

## DESCRIPTION

KPKN, KPKW are square perforated supply-exhaust air grates designed for low- and medium-pressure installations. They can supply or exhaust air and can be used with constant and variable airflow. The air can be supplied at the temperature by 12°C than the temperature in the ventilated room. This makes them appropriate for cooling facilities with special micro-climate requirements. KPKN are equipped with a regulated screen, which allows for limiting directions of the airflow. It is recommended to install KPKN into the ceiling. KPKW are designed for exhausting air. They are not equipped with screens. Additional features comprise lacunar panel PK used instead underslung ceiling panels.

## FEATURES

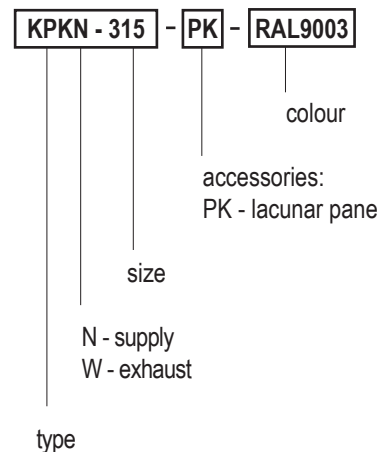
- regulated screen allows of limiting directions for the airflow
- wide throttling scope
- easy installation
- can be installed with an expansion can SR/KPKN
- throttle blades made of zinc-coated steel sheet
- available in standard RAL 9003 colour
- upon customer's request, can be made in any colour from RAL palette

## STANDARD SIZES

Size	A [mm]	B [mm]	Ø D [mm]	□ I [mm]
100	250	55	98	205
125	300	55	123	255
160	400	55	158	355
200	500	55	198	455
250	500	55	248	455
315	600	55	313	555
400	600	55	398	555

□ I - installation hole size

## ORDER REFERENCE



# 2.4 KPKN, KPKW

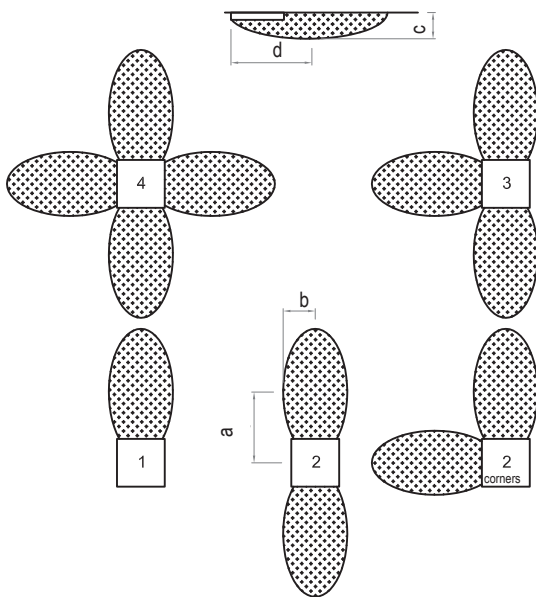
## square perforated supply-exhaust air grates

### AIR SUPPLY FEATURES

Due to internal manually controlled screen, it is possible to control the number of directions for air supply.

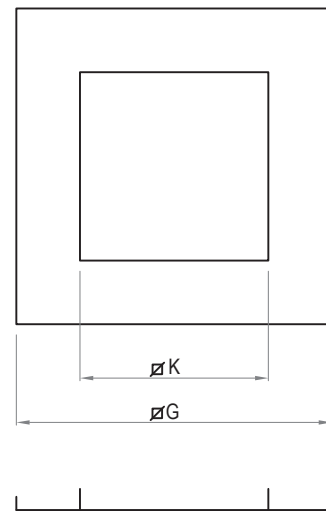
The figures show possible airflow directions. Depending on the number of directions, the airflow scope L (m) for the end speed  $v=0.2$  m/s should be reviewed using data from the table below.

	4	3	2	2 corner	1
a	-	0.39	1.0	0.5	0.91
b	-	0.39	0.51	0.41	0.3
c	0.051	0.051	0.049	0.05	0.061
d	0.39	0.39	0.41	0.4	0.41

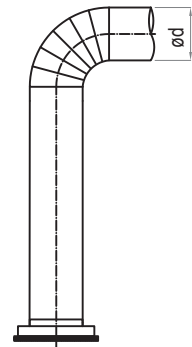


### LACUNAR PANEL PK

PK is a lacunar panel for air grates KPKN and KPKW. It is used in place of underslung ceiling panel, if the size of the air grate is smaller than the ceiling panel size.



PK	□ K [mm]	□ G [mm]
100	205	595
125	255	
160	355	
200	455	
250	555	
315	555	
400	555	



### INSTALLATION

KPKN, KPKW are connected directly to the expansion box SR/KPKN or optionally to the ventilation duct of a round diameter.

For installation with the expansion box, see: SR/KPKN.

## FEATURES

The figure shows airflow capacity  $V$  (m<sup>3</sup>/h), pressure loss  $p$  (Pa), air-flow scope  $L$  (m) for end speed of 0.2 m/s, and volume level [dB(A)].

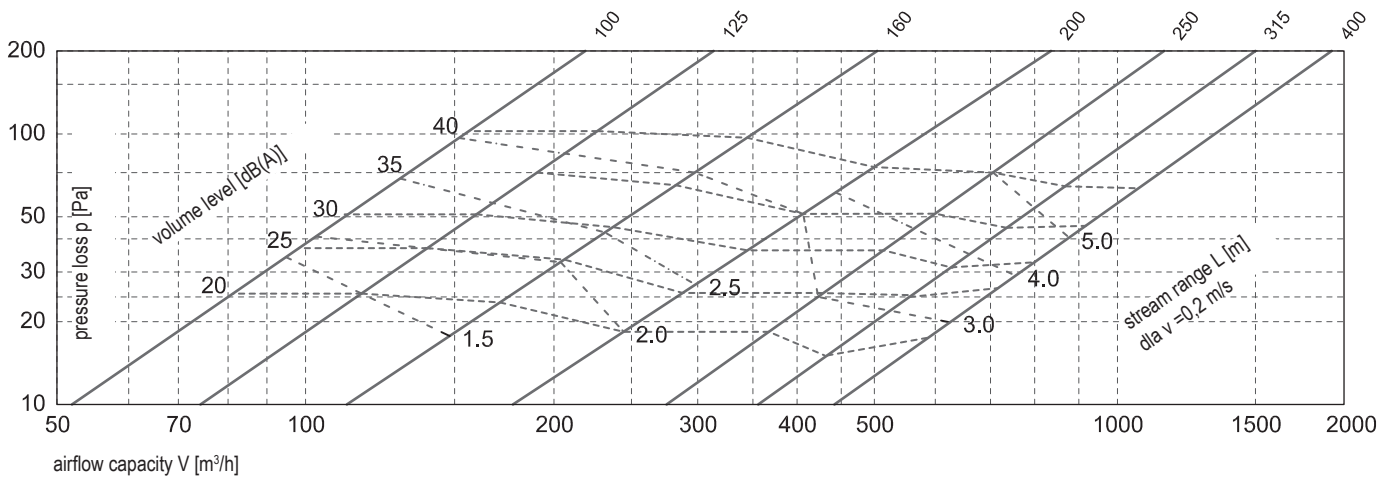
For limited airflow directions the scope should be reviewed using the figures from the table below

The figures relate to the air grate installed into the ceiling. Airflow scope reflects 4-direction airflow option.

1 direction	2 corner directions	3 directions
1,62 - 2,21*	1,19 - 1,53*	1,09 - 1,31*

\* - depends on the setting of the screen

### AIR SUPPLY



### AIR EXHAUST

