

DH SERIES

High induction Swirl diffuser



Diffusion

Components
for perfect air
distribution in HVAC
systems



Product

DHE, DHR, DHL and DHV SERIES

Application

Ceiling mounted, supply and return

Construction

Steel diffuser with black ABS deflectors
Finish: White RAL 9016

The same design can be made on 595x595 panel

SPECIFICATION

High performance swirl diffuser on circular or square panel.
Suitable for both constant and variable flow rate systems.
Available in 595x595 size for lay-in suspended ceiling or Fine Line with T of 15 mm o 24 mm

MOUNTING

With side screws or central screw on mounting bridge (optionally installed in plenum)

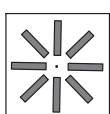
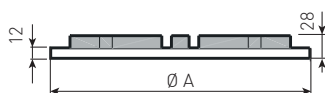
ACCESSORIES

PQOS-PQOI Galvanised sheet metal plenum (damper and equaliser installed on request).
PQOP Polystyrene plenum for panelled 595 x 595 diffusers only.
RC1BS Connector with ABS damper diameter Ø 160, Ø 200, Ø 250.
EQ1B Equaliser on polystyrene plenum (on request)

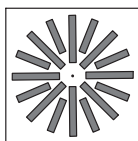
DIMENSIONS

DHE SQUARE DIFFUSER

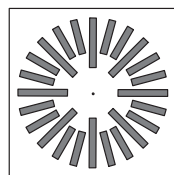
DN mm	□ A mm
300x300	296x296
400x400	396x396
500x500	496x496
600x600	596x596
625x625	621x621
800x800	796x796



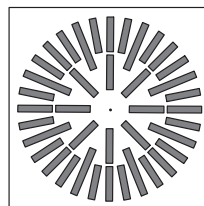
300x8



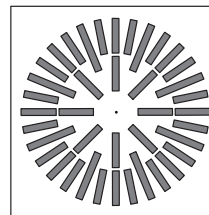
400x16



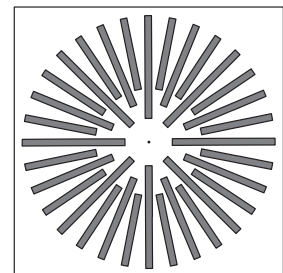
500x32



600x40



620x40



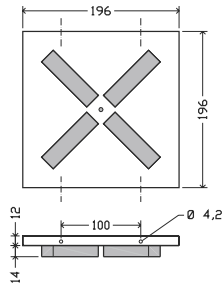
800x32

DH SERIES

High induction Swirl diffuser

DHE 200

QUICK SELECTION TABLE



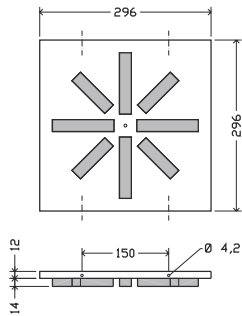
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	4	8	13	19	27	45	56	68	94
Flow rate	mc/h	19	28	37	47	56	75	84	94	112
Throw	m	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.5

Diffuser mounted on plenum with open damper, terminal velocity VT=0,25 m/s

DHE 300

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	3.0	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.6	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	5	10	16	25	34	58	72	87	121
Flow rate	mc/h	51	76	102	127	153	204	229	255	306
Throw	m	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1	1.2

Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity Vt=0.37 m/s

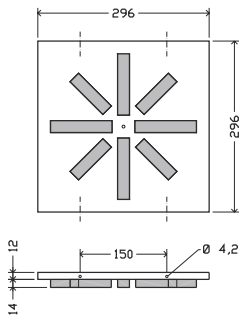


Diffusion

Components
for perfect air
distribution in HVAC
systems

DHE 400

QUICK SELECTION TABLE



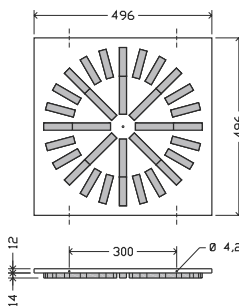
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		█								
Hospitals			█							
Apartments, offices				█						
Commercial buildings					█					

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	6	12	21	19	44	74	91	111	154
Flow rate	mc/h	136	204	272	47	409	545	613	681	817
Throw	m	0.4	0.6	0.7	0.2	1.1	1.5	1.7	1.9	2.3

Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity V_t=0.37 m/s

DHE 500/32

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		█								
Hospitals			█							
Apartments, offices				█						
Commercial buildings					█					

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	7	14	24	19	50	85	105	128	178
Flow rate	mc/h	242	363	485	47	727	969	1090	1211	1454
Throw	m	0.2	0.3	0.4	0.5	0.6	2.2	2.5	2.8	3.3

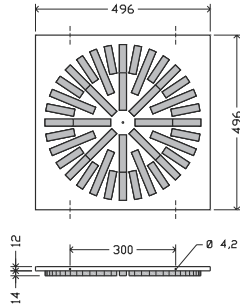
Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity V_t=0.37 m/s

DH SERIES

High induction Swirl diffuser

DHE 500/40

QUICK SELECTION TABLE



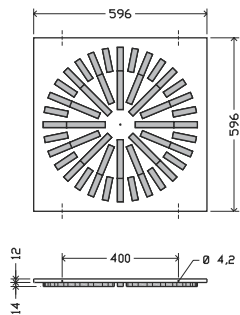
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		████████								
Hospitals			████████							
Apartments, offices				████████						
Commercial buildings					████████					

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	8	16	27	40	55	94	116	140	196
Flow rate	mc/h	356	535	713	891	1069	1426	1604	1782	2138
Throw	m	0.8	1.1	1.5	1.9	2.3	3	3.4	3.8	4.6

Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity V_t=0.37 m/s

DHE 600/FC

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		████████								
Hospitals			████████							
Apartments, offices				████████						
Commercial buildings					████████					

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	8	16	28	42	58	98	121	147	205
Flow rate	mc/h	428	642	856	1070	1284	1712	1926	2141	2569
Throw	m	0.9	1.3	1.8	2.2	2.7	3.6	4	4.4	5.3

Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity V_t=0.37 m/s

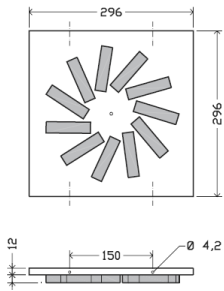


Diffusion

Components
for perfect air
distribution in HVAC
systems

DHR 300

QUICK SELECTION TABLE



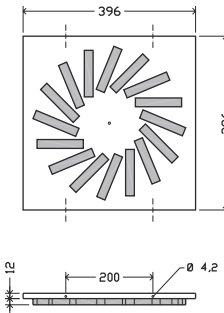
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		█								
Hospitals			█							
Apartments, offices				█						
Commercial buildings					█					

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	7	15	24	36	50	82	101	121	167
Flow rate	mc/h	74	111	149	186	223	297	334	371	446
Throw	m	0.2	0.3	0.5	0.6	0.7	0.9	1	1.1	1.4

Diffuser mounted on plenum with open damper, terminal velocity VT=0,25 m/s

DHR 400

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		█								
Hospitals			█							
Apartments, offices				█						
Commercial buildings					█					

Installation height (m)	min	2.6	2.7	2.8	3.0	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.6	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	7	14	24	35	49	81	99	119	164
Flow rate	mc/h	140	211	281	351	421	562	632	702	843
Throw	m	0.4	0.6	0.8	1	1.2	1.5	1.7	1.9	2.3

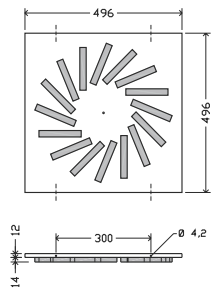
Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity Vt=0.37 m/s

DH SERIES

High induction Swirl diffuser

DHR 500

QUICK SELECTION TABLE



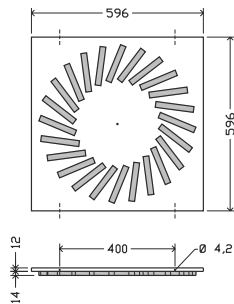
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		██████████								
Hospitals			██████████							
Apartments, offices				██████████						
Commercial buildings					██████████					

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	7	14	24	35	48	80	98	118	163
Flow rate	mc/h	175	263	350	438	525	701	788	876	1051
Throw	m	0.5	0.7	0.9	1.1	1.4	1.8	2	2.3	2.7

Diffuser mounted on plenum with open damper, terminal velocity VT=0,25 m/s

DHR 600

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries		██████████								
Hospitals			██████████							
Apartments, offices				██████████						
Commercial buildings					██████████					

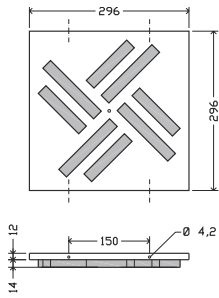
Installation height (m)	min	2.6	2.7	2.8	3.0	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.6	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	7	14	23	35	48	79	97	117	161
Flow rate	mc/h	260	389	519	649	779	1039	1168	1298	1558
Throw	m	0.6	0.9	1.2	1.5	1.8	2.4	2.7	3	3.6

Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity V_t=0.37 m/s



DHL 300

QUICK SELECTION TABLE



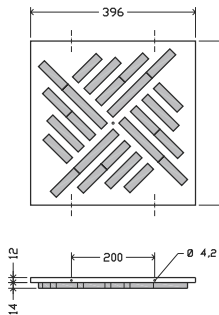
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	3	6	10	15	21	36	45	55	77
Flow rate	mc/h	75	112	149	186	224	298	335	373	447
Throw	m	0.2	0.3	0.4	0.5	0.6	0.9	1	1.1	1.3

Diffuser mounted on plenum with open damper, terminal velocity VT=0,25 m/s

DHL 400

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	3.0	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.6	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	6	13	24	33	46	78	98	119	168
Flow rate	mc/h	191	286	382	477	572	763	859	954	1145
Throw	m	05	07	1	12	15	2	22	25	3

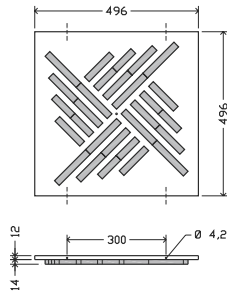
Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity Vt=0.37 m/s

DH SERIES

High induction Swirl diffuser

DHL 500

QUICK SELECTION TABLE



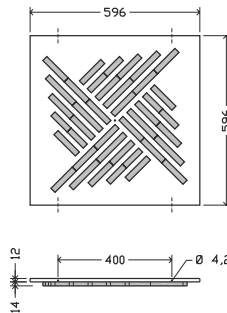
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	8	16	28	42	60	102	127	155	218
Flow rate	mc/h	262	393	524	654	785	1047	1178	1309	1571
Throw	m	0.6	1	1.3	1.6	1.9	2.6	2.9	3.2	3.8

Diffuser mounted on plenum with open damper, terminal velocity VT=0,25 m/s

DHL 600

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

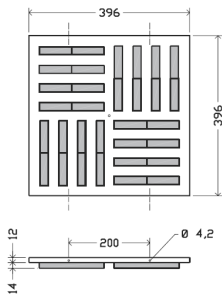
Installation height (m)	min	2.6	2.7	2.8	3.0	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.6	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	11	23	39	59	83	142	173	215	302
Flow rate	mc/h	388	582	776	970	1164	1552	1746	1940	2328
Throw	m	0.8	1.2	1.7	2.1	2.5	3.3	3.7	4.2	5

Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity V_t=0.37 m/s



DHV 400

QUICK SELECTION TABLE



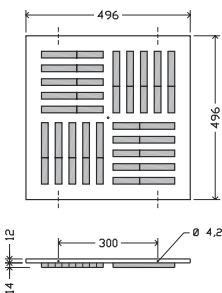
Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	15	31	53	80	112	189	235	285	398
Flow rate	mc/h	263	395	526	658	789	1052	1184	1316	1579
Throw	m	0.6	0.9	1.2	1.5	1.8	2.4	2.7	3	3.6

Diffuser mounted on plenum with open damper, terminal velocity VT=0,25 m/s

DHV 500

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	3.0	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.6	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	14	30	50	75	105	178	221	268	375
Flow rate	mc/h	379	568	757	947	1136	1515	1704	1893	2272
Throw	m	0.2	1.2	1.6	2	2.4	3.2	3.6	4	4.8

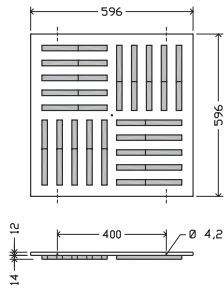
Diffuser mounted on plenum with open damper and equalizer grid, terminal velocity Vt=0.37 m/s

DH SERIES

High induction Swirl diffuser

DHV 600

QUICK SELECTION TABLE



Noise level	Nr dB	< 20	20	25	30	35	40	45	50	55
Churches, libraries										
Hospitals										
Apartments, offices										
Commercial buildings										

Installation height (m)	min	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
	max	3.3	3.4	3.4	3.5	3.6	3.7	3.9	4	4.1
Outlet velocity V _k	m/s	2	3	4	5	6	8	9	10	12
Pressure drop	Pa	14	28	48	73	101	171	213	258	360
Flow rate	mc/h	483	725	967	1209	1450	1934	2175	2417	2901
Throw	m	1	1.5	2	2.5	3	4	4.5	5	6

Diffuser mounted on plenum with open damper; terminal velocity VT=0,25 m/s