## CPS & CPR - Perforated Diffusers

### Models: CPS & CPR

The Holyoake Series CPS and CPR perforated supply and return diffusers are designed for heating, cooling and ventilating, ceiling applications.

The Series CPS comprises of a perforated face plate mounted in a removable core frame, which blends suitably into many ceiling types. Concealed, adjustable pattern controllers on the rear, provide efficient airflow distribution and can be easily adjusted, by simply removing the fascia, unlocking and repositioning. Then any desired distribution pattern can be obtained, without any change in airflow, or noise levels. This simplifies ordering procedures and eliminates the need to rebalance the system. Series CPR are identical, without patterns. Minimal ceiling plenum height is required, (dependant on connecting spigot style); which is available with a varied choice of round, or square inlet sizes, see table below.

#### Construction

Extruded aluminium frames. Aluminium perforated face and galvanised adaptor pan.

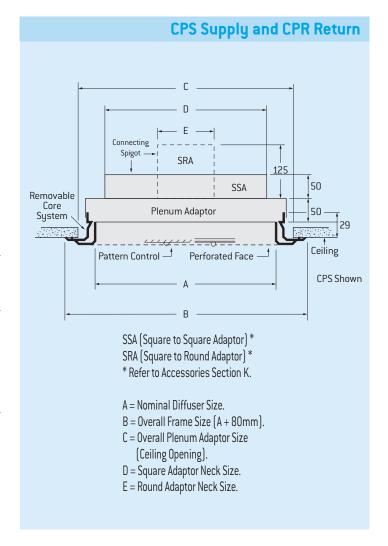
### Installation

The CPS plenum adaptor is independently supported, built in to the ceiling and then connected and sealed to the ductwork.

The Removable core system allows the preset pattern controllers to be suitably positioned and then the perforated face is simply pushed into the installed frame and clipped into place.

### **Features**

- Aesthetically pleasing design.
- Fully adjustable concealed pattern controllers.
- Infinite range of distribution patterns.
- Compact assembly height and Removable Core frame.
- Plaster ceiling and 'T' Rail installation options.
- Circular, or square inlets in a range of sizes.



A Nominal Diffuser Size  C* Overall Plenum Adaptor Size		250 x 250	350 x 350	450 x 450	550 x 550	250 x 550	550 x 850	250 x 850	250 x 1150	550 x 1150
		300 x 300	400 x 400	500 x 500	600 x 600	300 x 600	600 x 900	300 x 900	300 x 1200	600 x 1200
	150 x 150	•	•	•	•	•	•	•	•	•
Nominal	200 x 200		•	•	•		•			•
Neck Size	250 x 250			•	•		•			•
D*	300 x 300				•		•			•
	150 x 450					•		•	•	
Nominal	125 DIA	•	•	•	•	•	•	•	•	•
Nominal Neck	150 DIA	•	•	•	•	•	•	•	•	•
Diameter	175 DIA	•	•	•	•	•	•	•	•	•
E*	200 DIA		•	•	•		•			•
	250 DIA		•	•	•		•			•
CPS &	300 DIA			•	•		•			•
CPR with	350 DIA			•	•		•			•
Adaptor	400 DIA				•		•			•

Ceiling Module and Duct Sizes\*

Indicates available combination

### Note

- $1. For other frame styles and module sizes and for the performance of sizes \\ not shown in the capacity tables, contact your local Holyoake branch.$
- 2. Seismic restraints are required, but not supplied.

### Options

Heavy gauge galvanised perforated face, available against special order. OBD-2 — Opposed blade damper.

### **Finish**

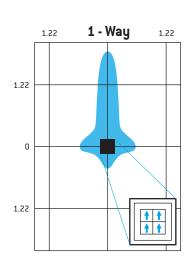
Standard Finish is Holyoake White, or can be powder coated to specific requirements.

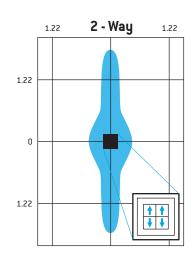
## Perforated Diffusers – CPS & CPR

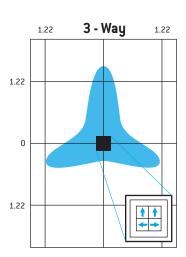
## Air Pattern Controller Adjustment Notes

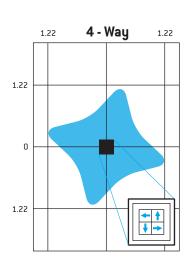
- 1. Extract the Removeable Core from the CPS diffuser.
- 2. The pattern controls are mounted on the rear of the Removable Core and are now visible. Loosen stud tubing and rotate the air pattern controller to the desired flow direction. Tighten the stud tubing on the controller.
- 3. Replace the Removable Core assembly.

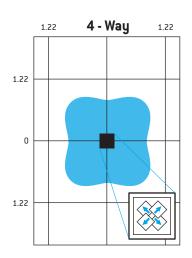
### Versatile Air Distribution for most Applications











Throw values for above pattern will be 0.6 times the values shown in the peformance tables.

### Performance Notes

- 1. Refer to Performance Data Tables on the following pages.
- 2. CPR Return Data is shown in Dark Blue shaded area at the bottom of each table
- 3. Throw values are given for terminal velocities of 0.75 and 0.25 m/s.

# CPS & CPR - Performance Data

								30	0 x 300	Modul	e Size
Duct Size	Neck Velocity Vel. Press.,		1.53 2	2.04 3	2.55 4	3.06 6	3.57 8	4.08 10	5.1 16	6.12 23	7.14 31
	Tot. Press., Flow Rate, n NC	Pa	3 0.019	5 0.026 -	8 0.033 15	11 0.038 20	15 0.045 24	19 0.052 28	30 0.064 34	43 0.078 39	59 0.090 43
125 mm RD	Throw, 3-W m 2-W 1-W	VAY VAY	0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	0.6-1.5 0.6-1.8 0.6-1.8 0.6-2.4	0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7	0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1	0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4	0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0	1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0	1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3	1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.6
	Tot. Press., Flow Rate, n NC		4 0.028	7 0.038 -	10 0.047 17	15 0.057 22	20 0.066 26	25 0.076 30	40 0.092 36	57 0.111 41	77 0.130 45
150 mm RD	Throw, 3-W m 2-W 1-W	VAY VAY	0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	0.6-1.5 0.6-1.8 0.6-2.1 0.9-2.7	0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4	0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4	0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7	0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0	1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6	1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9	2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2
	Tot. Press., Flow Rate, n NC		6 0.038	10 0.050 15	15 0.064 21	21 0.076 26	29 0.090 30	37 0.102 34	58 0.127 40	83 0.151 45	113 0.177 49
175 mm RD	Throw, 4-W 3-W m 2-W 1-W	VAY VAY	0.3-1.5 0.3-1.5 0.3-1.8 0.6-2.4	0.6-1.8 0.6-2.1 0.6-2.7 0.9-3.4	0.9-2.7 0.9-3.1 0.9-3.4 1.2-3.7	0.9-3.1 0.9-3.4 1.2-3.7 1.5-3.4	1.2-3.1 1.2-3.7 1.5-4.3 1.8-4.3	1.2-3.4 1.5-4.0 1.5-4.6 2.4-4.6	1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2	2.4-4.0 2.1-4.9 2.7-5.5 3.4-5.5	2.7-4.3 2.7-5.2 3.1-6.1 3.7-6.1
	Tot. Press., Flow Rate, n NC		5 0.035	8 0.047 13	13 0.059 19	19 0.071 24	25 0.083 28	33 0.094 32	50 0.118 38	73 0.142 43	99 0.165 47
150 x 150	4-W Throw, 3-W m 2-W 1-W Neg Stat. Pres	VAY VAY VAY	0.3-1.5 0.3-1.5 0.3-1.8 0.6-2.1	0.6-1.8 0.6-2.1 0.6-2.4 0.9-3.1	0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4	0.9-2.7 0.9-3.1 1.2-3.7 1.5-3.7	1.2-2.7 1.2-3.4 1.5-4.0 1.8-4.0	1.2-3.1 1.5-3.7 1.5-4.3 2.1-4.3	1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2	2.1-3.7 2.1-4.6 2.4-5.2 3.1-5.2	2.4-4.0 2.4-2.9 2.7-5.8 3.4-5.8
250 x 250	Flow Rate, n NC		0.099	0.132 17	0.163 24	0.198 30	0.229 35	0.262 39	0.328 46	0.392 53	0.458 58
* perform	ance data for C	PR.						30	0 x 600	Modul	e Size
Duct Size	Neck Velocity		1.53	2.04	2.55	3.06	3.57	4.08	5.1	6.12	7.14
	Vel Press	Pa	2	3	4	6	8	10	16	23	31
	Vel. Press., Tot. Press., Flow Rate, n	Pa	3 0.019	3 5 0.226	7 0.033	6 10 0.038	8 14 0.045	10 18 0.052	16 27 0.064	23 39 0.078	31 54 0.090
125 mm RD	Tot. Press., Flow Rate, n NC 4-V Throw, 3-V	Pa n³/s VAY VAY VAY	3	5	7	10	14	18	27	39	54
	Tot. Press., Flow Rate, n NC 4-V Throw, 3-V 2-V 1-W Tot. Press., Flow Rate, n	Pa n³/s VAY VAY VAY VAY	3 0.019 - 0.3-1.2 0.3-1.2 0.3-1.5	5 0.226 - 0.6-1.5 0.6-1.8 0.6-1.8	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066	18 0.052 27 0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0 21 0.076	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.6 65 0.130
	Tot. Press., Flow Rate, n NC  4-W Throw,	Pa n³/s VAY VAY VAY Pa n³/s VAY VAY VAY	3 0.019 - 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	5 0.226 0.6-1.5 0.6-1.8 0.6-2.4 6 0.038 0.6-1.5 0.6-1.5 0.6-1.8 0.6-2.1	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.4 0.9-2.7 0.9-2.4	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7	18 0.052 27 0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 65 0.130 45 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2
RD 150 mm	Tot. Press., Flow Rate, n NC  Throw, M 2-W 1-W Tot. Press., Flow Rate, n NC  Throw, M 2-W 1-W Tot. Press., Flow Rate, n NC Throw, Throw, Throw, Tot. Press., Flow Rate, n	Pa n³/s VAY VAY VAY Pa n³/s VAY VAY VAY VAY	3 0.019 - 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	5 0.226 - 0.6-1.5 0.6-1.8 0.6-2.4 6 0.038 - 0.6-1.5 0.6-1.5 0.6-2.1 0.9-2.7 7 0.050	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.1 0.9-2.2 0.9-2.7	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7	18 0.052 27 0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0 25 0.102	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.6 65 0.130 45 2.1-3.4 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2
RD 150 mm	Tot. Press., Flow Rate, n NC  4-V Throw, 3-V 1-W Tot. Press., Flow Rate, n NC  Throw, 3-V 1-V Tot. Press., Flow Rate, n NC  Tot. Press., Flow Rate, n NC  4-V Throw, 3-V 1-V Throw, 3-V 1-V Throw, 3-V 1-V 1-V 1-V	Pa n³/s VAY VAY VAY VAY VAY VAY VAY VAY VAY VAY	3 0.019 - 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	5 0.226 - 0.6-1.5 0.6-1.8 0.6-2.4 6 0.038 - 0.6-1.5 0.6-1.5 0.6-1.8 0.6-2.1	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4 10 0.064 20 0.9-3.1 0.9-3.4 1.2-3.7	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4 15 0.076 25 0.9-3.1 0.9-3.1 1.2-3.7	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7 19 0.090 29 1.2-3.1 1.2-3.7 1.5-4.3 1.8-4.3	18 0.052 27 0.9-2.4 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0 25 0.102 33 1.2-3.4 1.5-4.0 1.5-4.6 2.4-4.6	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6 39 0.127 39 1.8-3.7 1.8-4.3 2.1-5.2	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9 56 0.151 44 2.4-4.0 2.1-4.9 2.7-5.5 3.4-5.5	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 65 0.130 45 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2 76 0.177 48 2.7-4.3 2.7-5.2 3.1-6.1
150 mm RD 175 mm	Tot. Press., Flow Rate, n NC  Throw, M 2-W 1-W Tot. Press., Flow Rate, n NC  Throw, M 1-W Tot. Press., Flow Rate, n NC  Throw, M 1-W Tot. Press., Flow Rate, n NC  Throw, Tot. Press., Flow Rate, n NC  Throw, Tot. Press., Flow Rate, n NC  Throw, M 1-W Tot. Press., Flow Rate, n	Pa n³/s  VAY VAY VAY VAY VAY VAY VAY VAY VAY VA	3 0.019 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8 4 0.038 - 0.3-1.5 0.6-1.8	5 0.226 	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4 10 0.064 20 0.9-2.7 0.9-3.1 0.9-3.1 10-3.7 12-3.7	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4 15 0.076 25 0.9-3.1 0.9-3.1 1.5-3.4 1.5-3.4	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7 19 0.090 29 1.2-3.1 1.2-3.1 1.2-3.4 1.5-3.7	18 0.052 27 0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0 25 0.102 33 1.2-3.4 1.5-4.0 1.5-4.0 2.5-4.0 1.5-4.0	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6 39 0.127 39 1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9 56 0.151 44 2.4-4.0 2.1-4.9	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 65 0.130 45 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2 76 0.177 48 2.7-4.3 2.7-5.2 3.1-6.1 94 0.165
150 mm RD 175 mm	Tot. Press., Flow Rate, n NC  4-V Throw, 3-V 1-W Tot. Press., Flow Rate, n NC  Throw, M 2-V 1-W Tot. Press., Flow Rate, n NC  Throw, A-V Throw, M 2-W Throw, M 1-V Tot. Press., Flow Rate, n NC  4-V Throw, M 1-V Throw, A-V	Pa n³/s  VAY	3 0.019 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.5 0.6-1.8 4 0.038 - 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5	5 0.226  0.6-1.5 0.6-1.8 0.6-2.4 6 0.038  0.6-1.5 0.6-2.1 0.9-2.7 7 0.050 14 0.6-2.1 0.6-2.1 0.6-2.7 0.9-3.4 8 0.6-2.1 0.6-2.7 0.9-3.4	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4 10 0.064 20 0.9-3.1 10.9-3.4 1.2-3.7 12 0.059 19 0.9-2.7 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4 15 0.076 25 0.9-3.4 1.2-3.7 1.5-3.4 18 0.071 24 0.9-2.7 0.9-3.1 1.2-3.7 1.5-3.7	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7 19 0.090 29 1.2-3.1 1.2-3.7 1.5-4.3 1.8-4.3 24 0.083 28 1.2-2.7 1.2-3.4 1.5-4.0 1.8-4.0	18 0.052 27 0.9-2.4 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0 25 0.102 33 1.2-3.4 1.5-4.6 2.4-4.6 31 0.094 32 1.2-3.7 1.5-4.3 2.1-4.3	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6 39 0.127 39 1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9 56 0.151 44 2.4-4.0 2.1-4.9 2.7-5.5 3.4-5.5 69 0.142 43 2.1-3.7 2.1-4.6 2.4-5.2 3.1-5.2	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.6 65 0.130 45 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2 76 0.177 48 2.7-4.3 2.7-5.2 3.1-6.1 3.7-6.1 94 0.165 47 2.4-4.0 2.4-4.9 2.7-5.8 3.4-5.8
150 mm RD 175 mm RD	Tot. Press., Flow Rate, n NC  4-V Throw, 3-V 1-W Tot. Press., Flow Rate, n NC  Throw, 3-V 1-V Tot. Press., Flow Rate, n NC  Throw, 3-V 1-V Throw, 3-V 1-V Tot. Press., Flow Rate, n NC  Throw, 3-V 1-V Tot. Press., Flow Rate, n NC  Throw, 1-V Tot. Press., Flow Rate, n NC  Throw, 1-V Tot. Press., Flow Rate, n NC Throw, 1-V Tot. Press., Flow Rate, n NC	Pa n³/s  VAY	3 0.019 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.5 0.6-1.8 4 0.038 - 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5	5 0.226  0.6-1.5 0.6-1.8 0.6-2.4 6 0.038  0.6-1.5 0.6-2.1 0.9-2.7 7 0.050 14 0.6-2.1 0.6-2.7 0.9-3.4 8 0.047 13 0.6-2.1 0.6-2.1 0.6-2.1 0.6-2.1 13 0.6-2.1 0.6-2.1	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4 10 0.064 20 0.9-3.1 0.9-3.4 1.2-3.7 12 0.9-2.7 0.9-3.4 1.2-3.7	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4 15 0.076 25 0.9-3.1 0.9-3.4 1.2-3.7 1.5-3.4 18 0.071 24 0.9-2.7 0.9-3.1 1.2-3.7 1.5-3.4	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7 19 0.090 29 1.2-3.1 1.2-3.7 1.5-4.3 1.8-4.3 24 0.083 28 1.2-2.7 1.2-3.4 1.5-4.0 1.8-4.0 53 0.248	18 0.052 27 0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0 25 0.102 33 1.2-3.4 1.5-4.6 2.4-4.6 31 0.094 32 1.2-3.1 1.5-3.7 1.5-4.3 2.4-4.6 31 0.094 32 1.2-3.1 1.5-3.7 1.5-4.3 2.4-4.6	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6 39 0.127 39 1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2 48 0.118 38 1.8-3.4 1.8-4.0 2.1-4.9 2.4-4.9 108 0.354	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9 56 0.151 44 2.4-4.0 2.1-4.9 2.7-5.5 3.4-5.5 69 0.142 43 2.1-3.7 2.1-4.6 2.4-5.2 3.1-5.2	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 65 0.130 45 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2 76 0.177 48 2.7-4.3 2.7-5.2 3.1-6.1 3.7-6.1 94 0.165 47 2.4-4.9 2.7-5.8 3.4-5.8 210 0.496
150 mm RD 175 mm RD	Tot. Press., Flow Rate, n NC  4-V Throw, 3-V 1-W Tot. Press., Flow Rate, n NC  Throw, M Tot. Press., Flow Rate, n NC  Throw, C Tot. Press., C Throw, C Throw	Pa n³/s  VAY	3 0.019 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8 4 0.028 - 0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8 4 0.038 - 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5 0.3-1.5	5 0.226 - 0.6-1.5 0.6-1.8 0.6-2.4 6 0.038 - 0.6-1.5 0.6-1.8 0.6-2.1 0.9-2.7 7 0.050 14 0.6-2.1 0.6-2.7 0.9-3.4 8 0.047 13 0.6-2.1 0.6-2.1 0.6-2.1 0.6-2.1	7 0.033 14 0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7 9 0.047 17 0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4 10 0.064 20 0.9-3.1 1.2-3.7 12 0.9-2.7 0.9-2.4 1.2-3.7	10 0.038 19 0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1 12 0.057 22 0.9-2.4 0.9-2.7 0.9-3.1 1.2-3.4 15 0.076 25 0.9-3.1 0.9-3.4 1.2-3.7 1.5-3.4 18 0.071 24 0.9-2.7 0.9-2.7 0.9-3.1 1.2-3.7 1.5-3.7	14 0.045 23 0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4 17 0.066 26 0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7 19 0.090 29 1.2-3.1 1.2-3.7 1.5-4.3 1.8-4.3 24 0.083 28 1.2-2.7 1.2-3.4 1.5-3.4	18 0.052 27 0.9-2.4 1.2-3.7 1.8-4.0 21 0.076 30 0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0 25 0.102 33 1.2-3.4 1.5-4.6 2.4-4.6 31 0.094 32 1.2-3.1 1.5-3.7 1.5-3.7 1.5-4.3 2.1-4.3 69	27 0.064 33 1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0 33 0.092 36 1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6 39 0.127 39 1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2 48 0.118 38 1.8-3.4 1.8-4.0 2.1-4.9 2.4-4.9	39 0.078 38 1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3 48 0.111 41 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9 56 0.151 44 2.4-4.0 2.1-4.9 2.7-5.5 3.4-5.5 69 0.142 43 2.1-3.7 2.1-4.6 2.4-5.2 3.1-5.2	54 0.090 42 1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.6 65 0.130 45 2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2 76 0.177 48 2.7-4.3 2.7-5.2 3.1-6.1 3.7-6.1 94 0.165 47 2.4-4.0 2.4-4.9 2.7-5.8 3.4-5.8

## Performance Data – CPS & CPR

## 400 x 400 Module Size

Duct Size		Velocity, m/s	1.53	2.04	2.55	3.06	3.57	4.08	5.1	6.12	7.14
Duct Size	Vel.	Press., Pa	2	3	4	6	8	10	16	23	31
	Tot. Press., Pa					10	14	18	28	40	54
	Flow Rate, m³/s		0.019	0.026	0.033	0.038	0.045	0.052	0.064	0.078	0.090
		NC	-	-	14	19	23	27	33	38	42
125 mm	т.	4-WAY	0.3-1.2	0.6-1.5	0.6-1.8	0.6-2.1	0.9-2.1	0.9-2.4	1.5-2.7	1.8-3.1	1.8-3.1
RD	Throw,	3-WAY	0.3-1.2	0.6-1.8	0.6-2.1	0.6-2.4	0.9-2.7	1.2-3.1	1.5-3.1	1.8-3.7	1.8-4.0
	m	2-WAY	0.3-1.5	0.6-1.8	0.6-2.4	0.9-3.1	1.2-3.1	1.2-3.7	1.8-4.0	2.1-4.3	2.1-4.6
		1-WAY	0.6-1.8	0.6-2.4	0.9-2.7	1.2-3.1	1.5-3.4	1.8-4.0	1.8-4.0	2.4-4.3	2.7-4.6
		Press., Pa				12	17	21	33	48	65
	Flow	Rate, m³/s	0.028	0.038	0.047	0.057	0.066	0.076	0.094	0.110	0.130
450		NC	0.0.1.0		17	22	26	30	36	41	45
150 mm	Throw,	4-WAY	0.3-1.2	0.6-1.5	0.9-2.1	0.9-2.4	0.9-2.4	0.9-2.7	1.5-3.1	1.8-3.1	2.1-3.4
RD	·	3-WAY	0.3-1.2	0.6-1.8	0.9-2.4	0.9-2.7	0.9-3.1	1.2-3.1	1.5-3.4	1.8-4.0	2.1-4.3
	m	2-WAY	0.3-1.5	0.6-2.1	0.9-2.7	0.9-3.1	1.2-3.4	1.2-3.7	1.8-4.3	2.1-4.6	2.4-5.2
	-	1-WAY	0.6-1.8	0.9-2.7	0.9-3.4	1.2-3.4	1.5-3.7	1.8-4.0	2.1-4.6	2.7-4.9	3.1-5.2
		Press., Pa	4 0.038	7 0.050	10 0.064	15 0.076	19 0.090	25 0.102	39 0.127	56 0.151	76 0.177
175 mm	Flow	Rate, m³/s NC	0.038	0.050 14	20	25	29	33	39	0.151 44	48
RD		4-WAY	0.3-1.5	0.6-1.8	0.9-2.7	0.9-3.1	1.2-3.1	1.2-3.4	1.8-3.7	2.4-4.0	2.7-4.3
or	Throw,	3-WAY	0.3-1.5	0.6-1.6	0.9-2.7	0.9-3.1	1.2-3.1	1.5-4.0	1.8-4.3	2.4-4.0	2.7-4.3
150 x 150	Í	2-WAY	0.3-1.3	0.6-2.7	0.9-3.4	1.2-3.I	1.5-4.3	1.5-4.6	2.1-5.2	2.7-5.5	3.1-6.1
130 X 130	m	1-WAY	0.6-2.4	0.9-3.4	1.2-3.7	1.5-4.0	1.8-4.3	2.4-4.6	2.7-5.2	3.4-5.5	3.7-6.1
	Tot	Press., Pa	5	7	12	17	22	29	45	64	88
	Flow Rate, m <sup>3</sup> /s		0.050	0.066	0.083	0.099	0.116	0.132	0.165	0.198	0.231
	NC		-	16	22	27	31	35	41	46	50
200 mm		4-WAY	0.3-1.8	0.6-2.4	1.2-3.1	1.2-3.4	1.2-3.7	1.5-3.7	1.8-4.0	2.4-4.3	2.7-4.9
RD	Throw,	3-WAY	0.3-1.8	0.6-2.4	1.2-3.4	1.2-4.0	1.5-4.0	1.5-4.3	2.1-4.9	2.7-5.5	3.1-5.8
	m	2-WAY	0.3-2.1	0.6-3.1	1.2-3.7	1.2-4.3	1.5-4.6	1.8-5.2	2.4-5.8	3.1-6.4	3.7-6.7
		1-WAY	0.9-2.7	1.2-3.7	1.5-4.0	1.8-4.3	2.1-4.6	2.4-5.2	3.1-5.8	4.0-6.4	4.0-6.7
	Tot.	Press., Pa	6	10	16	23	30	39	61	87	119
		Rate, m³/s	0.078	0.104	0.127	0.153	0.179	0.205	0.257	0.309	0.359
		NC	11	19	25	30	34	38	44	49	53
250 mm		4-WAY	0.3-2.4	0.6-3.1	1.2-3.7	1.2-4.0	1.8-4.3	2.1-4.3	2.4-5.2	3.1-5.5	3.4-6.1
RD	Throw,	3-WAY	0.3-2.4	0.6-3.1	1.2-4.0	1.8-4.6	2.1-5.2	2.1-5.5	2.7-6.1	3.4-6.7	3.7-7.0
	m	2-WAY	0.3-2.7	0.6-3.7	1.2-4.3	1.8-5.5	2.1-5.8	2.4-6.4	3.1-7.0	3.7-7.6	4.3-8.5
		1-WAY	0.3-3.4	1.2-4.3	2.1-5.2	2.4-5.5	2.7-5.8	3.1-6.4	3.7-7.0	4.6-7.6	4.6-8.5
		Press., Pa			14	20	27	34	54	76	104
	Flow	Rate, m³/s	0.064	0.085	0.104	0.125	0.146	0.168	0.210	0.253	0.295
200 200		NC	9	17	23	28	32	36	42	47	51
200 x 200	Thrau	4-WAY	0.3-2.1	0.6-2.7	1.2-3.4	1.2-3.7	1.5-4.0	1.8-4.0	2.1-4.6	2.7-4.9	3.1-5.5
	Throw,	3-WAY	0.3-2.1	0.6-2.7	1.2-3.7	1.5-4.3	1.8-4.6	1.8-4.9	2.4-5.5	3.1-6.1	3.4-6.4
	m	2-WAY	0.3-2.4	0.6-3.4	1.2-4.0	1.5-4.9	1.8-5.2	2.1-5.8	2.7-6.4	3.4-7.0	4.0-7.6
	N. O.	1-WAY	0.9-3.1	1.2-4.0	1.8-4.6	2.1-4.9	2.4-5.2	2.7-5.8	3.4-6.4	4.3-7.0	4.3-7.6
250 050		at. Press., Pa	8	13	19	28	39	50	78	113	154
350 x 350	Flow	Rate, m³/s	0.194	0.257	0.321	0.385	0.449	0.515	0.642	0.770	0.897
	NC			18	25	31	36	40	47	54	59

\* performance data for CPR.

Guide Product Weights									
Approximate Weight in Kg.									
Size	CPR	CPS							
300 x 300	1.35	1.75							
600 x 600	1.98	2.38							

# CPS & CPR - Performance Data

								50	0 x 500	Modul	e Size
Duct Size		Velocity, m/s . Press., Pa	1.53 2	2.04 3	2.55 4	3.06 6	3.57 8	4.08 10	5.1 16	6.12 23	7.14 31
		Press., Pa Rate, m³/s NC	3 0.019 -	5 0.026 -	7 0.033 14	10 0.038 19	14 0.045 23	18 0.052 27	28 0.064 33	40 0.078 38	54 0.090 42
125 mm RD	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	0.6-1.5 0.6-1.8 0.6-1.8 0.6-2.4	0.6-1.8 0.6-2.1 0.6-2.4 0.9-2.7	0.6-2.1 0.6-2.4 0.9-3.1 1.2-3.1	0.9-2.1 0.9-2.7 1.2-3.1 1.5-3.4	0.9-2.4 1.2-3.1 1.2-3.7 1.8-4.0	1.5-2.7 1.5-3.1 1.8-4.0 1.8-4.0	1.8-3.1 1.8-3.7 2.1-4.3 2.4-4.3	1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.6
		Press., Pa Rate, m³/s NC	4 0.028 -	6 0.038 -	9 0.047 17	12 0.057 22	17 0.066 26	21 0.076 30	33 0.094 36	48 0.110 41	65 0.130 45
150 mm RD	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.3-1.2 0.3-1.2 0.3-1.5 0.6-1.8	0.6-1.5 0.6-1.8 0.6-2.1 0.9-2.7	0.9-2.1 0.9-2.4 0.9-2.7 0.9-3.4	0.9-2.4 0.9-2.7 0.9-3.1 1.4-3.4	0.9-2.4 0.9-3.1 1.2-3.4 1.5-3.7	0.9-2.7 1.2-3.1 1.2-3.7 1.8-4.0	1.5-3.1 1.5-3.4 1.8-4.3 2.1-4.6	1.8-3.1 1.8-4.0 2.1-4.6 2.7-4.9	2.1-3.4 2.1-4.3 2.4-5.2 3.1-5.2
175 mm		Press., Pa Rate, m³/s NC	4 0.038 -	7 0.050 13	10 0.064 19	14 0.076 24	18 0.090 28	23 0.102 32	37 0.127 38	52 0.151 43	71 0.177 47
RD or 150 x 150	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.3-1.5 0.3-1.5 0.3-1.8 0.6-2.4	0.6-1.8 0.6-2.1 0.6-2.7 0.9-3.4	0.9-2.7 0.9-3.1 0.9-3.4 1.2-3.7	0.9-3.1 0.9-3.4 1.2-3.7 1.5-4.0	1.2-3.1 1.2-3.7 1.5-4.3 1.8-4.3	1.2-3.4 1.5-4.0 1.5-4.6 2.4-4.6	1.8-3.7 1.8-4.3 2.1-5.2 2.7-5.2	2.4-4.0 2.1-4.9 2.7-5.5 3.4-5.5	2.7-4.3 2.7-5.2 3.1-6.1 3.7-6.1
		Press., Pa Rate, m³/s NC	4 0.050 -	6 0.066 16	10 0.083 22	14 0.099 27	19 0.116 31	24 0.132 35	38 0.165 41	54 0.198 46	74 0.231 50
200 mm RD	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.3-1.8 0.3-1.8 0.3-2.1 0.9-2.7	0.6-2.4 0.6-2.4 0.6-3.1 1.2-3.7	1.2-3.1 1.2-3.4 1.2-3.7 1.5-4.0	1.2-3.4 1.2-4.0 1.2-4.3 1.8-4.3	1.2-3.7 1.5-4.0 1.5-4.6 2.1-4.6	1.5-3.7 1.5-4.3 1.8-5.2 2.4-5.2	1.8-4.0 2.1-4.9 2.4-5.8 3.1-5.8	2.4-4.3 2.7-5.5 3.1-6.4 4.0-6.4	2.7-4.9 3.1-5.8 3.7-6.7 4.0-6.7
250 mm		Press., Pa Rate, m³/s NC	5 0.078 11	8 0.104 19	13 0.127 25	18 0.153 30	24 0.179 34	31 0.205 38	49 0.257 44	70 0.309 49	95 0.359 53
RD or 200 x 200	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.3-2.4 0.3-2.4 0.3-2.7 0.9-3.4	0.6-3.1 0.6-3.1 0.6-3.7 1.2-4.3	1.2-3.7 1.2-4.0 1.2-4.3 1.2-5.2	1.2-4.0 1.8-4.6 1.8-5.5 2.4-5.5	1.8-4.3 2.1-5.2 2.1-5.8 2.7-5.8	2.1-4.3 2.1-5.5 2.4-6.4 3.1-6.4	2.4-5.2 2.7-6.1 3.1-7.0 3.7-7.0	3.1-5.5 3.4-6.7 3.7-7.6 4.6-7.6	3.4-6.1 3.7-7.0 4.3-8.5 4.6-8.5
		Press., Pa Rate, m³/s NC	6 0.111 14	10 0.149 22	15 0.184 28	22 0.222 33	30 0.260 37	38 0.297 41	60 0.371 47	85 0.446 52	116 0.516 56
300 mm RD	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.6-2.1 0.6-3.1 0.6-3.4 0.9-4.3	0.9-3.7 0.9-4.0 0.9-4.6 1.5-5.5	1.5-4.3 1.5-4.9 1.5-5.5 2.1-6.1	1.5-4.9 1.8-5.5 2.1-6.1 2.4-6.4	1.8-5.2 2.1-6.1 2.4-7.0 3.4-7.0	2.1-5.5 2.4-6.4 2.7-7.6 3.4-7.6	2.7-6.1 3.4-7.0 3.7-8.5 4.6-8.5	3.7-6.4 4.0-8.2 4.6-9.5 5.5-9.5	4.3-7.0 4.6-8.5 5.2-10.1 9.5-10.1
		Press., Pa Rate, m³/s NC	8 0.151 19	13 0.201 27	20 0.250 38	29 0.300 38	38 0.349 42	49 0.401 46	77 0.500 52	110 0.600 57	151 0.699 61
350 mm RD	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.6-3.1 0.6-3.4 0.9-3.7 1.2-4.9	1.2-4.0 1.2-4.3 1.2-5.2 1.8-6.1	1.8-4.9 1.8-5.5 1.8-6.1 2.4-7.0	1.8-5.5 2.1-6.1 2.4-7.0 3.1-7.3	2.1-5.8 2.4-7.0 3.1-7.9 3.7-7.9	2.4-6.1 3.1-7.3 3.4-8.8 4.0-8.8	3.4-7.0 3.7-7.9 4.0-9.5 5.2-9.5	4.0-7.3 4.3-9.2 5.2-10.7 6.1-10.7	4.9-7.9 5.2-9.5 5.8-11.3 6.7-11.3
		Press., Pa Rate, m³/s NC	6 0.099 13	9 0.132 21	15 0.165 27	21 0.196 32	28 0.229 36	36 0.262 40	56 0.328 46	80 0.394 51	109 0.460 55
250 x 250	Throw, m	4-WAY 3-WAY 2-WAY 1-WAY	0.6-2.4 0.6-2.7 0.6-3.1 0.9-4.0	0.9-3.4 0.9-3.7 0.9-4.3 1.5-5.2	1.5-4.0 1.5-4.6 1.5-5.2 2.1-6.8	1.5-4.6 1.8-5.2 2.1-5.8 2.4-6.1	1.8-4.9 2.1-5.8 2.4-6.7 3.1-6.7	2.1-5.2 2.4-6.1 2.7-7.3 3.4-7.3	2.7-5.8 3.1-6.7 3.4-7.9 4.3-7.9	3.4-6.1 3.7-7.6 4.3-8.8 5.2-8.8	4.0-6.7 4.3-7.9 4.9-9.5 5.5-9.5
450 x 450		at. Press., Pa Rate, m³/s NC	8 0.319 10	13 0.425 19	19 0.529 26	28 0.637 32	39 0.746 37	50 0.850 41	78 1.060 48	113 1.270 55	154 1.490 60

<sup>\*</sup> performance data for CPR.

190D

# Performance Data – CPS & CPR

## 600 x 600 Module Size

Duct Size	Neck \	Velocity, m/s	1.53	2.04	2.55	3.06	3.57	4.08	5.1	6.12	7.14
Duct Size		. Press., Pa	2	3	4	6	8	10	16	23	31
		Press., Pa	3 0.019	5 0.026	7 0.033	10 0.038	14 0.045	18 0.052	28 0.064	40 0.078	54 0.090
	FIOW	Rate, m³/s NC	0.019	0.026	14	19	23	27	33	38	42
125 mm		4-WAY	0.3-1.2	0.6-1.5	0.6-1.8	0.6-2.1	0.9-2.1	0.9-2.4	1.5-2.7	1.8-3.1	1.8-3.1
RD	Throw,	3-WAY	0.3-1.2	0.6-1.8	0.6-2.1	0.6-2.4	0.9-2.7	1.2-3.1	1.5-3.1	1.8-3.7	1.8-4.0
	m	2-WAY 1-WAY	0.3-1.5 0.6-1.8	0.6-1.8 0.6-2.4	0.6-2.4 0.9-2.7	0.9-3.1 1.2-3.1	1.2-3.1 1.5-3.4	1.2-3.7 1.8-4.0	1.8-4.0 1.8-4.0	2.1-4.3 2.4-4.3	2.1-4.6 2.7-4.6
	Tot	Press., Pa	4	6	9	1.2-3.1	1.3-3.4	21	33	48	65
		Rate, m³/s	0.028	0.038	0.047	0.057	0.066	0.076	0.094	0.110	0.130
450		NC	-	-	17	22	26	30	36	41	45
150 mm RD	Throw,	4-WAY 3-WAY	0.3-1.2 0.3-1.2	0.6-1.5 0.6-1.8	0.9-2.1 0.9-2.4	0.9-2.4 0.9-2.7	0.9-2.4 0.9-3.1	0.9-2.7 1.2-3.1	1.5-3.1 1.5-3.4	1.8-3.1 1.8-4.0	2.1-3.4 2.1-4.3
IVD.	m	2-WAY	0.3-1.5	0.6-2.1	0.9-2.7	0.9-3.1	1.2-3.4	1.2-3.7	1.8-4.3	2.1-4.6	2.4-5.2
		1-WAY	0.6-1.8	0.9-2.7	0.9-3.4	1.2-3.4	1.5-3.7	1.8-4.0	2.1-4.6	2.7-4.9	3.1-5.2
		Press., Pa	4	6	10	14	18	23	37	52	71
175 mm	Flow	Rate, m³/s NC	0.038	0.050 13	0.064 19	0.076 24	0.090 28	0.102 32	0.127 38	0.151 43	0.177 47
RD		4-WAY	0.3-1.5	0.6-1.8	0.9-2.7	0.9-3.1	1.2-3.1	1.2-3.4	1.8-3.7	2.4-4.0	2.7-4.3
or	Throw,	3-WAY	0.3-1.5	0.6-2.1	0.9-3.1	0.9-3.4	1.2-3.7	1.5-4.0	1.8-4.3	2.1-4.9	2.7-5.2
150 x 150	m	2-WAY 1-WAY	0.3-1.8 0.6-2.4	0.6-2.7 0.9-3.4	0.9-3.4 1.2-3.7	1.2-3.7 1.5-4.0	1.5-4.3 1.8-4.3	1.5-4.6 2.4-4.6	2.1-5.2 2.7-5.2	2.7-5.5 3.4-5.5	3.1-6.1 3.7-6.1
	Tot	Press., Pa	4	6	1.2-3.7	1.5-4.0	1.0-4.3	2.4-4.0	38	5.4-5.5	74
		Rate, m³/s	0.050	0.066	0.083	0.099	0.116	0.132	0.165	0.198	0.231
200		NC 4 WAY	0.24.0	17	23	28	32	36	42	47	51
200 mm RD	Throw,	4-WAY 3-WAY	0.3-1.8 0.3-1.8	0.6-2.4 0.6-2.4	1.2-3.1 1.2-3.4	1.2-3.4 1.2-4.0	1.2-3.7 1.5-4.0	1.5-3.7 1.5-4.3	1.8-4.0 2.1-4.9	2.4-4.3 2.7-5.5	2.7-4.9 3.1-5.8
ND	m	2-WAY	0.3-2.1	0.6-3.1	1.2-3.7	1.2-4.3	1.5-4.6	1.8-5.2	2.4-5.8	3.1-6.4	3.7-6.7
		1-WAY	0.9-2.7	1.2-3.7	1.5-4.0	1.8-4.3	2.1-4.6	2.4-5.2	3.1-5.8	4.0-6.4	4.0-6.7
		Press., Pa	4	7 0.104	11 0.127	16 0.153	21 0.179	28 0.205	43 0.257	61	83 0.359
250 mm	FIOW	Rate, m³/s NC	0.078 11	19	25	30	34	38	0.25r 44	0.309 49	0.359 53
RD	T.	4-WAY	0.3-2.4	0.6-3.1	1.2-3.7	1.2-4.0	1.8-4.3	2.1-4.3	2.4-5.2	3.1-5.5	3.4-6.1
or	Throw,	3-WAY	0.3-2.4	0.6-3.1	1.2-4.0	1.8-4.6	2.1-5.2	2.1-5.5	2.7-6.1	3.4-6.7	3.7-7.0
200 x 200	m	2-WAY 1-WAY	0.3-2.7 0.3-3.4	0.6-3.7 1.2-4.3	1.2-4.3 2.1-5.2	1.8-5.5 2.4-5.5	2.1-5.8 2.7-5.8	2.4-6.4 3.1-6.4	3.1-7.0 3.7-7.0	3.7-7.6 4.6-7.6	4.3-8.5 4.6-8.5
	Tot.	Press., Pa	5	9	14	19	26	33	52	75	102
200	Flow	Rate, m³/s	0.111	0.149	0.184	0.222	0.260	0.297	0.371	0.446	0.519
300 mm RD		NC 4-WAY	14 0.6-2.4	22 0.9-3.7	28 1.5-4.3	33 1.5-4.9	37 1.8-5.2	41 2.1-5.5	47 2.7-6.1	52 3.7-6.4	56 4.3-7.0
or	Throw,	3-WAY	0.6-3.1	0.9-4.0	1.5-4.9	1.8-5.5	2.1-6.1	2.4-6.4	3.4-7.0	4.0-8.2	4.6-8.5
250 x 250	m	2-WAY	0.6-3.4	0.9-4.6	1.5-5.5	2.1-6.1	2.4-7.0	2.7-7.6	3.7-8.5	4.6-9.5	5.2-10.1
	Tot	1-WAY	0.9-4.3	1.5-5.5	2.1-6.1	2.4-6.4	3.4-7.0	3.4-7.6	4.6-8.5	5.5-9.5	9.5-10.1
		Press., Pa Rate, m³/s	6 0.151	10 0.201	16 0.250	22 0.300	28 0.349	39 0.401	61 0.500	86 0.600	118 0.699
		NC	16	24	30	35	39	43	49	54	58
350 mm RD	Throw,	4-WAY 3-WAY	0.6-3.1 0.6-3.4	1.2-4.0 1.2-4.3	1.8-4.9 1.8-5.5	1.8-5.5 2.1-6.1	2.1-5.8 2.4-7.0	2.4-6.1 3.1-7.3	3.4-7.0 3.7-7.9	4.0-7.3 4.3-9.2	4.9-7.9 5.2-9.5
ועט	m	2-WAY	0.6-3.4	1.2-4.3	1.8-5.5	2.1-6.1	3.1-7.9	3.4-8.8	4.0-9.5	5.2-10.7	5.2-9.5
		1-WAY	1.2-4.9	1.8-6.1	2.4-7.0	3.1-7.3	3.7-7.9	4.0-8.8	5.2-9.5	6.1-10.7	6.7-11.3
		Press., Pa	8	12	19	28	37	48	75 0.004	108	147
	Flow	Rate, m³/s NC	0.198 19	0.264 27	0.331 33	0.397 38	0.463 42	0.529 46	0.661 52	0.793 57	0.924 58
400 mm		4-WAY	0.6-3.7	1.5-4.6	1.8-5.8	2.4-6.1	2.7-6.4	3.4-7.3	4.0-7.9	4.6-8.5	5.5-9.5
RD	Throw,	3-WAY	0.9-3.7	1.5-5.2	1.8-6.1	2.4-7.6	2.7-7.9	3.4-8.5	4.3-9.8	5.2-10.4	5.8-11.6
	m	2-WAY 1-WAY	1.2-4.3 1.5-5.5	1.5-5.8 2.4-7.3	1.8-7.3 2.7-7.9	2.7-8.5 3.4-8.5	3.4-9.5 4.0-9.5	4.0-10.1 4.6-10.1	4.6-11.3 5.8-11.3	5.8-12.2 7.3-12.2	6.4-13.4 7.6-13.4
		. Press., Pa	6	10	15	21	29	37	58	83	113
	Flow	Rate, m <sup>3</sup> /s	0.142	0.189	0.236	0.283	0.331	0.378	0.472	0.567	0.661
300 x 300		NC 4-WAY	16 0.6-3.1	24 1.2-4.0	30 1.5-4.9	35 2.1-5.2	39 2.4-5.5	43 2.7-6.1	49 3.4-6.7	54 4.0-7.3	58 4.6-7.9
	Throw,	3-WAY	0.6-3.1	1.2-4.3	1.5-5.2	2.1-6.4	2.4-6.7	2.7-7.3	3.7-8.2	4.3-8.8	4.9-9.8
	m	2-WAY	0.6-3.7	1.2-4.9	1.5-6.1	2.4-7.3	2.7-7.9	3.4-8.5	4.0-9.5	4.9-10.4	5.5-11.3
	Neg St	1-WAY	1.2-4.6 8	2.1-6.1 <b>13</b>	2.4-6.7 <b>19</b>	3.1-7.3 <b>28</b>	3.4-7.9 <b>39</b>	4.0-8.5 <b>50</b>	4.9-9.5 <b>78</b>	6.1-10.4 113	6.4-11.3 154
550 x 550		v Rate, m³/s	0.472	0.637	0.793	0.954	1.100	1.270	1.590	1.900	2.220
		NC	11	20	27	33	38	42	49	56	61

<sup>\*</sup> performance data for CPR.

## CPR, CPS, CPMS, CPSHS, CPSS, CPT & CPTR

### **Product Ordering Key and Suggested Specifications**



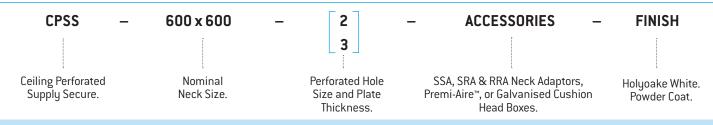
Ceiling Perforated diffusers shall be Holyoake Series CPS, or CPR and shall consist of an extruded aluminium frame with close mitred corners and 0.75 mm aluminium perforated face in an extruded aluminium sub-frame. The face shall be removable, by means of a separate mounting frame, which if used for supply air shall be furnished with field adjustable pattern control louvers and a galvanised steel plenum with duct connection. All shall be as manufactured by Holyoake.



Ceiling Perforated Maximum Security Grilles (CPMS) shall be constructed of Stainless Steel type 304 for easy wash down. The faceplate shall be constructed from a single piece with 2mm holes, with no ledges or face fixings. They shall be tested to ASTM F254 and meet a minimum grade 2 rating. All shall be as manufactured by Holyoake.



Ceiling Perforated Supply High Secure diffusers shall be Holyoake Series CPSHS. These shall be constructed from a single piece of Stainless Steel 304 Grade face plate, with small 2mm diameter holes, with no ledges, or face fixings. Complete with a long welded neck sleeve for full floor penetration and neck clamping flanges, ensuring no face fixings are required. All shall be as manufactured by Holyoake.



Ceiling Perforated Supply Secure diffusers shall be Holyoake Series CPSS and shall be constructed from heavy section aluminium surround to provide maximum security. 2 or 3 mm thick steel plate shall provide 30, or 40 % free area. Finished in a durable Powder Coat. All shall be as manufactured by Holyoake.

Note Seismic restraints are required, but not supplied.