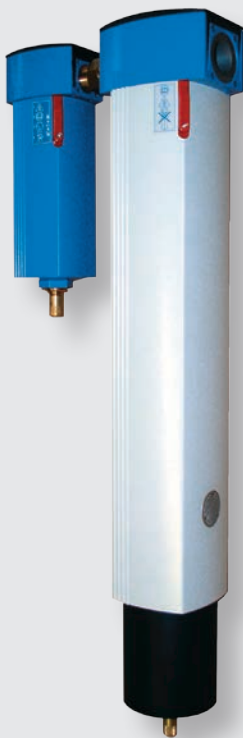


Membrane dryers

DM 05 V to DM 14 V

Flow capacity: 125–2730 l/min, 4–96 cfm
 Max. operating pressure: 7–15 bar, 100–220 psig



INTEGRATED CYCLONE SEPARATOR

The integrated cyclone separator assures optimal functioning of the membrane dryer by way of pre-filtration.

ENERGY EFFICIENT

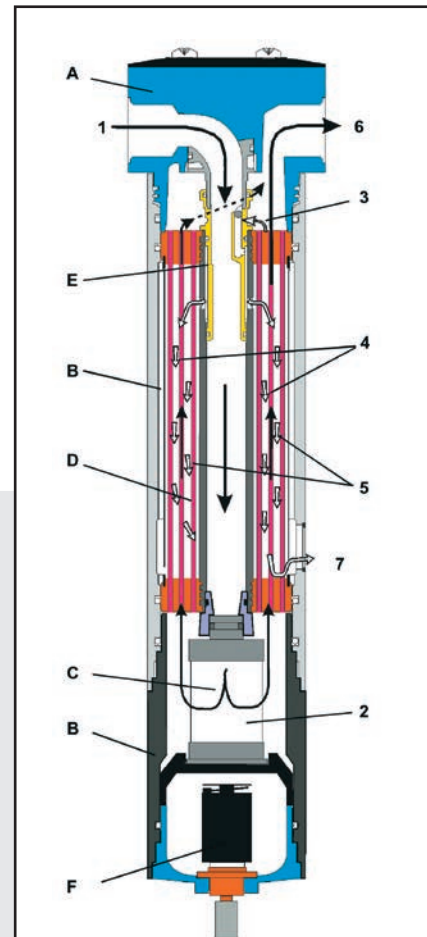
As the membrane dryer does not have a motor or any moving parts it does not need any additional energy.

INTEGRATED COMPRESSED AIR FILTER

A standard compressed air filter is included to provide technically oil free compressed air.

COMPACT

Thanks to its compact and space-saving design, it can be used everywhere as a terminal station dryer.



Membrane Dryer Layout

- A:** Head (inlet / outlet)
- B:** Filter housing
- C:** Nano-filter
- D:** Membrane element including main body
- E:** Nozzle with adapter
- F:** Float drain

(1) Saturated compressed air enters via the dryer cap (A) and flows down the central tube (D). **(2)** The nano-filter (C) removes any remaining aerosols and particles, separated condensate is drained (F). The saturated compressed air flows through the inside of the membranes. **(3)** A part of the compressed air is diverted and expands to atmosphere at the nozzle (E). **(4)** This very dry purge air is lead across the outside of the membranes (D). **(5)** Thus the saturated compressed air flows on the inside and the dry purge air on the outside. Due to the differences in humidity, moisture diffuses from the compressed air to the purge air. **(6)** The dry compressed air exits. **(7)** The purge air escapes to the atmosphere.

Pressure dew point reduction in a compact package: The BOGE membrane dryer is used where the pressure dew point needs to be reduced between 20 and 50 Kelvin. it requires little space and can be installed at minimal cost – ideally between the compressor and the receiver.

| BOGE Type | Max. operating pressure | | Flow volume Dry inlet | | Purge air | | | Flow volume Dryer outlet | | Compressed air connection IN/OUT | Dimensions L x W x H mm | Weight kg |
|-----------|-------------------------|------|-----------------------|-----|-----------|-------|-----|--------------------------|-----|-------------------------------------|-------------------------------|--------------|
| | bar | psig | l/min | cfm | Δt | l/min | cfm | l/min (air used) | cfm | | | |
| DM 05 V | 7 | 100 | 300 | 11 | 20 K | 30 | 1 | 270 | 10 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 9 | 130 | 420 | 15 | 20 K | 38 | 1 | 382 | 13 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 15 | 220 | 750 | 26 | 20 K | 62 | 2 | 688 | 24 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 7 | 100 | 180 | 6 | 35 K | 30 | 1 | 150 | 5 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 9 | 130 | 250 | 9 | 35 K | 38 | 1 | 212 | 7 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 15 | 220 | 460 | 16 | 35 K | 62 | 2 | 398 | 14 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 7 | 100 | 125 | 4 | 55 K | 30 | 1 | 95 | 3 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 9 | 130 | 175 | 7 | 55 K | 38 | 1 | 137 | 5 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 05 V | 15 | 220 | 320 | 11 | 55 K | 62 | 2 | 258 | 9 | G 3/8 | 167 x 60 x 522 | 3.0 |
| DM 06 V | 7 | 100 | 400 | 14 | 20 K | 40 | 1 | 360 | 13 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 9 | 130 | 560 | 20 | 20 K | 50 | 2 | 510 | 18 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 15 | 220 | 950 | 34 | 20 K | 80 | 3 | 870 | 31 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 7 | 100 | 240 | 8 | 35 K | 40 | 1 | 200 | 7 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 9 | 130 | 335 | 12 | 35 K | 50 | 2 | 285 | 10 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 15 | 220 | 605 | 21 | 35 K | 80 | 3 | 525 | 19 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 7 | 100 | 170 | 6 | 55 K | 40 | 1 | 130 | 5 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 9 | 130 | 235 | 8 | 55 K | 50 | 2 | 185 | 7 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 06 V | 15 | 220 | 425 | 15 | 55 K | 80 | 3 | 345 | 12 | G 3/8 | 167 x 60 x 582 | 3.2 |
| DM 09 V | 7 | 100 | 600 | 21 | 20 K | 60 | 2 | 540 | 19 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 9 | 130 | 835 | 29 | 20 K | 75 | 3 | 760 | 27 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 15 | 220 | 1470 | 52 | 20 K | 125 | 4 | 1345 | 47 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 7 | 100 | 360 | 13 | 35 K | 60 | 2 | 300 | 11 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 9 | 130 | 505 | 18 | 35 K | 75 | 3 | 430 | 15 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 15 | 220 | 890 | 31 | 35 K | 125 | 4 | 765 | 27 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 7 | 100 | 245 | 9 | 55 K | 60 | 2 | 185 | 7 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 9 | 130 | 345 | 12 | 55 K | 75 | 3 | 270 | 10 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 09 V | 15 | 220 | 650 | 23 | 55 K | 125 | 4 | 525 | 19 | G 3/4 | 210 x 80 x 592 | 4.5 |
| DM 13 V | 7 | 100 | 800 | 28 | 20 K | 80 | 3 | 720 | 25 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 9 | 130 | 1110 | 39 | 20 K | 105 | 4 | 1005 | 35 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 15 | 220 | 1820 | 64 | 20 K | 155 | 5 | 1665 | 59 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 7 | 100 | 485 | 17 | 35 K | 80 | 3 | 405 | 14 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 9 | 130 | 675 | 24 | 35 K | 105 | 4 | 570 | 20 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 15 | 220 | 1150 | 41 | 35 K | 155 | 5 | 995 | 35 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 7 | 100 | 330 | 12 | 55 K | 80 | 3 | 250 | 9 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 9 | 130 | 465 | 16 | 55 K | 105 | 4 | 360 | 13 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 13 V | 15 | 220 | 820 | 29 | 55 K | 155 | 5 | 665 | 23 | G 3/4 | 210 x 80 x 642 | 4.8 |
| DM 14 V | 7 | 100 | 1050 | 37 | 20 K | 120 | 4 | 930 | 33 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 9 | 130 | 1470 | 52 | 20 K | 150 | 5 | 1320 | 47 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 15 | 220 | 2730 | 96 | 20 K | 250 | 9 | 2480 | 88 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 7 | 100 | 710 | 25 | 35 K | 120 | 4 | 590 | 21 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 9 | 130 | 990 | 35 | 35 K | 150 | 5 | 840 | 30 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 15 | 220 | 1780 | 63 | 35 K | 250 | 9 | 1530 | 54 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 7 | 100 | 485 | 17 | 55 K | 120 | 4 | 365 | 13 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 9 | 130 | 680 | 24 | 55 K | 150 | 5 | 530 | 19 | G 3/4 | 210 x 80 x 712 | 5.1 |
| DM 14 V | 15 | 220 | 1320 | 47 | 55 K | 250 | 9 | 1070 | 38 | G 3/4 | 210 x 80 x 712 | 5.1 |