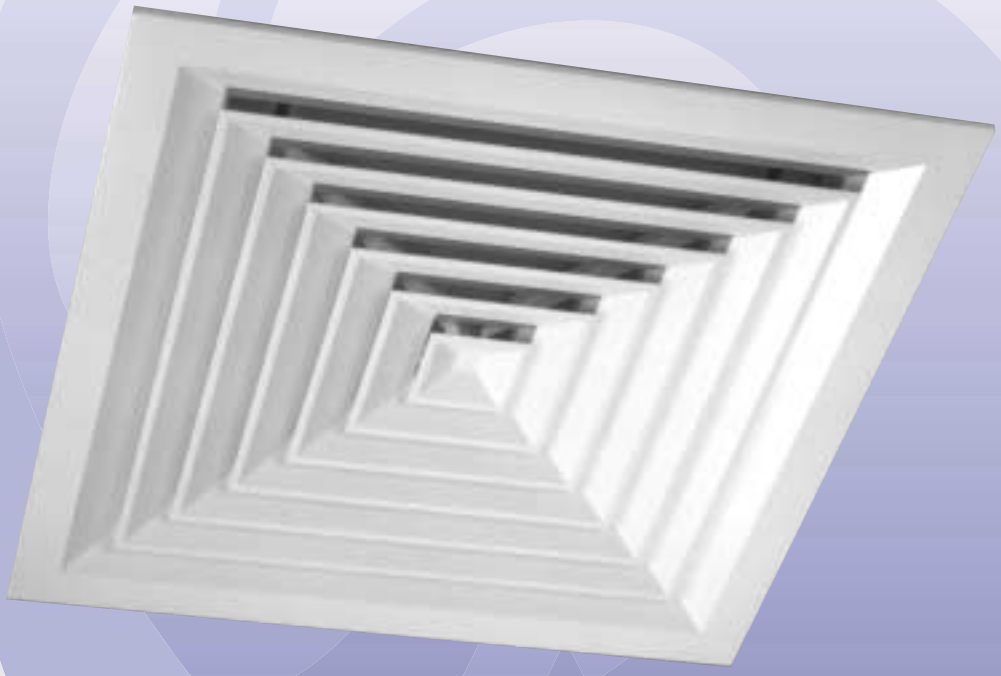
PUBLICATION
DIFFUSERS 1
APRIL 2008

SERIES DG

Louvred Face Ceiling Diffusers



Features

- Attractive Louvred Face Design.
- 4 Frame/Border Styles.
- 9 Different Air Pattern Core Options.
- Spring Loaded Removable Core.
- Complementary Top & Side Entry Connection Boxes.
- Pressed and Extruded aluminium Construction.

GILBERTS

SERIES DG

Introduction

Gilberts DG Series of Louvred Face Diffusers offer a distinct new evolution on a popular design theme. Combining up-to-date styling and design technology to blend with modern architecture the DG Series provide an unrivalled blend of performance and aesthetics featuring a restyled improved blade profile to give a balanced visual appearance from all aspects and angles and to ensure a clean horizontal air distribution pattern.
Units are available in 1, 2, 3 or 4 way blow, in both square and rectangular forms and in a wide variety of sizes ranging from 150 x 150 neck size up to 600 x 600 in 75mm increments. (Where uniform core appearance is needed clip on blanking plates are available to convert air patterns).

All Gilberts DG Units benefit from a robust spring loaded removable core assembly which allows easy access to dampers for initial balancing or cleaning and safety cords to firmly secure the core to the diffuser frame. In keeping with contemporary ceiling design the series is available with 4 specific frame border styles integrating operational flexibility by matching different popular ceiling types.

Standard Series Options:

Type DGA : Standard border suitable for both suspended and plaster ceiling applications.
Type DGB : Special border adapted for clip in ceiling grid applications.
Type DGC : Special border adapted for regular and drop in tile ceiling grids.
Type DGD : Narrow border option providing a higher capacity neck size suitable for suspended ceiling applications.

Further adaptations on these border frame platforms provides other distinct permutations allowing integration of the DG into almost any ceiling type, specification or design. For volume control the standard screwdriver operated opposed blade damper is available attached directly to the diffuser. Alternative plenum volume control options of a rotary damper, for top connection and quadrant or cord operated flap type damper for top/side connection can also be specified.
Standard finish for all DG Series is a Polyester Powder White. Other colours and finishes are available on request.

Selection Procedure

Having established the position where terminals can be sited, refer to data showing core pattern details and select the suitable direction pattern required. Knowing the volume and throw for each diffuser in question then check :

a) Recommended limit of volume per direction according to ceiling height (table 1) with throw of air required lying between the max and min values.
b) Note sound level from performance data and check this recommendations shown on table .
c) Determine the total pressure drop from performance data.

Table 1

Ceiling Height	Max vol per direction (each diffuser)	Cooling Differential Maximum
2.5m	0.090 m^3/s	12°C
3.0m	0.200 m^3/s	12°C
3.5m	0.350 m^3/s	12°C

Area to be served	Recommended Maximum NC Levels
Sound Broadcasting	15 - 20
Recording Studios, TV (Audience Studios)	20 - 25
Lecture Theatres, Cinemas, Concert Halls, Boardroom/Ex Offices Lounge, Conference Room, Court Room, Churches, Private Bedrooms	25 - 30
Operating Theatres, Hospital Wards, Staff Room, Class Rooms, Ballroom, Banquet Room, Library, Bank, Museum, Offices	30 - 40
Restaurants, Department Stores, Computer Suite, Washroom Toilet	35 - 40
Laundries, Kitchens, Swimming Pools, Sports Arena	40 - 45
Garage, Light Engineering Workshop	45 - 50
Heavy Engineering Workshop	50 - 65

Performance Data

The performance data tables provide information for cooling, ventilation and heating applications. They are intended to be aids to heating and air conditioning engineers.

References used :

Pressure : All pressures are in Pa (N/m^2) TP = Total Pressure SP = Negative Static Pressure

Throw : The first figure is the throw that corresponds to 0.5 m/s, and the second figure corresponds to 0.25 m/s.

Sound : NC values are based on a room absorption of 8db, re 10^{-12} watts and for one diffuser, with OBD Damper fully open.

Return Factors : If the unit is used as a return inlet, the performance data is obtained by applying the factors in the following manner : a) Sound : Add factor to the NC value listed
b) Negative static pressure : Multiply the factor by the total pressure listed in the tables.

Return Example : 150 x 150 DGA4 with 0.062 m3/s being returned through the unit
Return NC = 18 + 1 = 19
Return Pressure = (-SP) 20 x 1.1 = 22 Pa

Plenum Boxes : Where plenum boxes are attached to diffusers there will be an effect on both the noise and pressure drop values. Top connection boxes have little effect unless spigot connection velocities exceed 4 m/s. However for Side entry boxes an increase should be applied to the tables of 25% for supply pressure drops and 40% for extract.
The following spigot velocity figures indicate expected NC levels in the conditioned space and are based on a room absorbtion figure of 8db, re 10^{-12} watts.

Spigot Velocity 3.0 m/s NC Level 30-35
Spigot Velocity 2.5 m/s NC Level 30
Spigot Velocity 2.3 m/s NC Level 25-30
Spigot Velocity 2.0 m/s NC Level 25

The performance data for all Gilberts products is derived using a Gilberts plenum design and specification. Performance cannot be guaranteed where alternative plenum designs are used.

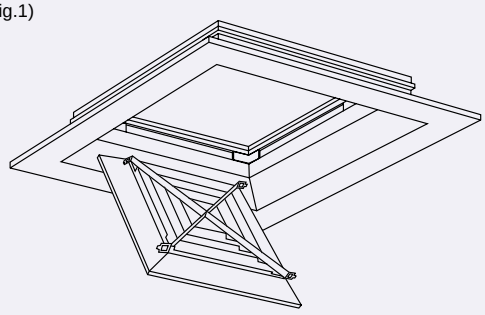
SERIES DG

Facilities

REMOVABLE CORE (fig.1)
The Louvred Face Core on all DG Series units is spring loaded to allow easy removal from the frame for cleaning, damper balancing and adjustment. To remove the core simply identify its spring spring loaded side and gently push the core horizontally towards the outer frame. Upon reaching its maximum movement the clips or pins on the opposite side of the core will have disengaged from the frame allowing that side to lower for full removal.
Note : Although safety cords are fitted the core will remove sufficiently to clear the frame and lower but will remain safely secured to prevent it from falling.

The removable core facility also allows different core styles to interchange on site where necessary.

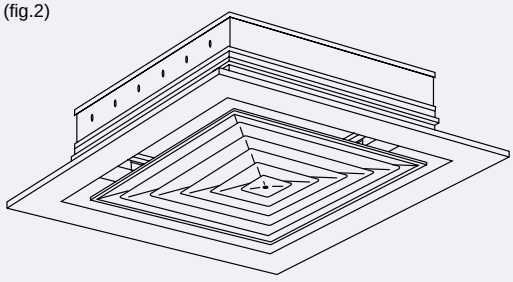
(fig.1)



DAMPER CONTROL (fig.2)
The DG Series now offers a variety of alternative damper control choices. Standard Opposed Blade Dampers remain an option for all units with screwdriver operation. In addition, however, a Rotary Damper is also available for units with Top Connection Box (TCB) type plenum. The rotary damper benefits from a low depth profile and comprises of a hit and miss style circular sliding plate which can be adjusted using finger tabs from the damper face.

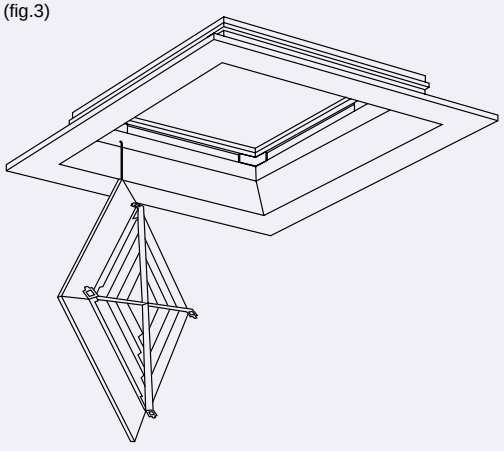
For top and side entry plenums quadrant and cord operated single blade flap type dampers can also be utilised or, for a more sophisticated form of volume control, Iris type dampers.

(fig.2)



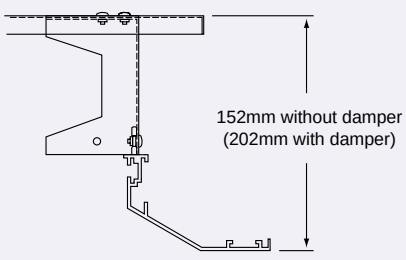
SAFETY CORD (fig.3)
A standard feature on DG Series are the Nylon Safety Cords.
The cords which are approximately 150mm in length bind the removable core to the diffuser frame. A useful safety feature, the cords will allow core removal but will prevent the core from accidently falling to the ground.

(fig.3)



NON VISION COWL (fig.4)
For non-ducted installations DG Units can be fitted with a matt black non-visual cowl plate (Ref: NVC/DG) at the rear to prevent see through vision into the ceiling void.

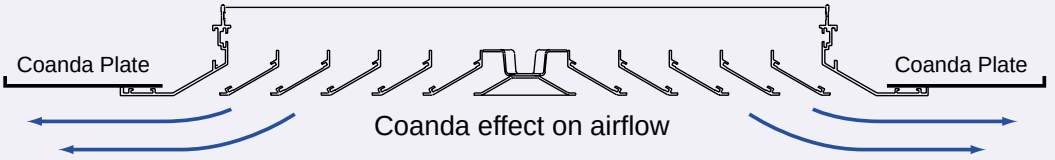
(fig.4)



SERIES DG

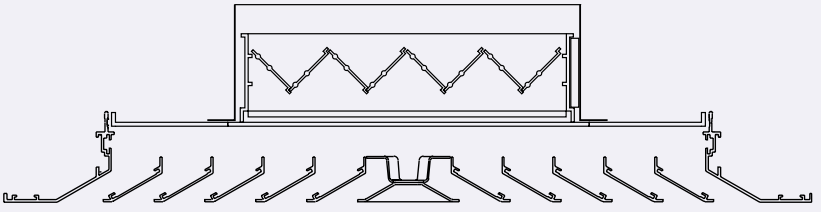
Coanda Plate

Available to suit all square sizes the coanda plate fixes to the back of the face flange of the diffuser to create a ceiling effect where diffusers are mounted in free space such as on exposed ductwork. The coanda effect can be used to increase the throw of the diffuser in these applications by allowing the air to flow across the plate and travel further before dropping into the occupied zone.
Standard Coanda width = List Size + 374mm

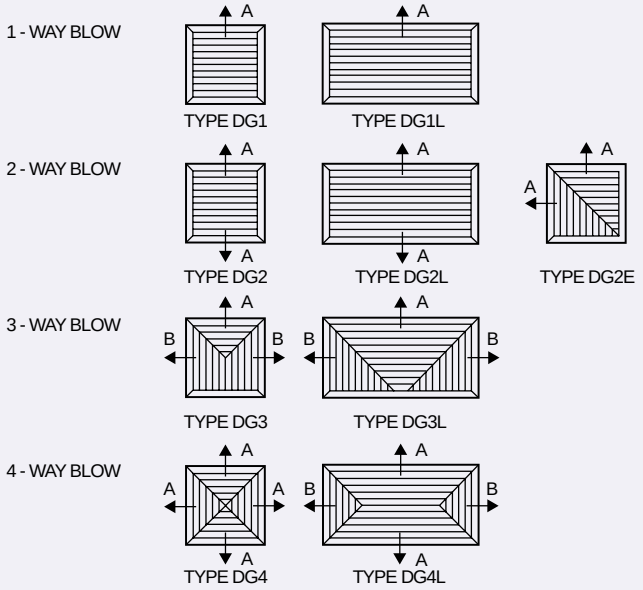


Neck Reducing Plate

Neck reduction plates can be fitted to the rear of all square face diffusers and are designed to limit airflow through the diffuser to a smaller neck size. Typically they are used on standard 600 sq ceiling grid size diffusers allowing the tile replacement size to be used throughout an installation whilst matching capacity to the required volume.
If opposed blade dampers are used in conjunction with a neck reduction plate the damper is also downsized with the neck to save on cost.



Air Pattern Options



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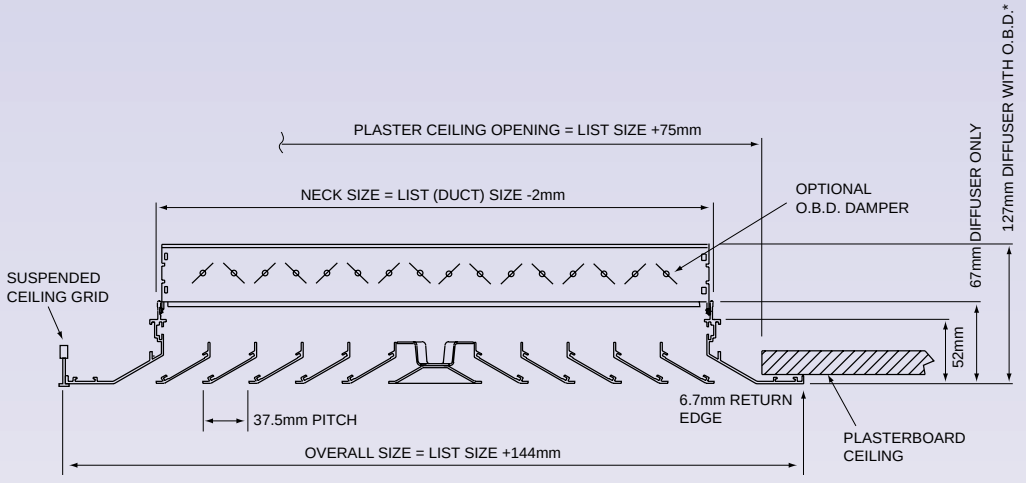
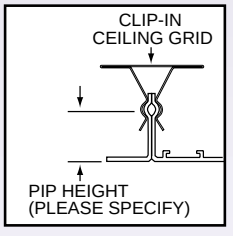
TYPE DGA Standard Border



LIST SIZE RANGE: 150 x 150 UPTO 600 x 600 IN 75mm INCREMENTS

TYPE DGB Clip in Border



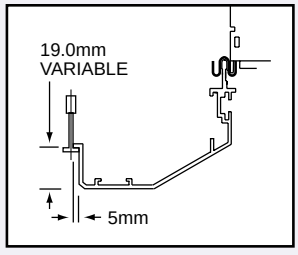
LIST SIZE RANGE: 450 x 450 ONLY (6OO O/A)

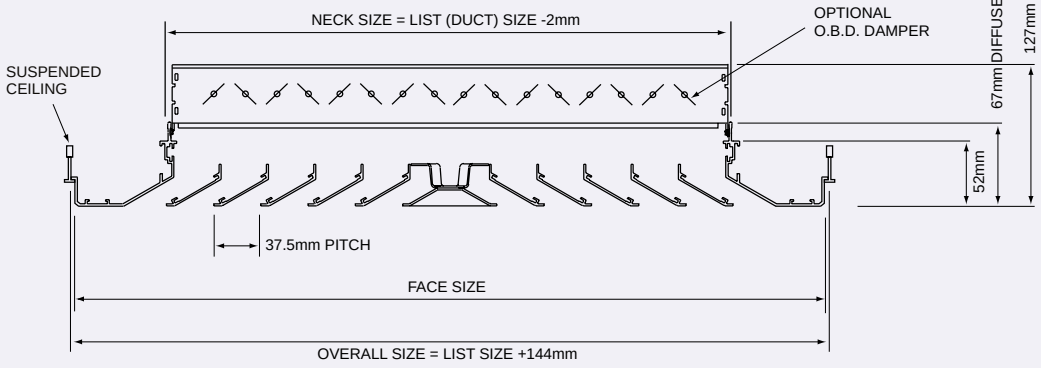
* Max depth - Depth may be lower depending on damper fitment. Please check where necessary

SERIES DG

Series DG

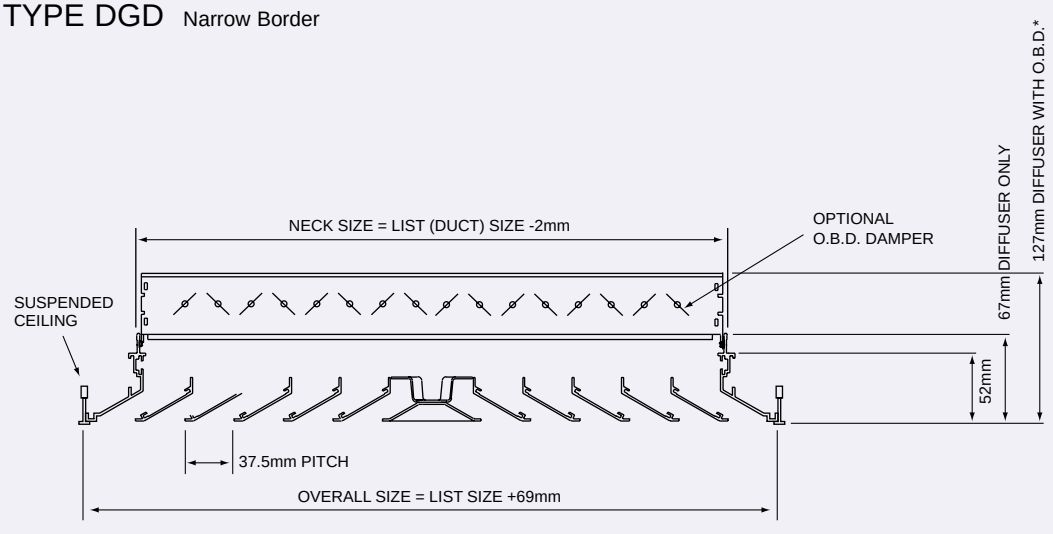
TYPE DGC Tegular Border





Overall Size Dims
List Size 450sq = 594sq O/A (584sq Face Size)
List Size 440sq = 584sq O/A (574sq Face Size)
List Size 350sq = 494sq O/A (484sq Face Size)
List Size 340sq = 484sq O/A (474sq Face Size)

TYPE DGD Narrow Border



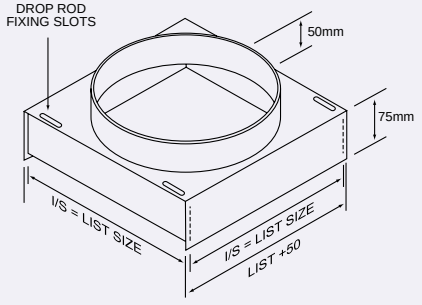
LIST SIZE RANGE: 150 x 150 UPTO 600 x 600 IN 75mm INCREMENTS
STANDARD SIZE: 525 x 525 (594 o/a)

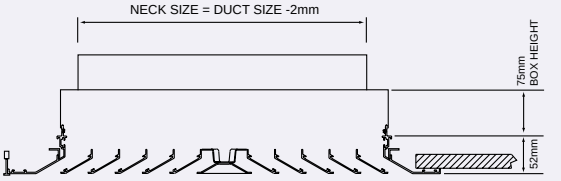
* Max depth - Depth may be lower depending on damper fitment. Please check where necessary

SERIES DG

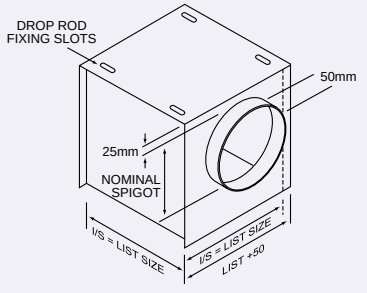
Plenum & Connection Boxes

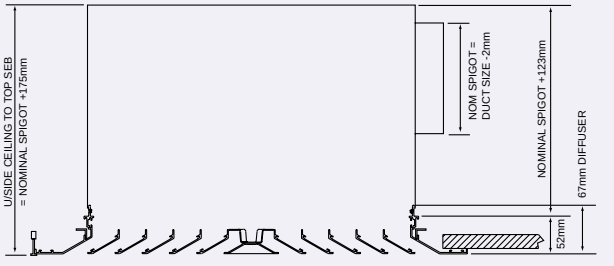
TYPE TCB: TOP CONNECTION BOX





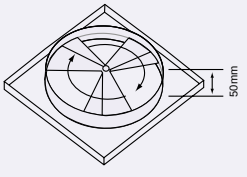
TYPE SEB: SIDE ENTRY BOX



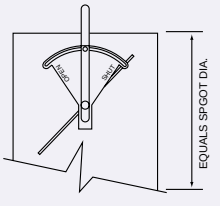


Plenum Volume Control

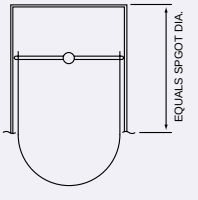
PLENUM TYPE TCB & SEB
ROTARY DAMPER - REF: DR



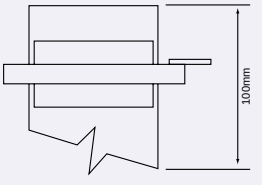
QUADRANT DAMPER - REF:DQ



CORD OP DAMPER - REF:DC



IRIS DAMPER - REF DI

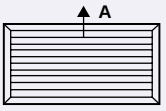


SIZE OPTIONS
150, 160, 200, 225
250, 300, 350, 400
& 450 Dia

General Plenum Specification

0.7mm Galvanised or Zintec coated mild steel plenum. Spigot Construction: Standard size spigots use plastic clip-in spigots. Non standard a sealed screw in spigot.

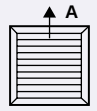
SERIES DG



ONE- WAY BLOW Type DG1L

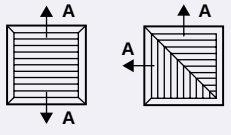
NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
225 x 150 0.0337 (1.2) x T.P. SUPPLY N.C. + 0	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .052 B – .052 – – 2.3/4	A .06 B – .06 – – 2.6/4.5	A .068 B – .068 – 10 3.5	A .076 B – .076 – 14 3.2/5.3	A .084 B – .084 – 17 3.3/5.6	A .092 B – .092 – 20 3.4/6	A .10 B – .10 – 23 3.5/6.3
300 x 150 0.045 (1.6) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .068 B – .068 – – 2.9/5.0	A .078 B – .078 – – 3.2/5.4	A .09 B – .09 – 11 3.5/5.9	A .102 B – .102 – 15 3.7/6.2	A .112 B – .112 – 18 4/6.5	A .124 B – .124 – 21 4.2/6.9	A .136 B – .136 – 24 4.4/7.2
375 x 150 0.0562 (1.9) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .084 B – .084 – – 3/5.4	A .098 B – .098 – – 3.3/5.8	A .112 B – .112 – 12 3.6/6.5	A .126 B – .126 – 15 3.8/6.8	A .14 B – .14 – 19 4.1/7.2	A .154 B – .154 – 23 4.3/7.4	A .168 B – .168 – 25 4.5/7.8
450 x 150 0.0675 (2.6) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .101 B – .101 – – 3.4/6.0	A .118 B – .118 – – 3.6/6.4	A .135 B – .135 – 13 3.9/6.9	A .151 B – .151 – 16 4/7.3	A .168 B – .168 – 20 4.2/7.6	A .185 B – .185 – 24 4.4/8	A .202 B – .202 – 26 4.7/8.4
525 x 150 0.0787 (3.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .118 B – .118 – – 3.5/6.1	A .137 B – .137 – – 3.7/6.5	A .157 B – .157 – 13 4/7	A .177 B – .177 – 16 4.1/7.4	A .196 B – .196 – 20 4.3/7.7	A .216 B – .216 – 24 4.5/8.2	A .236 B – .236 – 26 4.8/8.6
600 x 150 0.09 (4.0) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B – .135 – – 3.5/6.4	A .157 B – .157 – – 3.7/6.8	A .18 B – .18 – 14 4/7.2	A .202 B – .202 – 17 4.2/7.6	A .225 B – .225 – 21 4.5/8.4	A .247 B – .247 – 25 4.7/8.6	A .27 B – .27 – 27 4.9/8.9
300 x 225 0.0675 (1.4) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .10 B – .10 – – 3.3/5.9	A .118 B – .118 – – 3.5/6.3	A .135 B – .135 – 13 3.9/7	A .151 B – .151 – 16 4/7.2	A .168 B – .168 – 20 4.2/7.6	A .185 B – .185 – 24 4.4/8	A .202 B – .202 – 26 4.7/8.4
375 x 225 0.0843 (1.6) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .126 B – .126 – – 3.3/5.9	A .147 B – .147 – – 3.6/6.5	A .168 B – .168 – 14 4/7	A .189 B – .189 – 17 4.1/7.3	A .21 B – .21 – 21 4.3/7.7	A .231 B – .231 – 25 4.6/8.2	A .252 B – .252 – 27 4.8/8.6
450 x 225 0.101 (2.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .151 B – .151 – – 3.7/6.5	A .176 B – .176 – – 3.9/6.9	A .202 B – .202 – 15 4.2/7.2	A .227 B – .227 – 18 4.6/8.0	A .252 B – .252 – 22 4.9/8.8	A .277 B – .277 – 26 5.0/9.1	A .303 B – .303 – 28 5.2/9.4
525 x 225 0.118 (2.2) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .177 B – .177 – – 3.8/6.8	A .206 B – .206 – – 4/7	A .236 B – .236 – 15 4.2/7.5	A .265 B – .265 – 18 4.7/8.8	A .295 B – .295 – 22 5.0/9	A .324 B – .324 – 26 5.2/9.3	A .354 B – .354 – 28 5.3/9.6
600 x 225 0.135 (2.7) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .202 B – .202 – – 3.9/7	A .236 B – .236 – – 4.2/7.3	A .27 B – .27 – 16 4.4/7.7	A .303 B – .303 – 19 4.9/9.4	A .337 B – .337 – 23 5.2/9.2	A .371 B – .371 – 27 5.3/9.5	A .405 B – .405 – 29 5.5/9.8
375 x 300 0.112 (1.6) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .168 B – .168 – – 3.5/6.3	A .196 B – .196 – – 4/7	A .224 B – .224 – 16 4.3/7.7	A .252 B – .252 – 19 4.5/8	A .28 B – .28 – 23 4.7/8.4	A .308 B – .308 – 27 4.9/8.7	A .336 B – .336 – 29 5.1/9
450 x 300 0.135 (1.8) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .202 B – .202 – – 3.7/6.5	A .236 B – .236 – – 4/7	A .27 B – .27 – 17 4.4/7.7	A .303 B – .303 – 20 4.7/8.3	A .337 B – .337 – 24 5/9	A .371 B – .371 – 28 5.2/9.3	A .405 B – .405 – 30 5.5/9.6
525 x 300 0.157 (2.0) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .235 B – .235 – – 4/7.2	A .274 B – .274 – – 4.3/7.7	A .314 B – .314 – 17 4.6/8.4	A .353 B – .353 – 20 4.8/9.0	A .392 B – .392 – 24 5.4/9.6	A .431 B – .431 – 28 5.6/10	A .471 B – .471 – 30 6.0/10.5
600 x 300 0.18 (2.5) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .27 B – .27 – – 4.5/8	A .315 B – .315 – – 4.8/8.6	A .36 B – .36 – 18 5.2/9.2	A .405 B – .405 – 21 5.7/10.0	A .45 B – .45 – 25 6.2/10.8	A .495 B – .495 – 29 6.5/11.1	A .54 B – .54 – 31 6.7/11.4
450 x 375 0.168 (2.0) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .252 B – .252 – – 4/7	A .294 B – .294 – – 4.4/7.7	A .336 B – .336 – 18 4.7/8.4	A .378 B – .378 – 21 5.3/9	A .42 B – .42 – 25 5.7/9.8	A .462 B – .462 – 29 5.8/10.2	A .504 B – .504 – 31 6./10.5
525 x 375 0.196 (2.1) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .294 B – .294 – – 4.2/7.5	A .343 B – .343 – – 4.6/8.2	A .392 B – .392 – 18 4.9/8.9	A .441 B – .441 – 21 5.5/9.5	A .49 B – .49 – 25 5.9/10.2	A .539 B – .539 – 29 6.3/10.7	A .588 B – .588 – 31 6.5/11
600 x 375 0.225 (2.5) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .337 B – .337 – 10 4.5/7.8	A .393 B – .393 – 14 4.9/8.5	A .45 B – .45 – 19 5.2/9.2	A .506 B – .506 – 22 5.8/10	A .562 B – .562 – 26 6.2/10.7	A .618 B – .618 – 30 6.5/11.2	A .675 B – .675 – 32 6.8/11.5
525 x 450 0.236 (2.2) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .354 B – .354 – 10 4.7/8	A .413 B – .413 – 14 5.1/8.7	A .472 B – .472 – 19 5.4/9.4	A .531 B – .531 – 22 6.2/10.2	A .59 B – .59 – 26 6.4/11.2	A .649 B – .649 – 30 6.7/11.7	A .708 B – .708 – 32 7/12.2
600 x 450 0.27 (2.4) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .405 B – .405 – 11 4.9/8.4	A .472 B – .472 – 15 5.3/9.1	A .54 B – .54 – 20 5.6/10	A .607 B – .607 – 23 6.3/11.2	A .675 B – .675 – 27 6.7/12	A .742 B – .742 – 31 7/12.5	A .81 B – .81 – 33 7.3/13
600 x 525 0.315 (3.0) x T.P. SUPPLY N.C. + 7	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .472 B – .472 – 12 5.1/8.8	A .551 B – .551 – 16 5.6/9.5	A .63 B – .63 – 21 6/11.2	A .708 B – .708 – 24 6.4/12	A .787 B – .787 – 28 6.9/13	A .866 B – .866 – 32 7.2/13.4	A .945 B – .945 – 34 7.5/13.9

SERIES DG



ONE- WAY BLOW Type DG1

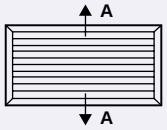
NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
150 x 150 0.0225 (1.1) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .034 B – .034 – – 2/4	A .04 B – .04 – – 2.2/4.2	A .045 B – .045 – – 2.5/4.5	A .051 B – .051 – – 2.7/4.8	A .056 B – .056 – 15 3/5	A .062 B – .062 – 18 3.1/5.5	A .067 B – .067 – 20 3.3/6
225 x 225 0.05 (1.2) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .075 B – .075 – – 3/5	A .087 B – .087 – – 3.5/5.5	A .1 B – .1 – – 4/6	A .112 B – .112 – 15 4.2/6.5	A .125 B – .125 – 18 4.5/7	A .135 B – .135 – 22 4.6/7.5	A .15 B – .15 – 24 4.7/8
300 x 300 0.09 (1.3) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B – .135 – – 4/6.5	A .157 B – .157 – – 4.2/6.7	A .18 B – .18 – 15 4.5/7	A .202 B – .202 – 18 4.7/8	A .225 B – .225 – 21 5/8.5	A .247 B – .247 – 24 5.2/8.7	A .27 B – .27 – 27 5.4/9
375 x 375 0.14 (1.8) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .21 B – .21 – – 4.5/7	A .245 B – .245 – – 4.7/8	A .28 B – .28 – 16 5/9	A .315 B – .315 – 20 5.2/9.5	A .35 B – .35 – 23 5.5/10	A .385 B – .385 – 25 5.7/10.5	A .42 B – .42 – 29 6/11
450 x 450 0.2025 (2.1) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .303 B – .303 – – 4.8/8	A .354 B – .354 – 15 5.1/8.5	A .405 B – .405 – 18 5.5/9	A .455 B – .455 – 21 6/10	A .506 B – .506 – 25 6.5/11	A .566 B – .566 – 27 6.7/11.5	A .607 B – .607 – 31 7/11.5
525 x 525 0.2756 (2.6) x T.P. SUPPLY N.C. + 8	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .413 B – .413 – – 5/9	A .482 B – .482 – 16 5.5/9.7	A .55 B – .55 – 20 6/10.5	A .62 B – .62 – 23 6.5/11.2	A .689 B – .689 – 27 7/12	A .758 B – .758 – 30 7.2/12.5	A .826 B – .826 – 33 7.5/13
600 x 600 0.36 (2.7) x T.P. SUPPLY N.C. + 9	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .54 B – .54 – 15 6/10	A .63 B – .63 – 18 6.5/11	A .72 B – .72 – 21 7/12	A .81 B – .81 – 25 7.3/12.8	A .9 B – .9 – 28 7.5/13.5	A .99 B – .99 – 30 7.8/13.8	A 1.08 B – 1.08 – 34 8/14



TWO- WAY BLOW Types DG2 and DG2E

NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
150 x 150 0.0225 (1.1) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .034 B – .017 – – 2/3	A .04 B – .02 – – 2.1/3.3	A .045 B – .022 – – 2.3/3.6	A .051 B – .025 – – 2.4/4	A .056 B – .028 – 15 2.5/4.2	A .062 B – .031 – 18 2.7/4.4	A .0.67 B – .033 – 20 3/4.6
225 x 225 0.05 (1.2) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .075 B – .037 – – 2.4/4	A .087 B – .043 – – 2.7/4.6	A .1 B – .05 – – 3/5	A .112 B – .056 – 15 3/5.3	A .125 B – .062 – 18 3.2/5.6	A .135 B – .067 – 22 3.3/5.8	A .15 B – .075 – 24 3.5/6
300 x 300 0.09 (1.3) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B – .067 – – 2.9/5.0	A .157 B – .078 – – 3.2/5.4	A .18 B – .09 – 15 3.5/6.9	A .202 B – .101 – 18 3.7/6.2	A .225 B – .112 – 21 4/6.5	A .247 B – .123 – 24 4.2/7	A .27 B – .135 – 27 4.4/7.2
375 x 375 0.14 (1.8) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .21 B – .105 – – 3.5/6.0	A .245 B – .122 – – 3.7/6.5	A .28 B – .14 – 16 4/7	A .315 B – .157 – 20 4.2/7.4	A .35 B – .175 – 23 4.5/7.9	A .385 B – .192 – 25 4.7/8.4	A .42 B – .21 – 29 5/9
450 x 450 0.2025 (2.1) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .303 B – .151 – – 3.7/6.5	A .354 B – .177 – 15 4/6.9	A .405 B – .202 – 18 4.2/7.2	A .455 B – .227 – 21 4.6/8	A .506 B – .253 – 25 5/8.8	A .556 B – .278 – 27 5/9.1	A .607 B – .303 – 31 5.2/9.4
525 x 525 0.2756 (2.6) x T.P. SUPPLY N.C. + 8	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .413 B – .206 – – 4/7.2	A .482 B – .241 – 16 4.5/8	A .55 B – .275 – 20 5/8.8	A .62 B – .31 – 23 5.2/9.4	A .689 B – .344 – 27 5.5/10	A .758 B – .379 – 30 5.7/10.5	A .826 B – .413 – 33 6/11
600 x 600 0.36 (2.7) x T.P. SUPPLY N.C. + 9	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .54 B – .27 – 15 4.5/8	A .63 B – .315 – 18 4.8/8.6	A .72 B – .36 – 21 5.2/9.2	A .81 B – .405 – 25 5.7/10	A .9 B – .45 – 28 6.2/10.8	A .99 B – .495 – 30 6.5/11.1	A 1.08 B – 0.54 – 34 6.7/11.4

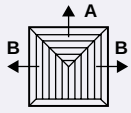
SERIES DG



TWO- WAY BLOW Type DG2L

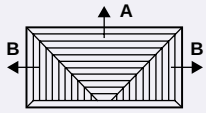
NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
225 x 150 0.0337 (1.2) x T.P. SUPPLY N.C. + 0	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .052 B – .026 – – 1.5/2.8	A .06 B – .03 – – 1.6/3.1	A .068 B – .034 – 10 1.8/3.4	A .076 B – .038 – 14 1.9/3.7	A .084 B – .042 – 17 2.1/4	A .092 B – .046 – 20 2.3/4.1	A .10 B – .05 – 23 2.5/4.3
300 x 150 0.045 (1.6) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .068 B – .034 – – 1.8/3.7	A .078 B – .039 – – 1.9/4	A .09 B – .045 – 11 2.1/4.3	A .102 B – .051 – 15 2.3/4.6	A .112 B – .056 – 18 2.5/5	A .124 B – .062 – 21 2.6/5.2	A .136 B – .068 – 24 2.8/5.5
375 x 150 0.0562 (1.9) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .084 B – .042 – – 2.1/4.0	A .098 B – .049 – – 2.3/4.1	A .112 B – .056 – 12 2.5/4.3	A .126 B – .063 – 15 2.6/4.7	A .14 B – .07 – 19 2.8/5.2	A .154 B – .077 – 23 3/5.6	A .168 B – .084 – 25 3.1/5.8
450 x 150 0.0675 (2.6) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .101 B – .050 – – 2.1/4.3	A .118 B – .059 – – 2.3/4.6	A .135 B – .067 – 13 2.5/4.9	A .151 B – .075 – 16 2.6/5.4	A .168 B – .084 – 20 2.8/5.8	A .185 B – .092 – 24 3/6	A .202 B – .101 – 26 3.1/6.1
525 x 150 0.0787 (3.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .118 B – .059 – – 2.5/4.6	A .137 B – .068 – – 2.8/5.1	A .157 B – .078 – 13 3.1/5.6	A .177 B – .088 – 16 3.4/6	A .196 B – .098 – 20 3.7/6.4	A .216 B – .108 – 24 3.8/6.7	A .236 B – .118 – 26 4/7
600 x 150 0.09 (4.0) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B – .067 – – 2.6/4.7	A .157 B – .078 – – 2.9/5.2	A .18 B – .09 – 14 3.2/5.7	A .202 B – .101 – 17 3.6/6.2	A .225 B – .112 – 21 3.8/6.5	A .247 B – .123 – 25 3.9/6.8	A .27 B – .135 – 27 4.1/7.1
300 x 225 0.0675 (1.4) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .10 B – .05 – – 2.2/4.3	A .118 B – .059 – – 2.4/4.6	A .135 B – .067 – 13 2.6/5	A .151 B – .075 – 16 2.7/5.4	A .168 B – 0.84 – 20 2.9/5.9	A .185 B – .092 – 24 3/6	A .202 B – .101 – 26 3.2/6.2
375 x 225 0.0843 (1.6) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .126 B – .063 – – 2.6/4.6	A .147 B – .073 – – 2.9/5	A .168 B – .084 – 14 3.1/5.5	A .189 B – .094 – 17 3.4/6	A .21 B – .11 – 21 3.8/6.5	A .231 B – .115 – 25 3.9/6.8	A .252 B – .126 – 27 4.1/7.1
450 x 225 0.101 (2.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .151 B – .075 – – 2.8/5.2	A .176 B – .088 – – 3.1/5.6	A .202 B – .101 – 15 3.4/6	A .227 B – .113 – 18 3.7/6.5	A .252 B – .126 – 22 4/7	A .277 B – .139 – 26 4.1/7.3	A .303 B – .151 – 28 4.3/7.6
525 x 225 0.118 (2.2) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .177 B – .088 – – 2.9/5.3	A .206 B – .103 – – 3.2/5.7	A .236 B – .118 – 15 3.5/6.1	A .265 B – .132 – 18 3.7/6.6	A .295 B – .147 – 22 4/7.1	A .324 B – .162 – 26 4.1/7.4	A .354 B – .177 – 28 4.3/7.7
600 x 225 0.135 (2.7) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .202 B – .101 – – 3.1/5.6	A .236 B – .118 – – 3.4/6	A .27 B – .135 – 16 3.7/6.6	A .303 B – .151 – 19 4/7	A .337 B – .168 – 23 4.3/7.6	A .371 B – .185 – 27 4.4/8	A .405 B – .202 – 29 4.6/8.4
375 x 300 0.112 (1.6) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .168 B – .084 – – 3.5.2	A .196 B – .098 – – 3.3/5.6	A .224 B – .112 – 16 3.6/6	A .252 B – .126 – 19 3.8/6.5	A .28 B – .14 – 23 4/7	A .308 B – .154 – 27 4.2/7.4	A .336 B – .168 – 29 4.4/7.8
450 x 300 0.135 (1.8) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .202 B – .101 – – 3.4/6.0	A .236 B – .118 – – 3.6/6.4	A .27 B – .135 – 17 3.9/6.9	A .303 B – .151 – 20 4/7.3	A .337 B – .168 – 24 4.2/7.6	A .371 B – .185 – 28 4.4/8	A .405 B – .202 – 30 4.7/8.4
525 x 300 0.157 (2.0) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .235 B – .118 – – 3.5/6.1	A .274 B – .137 – – 3.7/6.5	A .314 B – .157 – 17 4/7	A .353 B – .177 – 20 4.1/7.4	A .392 B – .196 – 24 4.3/7.7	A .431 B – .216 – 28 4.5/8.2	A .471 B – .236 – 30 4.8/8.6
600 x 300 0.18 (2.5) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .27 B – .135 – – 3.5/6.4	A .315 B – .157 – – 3.7/6.8	A .36 B – .18 – 18 4/7.2	A .405 B – .202 – 21 4.2/7.6	A .45 B – .225 – 25 4.5/8.4	A .495 B – .247 – 29 4.7/8.6	A .54 B – .27 – 31 4.9/8.9
450 x 375 0.168 (2.0) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .252 B – .126 – – 3.1/5.8	A .294 B – .147 – – 3.4/6.2	A .336 B – .168 – 18 3.7/6.7	A .378 B – .189 – 21 4/7.2	A .42 B – .21 – 25 4.3/7.6	A .462 B – .231 – 29 4.5/8	A .504 B – .252 – 31 4.7/8.4
525 x 375 0.196 (2.1) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .294 B – .147 – – 3.4/6.3	A .343 B – .171 – – 3.7/6.7	A .392 B – .196 – 18 4/7.2	A .441 B – .220 – 21 4.3/7.8	A .49 B – .245 – 25 4.6/8.4	A .539 B – .269 – 29 4.8/8.8	A .588 B – .294 – 31 5/9.2
600 x 375 0.225 (2.5) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .337 B – .168 – 10 3.9/7	A .393 B – .196 – 14 4.2/7.3	A .45 B – .226 – 19 4.4/7.6	A .506 B – .253 – 22 4.7/8	A .562 B – .281 – 26 4.8/8.8	A .618 B – .309 – 30 5/9	A .675 B – .337 – 32 5.2/9.5
525 x 450 0.236 (2.2) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .354 B – .177 – 10 3.8/6.8	A .413 B – .206 – 14 4/7	A .472 B – .236 – 19 4.2/7.5	A .531 B – .265 – 22 4.7/8.8	A .59 B – .295 – 26 5/9	A .649 B – .324 – 30 5.2/9.3	A .708 B – .354 – 32 5.3/9.6
600 x 450 0.27 (2.4) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .405 B – .202 – 11 3.9/7	A .472 B – .236 – 15 4.2/7.3	A .54 B – .27 – 20 4.4/7.7	A .607 B – .303 – 23 4.9/9.4	A .675 B – .337 – 27 5.2/9.2	A .742 B – .371 – 31 5.3/9.5	A .81 B – .405 – 33 5.5/9.8
600 x 525 0.315 (3.0) x T.P. SUPPLY N.C. + 7	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .472 B – .236 – 12 4.2/7.6	A .551 B – .275 – 16 4.6/8.2	A .63 B – .315 – 21 5.1/9	A .708 B – .354 – 24 5.5/9.7	A .787 B – .393 – 28 5.7/10.4	A .866 B – .433 – 32 6/10.8	A .945 B – .472 – 34 6.3/11.1

SERIES DG



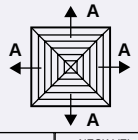
THREE-WAY BLOW Type DG3

NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
150 x 150 0.0225 (1.1) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .034 B .008 – .013 1/2 , 1.2/3	A .04 B .01 – .015 1/2.1 , 1.4/3	A .045 B .011 – .017 1.3/2.2 , 1.6/3	A .051 B .013 – .019 1.4/2.3 , 1.7/3.4	A .056 B .014 – .021 15 1.6/2.4 , 2/3.7	A .062 B .016 – .023 18 1.6/2.6 , 2/4	A .067 B .017 – .025 20 1.7/2.9 , 2/4
225 x 225 0.05 (1.2) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .075 B .019 – .028 1.3/2.4 , 2/3.4	A .087 B .021 – .033 1.4/2.6 , 2/3.7	A .1 B .024 – .038 1.6/2.8 , 2/4	A .112 B .026 – .043 15 1.7/3 , 2.2/4.2	A .125 B .03 – .047 18 1.8/3 , 2.5/4.4	A .135 B .034 – .050 22 1.8/3.1 , 3/4.6	A .15 B .038 – .056 24 1.8/3.3 , 3/4.8
300 x 300 0.09 (1.3) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B .033 – .051 1.5/2.6 , 2/4	A .157 B .04 – .058 1.6/3 , 2/4.1	A .18 B .045 – .067 15 1.8/3.2 , 2/4.2	A .202 B .05 – .076 18 1.9/3.5 , 2.5/5	A .225 B .057 – .084 21 2/3.8 , 2.8/5.2	A .247 B .063 – .092 24 2/4 , 3/5.4	A .27 B .069 – .1 27 2.2/4 , 3.2/5.8
375 x 375 0.14 (1.8) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .21 B .052 – .079 1.7/3 , 2.8/4.8	A .245 B .062 – .091 2/3.5 , 3/5.2	A .28 B .072 – .104 16 2/3.7 , 3.2/5.8	A .315 B .08 – .117 20 2/4 , 3.6/6.2	A .35 B .088 – .131 23 2.2/4.3 , 4/6.5	A .385 B .097 – .144 25 2.4/4.5 , 4/6.7	A .42 B .105 – .157 29 2.6/4.8 , 4.2/7
450 x 450 0.2025 (2.1) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .303 B .077 – .113 2/3. 8 , 3/5.2	A .354 B .09 – .132 15 2/3.9 , 3.2/5.6	A .405 B .104 – .150 18 2.2/4 , 3.5/6	A .455 B .116 – .169 21 2.5/4.5 , 4/6.5	A .506 B .129 – .188 25 2.6/5 , 4.2/7	A .556 B .141 – .207 27 2.8/5.2 , 4.1/7	A .607 B .155 – .226 31 3/5.5 , 4.5/7.5
525 x 525 0.2756 (2.6) x T.P. SUPPLY N.C. + 8	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .413 B .106 – .153 2.2/4.2 , 3.2/6	A .482 B .124 – .179 16 2.3/4.5 , 3.6/6	A .55 B .138 – .206 20 2.6/5 , 4/6.7	A .62 B .154 – .233 23 2.8/5.5 , 4.2/7	A .689 B .174 – .257 27 3/6 , 4.4/7.6	A .758 B .19 – .284 30 3/6 , 4.6/8	A .826 B .208 – .309 33 3.2/6 , 4.8/8.6
600 x 600 0.36 (2.7) x T.P. SUPPLY N.C. + 9	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .54 B .14 – .200 15 2.6/4.7 , 4/6.5	A .63 B .169 – .230 18 3/5 , 4/7	A 72 B .185 – .267 21 3/5.5 , 4/7.2	A .81 B .20 – .305 25 3.5/6 , 4.5/8	A .9 B .228 – .336 28 3.8/6.5 , 5/8.5	A .99 B .24 – .375 30 4/6.8 , 5/9	A 1.08 B .274 – .403 34 4/7 , 5.2/9.5



THREE-WAY BLOW Type DG3L

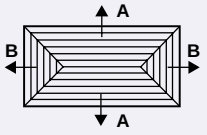
NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
300 x 150 0.045 (1.6) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .068 B .034 – .017 2/3 , 2/3	A .078 B .039 – .02 2.1/3.3 , 2.1/3.3	A .09 B .045 – .022 11 2.3/3.6 , 2.3/3.6	A .102 B .051 – .025 15 2.4/4 , 2.4/4	A .112 B .056 – .028 18 2.5/4.2 , 2.5/4.2	A .124 B .062 – .031 21 2.7/4.4 , 2.7/4.4	A .136 B .068 – .034 24 3/4.6 , 3/4.6
450 x 225 0.101 (2.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .151 B .077 – .037 2.4/4 , 2.4/4	A .176 B .090 – .043 2.7/4.6 , 2.7/4.6	A .202 B .101 – .05 15 3/5 , 3/5	A .227 B .113 – .056 18 3/5.3 , 3/5.3	A .252 B .126 – .163 22 3.2/5.6 , 3.2/5.6	A .277 B .138 – .069 26 3.3/5.8 , 3.3/5.8	A .303 B .151 – .075 28 3.5/6 , 3.5/6
600 x 300 0.18 (2.5) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .27 B .135 – .067 3.1/5 , 2.9/5	A .315 B .157 – .078 3.4/5.6 , 3.2/5.4	A .36 B .18 – .09 18 3.7/7 , 3.5/6.9	A .405 B .202 – .101 21 3.9/6.4 , 3.7/6.2	A .45 B .225 – .112 25 4.2/6.7 , 4/6.5	A .495 B .247 – .123 29 4.4/7.2 , 4.2/7	A .54 B .27 – .135 31 4.6/7.4 , 4.4/7.2



FOUR-WAY BLOW Type DG4

NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
150 x 150 0.0225 (1.1) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .034 B .008 – – 1/2	A .04 B .01 – – 1.1/2.1	A .045 B .011 – – 1.3/2.2	A .051 B .013 – – 1.4/2.3	A .056 B .014 – – 15 1.6/2.4	A .062 B .016 – – 18 1.6/2.6	A .067 B .017 – – 20 1.7/2.9
225 x 225 0.05 (1.2) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .075 B .019 – – 1.3/2.4	A .087 B .021 – – 1.4/2.6	A .1 B .025 – – 1.6/2.8	A .112 B .026 – – 15 1.7/3	A .125 B .031 – – 18 1.8/3	A .135 B .034 – – 22 1.8/3.1	A .15 B .038 – – 24 1.8/3.3
300 x 300 0.09 (1.3) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B .033 – – 1.5/2.6	A .157 B .04 – – 1.6/3	A .18 B .045 – – 15 1.8/3.2	A .202 B .05 – – 18 1.9/3.5	A .225 B .057 – – 21 2/3.8	A .247 B .062 – – 24 2/4	A .27 B .069 – – 27 2.2/4
375 x 375 0.14 (1.8) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .21 B .052 – – 1.7/3	A .245 B .062 – – 2/3.5	A .28 B .072 – – 16 2/3.7	A .315 B .08 – – 20 2/4	A .35 B .088 – – 23 2.2/4.3	A .385 B .097 – – 25 2.4/4.5	A .42 B .105 – – 29 2.6/4.8
450 x 450 0.2025 (2.1) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .303 B .077 – – 2/3. 8	A .354 B .09 – – 15 2/3.9	A .405 B .104 – – 18 2.2/4	A .455 B .116 – – 21 2.5/4.5	A .506 B .129 – – 25 2.6/5	A .556 B .141 – – 27 2.8/5.2	A .607 B .155 – – 31 3/5.5
525 x 525 0.2756 (2.6) x T.P. SUPPLY N.C. + 8	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .413 B .106 – – 2.2/4.2	A .482 B .124 – – 16 2.3/4.5	A .55 B .138 – – 20 2.6/5	A .62 B .154 – – 23 2.8/5.5	A .689 B .174 – – 27 3/6	A .758 B .19 – – 30 3/6	A .826 B .208 – – 33 3.2/6
600 x 600 0.36 (2.7) x T.P. SUPPLY N.C. + 9	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .54 B .14 – – 15 2.6/4.7	A .63 B .169 – – 18 3/5	A 72 B .185 – – 21 3/5.5	A .81 B .20 – – 25 3.5/6	A .9 B .228 – – 28 3.8/6.5	A .99 B .24 – – 30 4/6.8	A 1.08 B .274 – – 34 4/7

SERIES DG



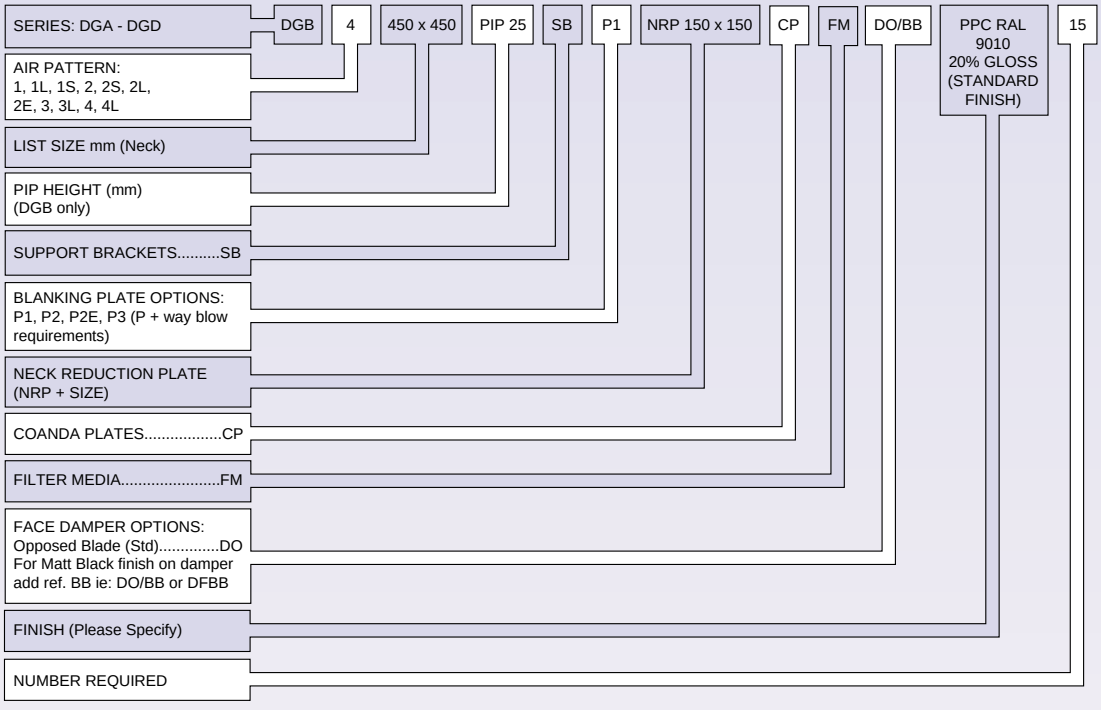
FOUR- WAY BLOW Type DG4L

NECK SIZE AREA m² RETURN – SP RETURN N.C.	NECK VEL m/s TOTAL PRESSURE Pa	1.5 6	1.75 8	2.0 11	2.25 14	2.5 17	2.75 20	3.0 24
225 x 150 0.0337 (1.2) x T.P. SUPPLY N.C. + 0	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .052 B .018 .008 – 1.5/2.8 , 1/2	A .06 B .02 .01 – 1.7/3 , 1/2.1	A .068 B .023 .011 10 2/3.4 , 1.3/2.2	A .076 B .025 .013 14 2.1/3.6 , 1.4/2.3	A .084 B .028 .014 17 2.2/4 , 1.6/2.4	A .092 B .03 .016 20 2.3/4.1 , 1.6/2.6	A .10 B .033 .017 23 2.5/4.3 , 1.7/2.9
300 x 150 0.045 (1.6) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .068 B .026 .008 – 2.1/3.7 , 1/2	A .078 B .029 .01 – 2.2/4 , 1/2.1	A .09 B .034 .011 11 2.4/4.3 , 1.3/2.2	A .102 B .038 .013 15 2.6/4.6 , 1.4/2.3	A .112 B .042 .014 18 2.8/5 , 1.6/2.4	A .124 B .046 .016 21 2.9/5.1 , 1.6/2.6	A .136 B .051 .017 24 3/5.2 , 1.7/2.9
375 x 150 0.0562 (1.9) x T.P. SUPPLY N.C. + 1	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .084 B .034 .008 – 2/4 , 1/2	A .098 B .039 .01 – 2.2/4.2 , 1/2.1	A .112 B .045 .011 12 2.4/4.6 , 1.3/2.2	A .126 B .05 .013 15 2.6/5 , 1.4/2.3	A .14 B .056 .014 19 2.8/5.2 , 1.6/2.4	A .154 B .061 .016 23 3/5.4 , 1.6/2.6	A .168 B .067 .017 25 3/5.8 , 1.7/2.9
450 x 150 0.0675 (2.6) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .101 B .042 .008 – 2.7/4.5 , 1/2	A .118 B .049 .01 – 2.8/4.7 , 1/2.1	A .135 B .056 .011 13 2.9/5 , 1.3/2.2	A .151 B .062 .013 16 3/5.5 , 1.4/2.3	A .168 B .07 .014 20 3/6 , 1.6/2.4	A .185 B .076 .016 24 3/6 , 1.6/2.6	A .202 B .085 .017 26 3.2/6.3 , 1.7/2.9
525 x 150 0.0787 (3.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .118 B .051 .008 – 2.8/5 , 1/2	A .137 B .058 .01 – 3/5.3 , 1/2.1	A .157 B .067 .011 13 3.2/5.6 , 1.4/2.3	A .177 B .075 .013 16 3.5/6 , 1.4/2.3	A .196 B .084 .014 20 4.6/6 , 1.6/2.4	A .216 B .092 .016 24 4/6.8 , 1.6/2.6	A .236 B .101 .017 26 4.2/7 , 1.7/2.9
600 x 150 0.09 (4.0) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .135 B .059 .008 – 2.8/5 , 1/2	A .157 B .068 .01 – 3/5.3 , 1/2.1	A .18 B .079 .011 14 3.2/5.6 , 1.4/2.3	A .202 .088 .013 17 3.5/6 , 1.4/2.3	A .225 B .098 .014 21 4.6/6 , 1.6/2.4	A .247 B .107 .016 25 4/6.8 , 1.6/2.6	A .27 B .119 .017 27 4.2/7 , 1.7/2.9
300 x 225 0.0675 (1.4) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .10 B .031 .019 – 1.8/3.4 , 1.3/2.4	A .118 B .038 .021 – 2/3.6 , 1.4/2.6	A .135 B .043 .024 13 2/4 , 1.6/2.8	A .151 .049 .026 16 2.4/4.2 , 1.7/3	A .168 B .054 .03 20 2.2/4.4 , 1.8/3	A .185 B .058 .034 24 2.6/4.8 , 1.8/3.1	A .202 B .063 .038 26 2.8/5 , 1.8/3.3
375 x 225 0.0843 (1.6) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .126 B .044 .019 – 2.7/4.5 , 1.3/2.4	A .147 B .052 .021 – 2.8/4.7 , 1.4/2.6	A .168 B .06 .024 14 2.9/5 , 1.6/2.8	A .189 .068 .026 17 3/5.5 , 1.7/3	A .21 B .075 .03 21 3/6 , 1.8/3	A .231 B .081 .034 25 3.6 , 1.8/3.1	A .252 B .088 .038 27 3.2/6.3 , 1.8/3.3
450 x 225 0.101 (2.0) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .151 B .056 .019 – 2.8/5 , 1.3/2.4	A .176 B .067 .021 – 3/5.3 , 1.4/2.6	A .202 B .077 .024 15 3.2/5.6 , 1.6/2.8	A .227 .087 .026 18 3.5/6 , 1.7/3	A .252 B .096 .03 22 4/6.6 , 1.8/3	A .277 B .104 .034 26 4/6.8 , 1.8/3.1	A .303 B .113 .038 28 4.2/7 , 1.8/3.3
525 x 225 0.118 (2.2) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .177 B .069 .019 – 3/5.4 , 1.3/2.4	A .206 B .082 .021 – 3.2/5.5 , 1.4/2.6	A .236 B .094 .024 15 3.5/6 , 1.6/2.8	A .265 .106 .026 18 3.8/6.5 , 1.7/3	A .295 B .117 .03 22 4/7 , 1.8/3	A .324 B .128 .034 26 4.1/7.5 , 1.8/3.1	A .354 B .139 .038 28 4.3/8 , 1.8/3.3
600 x 225 0.135 (2.7) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .202 B .082 .019 – 3/5.4 , 1.3/2.4	A .236 B .097 .021 – 3.2/5.5 , 1.4/2.6	A .27 B .111 .024 16 3.5/6 , 1.6/2.8	A .303 .125 .026 19 3.8/6.5 , 1.7/3	A .337 B .138 .03 23 4/7 , 1.8/3	A .371 B .151 .034 27 4.1/7.5 , 1.8/3.1	A .405 B .164 .038 29 4.3/8 , 1.8/3.3
375 x 300 0.112 (1.6) x T.P. SUPPLY N.C. + 2	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .168 B .051 .033 – 2/4 , 1.5/2.6	A .196 B .058 .04 – 2.2/4.2 , 1.6/3	A .224 B .067 .045 16 2.4/4.6 , 1.8/3.2	A .252 .076 .05 19 2.6/5 , 1.9/3.5	A .28 B .083 .057 23 2.8/5.2 , 2/3.8	A .308 B .091 .063 27 3/5.4 , 2/4	A .336 B .099 .069 29 3/5.8 , 2.2/4
450 x 300 0.135 (1.8) x T.P. SUPPLY N.C. + 3	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .202 B .068 .033 – 2.8/5 , 1.5/2.6	A .236 B .078 .04 – 3/5.3 , 1.6/3	A .27 B .09 .045 17 3.2/5.6 , 1.8/3.2	A .303 .101 .05 20 3.5/6 , 1.9/3.5	A .337 B .111 .057 24 4/6.6 , 2/3.8	A .371 B .122 .063 28 4/6.8 , 2/4	A .405 B .133 .069 30 4.2/7 , 2.2/4
525 x 300 0.157 (2.0) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .235 B .084 .033 – 3/5.4 , 1.5/2.6	A .274 B .097 .04 – 3.2/5.5 , 1.6/3	A .314 B .112 .045 17 3.5/6 , 1.8/3.2	A .353 .126 .05 20 3.8/6.5 , 1.9/3.5	A .392 B .139 .057 24 4/7 , 2/3.8	A .431 B .152 .063 28 4.1/7.5 , 2/4	A .471 B .166 .069 30 4.3/8 , 2.2/4
600 x 300 0.18 (2.5) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .27 B .102 .033 – 3.4/6 , 1.5/2.6	A .315 B .117 .04 – 3.6/6.5 , 1.6/3	A .36 B .135 .045 18 4/7 , 1.8/3.2	A .405 .152 .05 21 4/7.5 , 1.9/3.5	A .45 B .168 .057 25 4.3/8 , 2/3.8	A .495 B .184 .063 29 4.7/8.5 , 2/4	A .54 B .201 .069 31 5/9 , 2.2/4
450 x 375 0.168 (2.0) x T.P. SUPPLY N.C. + 4	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .252 B .074 .052 – 2.7/4.5 , 1.7/3	A .294 B .085 .062 – 2.8/4.7 , 2/3.5	A .336 B .096 .072 18 2.9/5 , 2/3.7	A .378 .109 .08 21 3/5.5 , 2/4	A .42 B .122 .088 25 3/6 , 2.2/4.3	A .462 B .134 .097 29 3/6 , 2.4/4.5	A .504 B .147 .105 31 3.2/6.3 , 2.6/4.8
525 x 375 0.196 (2.1) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .294 B .095 .052 – 3.4/6 , 1.7/3	A .343 B .109 .062 – 3.6/6.5 , 2/3.5	A .392 B .124 .072 18 4/7 , 2/3.7	A .441 .14 .08 21 4/7.5 , 2/4	A .49 B .157 .088 25 4.3/8 , 2.2/4.3	A .539 B .172 .097 29 4.7/8.5 , 2.4/4.5	A .588 B .189 .105 31 5/9 , 2.6/4.8
600 x 375 0.225 (2.5) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .337 B .116 .052 10 3.4/6 , 1.7/3	A .393 B .134 .062 14 3.6/6.5 , 2/3.5	A .45 B .153 .072 19 4/7 , 2/3.7	A .506 .173 .08 22 4/7.5 , 2/4	A .562 B .193 .088 26 4.3/8 , 2.2/4.3	A .618 B .212 .097 30 4.7/8.5 , 2.4/4.5	A .675 B .232 .105 32 5/9 , 2.6/4.8
525 x 450 0.236 (2.2) x T.P. SUPPLY N.C. + 5	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .354 B .1 .077 10 2.8/5 , 2/3.8	A .413 B .116 .09 14 3/5.3 , 2/3.9	A .472 B .132 .104 19 3.2/5.6 , 2.2/4	A .531 .149 .116 22 3.5/6 , 2.5/4.5	A .59 B .166 .129 26 4/6.6 , 2.6/5	A .649 B .183 .141 30 4/6.8 , 2.8/5.2	A .708 B .199 .155 32 4.2/7 , 3/5.5
600 x 450 0.27 (2.4) x T.P. SUPPLY N.C. + 6	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .405 B .125 .077 11 3.5/6.5 , 2/3.8	A .472 B .146 .09 15 3.7/7 , 2/3.9	A .54 B .166 .104 20 4/7.4 , 2.2/4	A .607 .187 .116 23 4.2/8 , 2.5/4.5	A .675 B .208 .129 27 4.5/8.4 , 2.6/5	A .742 B .23 .141 31 4.7/8.6 , 2.8/5.2	A .81 B .25 .155 33 5/9 , 3/5.5
600 x 525 0.315 (3.0) x T.P. SUPPLY N.C. + 7	TOTAL m³/s m³/s PER SIDE N.C. LEVEL THROW m	A .472 B .13 .106 12 3/5.4 , 2.2/4.2	A .551 B .151 .124 16 3.2/5.5 , 2.3/4.5	A 63 B .177 .138 21 3.5/6 , 2.6/5	A .708 .2 .154 24 3.8/6.5 , 2.8/5.5	A .787 B .219 .174 28 4/7 , 3/6	A .866 B .243 .19 32 4.1/7.5 , 3/6	A .945 B .264 .208 34 4.3/8 , 3.2/6

SERIES DG

Ordering Specification

Diffuser



LIST SIZE RANGE

Type	DGA DGC DGD	150 x 150 up to 600 x 600 in 75mm increments
Type	DGB	450 x 450 only (600 O/A)

FIXING

Diffuser only (solid duct connection): Drill & rivet through diffuser neck
Diffuser with Plenum: (flexible duct connection)
Standard support is via drop rods (by others) to slots on diffuser plenum

FINISH

Standard Finish:
Standard finish for all units is a PPC White RAL 9010 20% gloss.
Special Finish:
PPC to stock BS or RAL colour.
Stove Enamel to any BS or RAL colour.

Dampers: Mill Finish Aluminium or Galvanised Steel

SUPPORT BRACKETS

Fitted to diffuser for drop rod fixing on units without plenum connection box.

BLANKING PLATES

Clip on quarter core blanking available to modify air pattern on 4 way diffuser:

P1	= 4 Way Down to 1 Way
P2	= 4 Way Down to 2 Way
P2E	= 4 Way Down to 2 Way corner
P3	= 4 Way Down to 3 Way

NECK REDUCTION PLATES

Fitted to diffuser neck to reduce inlet size and maintain diffuser performance.

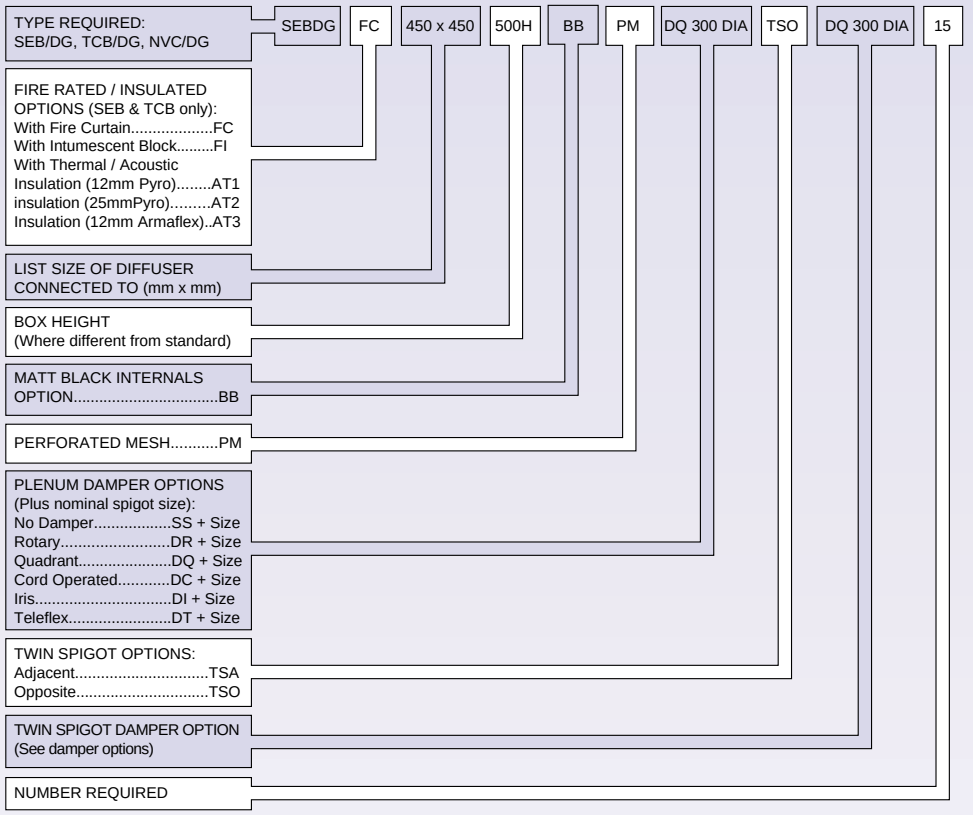
COANDA PLATES

Fitted to diffuser border to maintain ceiling effect.

SERIES DG

Ordering Specification

Plenum



GENERAL SPECIFICATION

0.7mm Galvanised or Zintec coated mild steel plenum. Spigot Construction: Standard size spigots use plastic clip-in spigots. Non standard a sealed screw in spigot.

PLENUM FITTING

Plenum boxes are typically supplied loose, however some diffuser models, for design and handling purposes, may be supplied with the plenum factory fitted. The popular 450sq unit is typically supplied with the box attached

FIRE RATED PLENUM OPTION

Fire Curtain - (FC) : Plenum fitted with curtain fire damper

Intumescent - (FI) : Plenum fitted with intumescent fire damper.
(see fire rated plenum datasheet for details).

THERMAL/ACOUSTIC INSULATION

Plenum box fully lined with 12 or 25mm black pyrosorb thermal & acoustic lining or 12mm Armaflex lining.

PERFORATED MESH

Plenum fitted internally with 50% perforated equalising mesh.

Contact

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