

## Data sheet

# ELIMINATOR® Hermetic filter drier

## Types DCL and DML



All ELIMINATOR® driers have a solid core with binding material held to an absolute minimum.

There are two types of ELIMINATOR® cores. Type DML driers have a core composition of 100% Molecular Sieve, while type DCL contain 80% Molecular Sieve with 20% activated alumina.

ELIMINATOR® type DML driers are designed for applications requiring the highest moisture capacity.

ELIMINATOR® type DCL driers are designed for applications requiring high moisture capacity and acid adsorption capacity.

Available with solder (pure copper) and flare connections.

### Features

#### The Core type DML

- 100% 3Å Molecular Sieve core
- High drying capacity minimizing the risk of acid formation (hydrolysis)
- Recommended for use with HFO, HC, HFC and HCFC refrigerants
- Will not deplete oil additives

#### The Core type DCL

- 80% 3Å Molecular Sieve with 20% activated alumina
- Perfect core blend for systems that operate at high condensing temperatures and require high drying capacity
- Recommended for use with HFO, HC, HFC and HCFC refrigerants

#### The Shell

- UL approved for MWP 667 psig
- Available with solder (pure copper) and flare connections
- Corrosion resistant powder-painted finish. Special coating for marine applications available upon request
- Allows installation with any orientation provided the arrow is in the flow direction
- Available in sizes 3 – 75 cubic inches

#### The Filter

- 25 µm (0.001 in.) filter provides high retention with minimal pressure drop
- Thermally stable up to 250 °F

# Data sheet | ELIMINATOR® Hermetic filter drier, types DCL and DML

## Approvals

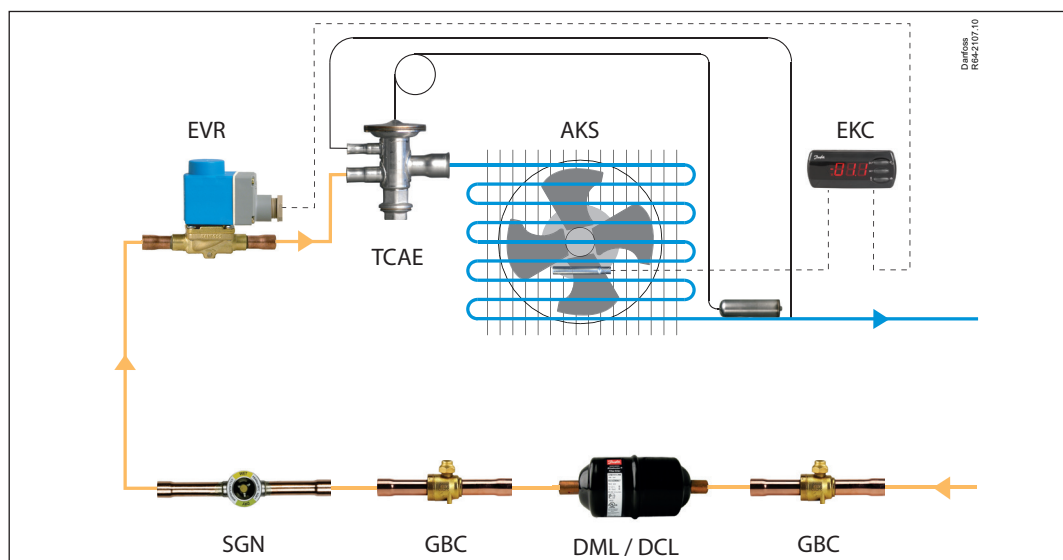
UL US, file no. SA 6398  
 PED 97/23/EC - a3p3  
 Compliant with ATEX hazard zone 2

**Note:** Only solder versions (cu-plated / pure copper) and connection sizes below 25 mm are approved for flammable refrigerants now.

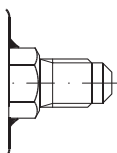
## Application

ELIMINATOR® hermetic filter driers protect refrigeration and air-conditioning systems from moisture, acids, and solid particles.

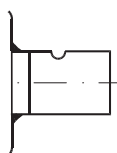
With these contaminants eliminated, systems are safer from harmful chemical reactions and from abrasive impurities.



## Technical data



Flare connection



Solder connection (pure copper)

### Surface and volume

| Filter        | Solid core surface | Solid core volume  | Filter drier volume (shell volume) | Filter drier volume (net. volume) |
|---------------|--------------------|--------------------|------------------------------------|-----------------------------------|
|               | [in <sup>2</sup> ] | [in <sup>3</sup> ] | [fl. oz.]                          | [fl. oz.]                         |
| DML / DCL 1.5 | 7.2                | 1.5                | 1.7                                | 1.21                              |
| DML / DCL 03  | 13.0               | 3.0                | 2.7                                | 1.28                              |
| DML / DCL 05  | 15.0               | 4.0                | 4.0                                | 1.72                              |
| DML / DCL 08  | 20.0               | 6.0                | 5.7                                | 2.18                              |
| DML / DCL 16  | 34.0               | 14.0               | 12.0                               | 4.11                              |
| DML / DCL 30  | 59.0               | 30.0               | 24.3                               | 7.58                              |
| DML / DCL 41  | 79.0               | 42.0               | 32.7                               | 9.66                              |
| DML / DCL 60  | 117.0              | 60.0               | 45.3                               | 11.89                             |
| DML / DCL 75  | 158.0              | 83.0               | 61.3                               | 15.23                             |

### Acid capacity

| Filter  | Acid capacity <sup>1)</sup> |
|---------|-----------------------------|
|         | [oz.]                       |
| DCL 1.5 | 0.01                        |
| DCL 03  | 0.02                        |
| DCL 05  | 0.03                        |
| DCL 08  | 0.05                        |
| DCL 16  | 0.11                        |
| DCL 30  | 0.23                        |
| DCL 41  | 0.31                        |
| DCL 60  | 0.45                        |
| DCL 75  | 0.63                        |

<sup>1)</sup> Adsorption capacity of oleic acid at 0.05 TAN (Total Acid Number)

### Maximum working pressure and allowable temperature

| Filter size                 | Connection type    | Connection            | Max. working pressure MWP | Temperature range |
|-----------------------------|--------------------|-----------------------|---------------------------|-------------------|
| [in <sup>3</sup> ]          |                    | [in.]                 | [psig]                    | [°F]              |
| 1.5, 03, 05, 08, 16, 30, 60 | Solder pure copper | 1/4 – 1 1/8 ODM / ODF | 667                       | -40 – 160         |
| 38, 41                      | Solder pure copper | 1/4 – 1 1/8 ODM / ODF | 500                       | -40 – 160         |
| 75                          | Solder pure copper | 3/4 – 1 1/8 ODM / ODF | 500                       | -40 – 160         |
| 03 – 75                     | Flare              | 1/4 – 3/4             | 667                       | -40 – 160         |

**Technical data and capacities**
**Drying and liquid capacity, type DML**

| Type          | Drying capacity [lb] refrigerant <sup>1)</sup> |       |       |       |       |       |       |       |       |       |       |       |       |       | Liquid capacity [TR] <sup>2)</sup> |       |       |       |       |       |       |
|---------------|------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------------|-------|-------|-------|-------|-------|-------|
|               | R134a                                          |       | R404A |       | R507  |       | R22   |       | R407C |       | R410A |       | R32   |       | R134a                              | R404A | R507  | R22   | R407C | R410A | R32   |
|               | [°F]                                           |       |       |       |       |       |       |       |       |       |       |       |       |       |                                    |       |       |       |       |       |       |
|               | 75                                             | 125   | 75    | 125   | 75    | 125   | 75    | 125   | 75    | 125   | 75    | 125   | 75    | 125   |                                    |       |       |       |       |       |       |
| DML 1.52s     | 6.4                                            | 6.0   | 6.8   | 6.6   | 7.1   | 6.4   | 6.4   | 6.0   | 6.4   | 6.0   | 5.7   | 5.3   | 6.0   | 5.5   | 1.70                               | 1.20  | 1.10  | 1.80  | 1.70  | 1.70  | 2.50  |
| DML 1.52x2/2s | 6.4                                            | 6.0   | 6.8   | 6.6   | 7.1   | 6.4   | 6.4   | 6.0   | 6.4   | 6.0   | 5.7   | 5.3   | 6.0   | 5.5   | 1.70                               | 1.20  | 1.10  | 1.80  | 1.70  | 1.70  | 2.50  |
| DML 032/032s  | 10.9                                           | 10.3  | 11.8  | 11.2  | 12.0  | 11.1  | 11.1  | 10.3  | 11.0  | 10.1  | 10.0  | 9.2   | 10.1  | 9.3   | 1.90                               | 1.42  | 1.38  | 2.12  | 2.02  | 2.11  | 3.09  |
| DML 032.5s    | 10.9                                           | 10.3  | 11.8  | 11.2  | 12.0  | 11.1  | 11.1  | 10.3  | 11.0  | 10.1  | 10.0  | 9.2   | 10.1  | 9.3   | 2.73                               | 1.98  | 1.92  | 2.99  | 2.84  | 2.93  | 4.30  |
| DML 033/033s  | 10.9                                           | 10.3  | 11.8  | 11.2  | 12.0  | 11.1  | 11.1  | 10.3  | 11.0  | 10.1  | 10.0  | 9.2   | 10.1  | 9.3   | 3.65                               | 2.80  | 2.72  | 4.11  | 3.94  | 4.17  | 6.10  |
| DML 034s      | 10.9                                           | 10.3  | 11.8  | 11.2  | 12.0  | 11.1  | 11.1  | 10.3  | 11.0  | 10.1  | 10.0  | 9.2   | 10.1  | 9.3   | 7.03                               | 5.72  | 5.56  | 8.13  | 7.86  | 8.57  | 12.47 |
| DML 052/052s  | 17.4                                           | 16.5  | 18.7  | 17.8  | 19.1  | 17.6  | 17.6  | 16.3  | 17.5  | 16.1  | 15.9  | 14.6  | 16.1  | 14.8  | 2.18                               | 1.60  | 1.55  | 2.40  | 2.28  | 2.37  | 3.47  |
| DML 052.5s    | 17.4                                           | 16.5  | 18.7  | 17.8  | 19.1  | 17.6  | 17.6  | 16.3  | 17.5  | 16.1  | 15.9  | 14.6  | 16.1  | 14.8  | 2.72                               | 1.99  | 1.93  | 3.00  | 2.85  | 2.95  | 4.33  |
| DML 053/053s  | 17.4                                           | 16.5  | 18.7  | 17.8  | 19.1  | 17.6  | 17.6  | 16.3  | 17.5  | 16.1  | 15.9  | 14.6  | 16.1  | 14.8  | 3.66                               | 2.79  | 2.71  | 4.10  | 3.92  | 4.15  | 6.06  |
| DML 054s      | 17.4                                           | 16.5  | 18.7  | 17.8  | 19.1  | 17.6  | 17.6  | 16.3  | 17.5  | 16.1  | 15.9  | 14.6  | 16.1  | 14.8  | 7.31                               | 5.91  | 5.74  | 8.43  | 8.14  | 8.83  | 12.87 |
| DML 055s      | 17.4                                           | 16.5  | 18.7  | 17.8  | 19.1  | 17.6  | 17.6  | 16.3  | 17.5  | 16.1  | 15.9  | 14.6  | 16.1  | 14.8  | 10.30                              | 8.26  | 8.03  | 11.84 | 11.42 | 12.35 | 18.00 |
| DML 082/082s  | 27.9                                           | 26.3  | 29.9  | 28.4  | 30.5  | 28.2  | 28.2  | 26.1  | 27.9  | 25.8  | 25.4  | 23.4  | 25.8  | 23.8  | 2.18                               | 1.55  | 1.50  | 2.37  | 2.23  | 2.28  | 3.35  |
| DML 082.5s    | 27.9                                           | 26.3  | 29.9  | 28.4  | 30.5  | 28.2  | 28.2  | 26.1  | 27.9  | 25.8  | 25.4  | 23.4  | 25.8  | 23.8  | 3.00                               | 2.23  | 2.16  | 3.32  | 3.16  | 3.31  | 4.85  |
| DML 083/083s  | 27.9                                           | 26.3  | 29.9  | 28.4  | 30.5  | 28.2  | 28.2  | 26.1  | 27.9  | 25.8  | 25.4  | 23.4  | 25.8  | 23.8  | 4.03                               | 3.12  | 3.03  | 4.56  | 4.37  | 4.65  | 6.79  |
| DML 084/084s  | 27.9                                           | 26.3  | 29.9  | 28.4  | 30.5  | 28.2  | 28.2  | 26.1  | 27.9  | 25.8  | 25.4  | 23.4  | 25.8  | 23.8  | 8.14                               | 6.07  | 5.88  | 9.03  | 8.60  | 8.99  | 13.17 |
| DML 085/085s  | 27.9                                           | 26.3  | 29.9  | 28.4  | 30.5  | 28.2  | 28.2  | 26.1  | 27.9  | 25.8  | 25.4  | 23.4  | 25.8  | 23.8  | 12.46                              | 10.04 | 9.76  | 14.35 | 13.85 | 15.02 | 21.88 |
| DML 162/162s  | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 2.18                               | 1.54  | 1.50  | 2.36  | 2.23  | 2.28  | 3.35  |
| DML 162.5s    | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 3.01                               | 2.09  | 2.02  | 3.23  | 3.04  | 3.08  | 4.53  |
| DML 163/163s  | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 4.64                               | 3.18  | 3.08  | 4.95  | 4.64  | 4.67  | 6.88  |
| DML 164/164s  | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 9.15                               | 6.69  | 6.49  | 10.07 | 9.55  | 9.90  | 14.53 |
| DML 165/165s  | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 12.69                              | 10.41 | 10.12 | 14.74 | 14.26 | 15.59 | 22.69 |
| DML 166/166s  | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 12.95                              | 10.63 | 10.34 | 15.04 | 14.56 | 15.93 | 23.17 |
| DML 167s      | 61.2                                           | 57.8  | 65.7  | 62.3  | 66.9  | 61.8  | 61.9  | 57.3  | 61.3  | 56.6  | 55.8  | 51.4  | 56.4  | 52.0  | 12.49                              | 11.41 | 11.14 | 15.21 | 15.01 | 17.34 | 25.01 |
| DML 303/303s  | 127.2                                          | 120.2 | 136.7 | 129.6 | 139.2 | 128.6 | 128.8 | 119.1 | 127.5 | 117.8 | 116.0 | 106.9 | 117.5 | 108.5 | 4.46                               | 3.00  | 2.90  | 4.72  | 4.41  | 4.40  | 6.49  |
| DML 304/304s  | 127.2                                          | 120.2 | 136.7 | 129.6 | 139.2 | 128.6 | 128.8 | 119.1 | 127.5 | 117.8 | 116.0 | 106.9 | 117.5 | 108.5 | 9.24                               | 7.11  | 6.90  | 10.41 | 9.97  | 10.58 | 15.46 |
| DML 305/305s  | 127.2                                          | 120.2 | 136.7 | 129.6 | 139.2 | 128.6 | 128.8 | 119.1 | 127.5 | 117.8 | 116.0 | 106.9 | 117.5 | 108.5 | 13.00                              | 10.51 | 10.22 | 14.99 | 14.48 | 15.72 | 22.90 |
| DML 306/306s  | 127.2                                          | 120.2 | 136.7 | 129.6 | 139.2 | 128.6 | 128.8 | 119.1 | 127.5 | 117.8 | 116.0 | 106.9 | 117.5 | 108.5 | 12.43                              | 11.34 | 11.07 | 15.13 | 14.92 | 17.22 | 24.85 |
| DML 307s      | 127.2                                          | 120.2 | 136.7 | 129.6 | 139.2 | 128.6 | 128.8 | 119.1 | 127.5 | 117.8 | 116.0 | 106.9 | 117.5 | 108.5 | 18.27                              | 15.34 | 14.93 | 21.44 | 20.84 | 23.05 | 33.48 |
| DML 309s      | 127.2                                          | 120.2 | 136.7 | 129.6 | 139.2 | 128.6 | 128.8 | 119.1 | 127.5 | 117.8 | 116.0 | 106.9 | 117.5 | 108.5 | 23.78                              | 19.84 | 19.31 | 27.83 | 27.02 | 29.79 | 32.61 |
| DML 413       | 171.6                                          | 162.2 | 184.5 | 174.9 | 187.8 | 173.5 | 173.8 | 160.7 | 172.0 | 158.9 | 156.6 | 144.3 | 158.5 | 146.2 | 5.23                               | 3.54  | 3.42  | 5.54  | 5.19  | 5.19  | 7.65  |
| DML 414/414s  | 171.6                                          | 162.2 | 184.5 | 174.9 | 187.8 | 173.5 | 173.8 | 160.7 | 172.0 | 158.9 | 156.6 | 144.3 | 158.5 | 146.2 | 9.49                               | 7.52  | 7.31  | 10.85 | 10.44 | 11.23 | 16.38 |
| DML 415/415s  | 171.6                                          | 162.2 | 184.5 | 174.9 | 187.8 | 173.5 | 173.8 | 160.7 | 172.0 | 158.9 | 156.6 | 144.3 | 158.5 | 146.2 | 15.78                              | 11.90 | 11.54 | 17.61 | 16.80 | 17.66 | 25.85 |
| DML 417s      | 171.6                                          | 162.2 | 184.5 | 174.9 | 187.8 | 173.5 | 173.8 | 160.7 | 172.0 | 158.9 | 156.6 | 144.3 | 158.5 | 146.2 | 18.98                              | 16.01 | 15.59 | 22.32 | 21.71 | 24.08 | 34.96 |
| DML 419s      | 171.6                                          | 162.2 | 184.5 | 174.9 | 187.8 | 173.5 | 173.8 | 160.7 | 172.0 | 158.9 | 156.6 | 144.3 | 158.5 | 146.2 | 27.10                              | 21.69 | 21.08 | 31.11 | 29.99 | 32.42 | 47.25 |
| DML 604s      | 257.6                                          | 243.5 | 276.9 | 262.5 | 281.9 | 260.4 | 260.9 | 241.2 | 258.2 | 238.6 | 235.0 | 216.5 | 237.9 | 219.6 | 7.93                               | 7.45  | 7.29  | 9.77  | 9.69  | 11.37 | 16.36 |
| DML 607s      | 257.6                                          | 243.5 | 276.9 | 262.5 | 281.9 | 260.4 | 260.9 | 241.2 | 258.2 | 238.6 | 235.0 | 216.5 | 237.9 | 219.6 | 19.93                              | 19.94 | 19.54 | 25.16 | 25.22 | 30.71 | 43.90 |
| DML 609s      | 257.6                                          | 243.5 | 276.9 | 262.5 | 281.9 | 260.4 | 260.9 | 241.2 | 258.2 | 238.6 | 235.0 | 216.5 | 237.9 | 219.6 | 17.45                              | 20.77 | 20.59 | 23.25 | 23.99 | 33.37 | 46.38 |
| DML 757s      | 352.3                                          | 333.0 | 378.7 | 359.0 | 385.5 | 356.1 | 356.8 | 329.9 | 353.0 | 326.2 | 321.3 | 296.1 | 325.2 | 300.0 | 24.16                              | 20.39 | 19.85 | 28.42 | 27.65 | 30.66 | 44.51 |
| DML 759s      | 352.3                                          | 333.0 | 378.7 | 359.0 | 385.5 | 356.1 | 356.8 | 329.9 | 353.0 | 326.2 | 321.3 | 296.1 | 325.2 | 300.0 | 23.95                              | 24.79 | 24.34 | 30.61 | 30.86 | 38.41 | 54.69 |

<sup>1)</sup> Drying capacity is based on following moisture content test standards before and after drying:

- R32: 990 ppm W - 50 ppm W
- R134a: 1050 ppm W - 50 ppm W
- R404A, R507: 1020 ppm W - 50 ppm W
- R407C: 1020 ppm W - 50 ppm W
- R410A: 1050 ppm W - 50 ppm W
- R22: 1050 ppm W - 60 ppm W

in accordance with ARI 710-2004

<sup>2)</sup> Given in accordance with ARI 710-2004 for

- t<sub>a</sub>= 5 °F
- t<sub>r</sub>= 85 °F
- Δp = 1 psi

For technical data on other refrigerants, please contact your Danfoss Sales Representative

## Data sheet | ELIMINATOR® Hermetic filter drier, types DCL and DML

### Technical data and capacities (continued)

#### Drying and liquid capacity, type DCL

| Type               | Drying capacity [lb] refrigerant <sup>1)</sup> |       |       |       |       |       |       |       |       |       |       |       |       |       | Liquid capacity [TR] <sup>2)</sup> |       |       |       |       |       |       |
|--------------------|------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------------------|-------|-------|-------|-------|-------|-------|
|                    | R134a                                          |       | R404A |       | R507  |       | R22   |       | R407C |       | R410A |       | R32   |       | R134a                              | R404A | R507  | R22   | R407C | R410A | R32   |
|                    | 75                                             | 125   | 75    | 125   | 75    | 125   | 75    | 125   | 75    | 125   | 75    | 125   | 75    | 125   |                                    |       |       |       |       |       |       |
| DCL 1.52XL/2.8mm s | 5.1                                            | 4.6   | 5.3   | 5.1   | 5.5   | 5.1   | 5.1   | 4.6   | 5.1   | 4.6   | 4.6   | 4.2   | 4.6   | 4.2   | 0.80                               | 0.50  | 0.50  | 0.90  | 0.80  | 0.80  | 1.20  |
| DCL 032/032s       | 8.5                                            | 8.0   | 9.1   | 8.7   | 9.3   | 8.6   | 8.6   | 8.0   | 8.5   | 7.9   | 7.8   | 7.2   | 7.9   | 7.3   | 1.90                               | 1.42  | 1.38  | 2.12  | 2.02  | 2.11  | 3.09  |
| DCL 032.5s         | 8.5                                            | 8.0   | 9.1   | 8.7   | 9.3   | 8.6   | 8.6   | 8.0   | 8.5   | 7.9   | 7.8   | 7.2   | 7.9   | 7.3   | 2.73                               | 1.98  | 1.92  | 2.99  | 2.84  | 2.93  | 4.30  |
| DCL 033/033s       | 8.5                                            | 8.0   | 9.1   | 8.7   | 9.3   | 8.6   | 8.6   | 8.0   | 8.5   | 7.9   | 7.8   | 7.2   | 7.9   | 7.3   | 3.65                               | 2.80  | 2.72  | 4.11  | 3.94  | 4.17  | 6.10  |
| DCL 052/052s       | 13.6                                           | 12.8  | 14.6  | 13.8  | 14.9  | 13.7  | 13.8  | 12.7  | 13.6  | 12.6  | 12.4  | 11.4  | 12.6  | 11.7  | 2.18                               | 1.60  | 1.55  | 2.40  | 2.28  | 2.37  | 3.47  |
| DCL 052.5s         | 13.6                                           | 12.8  | 14.6  | 13.8  | 14.9  | 13.7  | 13.8  | 12.7  | 13.6  | 12.6  | 12.4  | 11.4  | 12.6  | 11.7  | 2.72                               | 1.99  | 1.93  | 3.00  | 2.85  | 2.95  | 4.33  |
| DCL 053/053s       | 13.6                                           | 12.8  | 14.6  | 13.8  | 14.9  | 13.7  | 13.8  | 12.7  | 13.6  | 12.6  | 12.4  | 11.4  | 12.6  | 11.7  | 3.66                               | 2.79  | 2.71  | 4.10  | 3.92  | 4.15  | 6.06  |
| DCL 082/082s       | 21.7                                           | 20.5  | 23.3  | 22.1  | 23.8  | 21.9  | 22.0  | 20.3  | 21.8  | 20.1  | 19.8  | 18.2  | 20.1  | 18.5  | 2.18                               | 1.55  | 1.50  | 2.37  | 2.23  | 2.28  | 3.35  |
| DCL 082.5s         | 21.7                                           | 20.5  | 23.3  | 22.1  | 23.8  | 21.9  | 22.0  | 20.3  | 21.8  | 20.1  | 19.8  | 18.2  | 20.1  | 18.5  | 3.00                               | 2.23  | 2.16  | 3.32  | 3.16  | 3.31  | 4.85  |
| DCL 083/083s       | 21.7                                           | 20.5  | 23.3  | 22.1  | 23.8  | 21.9  | 22.0  | 20.3  | 21.8  | 20.1  | 19.8  | 18.2  | 20.1  | 18.5  | 4.03                               | 3.12  | 3.03  | 4.56  | 4.37  | 4.65  | 6.79  |
| DCL 084/084s       | 21.7                                           | 20.5  | 23.3  | 22.1  | 23.8  | 21.9  | 22.0  | 20.3  | 21.8  | 20.1  | 19.8  | 18.2  | 20.1  | 18.5  | 8.14                               | 6.07  | 5.88  | 9.03  | 8.60  | 8.99  | 13.17 |
| DCL 162/162s       | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 2.18                               | 1.54  | 1.50  | 2.36  | 2.23  | 2.28  | 3.35  |
| DCL 162.5s         | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 3.01                               | 2.09  | 2.02  | 3.23  | 3.04  | 3.08  | 4.53  |
| DCL 163/163s       | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 4.64                               | 3.18  | 3.08  | 4.95  | 4.64  | 4.67  | 6.88  |
| DCL 164/164s       | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 9.15                               | 6.69  | 6.49  | 10.07 | 9.55  | 9.90  | 14.53 |
| DCL 165/165s       | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 12.69                              | 10.41 | 10.12 | 14.74 | 14.26 | 15.59 | 22.69 |
| DCL 166/166s       | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 12.95                              | 10.63 | 10.34 | 15.04 | 14.56 | 15.93 | 23.17 |
| DCL 167s           | 47.7                                           | 45.1  | 51.3  | 48.6  | 52.2  | 48.2  | 48.3  | 44.7  | 47.8  | 44.2  | 43.5  | 40.1  | 44.1  | 40.6  | 12.49                              | 11.41 | 11.14 | 15.21 | 15.01 | 17.34 | 25.01 |
| DCL 303/303s       | 100.5                                          | 95.0  | 108.0 | 102.4 | 109.9 | 101.6 | 101.8 | 94.1  | 100.7 | 93.0  | 91.6  | 84.4  | 92.8  | 85.5  | 4.46                               | 3.00  | 2.90  | 4.72  | 4.41  | 4.40  | 6.49  |
| DCL 304/304s       | 100.5                                          | 95.0  | 108.0 | 102.4 | 109.9 | 101.6 | 101.8 | 94.1  | 100.7 | 93.0  | 91.6  | 84.4  | 92.8  | 85.5  | 9.24                               | 7.11  | 6.90  | 10.41 | 9.97  | 10.58 | 15.46 |
| DCL 305/305s       | 100.5                                          | 95.0  | 108.0 | 102.4 | 109.9 | 101.6 | 101.8 | 94.1  | 100.7 | 93.0  | 91.6  | 84.4  | 92.8  | 85.5  | 13.00                              | 10.51 | 10.22 | 14.99 | 14.48 | 15.72 | 22.90 |
| DCL 306/306s       | 100.5                                          | 95.0  | 108.0 | 102.4 | 109.9 | 101.6 | 101.8 | 94.1  | 100.7 | 93.0  | 91.6  | 84.4  | 92.8  | 85.5  | 12.43                              | 11.34 | 11.07 | 15.13 | 14.92 | 17.22 | 24.85 |
| DCL 307s           | 100.5                                          | 95.0  | 108.0 | 102.4 | 109.9 | 101.6 | 101.8 | 94.1  | 100.7 | 93.0  | 91.6  | 84.4  | 92.8  | 85.5  | 18.27                              | 15.34 | 14.93 | 21.44 | 20.84 | 23.05 | 33.48 |
| DCL 309s           | 100.5                                          | 95.0  | 108.0 | 102.4 | 109.9 | 101.6 | 101.8 | 94.1  | 100.7 | 93.0  | 91.6  | 84.4  | 92.8  | 85.5  | 23.78                              | 19.84 | 19.31 | 27.83 | 27.02 | 29.79 | 32.61 |
| DCL 413            | 139.5                                          | 131.9 | 150.0 | 142.2 | 152.7 | 141.0 | 141.3 | 130.7 | 139.8 | 129.2 | 127.3 | 117.3 | 128.7 | 118.8 | 5.23                               | 3.54  | 3.42  | 5.54  | 5.19  | 5.19  | 7.65  |
| DCL 414/414s       | 139.5                                          | 131.9 | 150.0 | 142.2 | 152.7 | 141.0 | 141.3 | 130.7 | 139.8 | 129.2 | 127.3 | 117.3 | 128.7 | 118.8 | 9.49                               | 7.52  | 7.31  | 10.85 | 10.44 | 11.23 | 16.38 |
| DCL 415/415s       | 139.5                                          | 131.9 | 150.0 | 142.2 | 152.7 | 141.0 | 141.3 | 130.7 | 139.8 | 129.2 | 127.3 | 117.3 | 128.7 | 118.8 | 15.78                              | 11.90 | 11.54 | 17.61 | 16.80 | 17.66 | 25.85 |
| DCL 417s           | 139.5                                          | 131.9 | 150.0 | 142.2 | 152.7 | 141.0 | 141.3 | 130.7 | 139.8 | 129.2 | 127.3 | 117.3 | 128.7 | 118.8 | 18.98                              | 16.01 | 15.59 | 22.32 | 21.71 | 24.08 | 34.96 |
| DCL 419s           | 139.5                                          | 131.9 | 150.0 | 142.2 | 152.7 | 141.0 | 141.3 | 130.7 | 139.8 | 129.2 | 127.3 | 117.3 | 128.7 | 118.8 | 27.10                              | 21.69 | 21.08 | 31.11 | 29.99 | 32.42 | 47.25 |
| DCL 604s           | 200.9                                          | 189.9 | 216.0 | 204.8 | 219.9 | 203.1 | 203.5 | 188.2 | 201.4 | 186.1 | 183.3 | 168.9 | 185.4 | 171.1 | 7.93                               | 7.45  | 7.29  | 9.77  | 9.69  | 11.37 | 16.36 |
| DCL 607s           | 200.9                                          | 189.9 | 216.0 | 204.8 | 219.9 | 203.1 | 203.5 | 188.2 | 201.4 | 186.1 | 183.3 | 168.9 | 185.4 | 171.1 | 19.93                              | 19.94 | 19.54 | 25.16 | 25.22 | 30.71 | 43.90 |
| DCL 609s           | 200.9                                          | 189.9 | 216.0 | 204.8 | 219.9 | 203.1 | 203.5 | 188.2 | 201.4 | 186.1 | 183.3 | 168.9 | 185.4 | 171.1 | 17.45                              | 20.77 | 20.59 | 23.25 | 23.99 | 33.37 | 46.38 |
| DCL 757s           | 279.1                                          | 263.8 | 300.0 | 284.4 | 305.4 | 282.1 | 282.7 | 261.3 | 279.7 | 258.4 | 254.5 | 234.5 | 257.7 | 237.7 | 24.16                              | 20.39 | 19.85 | 28.42 | 27.65 | 30.66 | 44.51 |
| DCL 759s           | 279.1                                          | 263.8 | 300.0 | 284.4 | 305.4 | 282.1 | 282.7 | 261.3 | 279.7 | 258.4 | 254.5 | 234.5 | 257.7 | 237.7 | 23.95                              | 24.79 | 24.34 | 30.61 | 30.86 | 38.41 | 54.69 |

<sup>1)</sup> Drying capacity is based on following moisture content test standards before and after drying:

- R32: 990 ppm W - 50 ppm W
- R134a: 1050 ppm W - 50 ppm W
- R404A, R507: 1020 ppm W - 50 ppm W
- R407C: 1020 ppm W - 50 ppm W
- R410A: 1050 ppm W - 50 ppm W
- R22: 1050 ppm W - 60 ppm W

in accordance with ARI 710-2004

<sup>2)</sup> Given in accordance with ARI 710-2004 for

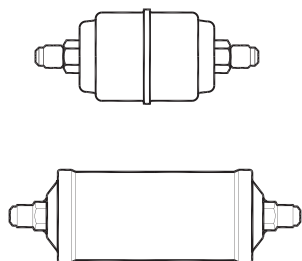
- $t_0 = 5^\circ\text{F}$
- $t_c = 85^\circ\text{F}$
- $\Delta p = 1\text{ psi}$

For technical data on other refrigerants, please contact your Danfoss Sales Representative

### Conversions

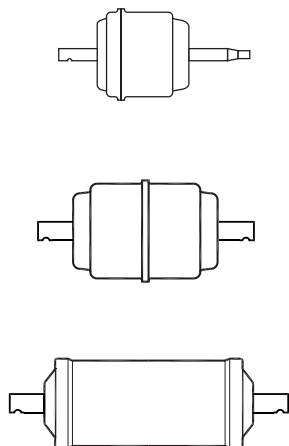
$$\text{Drops of water} = \frac{(\text{lbs of refrigerant} \times (\text{Initial PPM of water} - \text{Final PPM of water}))}{110}$$

See ARI standard 710-2004 for recommended initial and final PPM values for different refrigerants

**Ordering**

**Type DCL Flare**

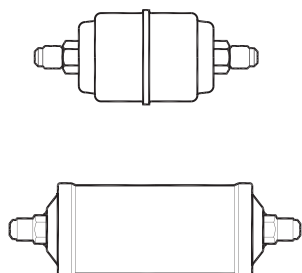
| Type    | Conn. |      | Multi pack             |      | Industrial pack<br>for OEM only |      |
|---------|-------|------|------------------------|------|---------------------------------|------|
|         | [in.] | [mm] | Code no.               | Qty. | Code no.                        | Qty. |
| DCL 032 | 1/4   | 6    | 023Z5000 <sup>1)</sup> | 32   | –                               | –    |
| DCL 032 | 1/4   | 6    | 023Z5075               | 32   | –                               | –    |
| DCL 033 | 3/8   | 10   | 023Z5001 <sup>1)</sup> | 32   | –                               | –    |
| DCL 033 | 3/8   | 10   | 023Z5089               | 32   | –                               | –    |
| DCL 052 | 1/4   | 6    | 023Z5002               | 24   | 023Z8002                        | 16   |
| DCL 053 | 3/8   | 10   | 023Z5003               | 24   | 023Z8003                        | 16   |
| DCL 082 | 1/4   | 6    | 023Z5004               | 24   | 023Z8004                        | 16   |
| DCL 083 | 3/8   | 10   | 023Z5005               | 24   | 023Z8005                        | 16   |
| DCL 084 | 1/2   | 12   | 023Z5006               | 24   | –                               | –    |
| DCL 162 | 1/4   | 6    | 023Z5007               | 12   | 023Z8007                        | 12   |
| DCL 163 | 3/8   | 10   | 023Z5008               | 12   | 023Z8008                        | 12   |
| DCL 164 | 1/2   | 12   | 023Z5009               | 12   | 023Z8009                        | 12   |
| DCL 165 | 5/8   | 16   | 023Z5010               | 12   | 023Z8010                        | 12   |
| DCL 166 | 3/4   | 19   | 023Z5011               | 12   | –                               | –    |
| DCL 303 | 3/8   | 10   | 023Z0012               | 8    | –                               | –    |
| DCL 304 | 1/2   | 12   | 023Z0013               | 8    | 023Z3013                        | 8    |
| DCL 305 | 5/8   | 16   | 023Z0014               | 8    | 023Z3014                        | 8    |
| DCL 306 | 3/4   | 19   | 023Z0156               | 8    | –                               | –    |
| DCL 414 | 1/2   | 12   | 023Z0102               | 8    | –                               | –    |
| DCL 415 | 5/8   | 16   | 023Z0103               | 8    | –                               | –    |

<sup>1)</sup> Wire mesh in filter drier outlet

**Ordering  
(continued)**

**Type DCL Solder (copper)**

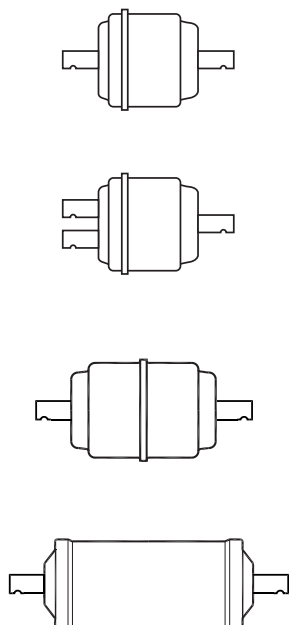
| Type               | Conn. | Multi pack             |      | Industrial pack<br>for OEM only |      | Conn. | Multi pack |      |
|--------------------|-------|------------------------|------|---------------------------------|------|-------|------------|------|
|                    | [in.] | Code no.               | Qty. | Code no.                        | Qty. | [mm]  | Code no.   | Qty. |
| DCL 1.52XL/2.8mm s | 1/4   | –                      | –    | 023Z8252                        | 36   | –     | –          | –    |
| DCL 032s           | 1/4   | 023Z5013 <sup>1)</sup> | 32   | 023Z8013 <sup>1)</sup>          | 28   | 3     | –          | –    |
| DCL 032.5s         | 5/16  | 023Z5014               | 32   | –                               | –    | 8     | –          | –    |
| DCL 033s           | 3/8   | 023Z5015               | 32   | –                               | –    | 10    | 023Z5016   | 32   |
| DCL 052s           | 1/4   | 023Z5018               | 24   | –                               | –    | 6     | –          | –    |
| DCL 053s           | 3/8   | 023Z5019               | 24   | 023Z8011                        | 16   | 10    | 023Z5020   | 24   |
| DCL 082s           | 1/4   | 023Z5022               | 24   | –                               | –    | 6     | –          | –    |
| DCL 083s           | 3/8   | 023Z5023               | 24   | 023Z8023                        | 16   | 10    | 023Z5024   | 24   |
| DCL 084s           | 1/2   | 023Z5026               | 24   | 023Z8026                        | 16   | 12    | 023Z5025   | 24   |
| DCL 085s           | 5/8   | 023Z5145               | 24   | –                               | –    | –     | –          | –    |
| DCL 162s           | 1/4   | 023Z5028               | 12   | –                               | –    | 6     | 023Z5027   | 12   |
| DCL 163s           | 3/8   | 023Z5029               | 12   | –                               | –    | 10    | 023Z5030   | 12   |
| DCL 164s           | 1/2   | 023Z5032               | 12   | 023Z8032                        | 12   | 12    | 023Z5031   | 12   |
| DCL 165s           | 5/8   | 023Z5033               | 12   | –                               | –    | 12    | –          | –    |
| DCL 166s           | 3/4   | 023Z5070               | 12   | –                               | –    | –     | –          | –    |
| DCL 167s           | 7/8   | 023Z5034               | 12   | –                               | –    | –     | –          | –    |
| DCL 303s           | 3/8   | 023Z0030               | 8    | –                               | –    | 10    | –          | –    |
| DCL 304s           | 1/2   | 023Z0031               | 8    | –                               | –    | 12    | –          | –    |
| DCL 305s           | 5/8   | 023Z0032               | 8    | 023Z3032                        | 8    | 16    | –          | –    |
| DCL 306s           | 3/4   | 023Z0033               | 8    | –                               | –    | 18    | 023Z0216   | 8    |
| DCL 307s           | 7/8   | 023Z0034               | 8    | –                               | –    | 22    | –          | –    |
| DCL 309s           | 1 1/8 | 023Z0035               | 8    | –                               | –    | 28    | –          | –    |
| DCL 414s           | 1/2   | 023Z0104               | 8    | –                               | –    | 12    | –          | –    |
| DCL 415s           | 5/8   | 023Z0105               | 8    | –                               | –    | 16    | –          | –    |
| DCL 417s           | 7/8   | 023Z0106               | 8    | –                               | –    | 22    | –          | –    |
| DCL 419s           | 1 1/8 | 023Z0107               | 8    | –                               | –    | 28    | –          | –    |
| DCL 607s           | 7/8   | 023Z0036               | 12   | –                               | –    | 22    | –          | –    |
| DCL 609s           | 1 1/8 | 023Z0037               | 12   | –                               | –    | 28    | –          | –    |
| DCL 757s           | 7/8   | 023Z0115               | 12   | –                               | –    | 22    | –          | –    |
| DCL 759s           | 1 1/8 | 023Z0116               | 12   | –                               | –    | 28    | –          | –    |

<sup>1)</sup> Wire mesh in filter drier outlet

**Ordering  
(continued)**

**Type DML Flare**

| Type    | Conn. |      | Multi pack             |      | Industrial pack<br>for OEM only |      |
|---------|-------|------|------------------------|------|---------------------------------|------|
|         | [in.] | [mm] | Code no.               | Qty. | Code no.                        | Qty. |
| DML 032 | 1/4   | 6    | 023Z5035 <sup>1)</sup> | 32   | 023Z8035 <sup>1)</sup>          | 28   |
| DML 033 | 3/8   | 10   | 023Z5036 <sup>1)</sup> | 32   | 023Z8036 <sup>1)</sup>          | 28   |
| DML 033 | 3/8   | 10   | 023Z5090               | 32   | –                               | –    |
| DML 052 | 1/4   | 6    | 023Z5037               | 24   | 023Z8037                        | 16   |
| DML 053 | 3/8   | 10   | 023Z5038               | 24   | 023Z8038                        | 16   |
| DML 082 | 1/4   | 6    | 023Z5039               | 24   | 023Z8039                        | 16   |
| DML 083 | 3/8   | 10   | 023Z5040               | 24   | 023Z8040                        | 16   |
| DML 084 | 1/2   | 12   | 023Z5041               | 24   | 023Z8041                        | 16   |
| DML 085 | 5/8   | 16   | 023Z5073               | 24   | –                               | –    |
| DML 162 | 1/4   | 6    | 023Z5042               | 12   | 023Z8042                        | 12   |
| DML 163 | 3/8   | 10   | 023Z5043               | 12   | 023Z8043                        | 12   |
| DML 164 | 1/2   | 12   | 023Z5044               | 12   | 023Z8044                        | 12   |
| DML 165 | 5/8   | 16   | 023Z5045               | 12   | 023Z8045                        | 12   |
| DML 166 | 3/4   | 19   | 023Z5046               | 12   | –                               | –    |
| DML 303 | 3/8   | 10   | 023Z0049               | 8    | 023Z3049                        | 8    |
| DML 304 | 1/2   | 12   | 023Z0050               | 8    | 023Z3050                        | 8    |
| DML 305 | 5/8   | 16   | 023Z0051               | 8    | 023Z3051                        | 8    |
| DML 306 | 3/4   | 19   | 023Z0193               | 8    | 023Z3193                        | 8    |
| DML 385 | 5/8   | 16   | 023Z0189               | 8    | –                               | –    |
| DML 413 | 3/8   | 10   | 023Z0108               | 8    | –                               | –    |
| DML 414 | 1/2   | 12   | 023Z0109               | 8    | –                               | –    |
| DML 415 | 5/8   | 16   | 023Z0110               | 8    | 023Z3110                        | 6    |
| DML 416 | 3/4   | 19   | 023Z0195               | 8    | 023Z0210                        | 6    |

<sup>1)</sup> Wire mesh in filter drier outlet

**Ordering  
(continued)**

**Type DML Solder (copper)**

| Type          | Conn. | Multi pack             |      | Industrial pack<br>for OEM only |      | Conn. | Multi pack |      | Industrial pack<br>for OEM only |      |
|---------------|-------|------------------------|------|---------------------------------|------|-------|------------|------|---------------------------------|------|
|               | [in.] | Code no.               | Qty. | Code no.                        | Qty. | [mm]  | Code no.   | Qty. | Code no.                        | Qty. |
| DML 1.52s     | 1/4   | —                      | —    | 023Z8253                        | 36   | —     | —          | —    | —                               | —    |
| DML 1.52x2/2s | 1/4   | —                      | —    | 023Z8250                        | 36   | —     | —          | —    | —                               | —    |
| DML 032s      | 1/4   | 023Z5048 <sup>1)</sup> | 32   | 023Z8048 <sup>1)</sup>          | 28   | 6     | —          | —    | 023Z8047                        | 28   |
| DML 032.5s    | 5/16  | 023Z5049               | 32   | —                               | —    | 8     | —          | —    | —                               | —    |
| DML 033s      | 3/8   | 023Z5050               | 32   | 023Z8050                        | 28   | 10    | 023Z5051   | 32   | —                               | —    |
| DML 034s      | 3/8   | 023Z5121               | 32   | —                               | —    | 12    | —          | —    | —                               | —    |
| DML 052s      | 1/4   | 023Z5053               | 24   | —                               | —    | 6     | 023Z5052   | 24   | —                               | —    |
| DML 053s      | 3/8   | 023Z5054               | 24   | 023Z8054                        | 16   | 10    | 023Z5055   | 24   | 023Z8055                        | 16   |
| DML 054s      | 1/2   | 023Z5101               | 24   | —                               | —    | —     | —          | —    | —                               | —    |
| DML 055s      | 5/8   | 023Z5100               | 24   | —                               | —    | 16    | 023Z5100   | 24   | —                               | —    |
| DML 082s      | 1/4   | 023Z5057               | 24   | —                               | —    | 6     | —          | —    | —                               | —    |
| DML 082.5s    | 5/16  | 023Z5117               | 24   | —                               | —    | 8     | —          | —    | —                               | —    |
| DML 083s      | 3/8   | 023Z5058               | 24   | —                               | —    | 10    | 023Z5059   | 24   | —                               | —    |
| DML 084s      | 1/2   | 023Z5061               | 24   | —                               | —    | 12    | 023Z5060   | 24   | —                               | —    |
| DML 085s      | 5/8   | 023Z5072               | 24   | —                               | —    | 16    | —          | —    | —                               | —    |
| DML 162s      | 1/4   | 023Z5063               | 12   | —                               | —    | 6     | —          | —    | —                               | —    |
| DML 163s      | 3/8   | 023Z5064               | 12   | —                               | —    | 10    | 023Z5065   | 12   | —                               | —    |
| DML 164s      | 1/2   | 023Z5067               | 12   | 023Z8067                        | 12   | 12    | 023Z5066   | 12   | —                               | —    |
| DML 165s      | 5/8   | 023Z5068               | 12   | 023Z8068                        | 12   | 16    | —          | —    | —                               | —    |
| DML 166s      | 3/4   | 023Z5071               | 12   | 023Z8071                        | 12   | 19    | —          | —    | —                               | —    |
| DML 167s      | 7/8   | 023Z5069               | 12   | —                               | —    | 22    | —          | —    | —                               | —    |
| DML 303s      | 3/8   | 023Z0067               | 8    | —                               | —    | 10    | —          | —    | —                               | —    |
| DML 304s      | 1/2   | 023Z0068               | 8    | —                               | —    | 12    | —          | —    | —                               | —    |
| DML 305s      | 5/8   | 023Z0069               | 8    | 023Z3069                        | 8    | 16    | —          | —    | —                               | —    |
| DML 306s      | 3/4   | 023Z0070               | 8    | —                               | —    | 19    | —          | —    | —                               | —    |
| DML 307s      | 7/8   | 023Z0071               | 8    | 023Z3071                        | 8    | 22    | —          | —    | —                               | —    |
| DML 309s      | 1 1/8 | 023Z0072               | 8    | —                               | —    | 28    | —          | —    | —                               | —    |
| DML 414s      | 1/2   | 023Z0111               | 8    | —                               | —    | 12    | —          | —    | —                               | —    |
| DML 415s      | 5/8   | 023Z0112               | 8    | —                               | —    | 16    | —          | —    | —                               | —    |
| DML 416s      | 3/4   | —                      | —    | —                               | —    | 19    | 023Z8246   | 8    | —                               | —    |
| DML 417s      | 7/8   | 023Z0113               | 8    | —                               | —    | 22    | —          | —    | —                               | —    |
| DML 419s      | 1 1/8 | 023Z0114               | 8    | 023Z3114                        | 6    | 28    | —          | —    | —                               | —    |
| DML 604s      | 1/2   | —                      | —    | —                               | —    | 12    | —          | —    | —                               | —    |
| DML 607s      | 7/8   | 023Z0073               | 12   | —                               | —    | 22    | —          | —    | —                               | —    |
| DML 609s      | 1 1/8 | 023Z0074               | 12   | —                               | —    | 28    | —          | —    | —                               | —    |
| DML 757s      | 7/8   | 023Z0117               | 12   | —                               | —    | 22    | —          | —    | —                               | —    |
| DML 759s      | 1 1/8 | 023Z0118               | 12   | —                               | —    | 28    | —          | —    | —                               | —    |

<sup>1)</sup> Wire mesh in filter drier outlet



**Identification**
**Type codes**

| Type                                                           | Codes   | Description                                 |
|----------------------------------------------------------------|---------|---------------------------------------------|
| Filter drier                                                   | D       | Drier                                       |
| Solid core                                                     | C       | 80% Molecular Sieve / 20% activated alumina |
|                                                                | M       | 100% Molecular Sieve core                   |
| Application                                                    | L       | Liquid line                                 |
| Size (volume)                                                  | 1.5     | 1.5 in <sup>3</sup>                         |
|                                                                | 03      | 3 in <sup>3</sup>                           |
|                                                                | 05      | 5 in <sup>3</sup>                           |
|                                                                | 08      | 8 in <sup>3</sup>                           |
|                                                                | 16      | 16 in <sup>3</sup>                          |
|                                                                | 30      | 30 in <sup>3</sup>                          |
|                                                                | 38      | 38 in <sup>3</sup>                          |
|                                                                | 41      | 41 in <sup>3</sup>                          |
|                                                                | 60      | 60 in <sup>3</sup>                          |
|                                                                | 75      | 75 in <sup>3</sup>                          |
| Connection<br>(filter connection in 1/8 of an inch increments) | 2       | 1/4 in. / 6 mm                              |
|                                                                | 2.5     | 5/16 in. / 8 mm                             |
|                                                                | 3       | 3/8 in. / 10 mm                             |
|                                                                | 4       | 1/2 in. / 12 mm                             |
|                                                                | 5       | 5/8 in. / 16 mm                             |
|                                                                | 6       | 3/4 in. / 18 (19) mm                        |
|                                                                | 7       | 7/8 in. / 22 mm                             |
|                                                                | 9       | 1 1/8 in. / 28 mm                           |
| Connection type                                                | (blank) | Flare connection                            |
|                                                                | s       | Solder connection (pure copper)             |

**Example for type codes**

| D            | C          | L           | 05            | 3                                                           | s               |
|--------------|------------|-------------|---------------|-------------------------------------------------------------|-----------------|
| ↓            | ↓          | ↓           | ↓             | ↓                                                           | ↓               |
| Filter drier | Solid core | Application | Size (volume) | Connection (filter connection in 1/8 of an inch increments) | Connection type |

**DML 1.52x2/2s**

| D            | M          | L           | 1.5           | 2                                                           | x2/2                                                                | s               |
|--------------|------------|-------------|---------------|-------------------------------------------------------------|---------------------------------------------------------------------|-----------------|
| ↓            | ↓          | ↓           | ↓             | ↓                                                           | ↓                                                                   | ↓               |
| Filter drier | Solid core | Application | Size (volume) | Connection (filter connection in 1/8 of an inch increments) | Dual connector inlet/ Connection outlet in 1/8 of an in. increments | Connection type |

## Selection

Type selection is made considering the application

| Refrigerant and oil types |                            | DCL                           | DML         |
|---------------------------|----------------------------|-------------------------------|-------------|
| Refrigerant               | HFO                        | Recommended                   | Recommended |
|                           | HC <sup>1)</sup>           | Recommended                   | Recommended |
|                           | HFC                        | Recommended                   | Recommended |
|                           | HCFC                       | Recommended                   | Recommended |
| Oil                       | Mineral or AB              | Recommended                   | Recommended |
|                           | POE or PAG, pure           | Recommended                   | Recommended |
|                           | POE or PAG, with additives | Not recommended <sup>2)</sup> | Recommended |

<sup>1)</sup> Only solder versions (cu-plated / pure copper) and connection sizes below 25 mm are approved for flammable refrigerants now.

<sup>2)</sup> DCL Hermetic filter driers contain activated alumina, which is a polar material used for acid adsorption. Many oil additives are also polar substances and can be adsorbed by the activated alumina, rendering them useless, and reducing the drier's acid capacity, though this is not harmful to the system.

## Selection example

Select the appropriate type (DML or DCL) based on refrigerant and oil type. Then select the drier size based on the adsorption and liquid capacity required.

c. Result

DML 163 or DML 163s can be used

If the initial moisture content is very small or a planned change of the filter drier is considered, a smaller filter drier size can be chosen.

a. Amount of charge: 55 lbs R134a at tL = 75 °F  
To dry 55 lbs R134a at 75 °F from 1050 to 60 ppm moisture, a DML 16 is necessary

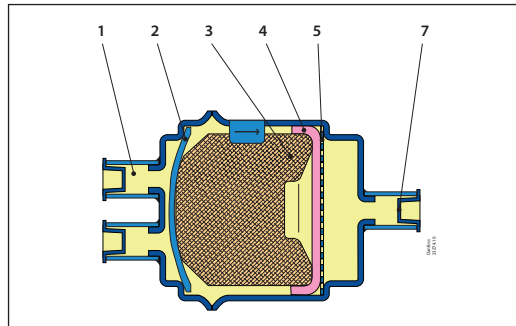
b. Cooling capacity: Q<sub>e</sub> = 5.7 TR  
To obtain a mass flow corresponding to 5.7 TR cooling capacity with a DML 16 filter drier, a 3/8 in. connection must be chosen.  
Larger connections can be chosen in accordance with the liquid line dimension

| Type          | Drying capacity [lb] refrigerant <sup>1)</sup> |      |       |      |      |      |      |      |       |      |       |      |      |      | Liquid capacity [TR] <sup>2)</sup> |       |       |       |       |       |       |  |
|---------------|------------------------------------------------|------|-------|------|------|------|------|------|-------|------|-------|------|------|------|------------------------------------|-------|-------|-------|-------|-------|-------|--|
|               | R134a                                          |      | R404A |      | R507 |      | R22  |      | R407C |      | R410A |      | R32  |      | R134a                              | R404A | R507  | R22   | R407C | R410A | R32   |  |
|               | [°F]                                           |      |       |      |      |      |      |      |       |      |       |      |      |      |                                    |       |       |       |       |       |       |  |
|               | 75                                             | 125  | 75    | 125  | 75   | 125  | 75   | 125  | 75    | 125  | 75    | 125  | 75   | 125  |                                    |       |       |       |       |       |       |  |
| DML 1.52s     | 6.4                                            | 6.0  | 6.8   | 6.6  | 7.1  | 6.4  | 6.4  | 6.0  | 6.4   | 6.0  | 5.7   | 5.3  | 6.0  | 5.5  | 1.70                               | 1.20  | 1.10  | 1.80  | 1.70  | 1.70  | 2.50  |  |
| DML 1.52x2/2s | 6.4                                            | 6.0  | 6.8   | 6.6  | 7.1  | 6.4  | 6.4  | 6.0  | 6.4   | 6.0  | 5.7   | 5.3  | 6.0  | 5.5  | 1.70                               | 1.20  | 1.10  | 1.80  | 1.70  | 1.70  | 2.50  |  |
| DML 032/032s  | 10.9                                           | 10.3 | 11.8  | 11.2 | 12.0 | 11.1 | 11.1 | 10.3 | 11.0  | 10.1 | 10.0  | 9.2  | 10.1 | 9.3  | 1.90                               | 1.42  | 1.38  | 2.12  | 2.02  | 2.11  | 3.09  |  |
|               |                                                |      |       |      |      |      |      |      |       |      |       |      |      |      |                                    |       |       |       |       |       |       |  |
| DML 162/162s  | 61.2                                           | 57.8 | 65.7  | 62.3 | 66.9 | 61.8 | 61.9 | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 2.18                               | 1.54  | 1.50  | 2.36  | 2.23  | 2.28  | 3.35  |  |
| DML 162.5s    | 61.2                                           | 57.8 | 65.7  | 62.3 | 66.9 | 61.8 | 61.9 | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 3.01                               | 2.09  | 2.02  | 3.23  | 3.04  | 3.08  | 4.53  |  |
| DML 163/163s  | 61.2                                           | 57.8 | 65.7  | 62.3 | 66.9 | 61.8 | 61.9 | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 4.64                               | 3.18  | 3.08  | 4.95  | 4.64  | 4.67  | 6.88  |  |
| DML 164/164s  | 61.2                                           | 57.8 | 65.7  | 62.3 | 66.9 | 61.8 | 61.9 | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 9.15                               | 6.69  | 6.49  | 10.07 | 9.55  | 9.90  | 14.53 |  |
| DML 165/165s  | 61.2                                           | 57.8 | 65.7  | 62.3 | 66.9 | 61.8 | 61.9 | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 12.69                              | 10.41 | 10.12 | 14.74 | 14.26 | 15.59 | 22.69 |  |
| DML 166/166s  | 61.2                                           | 57.8 | 65.7  | 62.3 | 66.9 | 61.8 | 61.9 | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 12.95                              | 10.63 | 10.34 | 15.04 | 14.56 | 15.93 | 23.17 |  |
| DML 167s      |                                                |      |       |      |      |      |      | 57.3 | 61.3  | 56.6 | 55.8  | 51.4 | 56.4 | 52.0 | 12.49                              | 11.14 | 10.84 |       |       | 17.34 | 25.01 |  |

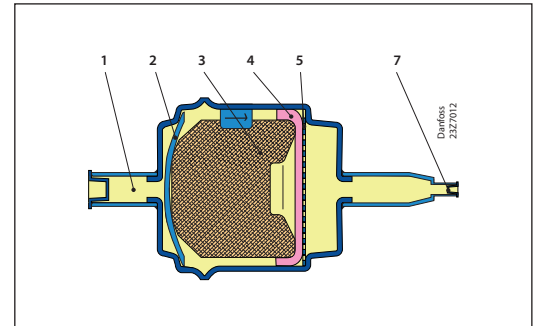


Design / Function

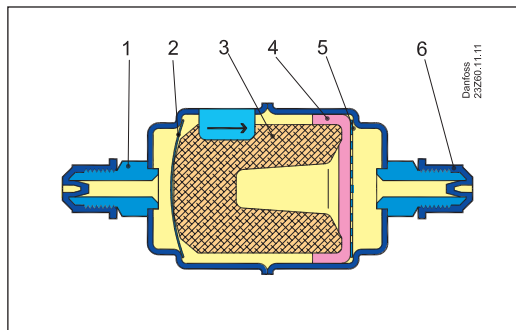
DML 1.5



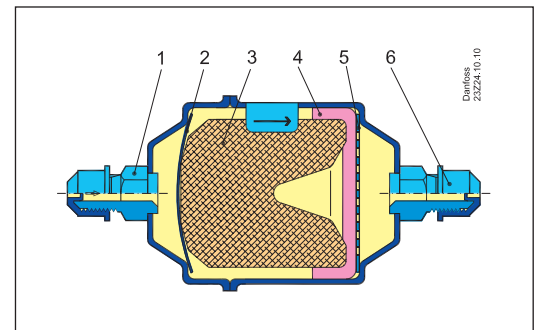
DCL 1.5



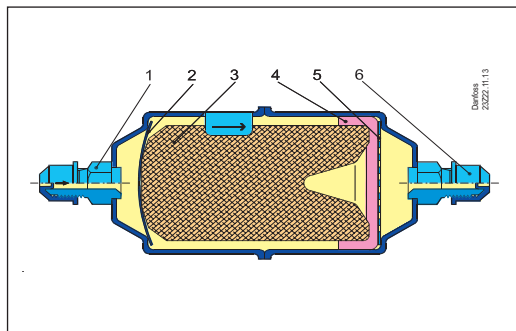
DML / DCL 03



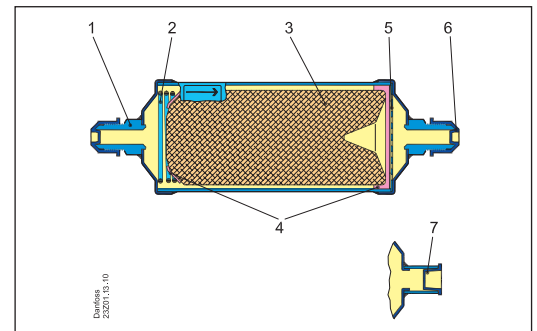
DML / DCL 05



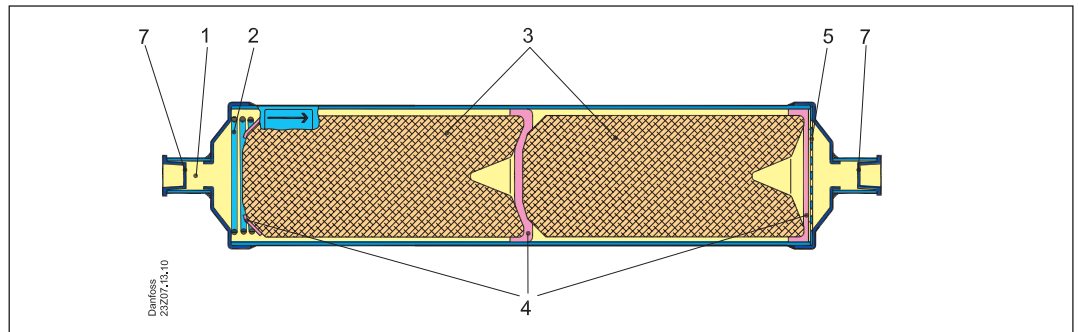
DML / DCL 08, DML / DCL 16



DML / DCL 30, DML / DCL 41



DML / DCL 60, DML / DCL 75



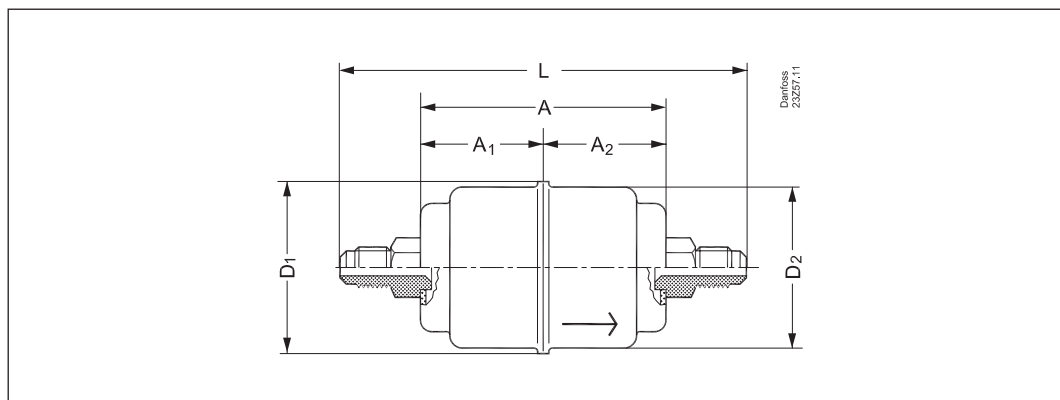
- 1. Inlet
- 2. Spring
- 3. Solid core
- 4. Polyester mat
- 5. Perforated plate
- 6. Seal cap, flare connection
- 7. Seal cap, solder connection

The relatively large diameter of the hermetic filter drier means that the liquid flow velocity is suitably low and the pressure drop minimal.

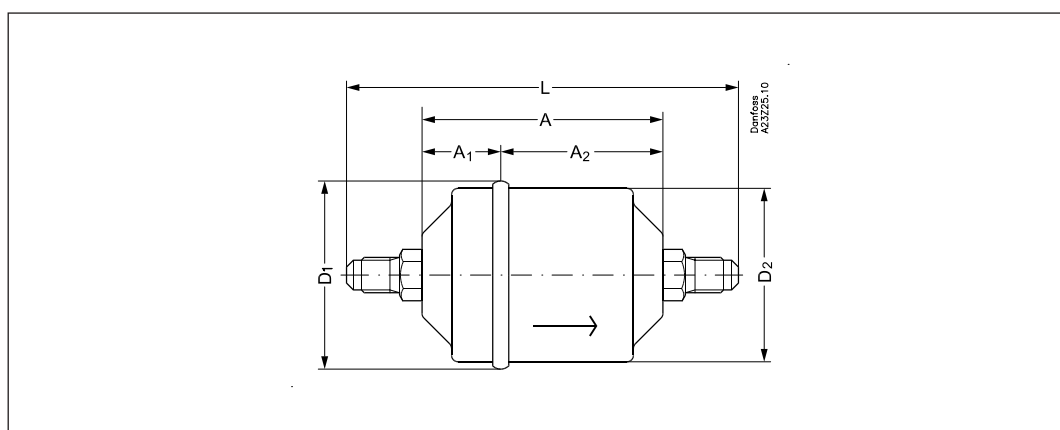
Powder formation is eliminated because the solid core grains are bonded and cannot move against each other.

## Dimensions and weights

## Flare connections



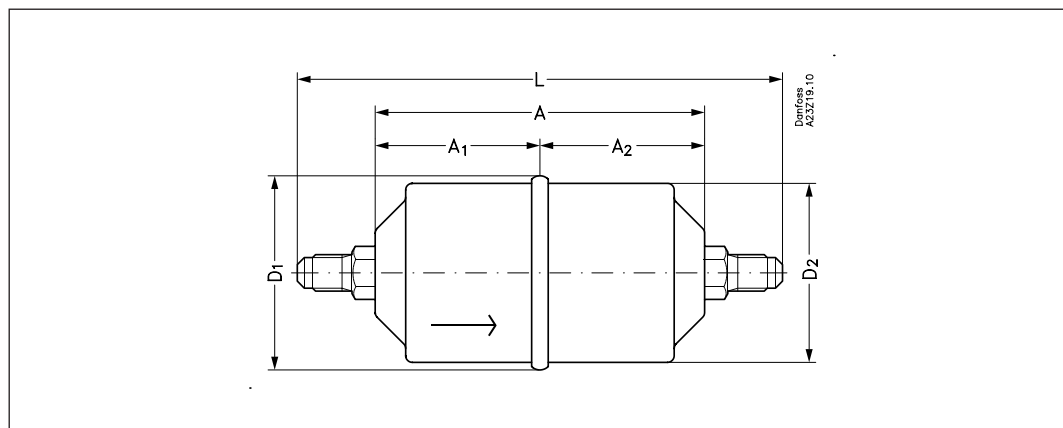
| Type        | A     | A <sub>1</sub> | A <sub>2</sub> | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|-------------|-------|----------------|----------------|-------|----------------|----------------|------------|
|             | [in.] | [in.]          | [in.]          | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 032 | 2.60  | 1.30           | 1.30           | 4.33  | 1.81           | 1.69           | 0.38       |
| DCL/DML 033 | 2.60  | 1.30           | 1.30           | 4.84  | 1.81           | 1.69           | 0.45       |



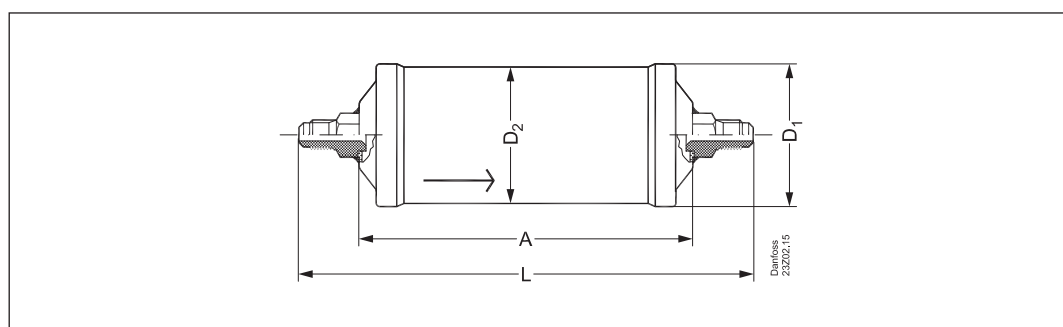
| Type        | A     | A <sub>1</sub> | A <sub>2</sub> | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|-------------|-------|----------------|----------------|-------|----------------|----------------|------------|
|             | [in.] | [in.]          | [in.]          | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 052 | 2.95  | 0.96           | 1.99           | 4.69  | 2.28           | 2.13           | 0.54       |
| DCL/DML 053 | 2.95  | 0.96           | 1.99           | 5.20  | 2.28           | 2.13           | 0.61       |

Dimensions and weights  
(continued)

Flare connections



| Type        | A     | A <sub>1</sub> | A <sub>2</sub> | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|-------------|-------|----------------|----------------|-------|----------------|----------------|------------|
|             | [in.] | [in.]          | [in.]          | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 082 | 3.98  | 1.99           | 1.99           | 5.71  | 2.28           | 2.13           | 0.69       |
| DCL/DML 083 | 3.98  | 1.99           | 1.99           | 6.22  | 2.28           | 2.13           | 0.76       |
| DCL/DML 084 | 3.98  | 1.99           | 1.99           | 6.54  | 2.28           | 2.13           | 0.84       |
| DML 085     | 3.98  | 1.99           | 1.99           | 6.89  | 2.28           | 2.13           | 0.94       |
| DCL/DML 162 | 4.33  | 2.17           | 2.17           | 6.06  | 3.15           | 2.99           | 1.43       |
| DCL/DML 163 | 4.33  | 2.17           | 2.17           | 6.57  | 3.15           | 2.99           | 1.47       |
| DCL/DML 164 | 4.33  | 2.17           | 2.17           | 6.89  | 3.15           | 2.99           | 1.52       |
| DCL/DML 165 | 4.33  | 2.17           | 2.17           | 7.24  | 3.15           | 2.99           | 1.56       |
| DCL/DML 166 | 4.33  | 2.17           | 2.17           | 7.17  | 3.15           | 2.99           | 1.61       |

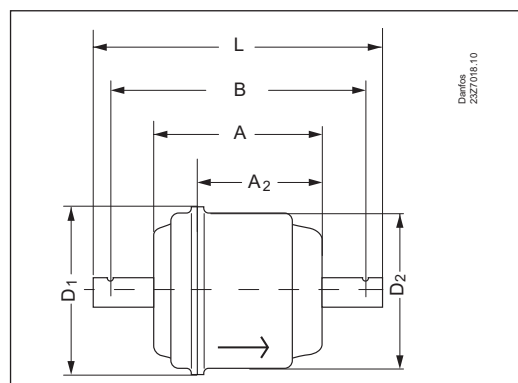


| Type        | A     | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|-------------|-------|-------|----------------|----------------|------------|
|             | [in.] | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 303 | 7.32  | 9.57  | 3.15           | 2.99           | 2.59       |
| DCL/DML 304 | 7.32  | 9.88  | 3.15           | 2.99           | 2.96       |
| DCL/DML 305 | 7.32  | 10.24 | 3.15           | 2.99           | 3.26       |
| DCL/DML 306 | 7.32  | 10.16 | 3.15           | 2.99           | 3.33       |
| DML 385     | 5.95  | 8.86  | 3.66           | 3.50           | 3.51       |
| DCL/DML 413 | 7.36  | 9.61  | 3.66           | 3.50           | 3.95       |
| DCL/DML 414 | 7.36  | 9.92  | 3.66           | 3.50           | 4.04       |
| DCL/DML 415 | 7.36  | 10.28 | 3.66           | 3.50           | 4.06       |

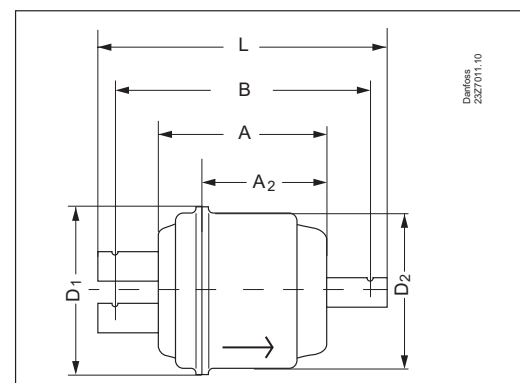
**Dimensions and weights  
(continued)**

**Solder connections**

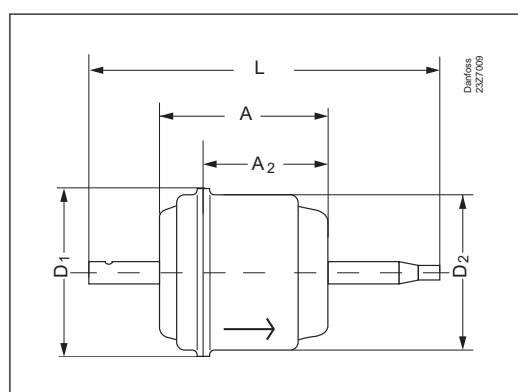
**DML 1.52s**



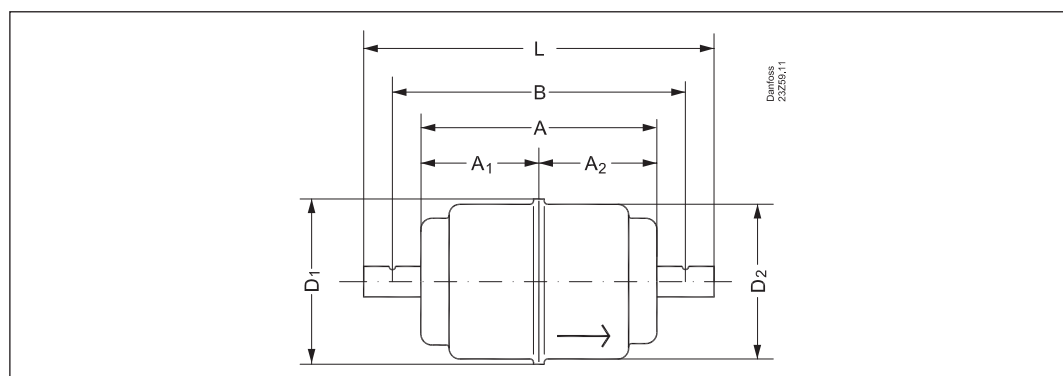
**DCL 1.52x2/2s**



**DCL 1.52XL/2.8mm s**



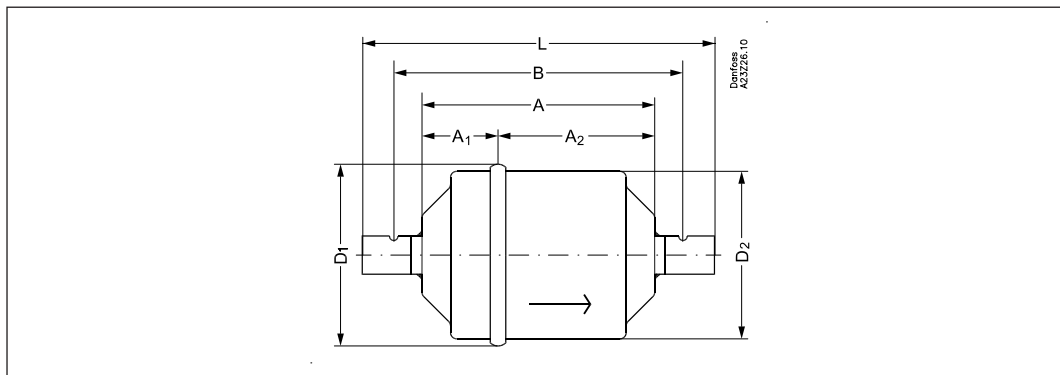
| Type               | A<br>[in.] | A <sub>2</sub><br>[in.] | B<br>[in.] | L<br>[in.] | D <sub>1</sub><br>[in.] | D <sub>2</sub><br>[in.] | Net weight<br>[lbs] |
|--------------------|------------|-------------------------|------------|------------|-------------------------|-------------------------|---------------------|
| DML 1.52s          | 1.77       | 1.30                    | 2.48       | 3.00       | 1.81                    | 1.69                    | 0.26                |
| DML 1.52x2/2s      | 1.77       | 1.30                    | 2.48       | 3.00       | 1.81                    | 1.69                    | 0.26                |
| DCL 1.52XL/2.8mm s | 1.77       | 1.30                    | –          | 4.17       | 1.81                    | 1.69                    | 0.26                |



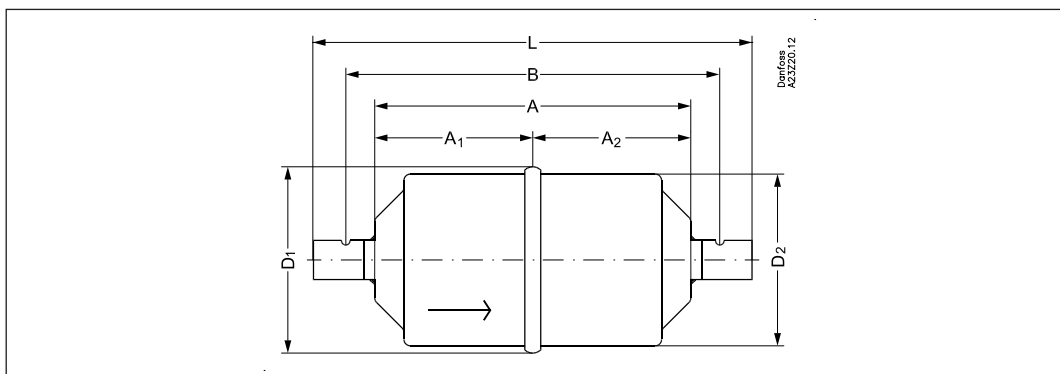
| Type           | A<br>[in.] | A <sub>1</sub><br>[in.] | A <sub>2</sub><br>[in.] | B<br>[in.] | L<br>[in.] | D <sub>1</sub><br>[in.] | D <sub>2</sub><br>[in.] | Net weight<br>[lbs] |
|----------------|------------|-------------------------|-------------------------|------------|------------|-------------------------|-------------------------|---------------------|
| DCL/DML 032s   | 2.60       | 1.30                    | 1.30                    | 3.23       | 3.86       | 1.81                    | 1.69                    | 0.34                |
| DCL/DML 032.5s | 2.60       | 1.30                    | 1.30                    | 3.31       | 4.02       | 1.81                    | 1.69                    | 0.37                |
| DCL/DML 033s   | 2.60       | 1.30                    | 1.30                    | 3.35       | 4.09       | 1.81                    | 1.69                    | 0.36                |
| DCL/DML 034s   | 2.60       | 1.30                    | 1.30                    | 3.43       | 4.25       | 1.81                    | 1.69                    | 0.37                |

Dimensions and weights  
(continued)

Solder connections



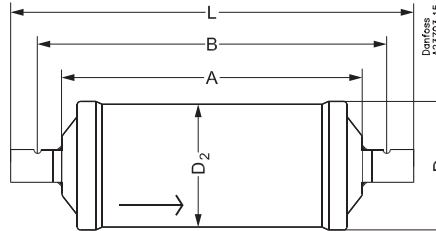
| Type           | A     | A <sub>1</sub> | A <sub>2</sub> | B     | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|----------------|-------|----------------|----------------|-------|-------|----------------|----------------|------------|
|                | [in.] | [in.]          | [in.]          | [in.] | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 052s   | 2.95  | 0.96           | 1.99           | 3.58  | 4.21  | 2.28           | 2.13           | 0.49       |
| DCL/DML 052.5s | 2.95  | 0.96           | 1.99           | 3.66  | 4.37  | 2.28           | 2.13           | 0.52       |
| DCL/DML 053s   | 2.95  | 0.96           | 1.99           | 3.70  | 4.45  | 2.28           | 2.13           | 0.50       |
| DML 054s       | 2.95  | 0.96           | 1.99           | 3.78  | 4.61  | 2.28           | 2.13           | 0.52       |
| DML 055s       | 2.95  | 0.96           | 1.99           | 3.90  | 4.84  | 2.28           | 2.13           | 0.53       |



| Type           | A     | A <sub>1</sub> | A <sub>2</sub> | B     | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|----------------|-------|----------------|----------------|-------|-------|----------------|----------------|------------|
|                | [in.] | [in.]          | [in.]          | [in.] | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 082s   | 3.98  | 1.99           | 1.99           | 4.61  | 5.24  | 2.28           | 2.13           | 0.64       |
| DCL/DML 082.5s | 3.98  | 1.99           | 1.99           | 4.69  | 5.39  | 2.28           | 2.13           | 0.67       |
| DCL/DML 083s   | 3.98  | 1.99           | 1.99           | 4.72  | 5.47  | 2.28           | 2.13           | 0.65       |
| DCL/DML 084s   | 3.98  | 1.99           | 1.99           | 4.80  | 5.63  | 2.28           | 2.13           | 0.71       |
| DML 085s       | 3.98  | 1.99           | 1.99           | 4.92  | 5.87  | 2.28           | 2.13           | 0.73       |
| DCL/DML 162s   | 4.33  | 2.17           | 2.17           | 4.96  | 5.59  | 3.15           | 2.99           | 1.36       |
| DCL/DML 162.5s | 4.33  | 2.17           | 2.17           | 5.04  | 5.75  | 3.15           | 2.99           | 1.39       |
| DCL/DML 163s   | 4.33  | 2.17           | 2.17           | 5.08  | 5.83  | 3.15           | 2.99           | 1.38       |
| DCL/DML 164s   | 4.33  | 2.17           | 2.17           | 5.16  | 5.98  | 3.15           | 2.99           | 1.41       |
| DCL/DML 165s   | 4.33  | 2.17           | 2.17           | 5.28  | 6.22  | 3.15           | 2.99           | 1.42       |
| DCL/DML 166s   | 4.33  | 2.17           | 2.17           | 5.51  | 6.69  | 3.15           | 2.99           | 1.45       |
| DCL/DML 167s   | 4.33  | 2.17           | 2.17           | 5.35  | 6.77  | 3.15           | 2.99           | 1.47       |

## Dimensions and weights (continued)

### Solder connections



| Type         | A     | B     | L     | D <sub>1</sub> | D <sub>2</sub> | Net weight |
|--------------|-------|-------|-------|----------------|----------------|------------|
|              | [in.] | [in.] | [in.] | [in.]          | [in.]          | [lbs]      |
| DCL/DML 303s | 7.32  | 8.07  | 8.82  | 3.15           | 2.99           | 2.86       |
| DCL/DML 304s | 7.32  | 8.15  | 8.98  | 3.15           | 2.99           | 2.91       |
| DCL/DML 305s | 7.32  | 8.27  | 9.21  | 3.15           | 2.99           | 2.92       |
| DCL/DML 306s | 7.32  | 8.50  | 9.69  | 3.15           | 2.99           | 2.93       |
| DCL/DML 307s | 7.32  | 8.35  | 9.76  | 3.15           | 2.99           | 2.96       |
| DCL/DML 309s | 7.32  | 8.15  | 9.80  | 3.15           | 2.99           | 2.98       |
| DCL/DML 414s | 7.36  | 8.19  | 9.02  | 3.66           | 3.50           | 3.92       |
| DCL/DML 415s | 7.36  | 8.31  | 9.25  | 3.66           | 3.50           | 3.94       |
| DCL/DML 417s | 7.36  | 8.39  | 9.80  | 3.66           | 3.50           | 4.01       |
| DCL/DML 419s | 7.36  | 8.19  | 9.84  | 3.66           | 3.50           | 4.03       |
| DCL/DML 604s | 13.27 | 14.09 | 14.92 | 3.15           | 2.99           | 4.94       |
| DCL/DML 607s | 13.27 | 14.29 | 14.71 | 3.15           | 2.99           | 4.98       |
| DCL/DML 609s | 13.27 | 14.09 | 14.75 | 3.15           | 2.99           | 5.03       |
| DCL/DML 757s | 13.31 | 14.33 | 15.75 | 3.66           | 3.50           | 6.98       |
| DCL/DML 759s | 13.31 | 14.13 | 15.79 | 3.66           | 3.50           | 7.00       |