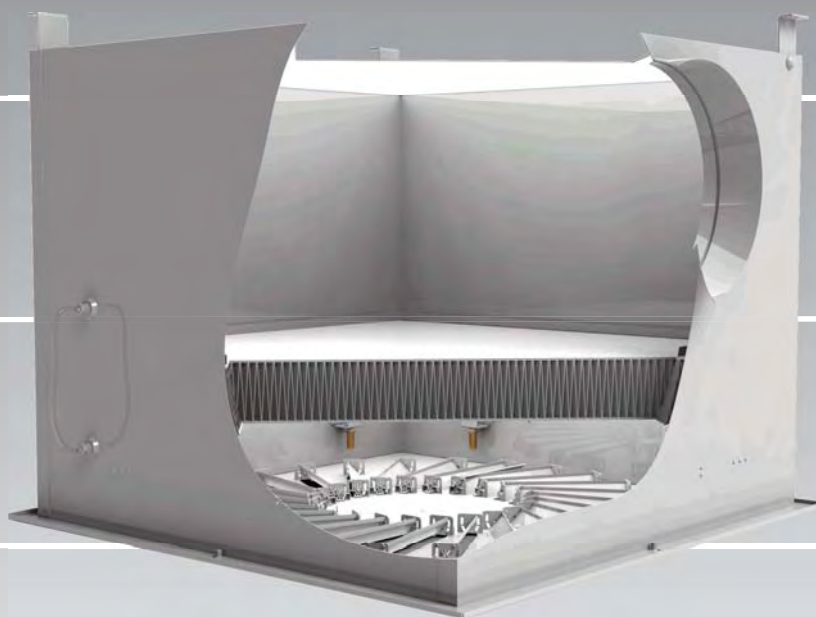


series

KPA



CONTENT OVERVIEW

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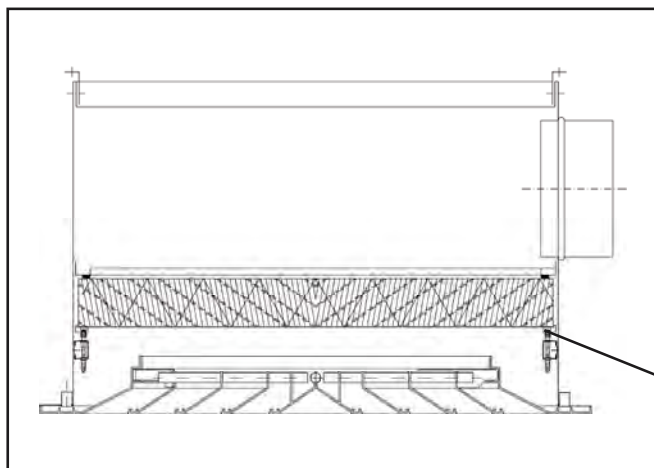
High performance filter plenum KPA



Circular side entry plenum



Circular top entry plenum



Air-tight element

Description

Plenum and diffusion element set for high-performance filtering. Are available in different sizes and allowing executions including different types of diffuser (swirl, square, perforated plate, ...) Ceiling and wall installation.

The plenum design has been adapted to the measurements of diverse-performance absolute filters existing on the market (H10...H14 and U15...U17): 305x305, 305x610, 610x610, 915x610, 1200x610 mm with thicknesses of 68, 78, 88, 150 and 292 mm

Lateral or top connection plenum manufactured. Differential pressure meter included. With additional manually adjustable shut-off damper.

High performance filter KPA has been tested for tightness in accordance with the UNE 100713, and its leakage rate less than 0.003% of nominal airflow.

The filters are individually tested and certified according to EN1822 standard.

Material

Plenum manufactured in galvanised steel plate painted on the inside and outside in gloss RAL 9010.

Special finishes upon request.

To ensure sealing the plenum is welded and sealed with white polyurethane perimeter also includes a tight closure.

Grilles and diffusers

Air diffusion elements for high efficiency in facilities both laminar and turbulent flow.

Technical data be found in their catalogs in the folder Koolair C1

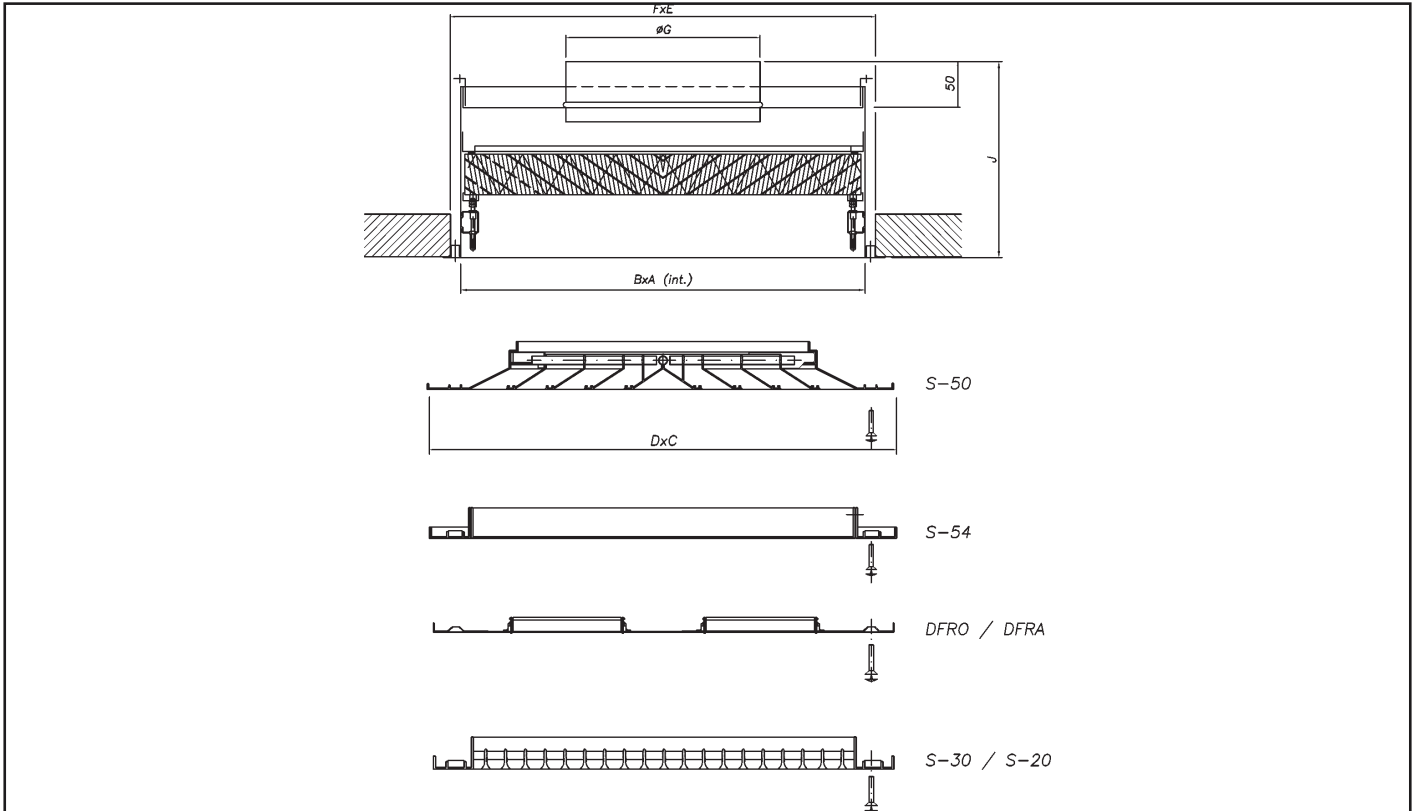
Applications

For zones which require high air purity and an absence of germs, such as in the pharmacy and medicine fields.

Air diffusion control, supply by laminar flow.

High performance filter plenum KPA

Circular top entry plenum



| FILTER | Laminar flow | | Turbulent flow | | PLENUM DIMENSIONS | | | | | | | |
|------------------|--------------|---------|----------------|---------|-------------------|-----|------|-----|------|-----|-----|-----|
| | Q (m³/h) | ΔP (Pa) | Q (m³/h) | ΔP (Pa) | A | B | C | D | E | F | Ø G | J |
| 305 x 305 x 68 | 150 | 120 | 250 | 220 | | | | | | | | |
| 305 x 305 x 150 | 150 | 120 | | | 319 | 82 | 369 | 369 | 355 | 355 | 123 | 293 |
| 305 x 305 x 292 | | | 550 | 280 | | | | | | | 123 | 375 |
| 610 x 610 x 68 | 600 | 120 | 1000 | 220 | | | | | | | 198 | 517 |
| 610 x 610 x 150 | 600 | 120 | | | 624 | 82 | 669 | 669 | 655 | 655 | 198 | 293 |
| 610 x 610 x 292 | | | 2000 | 280 | | | | | | | 198 | 375 |
| 610 x 305 x 68 | 300 | 120 | 560 | 220 | | | | | | | 298 | 517 |
| 610 x 305 x 150 | 300 | 120 | | | 319 | 82 | 669 | 369 | 655 | 355 | 158 | 293 |
| 610 x 305 x 292 | | | 2000 | 280 | | | | | | | 158 | 375 |
| 915 x 610 x 68 | 900 | 120 | 1500 | 220 | | | | | | | 298 | 517 |
| 915 x 610 x 150 | 900 | 120 | | | 624 | 82 | 969 | 669 | 959 | 655 | 249 | 293 |
| 915 x 610 x 292 | | | 2750 | 280 | | | | | | | 249 | 375 |
| 1220 x 610 x 68 | 1200 | 120 | 2000 | 220 | | | | | | | 499 | 517 |
| 1220 x 610 x 150 | 1200 | 120 | | | 624 | 82 | 1274 | 669 | 1264 | 655 | 298 | 293 |
| 1220 x 610 x 292 | | | 3500 | 280 | | | | | | | 298 | 375 |
| 457 x 457 x 68 | 335 | 120 | 560 | 220 | 471 | 82 | 519 | 519 | 505 | 505 | 158 | 293 |
| 545 x 545 x 68 | 480 | 120 | 800 | 220 | 557 | 557 | 594 | 594 | 584 | 584 | 198 | |

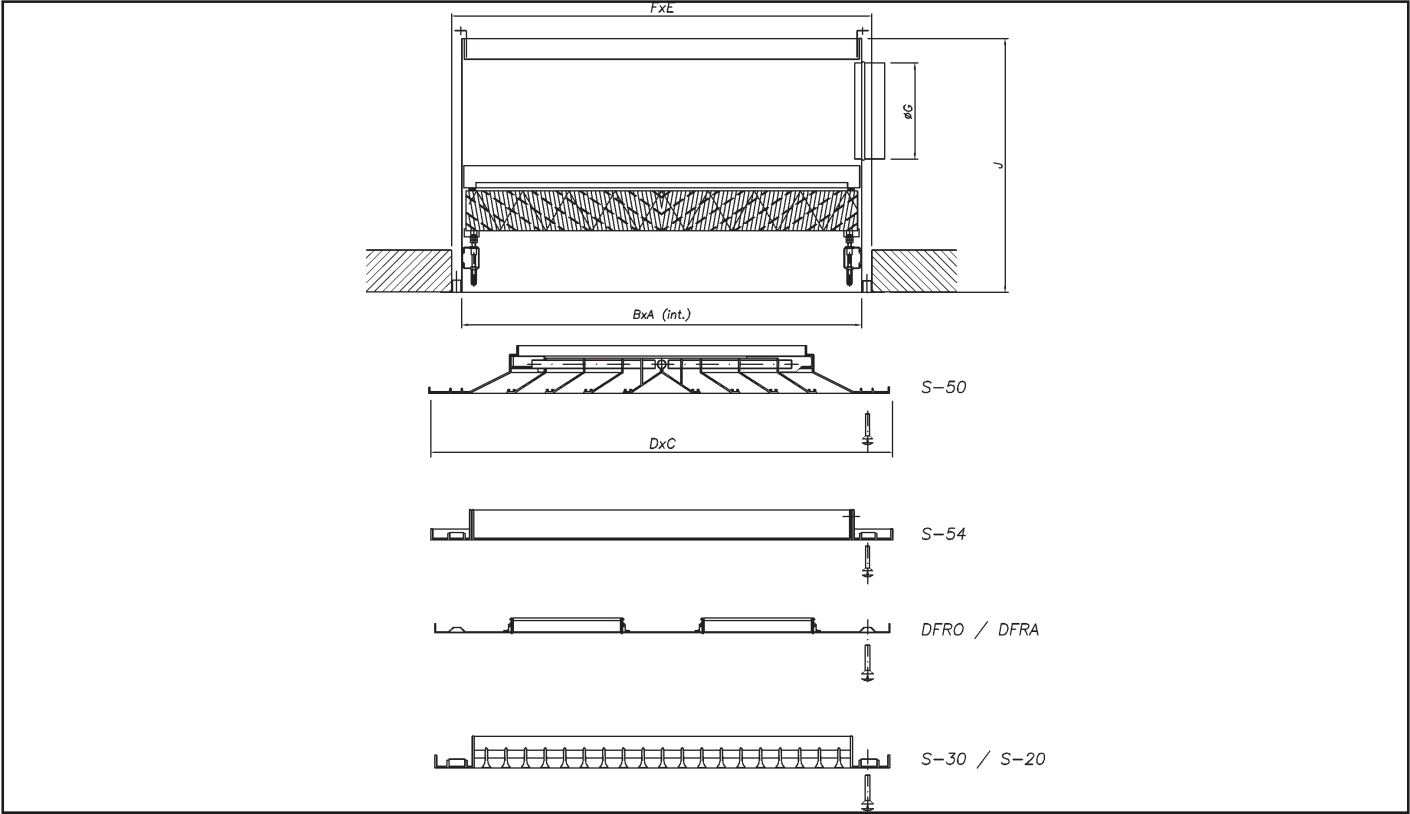
0.45 m/s face velocity for laminar flow

0.75 m/s face velocity for turbulent flow

Technical data for absolute filters with filter class H13/H14

High performance filter plenum KPA

Circular side entry plenum

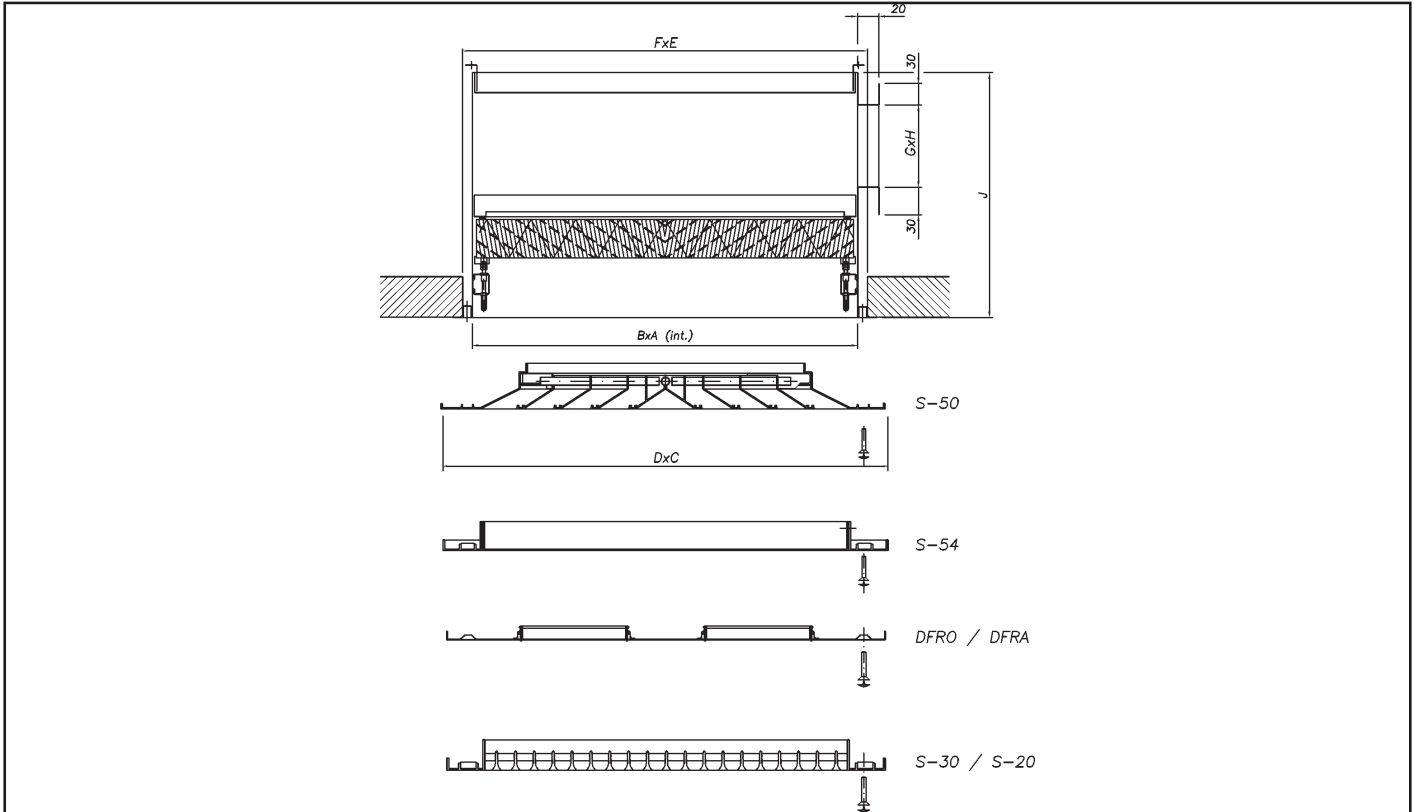


| FILTER | Laminar flow | | Turbulent flow | | PLENUM DIMENSIONS | | | | | | | |
|------------------|--------------|---------|----------------|---------|-------------------|------|------|-----|------|-----|-----|-----|
| | Q (m³/h) | ΔP (Pa) | Q (m³/h) | ΔP (Pa) | A | B | C | D | E | F | Ø G | J |
| 305 x 305 x 68 | 150 | 120 | 250 | 220 | 319 | 319 | 369 | 369 | 355 | 355 | 123 | 405 |
| 305 x 305 x 150 | 150 | 120 | | | | | | | | | 123 | 487 |
| 610 x 610 x 68 | 600 | 120 | 1000 | 220 | 624 | 624 | 669 | 669 | 655 | 655 | 198 | 480 |
| 610 x 610 x 150 | 600 | 120 | | | | | | | | | 198 | 562 |
| 610 x 305 x 68 | 300 | 120 | 560 | 220 | 319 | 624 | 669 | 369 | 655 | 355 | 158 | 440 |
| 610 x 305 x 150 | 300 | 120 | | | | | | | | | 158 | 522 |
| 915 x 610 x 68 | 900 | 120 | 1500 | 220 | 624 | 929 | 969 | 669 | 959 | 655 | 249 | 531 |
| 915 x 610 x 150 | 900 | 120 | | | | | | | | | 249 | 613 |
| 1220 x 610 x 68 | 1200 | 120 | 2000 | 220 | 624 | 1234 | 1274 | 669 | 1264 | 655 | 298 | 580 |
| 1220 x 610 x 150 | 1200 | 120 | | | | | | | | | 298 | 662 |
| 457 x 457 x 68 | 335 | 120 | 560 | 220 | 471 | 471 | 519 | 519 | 505 | 505 | 158 | 440 |
| 545 x 545 x 68 | 480 | 120 | 800 | 220 | 557 | 557 | 594 | 594 | 584 | 584 | 198 | 480 |

0.45 m/s face velocity for laminar flow
 0.75 m/s face velocity for turbulent flow
 Technical data for absolute filters with filter class H13/H14

High performance filter plenum KPA

Rectangular side entry plenum



| FILTER | Laminar flow | | Turbulent flow | | PLENUM DIMENSIONS | | | | | | | | |
|------------------|-----------------------|---------|-----------------------|---------|-------------------|-----|------|-----|------|-----|-----|-----|-----|
| | Q (m ³ /h) | ΔP (Pa) | Q (m ³ /h) | ΔP (Pa) | A | B | C | D | E | F | G | H | J |
| 305 x 305 x 68 | 150 | 120 | 250 | 220 | | | | | | | 125 | 200 | 405 |
| 305 x 305 x 150 | 150 | 120 | | | 319 | 319 | 369 | 369 | 355 | 355 | 200 | | 487 |
| 305 x 305 x 292 | | | 550 | 280 | | | | | | | 200 | | 705 |
| 610 x 610 x 68 | 600 | 120 | 1000 | 220 | | | | | | | 125 | 520 | 405 |
| 610 x 610 x 150 | 600 | 120 | | | 624 | 624 | 669 | 669 | 655 | 655 | 250 | | 613 |
| 610 x 610 x 292 | | | 2000 | 280 | | | | | | | 250 | 600 | 755 |
| 610 x 305 x 68 | 300 | 120 | 560 | 220 | | | | | | | 125 | 520 | 405 |
| 610 x 305 x 150 | 300 | 120 | | | 624 | 319 | 669 | 369 | 655 | 355 | 250 | | 487 |
| 610 x 305 x 292 | | | 2000 | 280 | | | | | | | 250 | | 755 |
| 915 x 610 x 68 | 900 | 120 | 1500 | 220 | | | | | | | 125 | 600 | 405 |
| 915 x 610 x 150 | 900 | 120 | | | 929 | 624 | 969 | 669 | 959 | 655 | 250 | | 613 |
| 915 x 610 x 292 | | | 2750 | 280 | | | | | | | 250 | | 755 |
| 1220 x 610 x 68 | 1200 | 120 | 2000 | 220 | | | | | | | 250 | 600 | 531 |
| 1220 x 610 x 150 | 1200 | 120 | | | 1234 | 624 | 1274 | 669 | 1264 | 655 | 250 | | 613 |
| 1220 x 610 x 292 | | | 3500 | 280 | | | | | | | 250 | | 755 |
| 457 x 457 x 68 | 335 | 120 | 560 | 220 | 471 | 471 | 519 | 519 | 505 | 505 | 100 | 200 | 380 |
| 545 x 545 x 68 | 480 | 120 | 800 | 220 | 557 | 557 | 594 | 594 | 584 | 584 | 150 | 200 | 430 |

0.45 m/s face velocity for laminar flow

0.75 m/s face velocity for turbulent flow

Technical data for absolute filters with filter class H13/H14

High performance filter plenum KPA



Return grille

KPA return grille

High performance filter plenum with return grille, available in sizes to adapt the filter dimensions. The plenum is airtight and has a pressure device to control the filter pressure drop.

Available models: egg-crate grilles, S22-5, fixed blades S20-45, perforated plate and single deflection grilles S20SH, between others.



Fastening system

Installation and maintenance

The fastening system of diffusers and grilles to the plenum is by means of perimeter screws that allow easy access for cleaning and disinfection.

Filters

Filtration class and overall filter efficiency in accordance with CEN-EN 1822.

| Filtration class | Overall filter efficiency % | Local efficiency % |
|------------------|-----------------------------|--------------------|
| H13 | ≥ 99,95 | 99.75 |
| H14 | ≥ 99,995 | 99.975 |

Grilles and diffusers coding

Ceiling application:

Swirls: Technical data in catalogue Series 40.2.



DFRO



DFRA

Square and perforated plate: Technical data in catalogue Series 50.



50-FR-4



54-FR

Wall application:

Single deflection grilles and linear grilles: Technical data in catalogue Series 20.1 and Series 30.



20-SH



31-1

Egg-crate: Technical data in catalogue Series 20.2.



22-5

| Filter size | Diffuser model | | |
|--------------|-------------------|----------|----------|
| | DFRO/DFRA (slots) | S50 | S54 |
| 305x305x68 | 12 | 225x225 | 369x369 |
| 305x305x150 | 12 | 225x225 | 369x369 |
| 305x305x292 | * | * | * |
| 610x610x68 | 24 | 525x525 | 669x669 |
| 610x610x150 | 24 | 525x525 | 669x669 |
| 610x61x292 | * | * | * |
| 610x305x68 | 16 | 525x225 | 669x369 |
| 610x305x150 | 16 | 525x225 | 669x369 |
| 610x305x292 | * | * | * |
| 915x610x68 | 40 | 825x525 | 969x669 |
| 915x610x150 | 40 | 825x525 | 969x669 |
| 915x610x292 | * | * | * |
| 1220x610x68 | 48 | 1025x525 | 1274x669 |
| 1220x610x150 | 48 | 1025x525 | 1274x669 |
| 1220x610x292 | * | * | * |
| 457x457x68 | 20 | 375x375 | 519x519 |
| 545x545x68 | 24 | 450x450 | 524x524 |

- (*) grille only, (dimensions adapted to filter size).

High performance filter plenum KPA

Coding

Coding provides a unique description of the model ordered by the customer.

Example:

(a) (b) (c) (d) (e) (f) (g) (h)
KPA – BLC – 610x610x68 – H14 – DFRO24 – P – RE – RAL

(a): Model

KPA: high performance filter plenum

(b): Plenum

BSC: with circular top entry plenum

BLC: with circular side entry plenum

BLR: with rectangular side entry plenum

(c): Filter

LxHxP: filter dimensions

(d): Filter efficiency

H13

H14

others

(e): Diffusers

DFRO: adjustable swirl diffuser (size indicated in table page 9)

S50: square diffuser (size indicated in table page 9)

S54: perforated plate diffusers (size indicated in table page 9)

S20SH: single deflection grille

S22-5: egg-crate grille

(f): Prepressure device

P with prepressure device

SP: without prepressure device

(g): Components

- without regulation damper

RE: with regulation damper

(h): Finished

RAL 9010 Painted in white RAL 9010, standard

RAL ... Painted in RAL upon requested

Specification

High-performance filter plenum KPA side entry, dimensions 610x610x68 adjustable swirl diffuser model DFRO 24. It incorporates high efficiency filter type H14. Manufactured in galvanized steel painted inside and outside, integrated differential pressure measurement and regulation damper in the spigot, with all their attachments. Painted in RAL upon request by the prescriptions.