

TMRA, TMRA-AA

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|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Neck Velocity m/s | 2.0 | 2.5 | 3.0 | 3.6 | 4.1 | 4.6 | 5.1 | 6.1 | 7.1 |
| Velocity Pressure Pa | 2 | 4 | 6 | 8 | 10 | 13 | 16 | 22 | 30 |
| Total Pressure, Hor. Pa | 5 | 8 | 12 | 16 | 21 | 26 | 33 | 47 | 64 |
| Total Pressure, Vert. Pa | 7 | 11 | 15 | 21 | 27 | 34 | 42 | 61 | 83 |

SIZE

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|---|---------------------------|-----------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|---------------|
| 6 | Air Flow, l/s | 38 | 47 | 57 | 66 | 76 | 85 | 94 | 111 | 130 |
| | NC (Noise Criteria), Hor. | - | 15 | 20 | 25 | 29 | 32 | 35 | 41 | 45 |
| | Horizontal Throw m | 0.5 - 0.5 - 1.5 | 0.5 - 1 - 1.8 | 0.5 - 1 - 2.3 | 1 - 1.3 - 2.3 | 1 - 1.5 - 2.5 | 1 - 1.5 - 2.5 | 1.3 - 1.8 - 2.8 | 1.3 - 2.3 - 2.8 | 1.5 - 2.3 - 3 |

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|---|---------------------------|---------------|-----------------|---------------|-------------|---------------|-----------------|-----------------|-----------------|-------------|
| 8 | Air Flow, l/s | 66 | 83 | 99 | 116 | 132 | 149 | 165 | 198 | 231 |
| | NC (Noise Criteria), Hor. | - | 16 | 21 | 26 | 30 | 33 | 36 | 42 | 47 |
| | Horizontal Throw m | 0.5 - 1 - 1.8 | 0.5 - 1.3 - 2.3 | 1 - 1.3 - 2.8 | 1 - 1.5 - 3 | 1.3 - 1.8 - 3 | 1.3 - 2.3 - 3.3 | 1.5 - 2.3 - 3.3 | 1.8 - 2.8 - 3.8 | 2.3 - 3 - 4 |

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|----|---------------------------|-----------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|---------------|-----------------|
| 10 | Air Flow, l/s | 103 | 129 | 154 | 180 | 206 | 232 | 257 | 309 | 360 |
| | NC (Noise Criteria), Hor. | - | 17 | 22 | 27 | 31 | 34 | 37 | 43 | 47 |
| | Horizontal Throw m | 0.5 - 1.3 - 2.3 | 1 - 1.5 - 2.8 | 1.3 - 1.8 - 3.3 | 1.3 - 2.3 - 3.8 | 1.5 - 2.3 - 4 | 1.8 - 2.5 - 4 | 1.8 - 2.8 - 4.3 | 2.3 - 3.3 - 5 | 2.8 - 3.8 - 5.3 |

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|----|---------------------------|---------------|-----------------|---------------|-----------------|-----------------|-------------|-----------------|---------------|-------------|
| 12 | Air Flow, l/s | 149 | 184 | 222 | 260 | 297 | 333 | 370 | 444 | 519 |
| | NC (Noise Criteria), Hor. | 11 | 17 | 23 | 27 | 31 | 35 | 38 | 43 | 48 |
| | Horizontal Throw m | 1 - 1.3 - 2.8 | 1.3 - 1.8 - 3.3 | 1.3 - 2.3 - 4 | 1.5 - 2.5 - 4.3 | 1.8 - 2.8 - 4.5 | 2.3 - 3 - 5 | 2.3 - 3.3 - 5.3 | 2.8 - 4 - 5.8 | 3 - 4.3 - 6 |

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|----|---------------------------|-------------|---------------|-----------------|-----------------|---------------|-----------------|-------------|---------------|---------------|
| 14 | Air Flow, l/s | 201 | 250 | 300 | 352 | 401 | 451 | 500 | 599 | 703 |
| | NC (Noise Criteria), Hor. | 11 | 18 | 23 | 28 | 32 | 35 | 39 | 44 | 49 |
| | Horizontal Throw m | 1 - 1.5 - 3 | 1.3 - 1.8 - 4 | 1.5 - 2.5 - 4.5 | 1.8 - 2.8 - 5.3 | 2.3 - 3 - 5.5 | 2.5 - 3.8 - 5.8 | 2.8 - 4 - 6 | 3 - 4.5 - 6.8 | 3.8 - 5.3 - 7 |

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|----|---------------------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|-------------|-----------------|-----------------|
| 16 | Air Flow, l/s | 264 | 330 | 396 | 463 | 529 | 595 | 661 | 793 | 925 |
| | NC (Noise Criteria), Hor. | 12 | 18 | 24 | 28 | 32 | 36 | 39 | 45 | 49 |
| | Horizontal Throw m | 1.3 - 1.8 - 3.8 | 1.5 - 2.3 - 4.5 | 1.8 - 2.8 - 5.5 | 2.3 - 3 - 5.8 | 2.5 - 3.8 - 6 | 2.8 - 4 - 6.8 | 3 - 4.5 - 7 | 3.8 - 5.5 - 7.5 | 4.3 - 5.8 - 8.3 |

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|----|---------------------------|---------------|-----------------|-------------|-----------------|-------------|---------------|---------------|-------------|---------------|
| 18 | Air Flow, l/s | 335 | 418 | 500 | 585 | 670 | 750 | 835 | 1001 | 1170 |
| | NC (Noise Criteria), Hor. | 12 | 19 | 24 | 29 | 33 | 36 | 40 | 45 | 50 |
| | Horizontal Throw m | 1.3 - 2.3 - 4 | 1.8 - 2.5 - 5.3 | 2.3 - 3 - 6 | 2.5 - 3.8 - 6.5 | 2.8 - 4 - 7 | 3 - 4.5 - 7.3 | 3.3 - 5.3 - 8 | 4 - 6 - 8.5 | 5 - 6.5 - 9.3 |

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|----|---------------------------|-----------------|-----------------|-----------------|---------------|---------------|-----------------|-----------------|-----------------|------------------|
| 20 | Air Flow, l/s | 413 | 519 | 618 | 722 | 826 | 930 | 1034 | 1232 | 1444 |
| | NC (Noise Criteria), Hor. | 13 | 19 | 25 | 29 | 33 | 37 | 40 | 45 | 50 |
| | Horizontal Throw m | 1.5 - 2.3 - 4.5 | 1.8 - 2.8 - 5.8 | 2.3 - 3.3 - 6.8 | 2.8 - 4 - 7.3 | 3 - 4.5 - 7.5 | 3.3 - 5.3 - 8.3 | 3.8 - 5.8 - 8.5 | 4.5 - 6.8 - 9.5 | 5.3 - 7.3 - 10.3 |

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|----|---------------------------|-----------------|-----------------|-------------|-------------|-----------------|-------------|------------------|----------------|------------------|
| 24 | Air Flow, l/s | 595 | 741 | 887 | 1038 | 1185 | 1331 | 1482 | 1779 | 2077 |
| | NC (Noise Criteria), Hor. | 13 | 20 | 25 | 30 | 34 | 38 | 41 | 46 | 51 |
| | Horizontal Throw m | 1.8 - 2.8 - 5.5 | 2.3 - 3.3 - 6.8 | 2.8 - 4 - 8 | 3 - 5 - 8.8 | 3.8 - 5.5 - 9.3 | 4 - 6 - 9.8 | 4.5 - 6.8 - 10.3 | 5.5 - 8 - 11.3 | 6.5 - 8.8 - 12.3 |

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|----|---------------------------|-----------------|-----------------|----------------|------------|------------------|------------------|----------------|-----------------|---------------|
| 30 | Air Flow, l/s | 925 | 1156 | 1388 | 1619 | 1850 | 2081 | 2313 | 2775 | 3238 |
| | NC (Noise Criteria), Hor. | 14 | 21 | 26 | 31 | 35 | 38 | 42 | 47 | 52 |
| | Horizontal Throw m | 2.3 - 3.3 - 6.8 | 2.8 - 4.3 - 8.5 | 3.3 - 5.3 - 10 | 4 - 6 - 11 | 4.5 - 6.8 - 11.5 | 5.3 - 7.5 - 12.3 | 5.8 - 8.5 - 13 | 6.8 - 10 - 14.3 | 8 - 11 - 15.3 |

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|----|---------------------------|---------------|----------------|--------------|------------|----------------|----------------|-----------------|-----------------|-----------------|
| 36 | Air Flow, l/s | 1331 | 1661 | 1996 | 2327 | 2657 | 2992 | 3323 | 3988 | 4649 |
| | NC (Noise Criteria), Hor. | 15 | 22 | 27 | 32 | 36 | 39 | 42 | 48 | 52 |
| | Horizontal Throw m | 2.8 - 4 - 8.3 | 3.3 - 5.3 - 10 | 4 - 6 - 12.3 | 5 - 7 - 13 | 5.5 - 8.3 - 14 | 6 - 9.3 - 14.8 | 6.8 - 10 - 15.5 | 8.3 - 12.3 - 17 | 9.5 - 13 - 18.3 |

| Downward Projection of Heated Air, m | | | | | | | | | |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-------------------|
| Neck Velocity m/s | 2.0 | 2.5 | 3.0 | 3.6 | 4.1 | 4.6 | 5.1 | 6.1 | 7.1 |
| 5.6° C Differential | 1.8 - 1.8 - 1 | 2.5 - 2.5 - 1.8 | 3 - 3.8 - 3.3 | 4 - 4.5 - 5 | 4.5 - 5.8 - 7.3 | 5.3 - 7 - 8.5 | 5.8 - 7.5 - 10 | 6.5 - 9.8 - 12.8 | 7.5 - 11.5 - 15.8 |
| 11.2° C Differential | 1.3 - 1.3 - 0.5 | 1.8 - 2.3 - 1.5 | 2.3 - 2.5 - 2.3 | 2.8 - 3.3 - 3.3 | 3 - 4.3 - 5 | 3.8 - 5 - 6 | 4 - 5.5 - 7.3 | 4.5 - 5.3 - 9.3 | 5.3 - 7.5 - 11 |
| 16.7° C Differential | 1 - 1 - 0.5 | 1.5 - 1.5 - 1.3 | 1.8 - 2.3 - 1.8 | 2.3 - 2.8 - 2.8 | 2.8 - 3.3 - 4 | 3 - 4 - 5 | 3.3 - 4.5 - 5.8 | 4 - 5.5 - 7.5 | 4.3 - 6 - 9.3 |
| 22.2° C Differential | 1 - 0.5 - 0.5 | 1.3 - 1.3 - 1 | 1.5 - 1.8 - 1.8 | 2.3 - 2.5 - 2.8 | 2.5 - 3 - 3.8 | 2.8 - 3.8 - 4.5 | 3 - 4 - 5.3 | 3.3 - 5 - 6.8 | 3.8 - 5.5 - 8.3 |

All pressures are given in Pa.
 Throw values are given for terminal velocities of 0.8, 0.5, and 0.3 m/s
 Throw Values are given for Isothermal Conditions.
 To obtain static pressure, subtract the velocity pressure from the total pressure.
 If the diffuser is mounted on an exposed duct, the throw values are 70% of those listed in the table.
 Each NC value represents the noise criteria curve which will not be exceeded by the sound pressure in any of the octave bands, 2nd through 7th, with a room absorption of 10dB, re 10-12 Watts.
 Dash (-) in space denotes an NC value of less than 10.
 Add 1 NC for Vertical setting.
 Downward Projection of Heated Air values represent the distance to a total air velocity of essentially zero.
 The three values are for sizes 6 - 12 - 24 diffusers respectively, for the neck velocities shown above.
 Data were obtained from test conducted in accordance with ANSI / ASHRAE Standard 70-1991, ISO Standard 5219, and ISO Standard 3741.

Note: All dimensions are nominal • product will be built to the closest inch equivalent dimension unless specially ordered to true metric

• contact factory for availability of sizes •

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