

| VSD1 150 WITHOUT HEATING (S320 SMALL CONE) |            |                          |      |      |      |      |      |
|--------------------------------------------|------------|--------------------------|------|------|------|------|------|
| NECK SIZE (mm)                             | READING    | NECK TOTAL PRESSURE (Pa) |      |      |      |      |      |
|                                            |            | 20                       | 30   | 40   | 50   | 60   | 70   |
| 150                                        | FLOW (l/s) | 61                       | 74   | 85   | 95   | 104  | 110  |
|                                            | THROW (m)  | 1.89                     | 2.16 | 2.48 | 2.62 | 2.77 | 2.81 |
|                                            | NC LEVEL   | 32                       | 34   | 37   | 39   | 41   | 43   |

| VCD, VRD1 150-300 WITHOUT HEATING (MEDIUM CONE, FLUSH TRIM) |            |                          |     |     |     |     |     |     |
|-------------------------------------------------------------|------------|--------------------------|-----|-----|-----|-----|-----|-----|
| NECK SIZE (mm)                                              | READING    | NECK TOTAL PRESSURE (Pa) |     |     |     |     |     |     |
|                                                             |            | 10                       | 20  | 30  | 40  | 50  | 60  | 70  |
| 150                                                         | FLOW (l/s) | 45                       | 64  | 78  | 90  | 101 | 111 | 120 |
|                                                             | THROW (m)  | 1.9                      | 2.4 | 2.8 | 3.0 | 3.2 | 3.3 | 3.4 |
|                                                             | NC LEVEL   | 12                       | 14  | 22  | 25  | 28  | 31  | 34  |
| 200                                                         | FLOW (l/s) | 72                       | 103 | 127 | 146 | 164 | 180 | 194 |
|                                                             | THROW (m)  | 2.6                      | 3.2 | 3.6 | 3.8 | 4.0 | 4.2 | 4.3 |
|                                                             | NC LEVEL   | 12                       | 15  | 19  | 23  | 27  | 30  | 33  |
| 250                                                         | FLOW (l/s) | 98                       | 139 | 171 | 198 | 222 | 245 | 264 |
|                                                             | THROW (m)  | 3.0                      | 3.6 | 4.0 | 4.3 | 4.5 | 4.6 | 4.8 |
|                                                             | NC LEVEL   | 12                       | 15  | 22  | 27  | 30  | 33  | 35  |
| 300                                                         | FLOW (l/s) | 124                      | 181 | 223 | 260 | 292 | 321 | 348 |
|                                                             | THROW (m)  | 3.3                      | 4.1 | 4.5 | 4.9 | 5.1 | 5.3 | 5.5 |
|                                                             | NC LEVEL   | 13                       | 21  | 28  | 32  | 36  | 38  | 41  |
| VCD, VRD1 350 WITHOUT HEATING (LARGE CONE, PROUD TRIM)      |            |                          |     |     |     |     |     |     |
| 350                                                         | FLOW (l/s) | 156                      | 225 | 275 | 320 | 359 | 395 | 429 |
|                                                             | THROW (m)  | 3.0                      | 3.8 | 4.2 | 4.5 | 4.8 | 4.9 | 5.1 |
|                                                             | NC LEVEL   | 15                       | 18  | 24  | 28  | 31  | 34  | 36  |

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the control disc fully open & an air velocity at 0.25m/s.

Noise Criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (i.e. the difference between Sound Pressure Level (dB re:2 x 10<sup>-5</sup> Pa) and Sound Power Level (dBW re: 10<sup>-12</sup> watts) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are shipped fully open.

Performance Data applies to Standard Air having a density of 1.2 kg/m<sup>3</sup>.

| VSD1 150-300 WITHOUT HEATING (LARGE CONE FLUSH TRIM) |            |                          |     |     |     |     |     |     |
|------------------------------------------------------|------------|--------------------------|-----|-----|-----|-----|-----|-----|
| NECK SIZE (mm)                                       | READING    | NECK TOTAL PRESSURE (Pa) |     |     |     |     |     |     |
|                                                      |            | 10                       | 20  | 30  | 40  | 50  | 60  | 70  |
| 150                                                  | FLOW (l/s) | 43                       | 61  | 75  | 87  | 98  | 107 | 116 |
|                                                      | THROW (m)  | 1.6                      | 2.2 | 2.5 | 2.8 | 3.0 | 3.1 | 3.3 |
|                                                      | NC LEVEL   | 13                       | 18  | 25  | 29  | 31  | 34  | 36  |
| 200                                                  | FLOW (l/s) | 74                       | 106 | 131 | 151 | 169 | 185 | 201 |
|                                                      | THROW (m)  | 2.5                      | 3.2 | 3.5 | 3.8 | 4.0 | 4.1 | 4.3 |
|                                                      | NC LEVEL   | 12                       | 18  | 25  | 29  | 32  | 35  | 37  |
| 250                                                  | FLOW (l/s) | 99                       | 143 | 177 | 205 | 230 | 251 | 274 |
|                                                      | THROW (m)  | 3.4                      | 4.1 | 4.5 | 4.8 | 5.1 | 5.3 | 5.4 |
|                                                      | NC LEVEL   | 14                       | 19  | 25  | 29  | 33  | 35  | 38  |
| 300                                                  | FLOW (l/s) | 112                      | 160 | 197 | 228 | 259 | 280 | 305 |
|                                                      | THROW (m)  | 3.5                      | 4.2 | 4.6 | 4.9 | 5.1 | 5.3 | 5.5 |
|                                                      | NC LEVEL   | 13                       | 17  | 24  | 28  | 31  | 34  | 36  |
| VSD1 350 WITHOUT HEATING (LARGE CONE PROUD TRIM)     |            |                          |     |     |     |     |     |     |
| 350                                                  | FLOW (l/s) | 182                      | 261 | 317 | 366 | 411 | 451 | 488 |
|                                                      | THROW (m)  | 2.8                      | 3.7 | 4.2 | 4.6 | 4.8 | 5.1 | 5.3 |
|                                                      | NC LEVEL   | 12                       | 21  | 26  | 30  | 34  | 36  | 38  |

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the control disc fully open & an air velocity at 0.25m/s.

Noise Criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (i.e. the difference between Sound Pressure Level (dB re:2 x 10<sup>-5</sup> Pa) and Sound Power Level (dBW re: 10<sup>-12</sup> watts) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are shipped fully open.

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