Kranh

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Type MFU | classic 1x1–F6/H13 Mobile HEPA filter unit





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Mobile HEPA filter unit, Type MFU | classic 1x1-F6/H13









Text for tender

The mobile HEPA filter unit is used to separate impurities in the air which form dust and aerosols. It is of partially screwed and partially welded construction.

If stainless steels are employed, DIN 25496, sub-heading 6.2 (4) was considered, i.e. when welding austenitic materials, only stabilised steels are used, e.g. 1.4541 and 1.4571, and for ferritic materials only tempered steels.

To ensure easy decontamination, all weld seams in contact with the media are welded without any breaks.

Design

- Shut-off damper, raw gas side fitted at the head of the filter unit with locking ring and flared conical nipple DN 200 (Jacob system) for connecting the suction line.
- HEPA filter housing, Krantz system, for following filter elements:

Fine dust filter element W/H/D 610/610/292 mm Filter class F7 to DIN EN 779

HEPA filter element W/H/D 610/610/292 mm Filter class H13 to DIN EN1822

- Stable housing made from stainless sheet steel, material 1.4541, specified for a loading of the filter elements from top to bottom.
- The special geometry means that deposited contaminants inside the filter housing are largely avoided.
- Perforated steel impact plate for even volume flow over the filter elements.

- Insertion openings for filter elements with exchange collars for bag in bag safe exchange system.
- Aluminium exchange collars with double under cut groove for contamination-free filter element changing.
- Removable stainless steel servicing cover, material 1.4541 for gas-tight sealing of the filter insert openings.
- Clamping of the HEPA filter element, independently variable, so that the required sealing is guaranteed even with soft seals. Pneumatic quick-release device for inserting and removing the filter element. Clamping mechanism can be used outside the housing.
- Surrounding frame with groove for checking the seating of the HEPA filter element, including snaplock coupling for connecting a seat testing device.
- Connection frame on dust and clean air side.
- Connection for pressure difference measurement device for each filter insert.
- Servicing bag with hollow rubber ring for each filter insert.
- Floor pan
 - 1.4541 stainless steel.
 - Medium pressure radial fan with directly coupled short circuit rotor motor, provided for direct building into the floor pan.
- Shut-off valve, AD-C|hightec DN 250; manually operated.
- Support construction

Other fittings

- Steering and handle
- Stable rollers for moving the mobile filter, two of which fitted with wheel and turntable brake
- Cable holder
- Combined on/off switch with emergency cutout
- Differential pressure display, fine dust filter element, display instrument manufacturer Magnehelic[®]
- Differential pressure display, HEPA filter element, display instrument manufacturer Magnehelic[®]
- 10 metre run of flex with CEKON 16A plug



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Technical specification

- Manufacturer: Krantz
- Type: MFU|classic 1x1 F6/H13
- Volume flow: 3,000 m³/h
- Total pressure difference fan: 3,500 Pa
- Permitted pressure difference: ±6,000 Pa
- Permitted working temperature: 70°C
- Voltage/Frequency: 400 V/50 Hz
- Rated motor output: 3.1 kW
- Motor current drain: 6.8A
- Connecting pipes raw gas side: DN 200 (System Jacob)
- Connecting pipes clean gas side: DN 250 (System Jacob)
- Outer sealing (filter housing) according to DIN 25 496: Leakage volume flow < 3 \cdot 10⁻⁵ of rated volume flow at $\Delta p = 2,000 \text{ Pa}$
- Inner sealing: (filter seating) Leakage volume flow < 3 \cdot 10⁻⁵ of rated volume flow at $\Delta p = 2,000 \, Pa$
- Dimensions W/H/D: approx. 915/1820/1000 (800)mm
- Weight: approx. 300 kg

Fine dust filter element

- Filter class: F6 to EN 779
- Dimensions W/H/D: 610/610/78mm
- Acceptance capacity: 1 unit

HEPA filter element

- Filter class: H13 to EN 1822
- Dimensions W/H/D: 610/610/292 mm
- Acceptance capacity: 1 unit



Type MFU | classic 1x1-F6/H13

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