

HL-PH-R Specifications

Air intake system for clean rooms

1. General

These specifications outline the requirements for the design, manufacture, delivery, and installation of a high-quality air intake system, specifically designed for use in clean rooms.

2. Application

The system is designed to filter the air extracted from clean rooms, using fine filters compliant with ISO16890, with polyurethane (PU) or EPDM seals. The system must allow wall and ceiling mounting and must be suitable for areas with positive or negative pressure.

3. Materials and construction

The unit is made of 1.5 mm and 2.0 mm thick galvanised steel for maximum durability. The unit has a RAL9010 epoxy paint finish that is oven-baked for a smooth, easy-to-clean, attractive surface that is corrosion-resistant under normal conditions of use. The unit has a robust welded construction for increased strength and stability. The sealing surface (mating surface) is completely smooth and contains no welds.

Top and side connections are available to meet different installation and space constraints.

The unit is suitable for coarse/fine filters with a thickness of 48 mm or 96 mm, simply by changing the position of the clamping system.

Equipped with an easy-to-open and -close perforated pivoting grill, with a safety device to prevent falling on one side and a quarter-turn screw or magnetic closure on the other side.

4. Functionality and performance

Installation can be carried out using a universal mounting system (support brackets) or with special mounting feet for clean room ceilings with a thickness of 50 to 135 mm.

The assembly meets airtightness requirements of type L1 according to standard EN1881 and class C according to standard EN1775.

Solutions for modular/tile ceilings (600x600 and 600x1200 mm) are also available.

5. Options

- Special mounting feet for clean room ceilings with a thickness of 50 to 135 mm.
- Closing the diffusion grill with magnets (except for the 4-way grill).
- 2 stages of filtration.
- Rectangular connection with lowered plenum.
- Specific RAL colour on request.
- AISI 304 or AISI 316 version.

6. Quality assurance

All components and the installation must comply with applicable industry standards and clean room classifications.

Full documentation of the installation, including test results, must be provided.

These specifications provide a comprehensive basis for selecting and installing an air extraction system that meets the stringent requirements of clean room environments.

