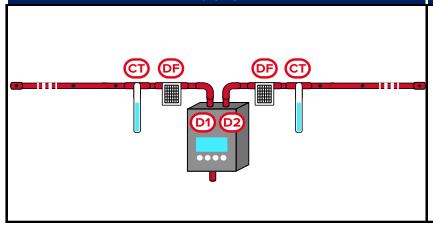
**Table B2_DF_CT**

| | |
|---|---|
| **Detection class** | **B** |
| **Number of detectors** | **2** |
| **Anti-dust filter** | **Yes** |
| **Condensation trap** | **Yes** |

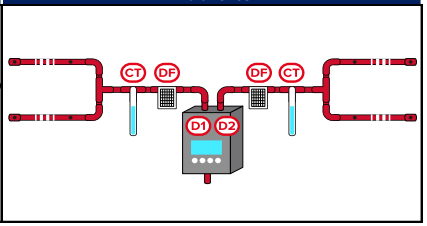
| | |
|---|---|
| **D1** | detector 1 module |
| **D2** | detector 2 module |
| **DF** | filter for dust |
| **CT** | trap for condensation |

| | |
|---|---|
| **Øn** | diameter of the hole "n" (mm) |
| **S** | detection sensitivity ($10^{-5}$ dB/m) |
| **V** | aspiration speed (RPM) |
| **F** | expected airflow (l/min) |
| **B** | air aspiration balancing between the holes (%) |
| **T** | transit time of the smoke (s) |

**1 branch**




**2 branches**




| Number of branches | Length of branches (m) | parameters | Number of holes for each branch | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 1 | 30 ÷ 60 | Ø | Ø 1: 10 | Ø 1: 4.5<br>Ø 2: 6 | Ø 1..2: 4.5<br>Ø 3: 6 | Ø 1..2: 4<br>Ø 3: 4.5<br>Ø 4: 5 | Ø 1..2: 4<br>Ø 3: 4.5<br>Ø 4: 5<br>Ø 5: 6 | Ø 1..3: 3<br>Ø 4..5: 3.5<br>Ø 6: 4 | Ø 1..4: 3<br>Ø 5..6: 3.5<br>Ø 7: 4 | Ø 1..4: 3<br>Ø 5..7: 3.5<br>Ø 8: 4 | Ø 1..3: 3<br>Ø 4..6: 3.5<br>Ø 7..8: 4<br>Ø 9: 4.5 | Ø 1: 2.5<br>Ø 2..5: 3<br>Ø 6..9: 3.5<br>Ø 10: 4 | Ø 1..10: 2.5<br>Ø 11: 3 | Ø 1..4: 2.5<br>Ø 5..11: 3<br>Ø 12: 3.5 | Ø 1..5: 2.5<br>Ø 6..12: 3<br>Ø 13: 3.5 | Ø 1: 2<br>Ø 2..8: 2.5<br>Ø 9..14: 3 | Ø 1..14: 2<br>Ø 15: 2.5 | Ø 1..15: 2<br>Ø 16: 2.5 | Ø 1..7: 2<br>Ø 8..17: 2.5 | |
| | | S | 6000 | 2368 | 1606 | 1302 | 1004 | 816 | 698 | 620 | 538 | 482 | 470 | 412 | 370 | 322 | 354 | 330 | 272 | |
| | | V | 2000 | 2500 | 2500 | 2750 | 2750 | 3000 | 3000 | 3250 | 3250 | 3500 | 3750 | 3750 | 3750 | 4000 | 4250 | 4250 | 4500 | |
| | | F | 30.6 | 40.9 | 49.5 | 57.7 | 62.4 | 61.2 | 63.0 | 73.4 | 77.1 | 81.5 | 79.9 | 87.1 | 89.0 | 93.6 | 85.1 | 88.0 | 102.6 | |
| | | B | 100 | 71 | 68 | 81 | 78 | 66 | 65 | 70 | 75 | 75 | 70 | 71 | 71 | 69 | 64 | 64 | 66 | |
| | | T | 53 | 54 | 55 | 56 | 55 | 57 | 60 | 55 | 55 | 55 | 58 | 55 | 55 | 56 | 57 | 57 | 54 | |
| 1 | 10 ÷ 30 | Ø | Ø 1: 5 | Ø 1: 3.5<br>Ø 2: 4.5 | Ø 1..2: 3.5<br>Ø 3: 4.5 | Ø 1..2: 3.5<br>Ø 3: 4<br>Ø 4: 4.5 | Ø 1: 3<br>Ø 2..4: 3.5<br>Ø 5: 4 | Ø 1..5: 3<br>Ø 6: 3.5 | Ø 1..6: 2.5<br>Ø 7: 3 | Ø 1..7: 2.5<br>Ø 8: 3 | Ø 1..8: 2.5<br>Ø 9: 3 | Ø 1..9: 2.5<br>Ø 10: 3 | Ø 1..10: 2<br>Ø 11: 2.5 | Ø 1..11: 2<br>Ø 12: 2.5 | Ø 1..12: 2<br>Ø 13: 2.5 | Ø 1..13: 2<br>Ø 14: 2.5 | Ø 1..14: 2<br>Ø 15: 2.5 | Ø 1..15: 2<br>Ø 16: 2.5 | Ø 1..17: 2 | Ø 1..18: 2 |
| | | S | 6000 | 2316 | 1644 | 1236 | 942 | 890 | 774 | 676 | 598 | 534 | 498 | 454 | 418 | 386 | 360 | 336 | 328 | 310 |
| | | V | 1500 | 1500 | 1500 | 1500 | 1500 | 1750 | 2000 | 2000 | 2000 | 2000 | 2250 | 2000 | 2000 | 2000 | 2000 | 2000 | 2250 | 2500 |
| | | F | 14.4 | 18.6 | 24.0 | 29.4 | 30.0 | 34.6 | 35.1 | 38.3 | 41.2 | 43.7 | 39.9 | 37.3 | 39.2 | 41.1 | 42.8 | 44.3 | 51.2 | 59.1 |
| | | B | 100 | 66 | 64 | 69 | 72 | 75 | 70 | 70 | 70 | 70 | 64 | 64 | 64 | 64 | 64 | 64 | 83 | 83 |
| | | T | 50 | 51 | 48 | 45 | 50 | 47 | 47 | 46 | 45 | 44 | 47 | 52 | 51 | 50 | 50 | 49 | 51 | 45 |
| 2 | 20 ÷ 40 | Ø | Ø 1: 5.5 | Ø 1: 3.5<br>Ø 2: 4.5 | Ø 1..2: 3<br>Ø 3: 3.5 | Ø 1..3: 2.5<br>Ø 4: 3 | Ø 1..4: 2.5<br>Ø 5: 3 | Ø 1..5: 2<br>Ø 6: 2.5 | Ø 1..6: 2<br>Ø 7: 2.5 | Ø 1..7: 2<br>Ø 8: 2.5 | Ø 1..9: 2 | | | | | | | | | |
| | | S | 3000 | 1174 | 890 | 668 | 538 | 450 | 388 | 340 | 324 | | | | | | | | | |
| | | V | 2000 | 2250 | 2750 | 3250 | 3250 | 3750 | 3500 | 3500 | 4250 | | | | | | | | | |
| | | F | 38.3 | 48.1 | 58.6 | 66.6 | 75.6 | 74.8 | 76.5 | 82.5 | 103.9 | | | | | | | | | |
| | | B | 100 | 66 | 76 | 70 | 70 | 64 | 64 | 64 | 93 | | | | | | | | | |
| | | T | 56 | 60 | 61 | 59 | 57 | 60 | 62 | 61 | 60 | | | | | | | | | |
| 2 | 5 ÷ 20 | Ø | Ø 1: 4 | Ø 1: 3<br>Ø 2: 3.5 | Ø 1..2: 2.5<br>Ø 3: 3 | Ø 1..3: 2.5<br>Ø 4: 3 | Ø 1..4: 2<br>Ø 5: 2.5 | Ø 1..5: 2<br>Ø 6: 2.5 | Ø 1..6: 2<br>Ø 7: 2.5 | Ø 1..8: 2 | Ø 1..9: 2 | | | | | | | | | |
| | | S | 3000 | 1280 | 872 | 670 | 534 | 452 | 390 | 368 | 328 | | | | | | | | | |
| | | V | 1500 | 1500 | 1750 | 1750 | 2000 | 2000 | 2000 | 2250 | 3250 | | | | | | | | | |
| | | F | 19.9 | 25.5 | 30.4 | 36.6 | 35.9 | 40.6 | 44.6 | 52.2 | 81.1 | | | | | | | | | |
| | | B | 100 | 76 | 70 | 70 | 64 | 64 | 64 | 95 | 96 | | | | | | | | | |
| | | T | 45 | 49 | 48 | 45 | 48 | 46 | 44 | 48 | 32 | | | | | | | | | |