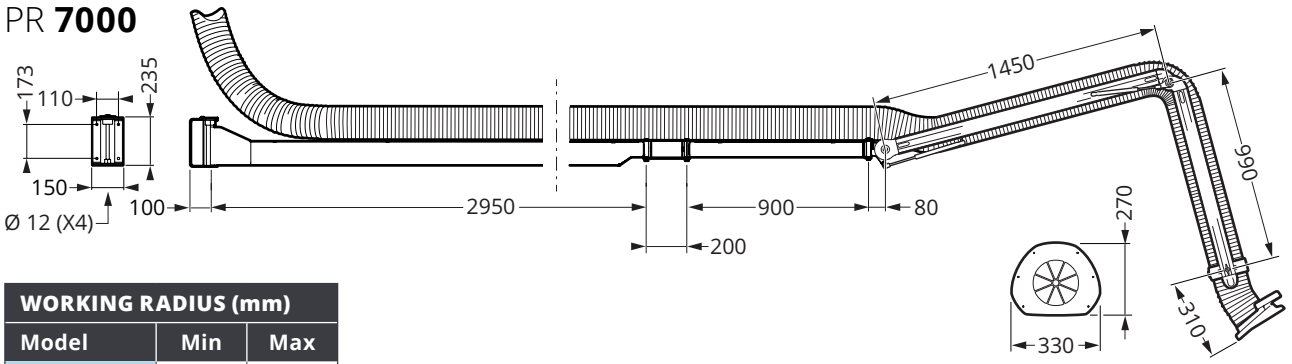
PR **5000**



WORKING RADIUS (mm)		
Model	**Min**	**Max**
PR 5000[1]	0	4750

[1] At 2500 mm installation height and 750 mm working height.

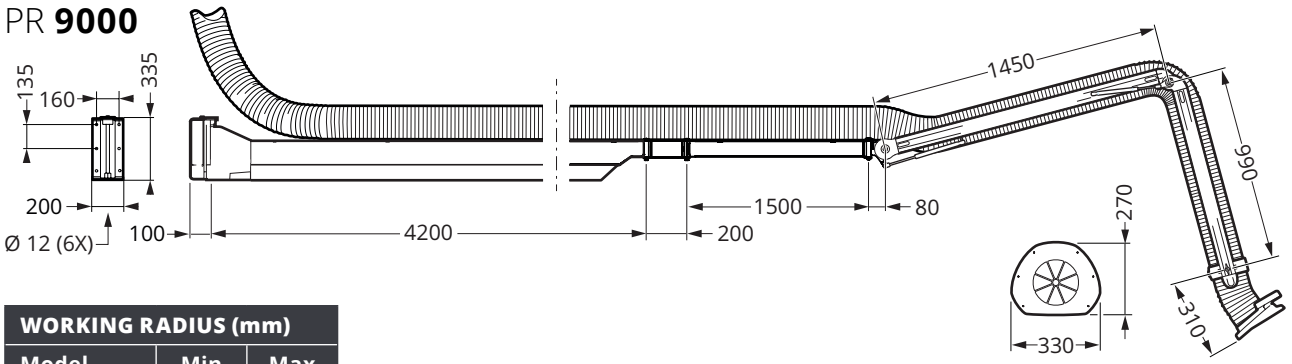
PR **7000**



WORKING RADIUS (mm)		
Model	**Min**	**Max**
PR 7000[1]	0	6400

[1] At 2500 mm installation height and 750 mm working height.

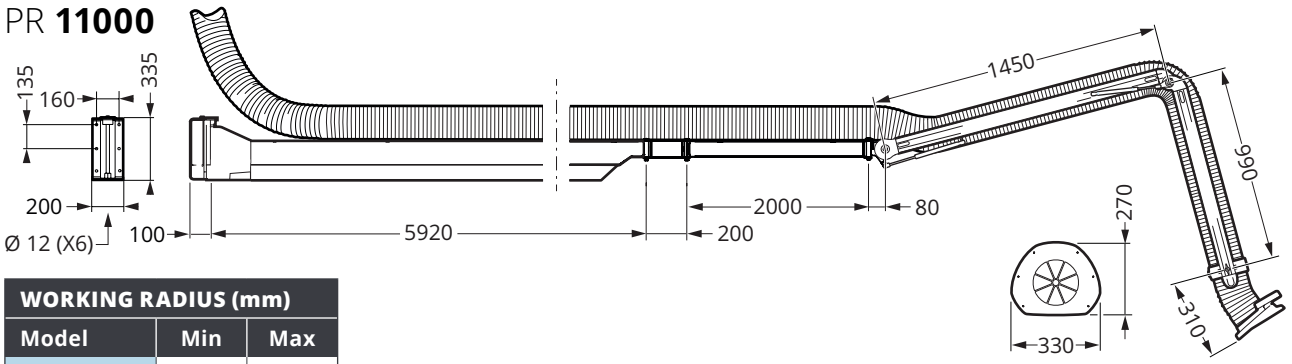
PR **9000**



WORKING RADIUS (mm)		
Model	**Min**	**Max**
PR 9000[1]	200	8150

[1] At 2500 mm installation height and 750 mm working height.

PR **11000**



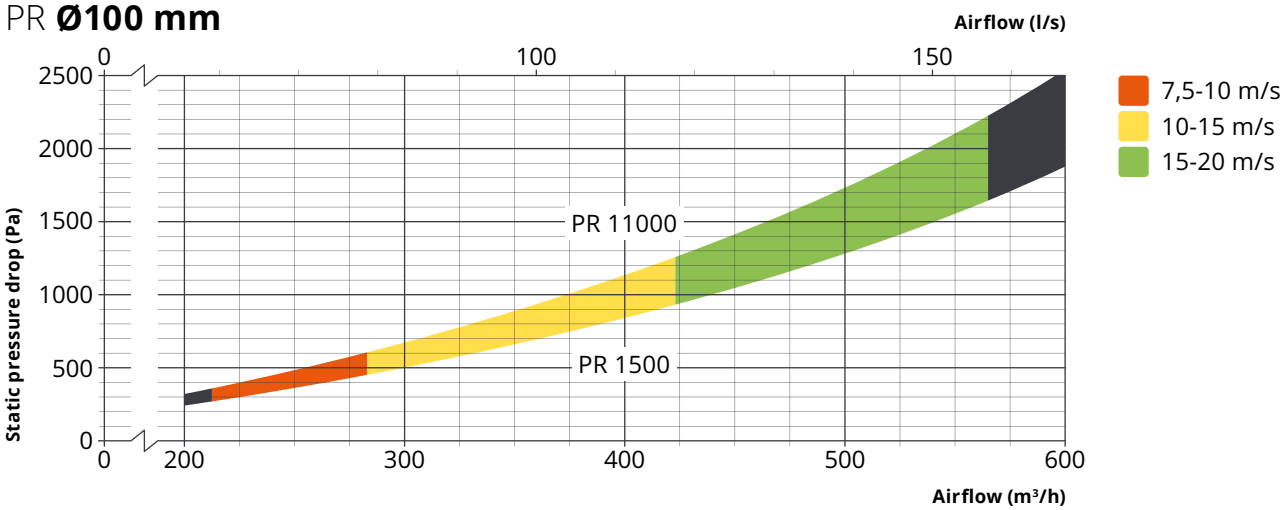
WORKING RADIUS (mm)		
Model	**Min**	**Max**
PR 11000[1]	1450	10400

[1] At 2500 mm installation height and 750 mm working height.

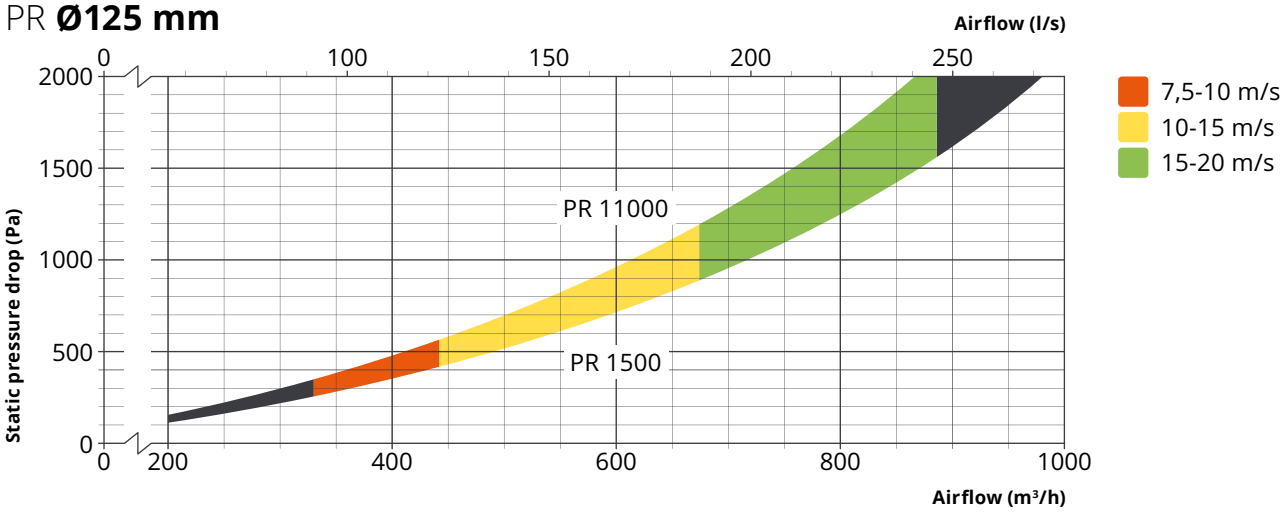
Pressure drop diagram

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.

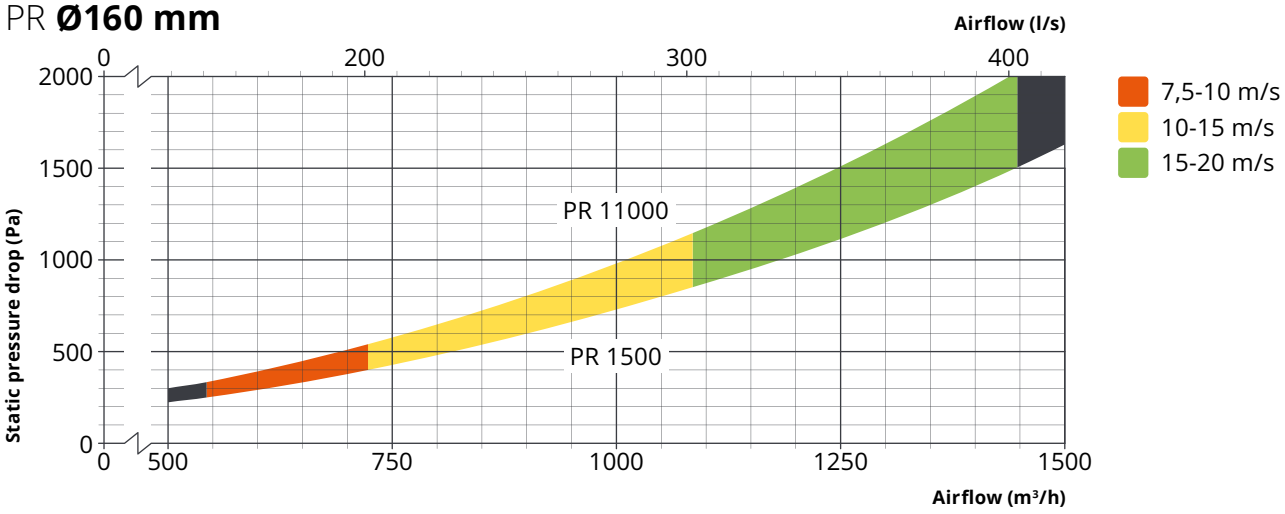
PR **Ø100 mm**



PR **Ø125 mm**



PR **Ø160 mm**

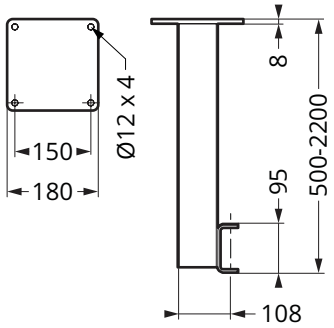


Brackets (ceiling/floor)

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.

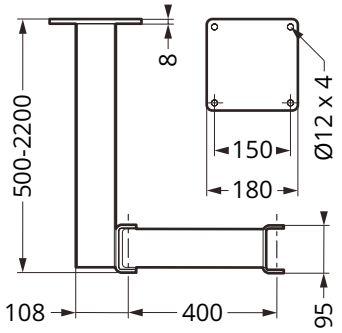


PTX	500	1000	1500	2000	2200[1]
Length (mm)	500	1000	1500	2000	2200
Weight (kg)	5	7,5	10	12,7	14

[1] Floor bracket

PTX 180

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

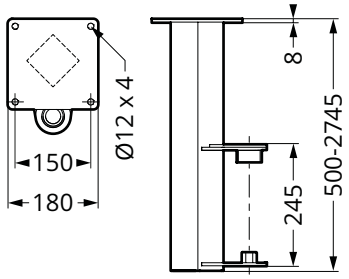


PTX 180	500	1000	1500	2000	2200[1]
Length (mm)	500	1000	1500	2000	2200
Weight (kg)	6,7	9,3	12	14,5	15,5

[1] Floor bracket

PTZ

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



PTZ	500	1000	1500	2000	2500[1]
Length (mm)	500	1000	1500	2000	2500
Weight (kg)	7,6	12	16,6	21,2	25,7

[1] 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

PR T
Push button for controlling fan or damper.

PR LED
LED work lighting including cables, transformer and push button.

Technical data - LED
Power: .....5 W at 350 mA
Illumination:.....2000 LX
Colour temperature:.....6500 K

PR LED/T
LED work lighting including cables and transformer with push button and an additional push button for controlling fan/damper.

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.

Hose

Material:.....	PVC-coated polyamide fabric with fully embedded spring steel coil
Temperature range:.....	-10°C to +90°C
Plastic components:.....	PA, PA 30%
Aluminium parts:	Anodised
Steel parts:.....	Black oxide, chromate conversion or powder coated

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.

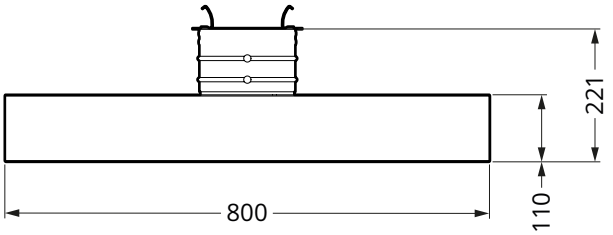
Included as standard with PR 9000/11000 and available as an accessory for PR 5000/7000.

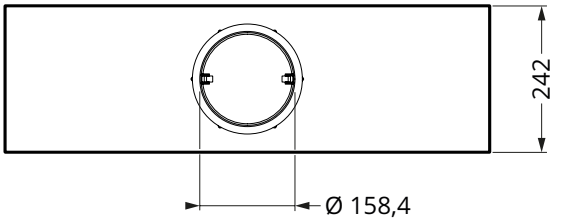
The right version for the right accessories

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

PRH 800

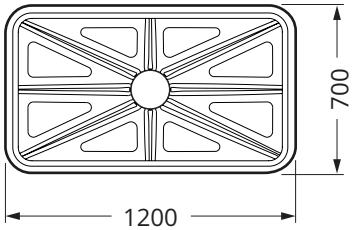
Hood with 360° swivel function. Enables a larger working area, such as when welding. Inserted into the PR hood with 2 internal fasteners to ensure that it is firmly attached. Supplied with the necessary fixtures and fittings. Suitable for PR 1500/2000/3000, dimension Ø160 mm.

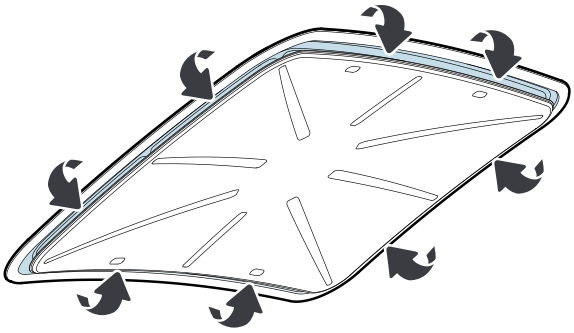




PRG

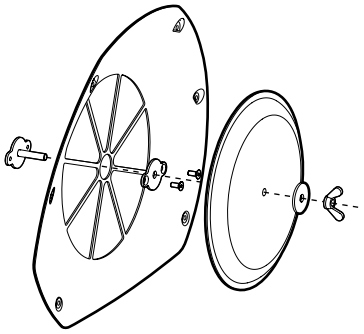
Glazier's hood with suction channel around the outside edge. Enables a larger working area, such as when gluing and joining glass. Supplied with the necessary fixtures and fittings. Suitable for PR 1500/2000/3000/4000, dimension Ø160 mm.





PR ST

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



Recommended airflow

Activity	Dimension (mm)	Airflow	
Welding (general)	Ø125	800 m^3/h	222 l/s
Welding (heavy)	Ø160	1000 - 1400 m^3/h	278 - 389 l/s
Industrial gases and particles	Ø100 Ø125	250 - 450 m^3/h 500 - 800 m^3/h	69 - 125 l/s 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.

FUMEX
Verkstadsvägen 2, 93161 Skellefteå, Sweden • Tel.: +46 910-361 80 • Fax: +46 910-130 22 • E-mail: info@fumex.se
www.fumex.com