

Exhaust Grilles

3HG / 3HJ / 3HF / GC5 / PER

Introduction

The Waterloo 3 Series vane grilles, GC5 eggcrate and PER mesh grilles have been designed to satisfy all exhaust applications in H & V systems.

The various cores may be selected to satisfy both engineering and architectural requirements. Cores are constructed from aluminium extrusions supported on integral aluminium tubes; mesh cores are perforated aluminium sheet.

The frames are constructed from aluminium extrusions which are mitred and welded or cleated.

Product Description

- 3HG** 0° fixed blade grille
3HJ 15° fixed blade grille
3HF 45° fixed blade grille
GC5 12.5 x 12.5 x 12.5 eggcrate grille
RCG-GC5 (C) Removable core grille (GC5) Core only
PER Perforated plate grille
RB Reverse border
OBSS Allen key operated opposed blade damper. If used with RCG, OBSS is mounted in duct or plenum. Equalising deflector

ED

Weights

- Series 3 7 kg/m² face area
 GC5 5 kg/m² face area
 RCG-GC5 6.5 kg/m² face area
 OBSS/ED 9.5 kg/m² face area
 PER 6.0 kg/m² face area

Finishes

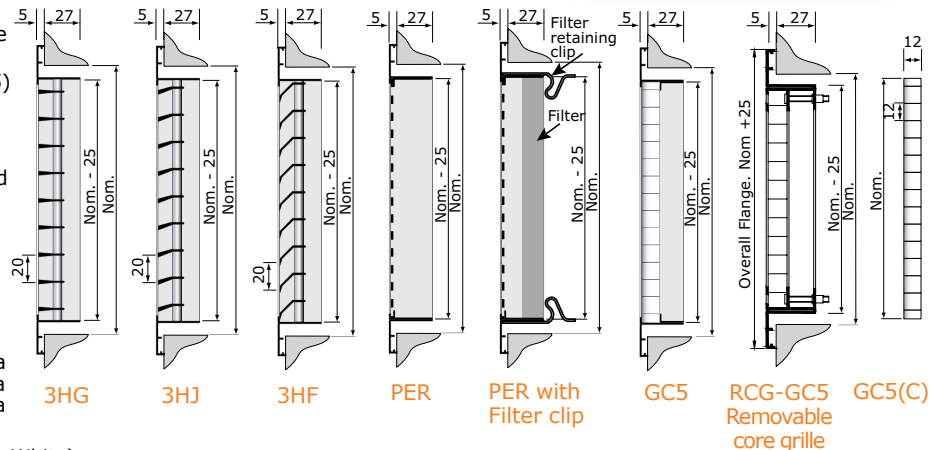
PPG9010 (RAL 9010 Gloss - 80% Gloss White)

PPM9010 (RAL 9010 Matt - 20% Gloss White)

PPM9006 (RAL 9006 Matt - 30% Gloss Silver)

Other colours or anodised finish available on request

GC5(C) Core is mill finished as standard



Free Area					
3HG	3HJ	3HF	GC5	RCG/GC5	PER
84%	84%	54%	91%	83%	51%

Please refer to pages 29 - 31 for full details of:
 Fixing Options
 Control Options
 Sub Frames
 Sizing Implications
 Border Options

dBA (L_p) and Static Pressure (P_s) Correction Factors for Grilles with an Open Damper

Grille Width	100+	125+	150+	200+	250+	300+	350+	450+	550+	600+	700+	850+	>1000
L _w Addition (C _L)	12	11	10	9	8	7	6	5	5	4	4	4	3
P _s Multiplier (C _p)	2.5	2.4	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.2

Sizes

Minimum Size - 100 x 100

Maximum Size - 2000 x 1500

(Maximum GC5 any x 2000)

Maximum RCG-GC5 600 x 600

Fixing Options

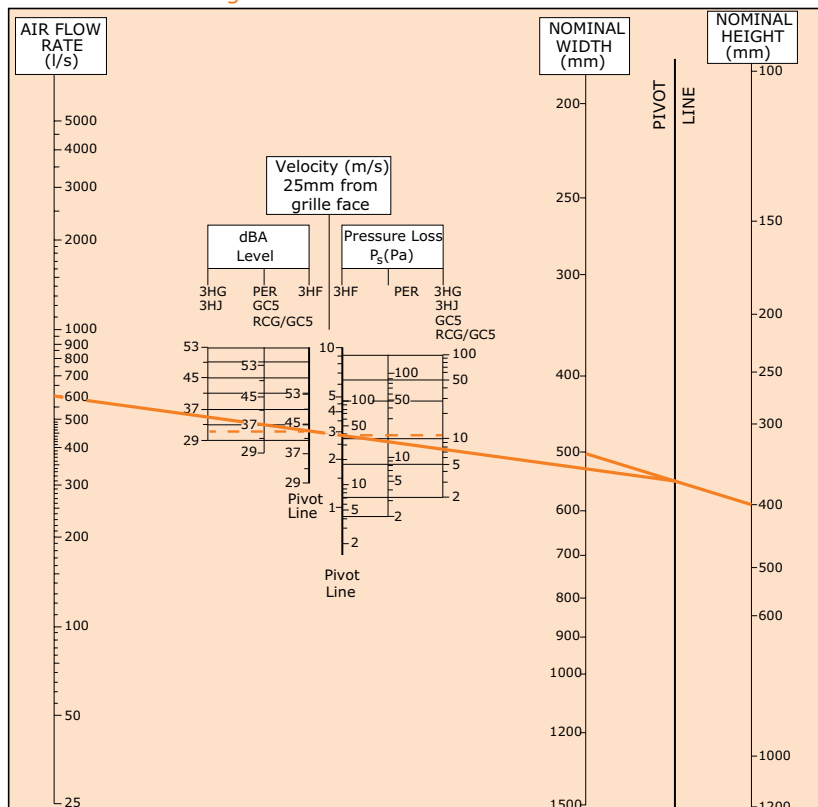
- SF CF CRB VS AFVS
 PFVS RCHS AFHS AFCF RCCF
 BSSBD BSSBP RCG-GC5

Selection Example

500/400 Grille Handling 600 l/s

- 3HJ grille
 Noise level = 32 dBA P_s = 11 Pa
- PER grille
 Noise level = 35 dBA P_s = 20 Pa
- 3HJ with open damper
 Noise level = 37 dBA P_s = 17 Pa
- PER with open damper
 Noise level = 40 dBA P_s = 31 Pa

Performance Nomogram



ORDER EXAMPLE

3HG/300/300/PPM9010/R25/SF/OBSS

- Type _____
 Nominal Width _____
 Nominal Height _____
 Finish _____
 Border _____
 Fixing _____
 Options _____