

EXTRACTION ARMS



PSR EXC/EXD

Extraction arm in polished acid-resistant stainless steel for ATEX work environments

ATEX
COMPATIBLE

MOVEX
PURE ADVANTAGE

ATEX
COMPATIBLE



Stainless steel extraction arm for demanding work environments

MOVEX PSR – stylish design in stainless steel developed for industries with explosion-class work environments. A design based on the fundamental Movex principle of using external support arms, which produce the lowest possible pressure drop and pose little risk of blockage. All surfaces are finished in polished stainless steel, and the hose is fitted with quick connectors, making MOVEX PSR the most easily cleaned extraction arm in the industry. MOVEX PSR is available in the lengths 7, 10 and 14' and the dimensions Ø4, 5, 6 and 8".

PSR EXC



ATEX
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PSR EXC is designed for workplaces with explosive atmospheres from which solvents and corrosive gases need to be extracted. The polyethylene (PE) hose is conductive and resistant to corrosive substances.

PSR EXD



ATEX
COMPATIBLE

PSR EXD is an extraction arm for workplaces with explosive atmospheres in which dust is a major risk factor. The polyurethane (PU) hose is permanently antistatic, highly durable and yet easy to clean.

Product properties

- Designed for the safe extraction of gas and dust in explosive atmospheres.
- Complies with the requirements of the ATEX directive for category 2 equipment for gas and dust, and it is suitable for use in zones 1 and 21 as well as 2 and 22.
- Made of stainless steel
- **MOVEX Q-MaiD™** quick hose connection
- Component-free airflow
- Hood and detachable protective grille in high-gloss polished acid-resistant steel
- Few components for easy cleaning
- Corrosion-resistant hose (EXC)
- Hose for dust (EXD)
- Stainless steel gas spring
- Dual grounding for maximum safety

Q quick
M maintenance
A assembling
I installation
D dismantling

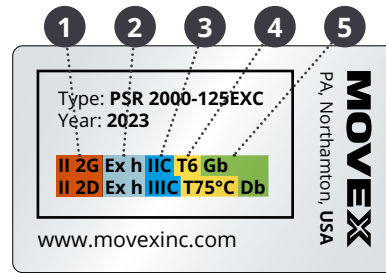


What is MOVEX Q-MaiD™?

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

ATEX labelling

Movex ATEX-compliant extraction arms are labelled with a nameplate providing information on the explosive atmospheres for which the product is suitable. The nameplate is structured as follows:



- 1 ATEX code
- 2 Type of protection (non-electrical)
- 3 Gas/Dust group
- 4 Temperature class
- 5 Equipment protection level

Equipment group 1

| Group | Area |
|-------|--------------|
| I | Below ground |
| II | Above ground |

Type of protection (non-electrical) 2

| Symbol | Type of protection |
|--------|-----------------------------------------------------------|
| h | Protection through design safety non-electrical equipment |

Equipment category

| Group | Zone |
|-------|----------------------|
| M1 | Energized |
| M2 | Non-energized |
| 1 | Very high protection |
| 2 | High protection |
| 3 | Normal protection |

Gas groups 3

| Group | Example |
|-------|----------|
| I | Methane |
| IIA | Propane |
| IIB | Ethylene |
| IIC | Hydrogen |

Temperature class gas 4

| Class | Max. surface temp. |
|-------|--------------------|
| T1 | 842 °F |
| T2 | 572 °F |
| T3 | 392 °F |
| T4 | 275 °F |
| T5 | 212 °F |
| T6 | 185 °F |

Equipment protection level 5

| Level | Zone |
|-------|---------------|
| Ga | 0 |
| Gb | 1 |
| Gc | 2 |
| Da | 20 |
| Db | 21 |
| Dc | 22 |
| Ma | Energized |
| Mb | Non-energized |

| Gas | Dust |
|-----|------|
| G | D |

Dust groups

| Group | Example |
|-------|----------------|
| IIIA | Combustible |
| IIIB | Non-conductive |
| IIIC | Conductive |

Temperature class dust

| Max. external surface temp. |
|-----------------------------|
|-----------------------------|

ATEX

Zone classification

Potentially explosive areas or premises must be classified in zones according to the frequency of occurrence and duration of explosive atmospheres. The person responsible for the operations is responsible for ensuring the classification of such risk areas.

Classification shall be conducted by persons knowledgeable about the properties of any flammable goods, the process and the equipment. Classification can be conducted in consultation with protection and electrical engineers as well as process technicians.

Zone 0 and Zone 20

An area in which explosive atmospheres are present continuously, for long periods or frequently.

Zone 1 and Zone 21

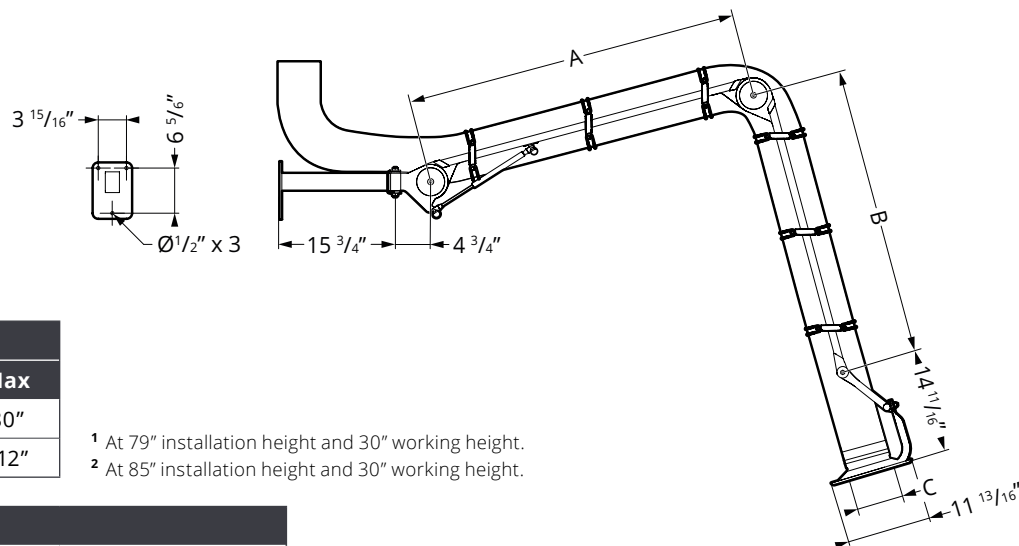
An area in which explosive atmospheres are expected to occur during normal operations.

Zone 2 and Zone 22

An area in which explosive atmospheres are not expected to occur during normal operations but, if they do occur, only last for a short time.

Dimensional drawing (in)

PSR 2000/3000

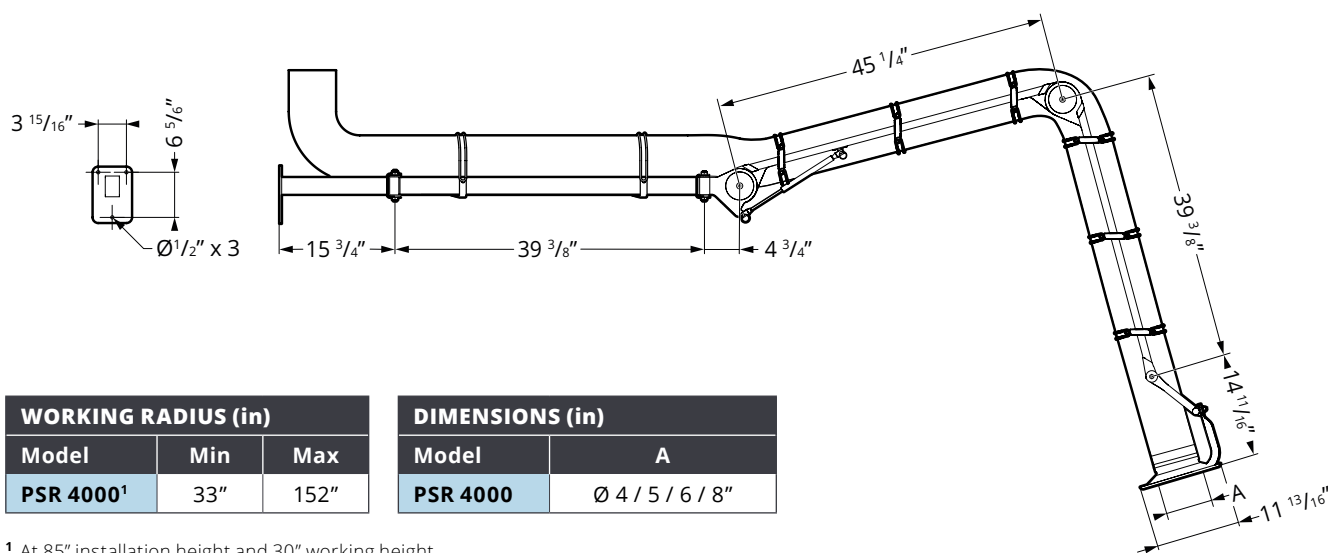


| WORKING RADIUS (in) | | |
|-----------------------|-----|------|
| Model | Min | Max |
| PSR 2000 ¹ | 0" | 80" |
| PSR 3000 ² | 0" | 112" |

¹ At 79" installation height and 30" working height.
² At 85" installation height and 30" working height.

| DIMENSIONS (in) | | | |
|-----------------|----------|---------|------------------|
| Model | A | B | C |
| PSR 2000 | 25 9/16" | 29 1/2" | Ø 4 / 5 / 6 / 8" |
| PSR 3000 | 45 1/4" | 39 3/8" | Ø 4 / 5 / 6 / 8" |

PSR 4000



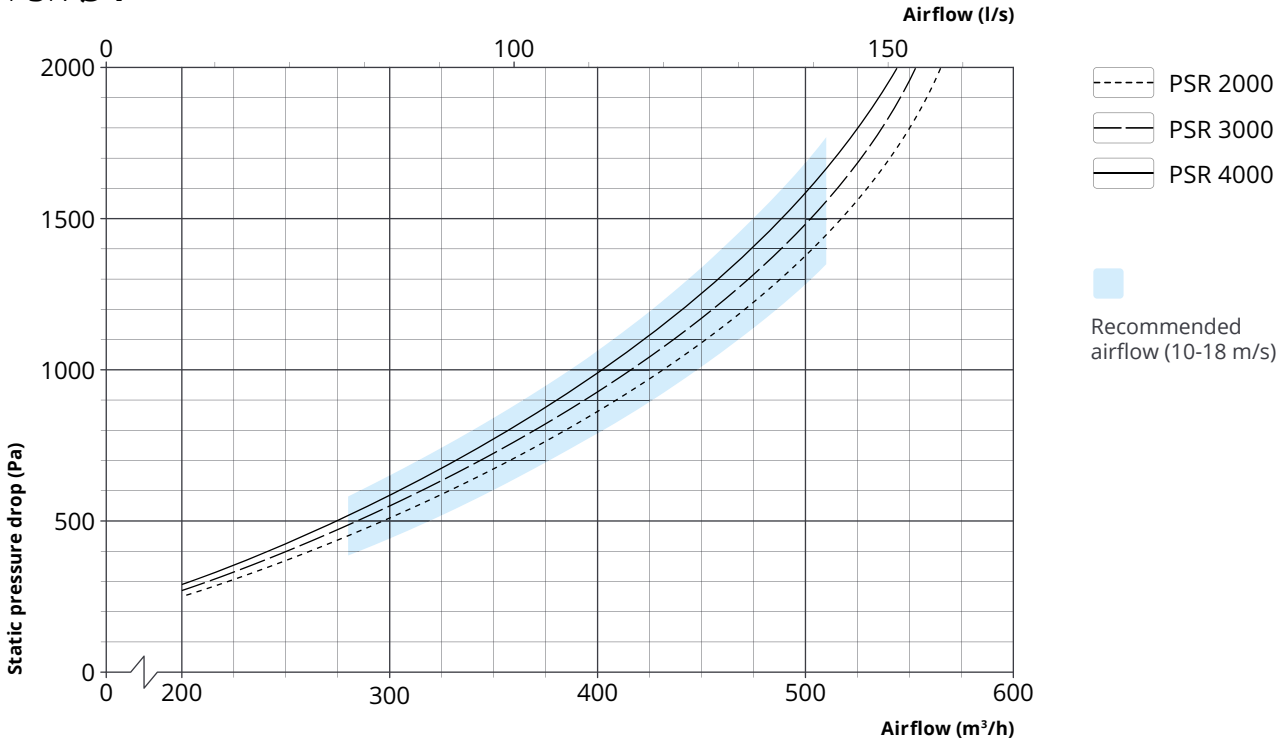
| WORKING RADIUS (in) | | |
|-----------------------|-----|------|
| Model | Min | Max |
| PSR 4000 ¹ | 33" | 152" |

| DIMENSIONS (in) | |
|-----------------|------------------|
| Model | A |
| PSR 4000 | Ø 4 / 5 / 6 / 8" |

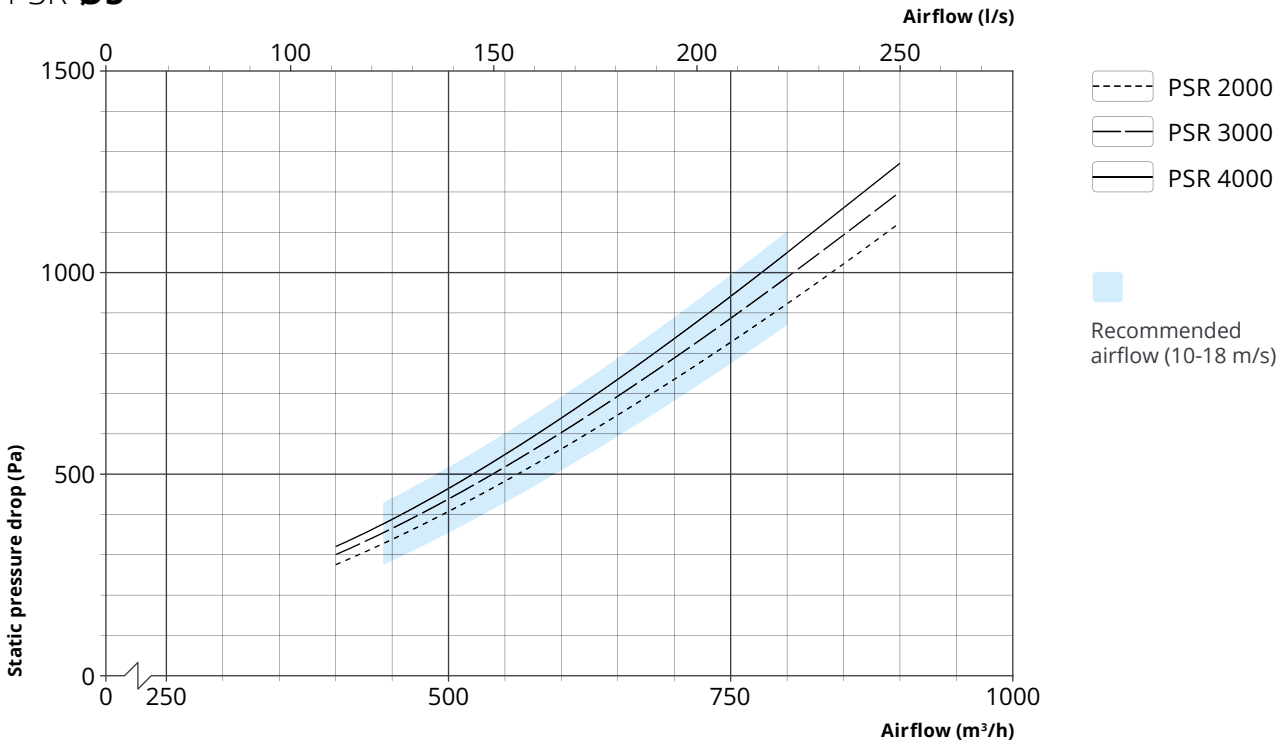
¹ At 85" installation height and 30" working height.

Pressure drop diagram

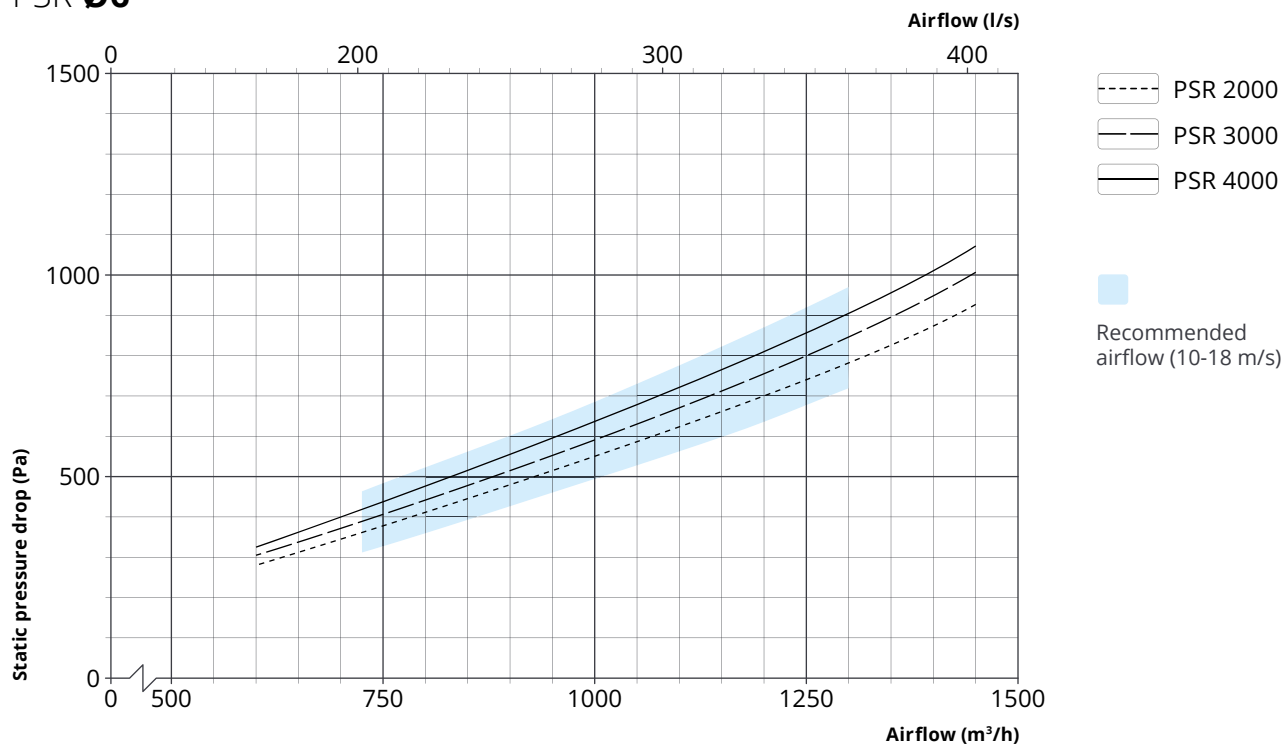
PSR Ø4"



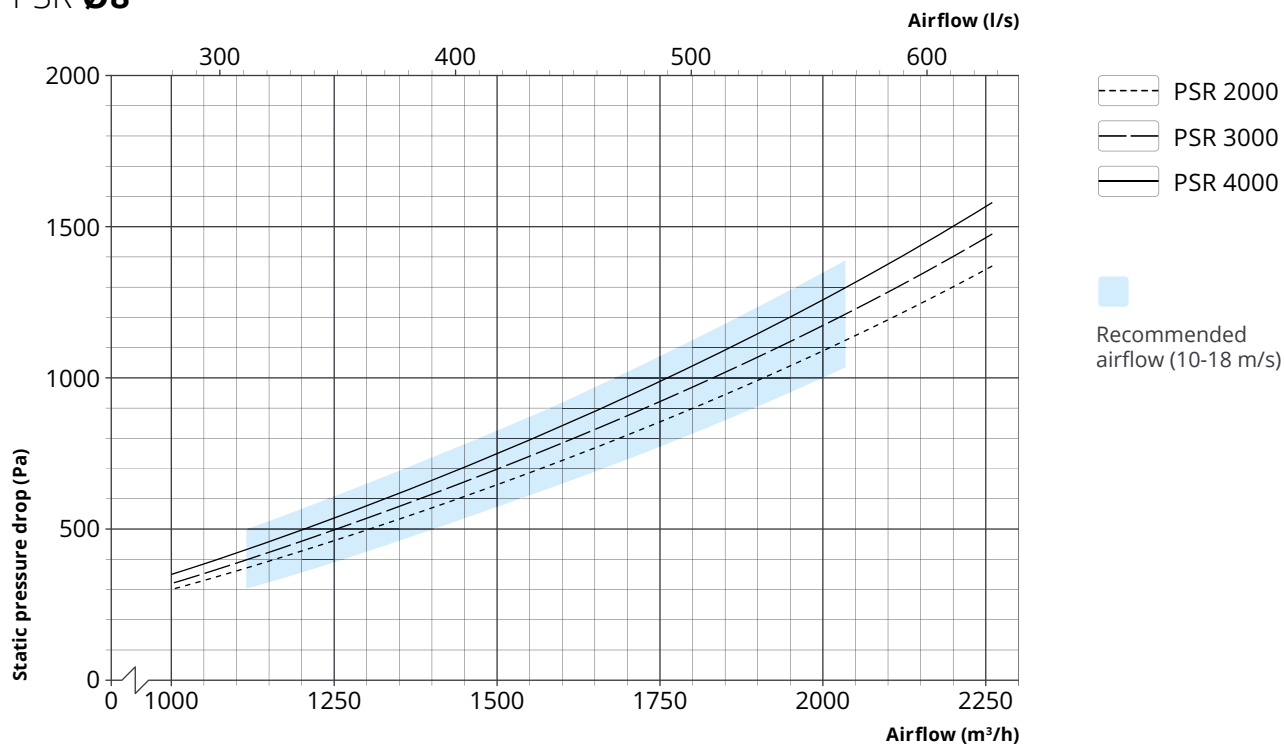
PSR Ø5"



PSR Ø6"



PSR Ø8"



Accessories



Ceiling bracket PTA2
Ceiling bracket in electro-polished stainless steel.

Lengths:
20 / 40 / 60"



Floor bracket PGA2
Floor bracket in electro-polished stainless steel.

Length:
87"



Rotation link PLA2
Extension link in electro-polished stainless steel for 180° of additional rotation.

Length:
9"



Damper PSMS
Damper in acid-resistant stainless steel. Easy to assemble/disassemble for quick and easy cleaning.

Dimensions:
Ø4 / 5 / 6 / 8"

Specifications

Form of delivery

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

Production

Since the product does not have an internal ignition source, it cannot be certified under the ATEX directive 2014/34/EU.

Surface treatment

Bearing components:.. Electropolished stainless steel (A2), grade EN 1.4301/AISE 304
Hood:..... High-gloss polished Ra 0.6±0.2 acid-resistant stainless steel (A4), grade EN 1.4401/AISE 316L
Plastic components:.... PP, PA6, TPU (FDA)
Rubber components: .. EPDM (FDA)

Versions

| PSR EXC/EXD | 2000 | 3000 | 4000 |
|---------------------------------|------|------|------|
| Length (ft):..... | 7 | 10 | 14 |
| Weight ¹ (lb): | 25,1 | 27,3 | 40,8 |

Hose - PSR EXC

Properties:Conductive PE hose with steel coil R <10⁴ Ω
Temperature range:....-40 °F to +140 °F
Dimensions (Ø):4 / 5 / 6 / 8"

Hose - PSR EXD

Properties:Permanent antistatic PU hose with stainless steel coil, R <10⁹ Ω
Temperature range:....-40 °F to +212 °F
Dimensions (Ø):4 / 5 / 6 / 8"

Resistant to hydrolysis and microbes, non-toxic, and food-grade certified in accordance with EC Regulation No. 1935/2004 and No. 10/2011, FDA standards 21 CFR 177.2600 and 178.2010.

¹ Excluding hose.