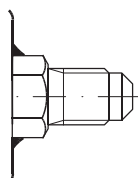
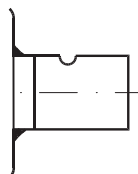




Eliminator® Liquid line filter driers, Type DCL and DML



Flare connection

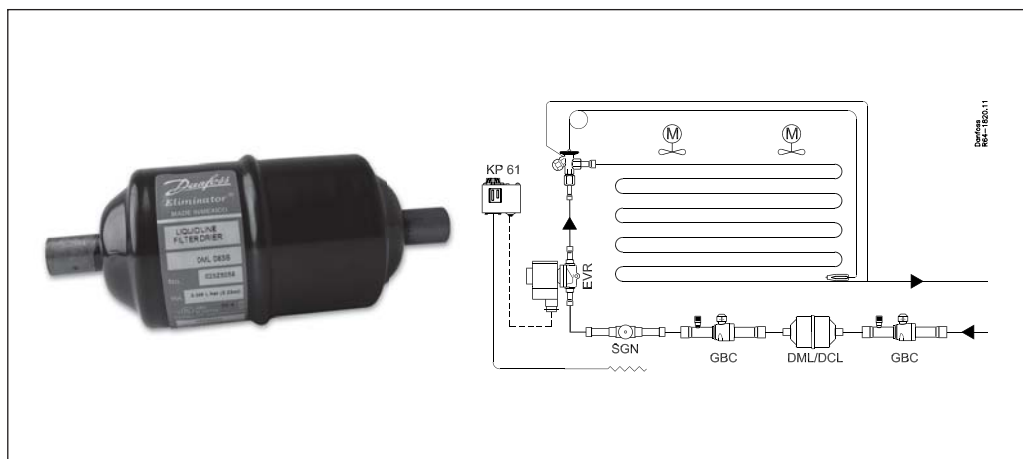


Solder connection (copper)

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Introduction



Eliminator® liquid line 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.

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.

All **Eliminator®** driers have a solid core with binding material held to an absolute minimum. Core selection is primarily based on the refrigerant oil used in the system.

Eliminator® type DML, with a solid core of 100% Molecular Sieve, is optimized for use with HFC refrigerants and polyolester (POE) or polyalkyl glycol (PAG) oils. Type DML driers are designed for applications requiring high water adsorption, and can be used with any manufacturer's compressor. Because type DML driers contain no activated alumina, oil additives will not be depleted.

Eliminator® type DCL, with a solid core of 80% Molecular Sieve and 20% activated alumina, is the drier of choice for systems with HCFC and CFC refrigerants and mineral or alkyl benzene oils. Type DCL driers are particularly suited for systems that operate at high condensing temperatures and require high drying capacity.

Features

The Core

Type DML

- 100% 3Å Molecular Sieve core.
- High drying capacity minimizing the risk of acid formation (hydrolysis).
- Optimized for HFC refrigerants (R134a, R404A, R410A, etc.) with POE or PAG oils. Compatible with R22.
- Will not deplete oil additives.

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.
- Optimized for CFC and HCFC refrigerants (R22, R502, etc.) with mineral or alkyl benzene oils. Compatible with HFC's and refrigerant blends.

The Shell

- UL approved for MWP up to 42 bar (610 psig)
- Available with solder (copper) and flare connections.
- Compact 3 cubic inches drier ideal for refrigeration and air conditioning units.
- Corrosion resistant powder-painted finish. Can be used in all environments including marine applications.
- Allows installation with any orientation provided the arrow is in the flow direction.
- Available in sizes from 3 to 75 cubic inches.

The Filter

- 25 µm (0.001 in.) filter provides high retention with minimal pressure drop.
- Thermally stable up to 120°C (250°F)

Approvals

UL file no. SA 6398
PED 97/23/EC - a3p3

Technical data

Surface and volume

Filter	Solid core surface [in ²]	Solid core volume [in ³]	Filter drier volume (shell volume) [fl. oz.]	Filter drier volume (net. volume) [fl. oz.]
DML/DCL 03	13	3	2.7	1.28
DML/DCL 05	15	4	4.0	1.72
DML/DCL 08	20	6	5.7	2.18
DML/DCL 16	34	14	12.0	4.11
DML/DCL 30	59	30	24.3	7.58
DML/DCL 41	79	42	32.7	9.66
DML/DCL 60	117	60	45.3	11.89
DML/DCL 75	158	83	61.3	15.23

Acid capacity

Filter	Acid capacity [oz.]
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

Temperature range

- 40 to 70°C (-40 to 160°F)

Technical data and capacities

DML

R134a, R507, R404A, R22, R407C, R410A

Drying and liquid capacity - Type DML

Type	Drying capacity [lbs refrigerant] ¹⁾						Liquid capacity [TR] ²⁾			Max. Working Pressure PS [psig]
	R134a		R404A R507		R22, R407C R410A		R134a	R404A R507	R22 R407C R410A	
	75°F	125°F	75°F	125°F	75°F	125°F				
DML032/032s	12.1	11.0	16.5	9.9	9.9	8.8	2.0	1.4	2.0	610
DML 032.5s	12.1	11.0	16.5	9.9	9.9	8.8	2.6	2.0	2.6	610
DML033/033s	12.1	11.0	16.5	9.9	9.9	8.8	4.9	3.7	5.4	610
DML034s	12.1	11.0	16.5	9.9	9.9	8.8	6.9	4.9	7.4	610
DML052/052s	18.7	17.6	28.7	16.5	17.6	15.4	2.0	1.4	2.3	610
DML 052.5s	18.7	17.6	28.7	16.5	17.6	15.4	2.6	2.0	2.6	610
DML053/053s	18.7	17.6	28.7	16.5	17.6	15.4	5.1	4.0	5.4	610
DML054s	18.7	17.6	28.7	16.5	17.6	15.4	7.1	5.1	7.7	610
DML055s	18.7	17.6	28.7	16.5	17.6	15.4	9.7	7.1	10.6	610
DML082/082s	27.6	26.5	44.1	25.3	27.6	24.3	2.0	1.4	2.3	610
DML 082.5s	27.6	26.5	44.1	25.3	27.6	24.3	2.6	2.3	3.1	610
DML083/083s	27.6	26.5	44.1	25.3	27.6	24.3	5.4	4.0	6.0	610
DML084/084s	27.6	26.5	44.1	25.3	27.6	24.3	7.4	5.7	8.3	610
DML085/085s	27.6	26.5	44.1	25.3	27.6	24.3	12.0	8.8	13.1	610
DML162/162s	59.5	56.2	95.9	52.9	59.5	50.7	2.0	1.4	2.3	610
DML 162.5s	59.5	56.2	95.9	52.9	59.5	50.7	2.6	2.3	3.1	610
DML163/163s	59.5	56.2	95.9	52.9	59.5	50.7	6.3	4.6	6.9	610
DML164/164s	59.5	56.2	95.9	52.9	59.5	50.7	8.6	6.3	9.4	610
DML165/165s	59.5	56.2	95.9	52.9	59.5	50.7	12.3	8.6	13.4	610
DML166/166s	59.5	56.2	95.9	52.9	59.5	50.7	12.6	8.8	13.7	507
DML167s	59.5	56.2	95.9	52.9	59.5	50.7	12.6	8.8	13.7	507
DML303/303s	125.7	119.0	203.9	112.4	125.7	106.9	6.0	4.3	6.6	610
DML304/304s	125.7	119.0	203.9	112.4	125.7	106.9	8.8	6.3	9.7	610
DML305/305s	125.7	119.0	203.9	112.4	125.7	106.9	12.6	9.4	14.0	610
DML306/306s	125.7	119.0	203.9	112.4	125.7	106.9	17.7	12.9	19.4	507
DML307s	125.7	119.0	203.9	112.4	125.7	106.9	17.7	12.9	19.4	507
DML309s	125.7	119.0	203.9	112.4	125.7	106.9	17.7	12.9	19.4	435
DML413	176.4	165.3	286.6	154.3	176.4	163.1	7.1	5.1	7.7	610
DML414/414s	176.4	165.3	286.6	154.3	176.4	163.1	9.1	6.6	10.0	610
DML415/415s	176.4	165.3	286.6	154.3	176.4	163.1	15.1	10.6	16.6	610
DML417s	176.4	165.3	286.6	154.3	176.4	163.1	26.0	18.6	28.6	507
DML419s	176.4	165.3	286.6	154.3	176.4	163.1	26.0	18.6	28.6	435
DML604s	249.1	235.9	407.9	222.7	251.3	213.8	7.7	5.7	8.8	610
DML607s	249.1	235.9	407.9	222.7	251.3	213.8	21.4	15.4	23.4	507
DML609s	249.1	235.9	407.9	222.7	251.3	213.8	24.9	18.3	27.1	435
DML757s	352.7	330.7	573.2	308.6	352.7	326.3	23.4	17.1	25.7	507
DML759s	352.7	330.7	573.2	308.6	352.7	326.3	26.9	19.4	29.1	435

1) Drying capacity is based on following moisture content test standards before and after drying:
R134a:
 From 1050 ppm W to 75 ppm W.
 If drying to 50 ppm W is required, reduce stated capacities by 15%.
R404A, R507:
 From 1020 ppm W to 30 ppm W.
R407C:
 From 1020 ppm W to 30 ppm W.
R410A:
 From 1050 ppm W to 60 ppm W.
R22:
 From 1050 ppm W to 60 ppm W in accordance with ARI 710-86.

2) Given in accordance with ARI 710-86 for
 t_e = -15°C (5°F),
 t_c = 30°C (85°F) and
 Δp = 0.07 bar (1 psig).

Technical data and capacities

DCL

R134a, R507, R404A, R407C, R410A

Drying and liquid capacity - Type DCL

Type	Drying capacity [lbs refrigerant] ¹⁾						Liquid capacity [TR] ²⁾			Max. Working Pressure PS [psi]
	R134a		R404A R507		R407C R410A		R134a	R404A R507	R407C R410A	
	75°F	125°F	75°F	125°F	75°F	125°F				
DCL032/032s	9.9	8.8	15.4	7.7	8.8	7.7	2.0	1.4	2.0	610
DCL 032.5s	9.9	8.8	15.4	7.7	8.8	7.7	2.6	2.0	2.6	610
DCL033/033s	9.9	8.8	15.4	7.7	8.8	7.7	4.9	3.7	5.4	610
DCL052/052s	13.7	13.2	22.0	12.1	13.2	12.1	2.0	1.4	2.3	610
DCL 052.5s	13.7	13.2	22.0	12.1	13.2	12.1	2.6	2.0	2.6	610
DCL053/053s	13.7	13.2	22.0	12.1	13.2	12.1	5.1	4.0	5.4	610
DCL082/082s	22.0	19.8	35.3	17.6	20.9	19.8	2.0	1.4	2.3	610
DCL 082.5s	22.0	19.8	35.3	17.6	20.9	19.8	2.6	2.3	3.1	610
DCL083/083s	22.0	19.8	35.3	17.6	20.9	19.8	5.4	4.0	6.0	610
DCL084/084s	22.0	19.8	35.3	17.6	20.9	19.8	7.4	5.7	8.3	610
DCL162/162s	52.9	48.5	81.6	44.1	48.5	44.1	2.0	1.4	2.3	610
DCL 162.5s	52.9	48.5	81.6	44.1	48.5	44.1	2.6	2.3	3.1	610
DCL163/163s	52.9	48.5	81.6	44.1	48.5	44.1	5.4	4.6	6.9	610
DCL164/164s	52.9	48.5	81.6	44.1	48.5	44.1	8.6	6.3	9.4	610
DCL165/165s	52.9	48.5	81.6	44.1	48.5	44.1	12.3	8.6	13.4	610
DCL166/166s	52.9	48.5	81.6	44.1	48.5	44.1	12.3	8.6	13.4	507
DCL167s	52.9	48.5	81.6	44.1	48.5	44.1	12.6	8.6	13.4	507
DCL303/303s	103.6	97.0	169.8	90.4	97.0	90.4	6.0	4.3	6.6	610
DCL304/304s	103.6	97.0	169.8	90.4	97.0	90.4	8.8	6.3	9.7	610
DCL305/305s	103.6	97.0	169.8	90.4	97.0	90.4	12.6	9.4	14.0	610
DCL306/306s	103.6	97.0	169.8	90.4	97.0	90.4	17.7	12.9	19.4	507
DCL307s	103.6	97.0	169.8	90.4	97.0	90.4	17.7	12.9	19.4	507
DCL309s	103.6	97.0	169.8	90.4	97.0	90.4	17.7	12.9	19.4	435
DCL413	143.3	134.5	233.7	123.5	134.5	123.5	7.1	5.1	7.7	610
DCL414/414s	143.3	134.5	233.7	123.5	134.5	123.5	9.1	6.6	10.0	610
DCL415/415s	143.3	134.5	233.7	123.5	134.5	123.5	15.1	10.6	16.6	610
DCL417s	143.3	134.5	233.7	123.5	134.5	123.5	25.9	18.6	28.6	507
DCL419s	143.3	134.5	233.7	123.5	134.5	123.5	25.9	18.6	28.6	435
DCL604s	207.2	167.6	330.7	180.8	196.2	180.8	7.7	5.7	8.8	610
DCL607s	207.2	167.6	330.7	180.8	196.2	180.8	21.4	15.4	23.4	507
DCL609s	207.2	167.6	330.7	180.8	196.2	180.8	24.9	18.3	27.1	435
DCL757s	286.6	282.2	467.4	251.3	266.8	246.9	23.4	17.1	25.7	507
DCL759s	286.6	282.2	467.4	251.3	266.8	246.9	26.9	19.4	29.1	435

R22, R12, R502

Type	Drying capacity [lbs refrigerant] ¹⁾						Liquid capacity [TR] ²⁾			Max. Working Pressure PS [psi]
	R22		R12		R502		R22	R12	R502	
	75 °F	125°F	75 °F	125°F	75 °F	125°F				
DCL032/032s	8.8	7.7	33.1	33.1	15.4	7.7	2.0	1.7	1.4	610
DCL 032.5s	8.8	7.7	33.1	33.1	15.4	7.7	2.6	2.3	2.0	610
DCL033/033s	8.8	7.7	33.1	33.1	15.4	7.7	5.4	4.0	3.7	610
DCL052/052s	12.1	11.0	44.1	44.1	22.0	11.0	2.3	1.7	1.4	610
DCL 052.5s	12.1	11.0	44.1	44.1	22.0	11.0	2.6	2.3	2.3	610
DCL053/053s	12.1	11.0	44.1	44.1	22.0	11.0	5.4	4.3	4.0	610
DCL082/082s	19.8	17.6	66.1	66.1	33.1	17.6	2.3	1.7	1.4	610
DCL 082.5s	19.8	17.6	66.1	66.1	33.1	17.6	2.6	2.3	2.3	610
DCL083/083s	19.8	17.6	66.1	66.1	33.1	17.6	6.0	4.3	4.0	610
DCL084/084s	19.8	17.6	66.1	66.1	33.1	17.6	8.3	6.3	5.7	610
DCL162/162s	44.1	41.9	154.3	154.3	77.2	39.7	2.3	1.7	1.4	610
DCL 162.5s	44.1	41.9	154.3	154.3	77.2	39.7	3.7	2.6	2.6	610
DCL163/163s	44.1	41.9	154.3	154.3	77.2	39.7	6.9	5.1	4.6	610
DCL164/164s	44.1	41.9	154.3	154.3	77.2	39.7	9.4	6.9	6.3	610
DCL165/165s	44.1	41.9	154.3	154.3	77.2	39.7	13.4	10.0	8.6	610
DCL166/166s	44.1	41.9	154.3	154.3	77.2	39.7	13.4	10.0	8.6	507
DCL167s	44.1	41.9	154.3	154.3	77.2	39.7	13.4	10.0	8.6	507
DCL303/303s	92.6	90.4	308.6	308.6	165.3	82.7	6.6	4.9	4.3	610
DCL304/304s	92.6	90.4	308.6	308.6	165.3	82.7	9.7	7.1	6.3	610
DCL305/305s	92.6	90.4	308.6	308.6	165.3	82.7	14.0	10.6	9.4	610
DCL306/306s	92.6	90.4	308.6	308.6	165.3	82.7	19.4	14.6	12.9	507
DCL307s	92.6	90.4	308.6	308.6	165.3	82.7	19.4	14.6	12.9	507
DCL309s	92.6	90.4	308.6	308.6	165.3	82.7	19.4	14.6	12.9	435
DCL413	130.1	123.5	440.9	440.9	220.0	110.2	7.4	5.7	5.1	610
DCL414/414s	130.1	123.5	440.9	440.9	220.0	110.2	10.0	7.4	6.6	610
DCL415/415s	130.1	123.5	440.9	440.9	220.0	110.2	16.6	12.3	10.6	610
DCL417s	130.1	123.5	440.9	440.9	220.0	110.2	28.6	21.1	18.6	507
DCL419s	130.1	123.5	440.9	440.9	220.0	110.2	28.6	21.1	18.6	435
DCL604s	185.2	176.4	551.2	551.2	330.7	165.3	8.3	6.3	5.4	610
DCL607s	185.2	176.4	551.2	551.2	330.7	165.3	23.7	18.0	15.4	507
DCL609s	185.2	176.4	551.2	551.2	330.7	165.3	27.7	20.9	18.0	435
DCL757s	264.6	242.5	661.4	661.4	440.9	220.0	26.0	19.7	16.9	507
DCL759s	264.6	242.5	661.4	661.4	440.9	220.0	29.7	22.6	19.4	435

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

R134a:
From 1050 ppm W to 75 ppm W.
If drying to 50 ppm W is required, reduce stated capacities by 15%.

R404A, R507:
From 1020 ppm W to 30 ppm W.

R407C:
From 1020 ppm W to 30 ppm W.

R410A:
From 1050 ppm W to 60 ppm W.

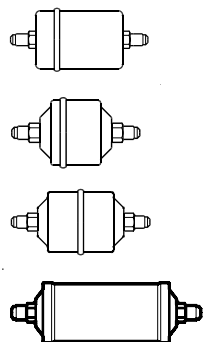
R22:
From 1050 ppm W to 60 ppm W in accordance with ARI 710-86.

R12:
From 565 ppm W to 15 ppm W in accordance with ARI 710-86.

R502:
From 1020 ppm W to 30 ppm W in accordance with ARI 710-86.

²⁾ Given in accordance with ARI 710-86 for $t_e = -15^\circ\text{C}$ (5°F), $t_c = 30^\circ\text{C}$ (85°F) and $\Delta p = 0.07$ bar (1 psig).

Ordering



Flare

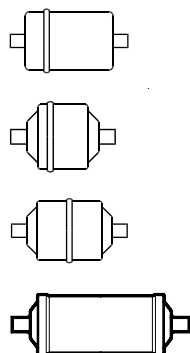
DCL

Type	Conn.		Multipack	Industrialpack	
	in.	mm	Code no.	Code no.	Qty.
DCL 032	1/4	6	023Z5000*	023Z8075	28
DCL 032	1/4	6	023Z5075		
DCL 033	3/8	10	023Z5001*		
DCL 033	3/8	10	023Z5089		
DCL 052	1/4	6	023Z5002	023Z8002	16
DCL 053	3/8	10	023Z5003	023Z8003	
DCL 082	1/4	6	023Z5004	023Z8004	16
DCL 083	3/8	10	023Z5005	023Z8005	
DCL 084	1/2	12	023Z5006	023Z8006	
DCL 162	1/4	6	023Z5007	023Z8007	12
DCL 163	3/8	10	023Z5008	023Z8008	
DCL 164	1/2	12	023Z5009	023Z8009	
DCL 165	5/8	16	023Z5010	023Z8010	
DCL 166	3/4	19	023Z5011		
DCL 303	3/8	10	023Z0012	023Z3013	
DCL 304	1/2	12	023Z0013		
DCL 305	5/8	16	023Z0014		
DCL 306	3/4	19	023Z0156		
DCL 413	3/8	10	023Z0101		
DCL 414	1/2	12	023Z0102		
DCL 415	5/8	16	023Z0103		

* Wire mesh in filter drier outlet

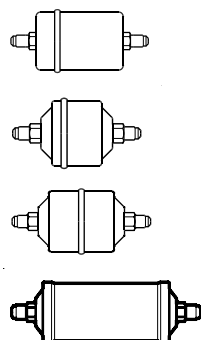
Solder (copper)

DCL



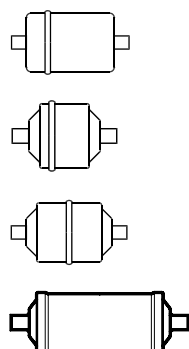
Type	Conn.	Multipack	Industrialpack		Conn.	Multipack	Industrialpack		
	in.	Code no.	Code no.	Qty.		mm	Code no.	Code no.	Qty.
DCL 032s	1/4	023Z5013*	023Z8013*	28	6	023Z5012*	023Z8012*	28	
DCL 032.5s	5/16	023Z5014	023Z8014*		8		023Z8014*		
DCL 033s	3/8	023Z5015			10	023Z5016			
DCL 052s	1/4	023Z5018	023Z8018	16	6	023Z5017	023Z8017	16	
DCL 052.5s	5/16	023Z5114			8	023Z5114			
DCL 053s	3/8	023Z5019	023Z8019		10	023Z5020	023Z8020		
DCL 082s	1/4	023Z5022	023Z8022	16	6	023Z5021		16	
DCL 082.5s	5/16	023Z5116			8	023Z5116			
DCL 083s	3/8	023Z5023	023Z8023		10	023Z5024			
DCL 084s	1/2	023Z5026	023Z8026		12	023Z5025			023Z8025
DCL 162s	1/4	023Z5028		12	6	023Z5027		12	
DCL 162.5s	5/16	023Z5118			8	023Z5118			
DCL 163s	3/8	023Z5029			10	023Z5030			023Z8030
DCL 164s	1/2	023Z5032			12	023Z5031			023Z8033
DCL 165s	5/8	023Z5033			16	023Z5033			
DCL 166s	3/4	023Z5070			19	023Z5070			
DCL 167s	7/8	023Z5034			22	023Z5034			
DCL 303s	3/8	023Z0030			023Z3030	8			10
DCL 304s	1/2	023Z0031		12	023Z0198				
DCL 305s	5/8	023Z0032	023Z3032	16	023Z0032		023Z3032		
DCL 306s	3/4	023Z0033		18	023Z0216				
DCL 307s	7/8	023Z0034	023Z3034	22	023Z0034		023Z3034		
DCL 309s	1 1/8	023Z0035		28	023Z0200				
DCL 414s	1/2	023Z0104			12	023Z0227			
DCL 415s	5/8	023Z0105			16	023Z0105			
DCL 417s	7/8	023Z0106			22	023Z0106			
DCL 419s	1 1/8	023Z0107			28	023Z0202			
DCL 604s	1/2	023Z0241			12	023Z0221			
DCL 607s	7/8	023Z0036			22	023Z0036			
DCL 609s	1 1/8	023Z0037			28	023Z0204			
DCL 757s	7/8	023Z0115			22	023Z0115			
DCL 759s	1 1/8	023Z0116			28	023Z0206			

* Wire mesh in filter drier outlet

Ordering (cont.)

Flare

Type	Conn.		Multipack	Industrialpack	
	in.	mm	Code no.	Code no.	Qty.
DML 032	1/4	6	023Z5035*	023Z8035*	28
DML 033	3/8	10	023Z5036*	023Z8036*	
DML 033	3/8	10	023Z5090	023Z8090	
DML 052	1/4	6	023Z5037	023Z8037	16
DML 053	3/8	10	023Z5038	023Z8038	
DML 082	1/4	6	023Z5039	023Z8039	16
DML 083	3/8	10	023Z5040	023Z8040	
DML 084	1/2	12	023Z5041	023Z8041	
DML 085	5/8	16	023Z5073	023Z8073	12
DML 162	1/4	6	023Z5042	023Z8042	
DML 163	3/8	10	023Z5043	023Z8043	
DML 164	1/2	12	023Z5044	023Z8044	
DML 165	5/8	16	023Z5045	023Z8045	8
DML 166	3/4	19	023Z5046	023Z8046	
DML 303	3/8	10	023Z0049	023Z3049	8
DML 304	1/2	12	023Z0050	023Z3050	
DML 305	5/8	16	023Z0051	023Z3051	
DML 306	3/4	19	023Z0193	023Z3193	
DML 413	3/8	10	023Z0108	023Z3108	6
DML 414	1/2	12	023Z0109	023Z3109	
DML 415	5/8	16	023Z0110	023Z3110	

* Wire mesh in filter drier outlet

DML
Solder (copper)


Type	Conn.	Multipack	Industrialpack		Conn.	Multipack	Industrialpack	
	in.	Code no.	Code no.	Qty.		mm	Code no.	Code no.
DML 032s	1/4	023Z5048*	023Z8048*	28	6	023Z5047*	023Z8047*	28
DML 032.5s	5/16	023Z5049	023Z8049		8	023Z5049	023Z8049	
DML 033s	3/8	023Z5050	023Z8050*		10	023Z5051	023Z8051*	
DML 034s	1/2	023Z5121			12	023Z5123		
DML 052s	1/4	023Z5053		16	6	023Z5052	023Z8052	16
DML 052.5s	5/16	023Z5115			8	023Z5115		
DML 053s	3/8	023Z5054	023Z8054		10	023Z5055	023Z8055	
DML 054s	1/2	023Z5101			12	023Z5099		
DML 055s	5/8	023Z5100			16	023Z5100		
DML 082s	1/4	023Z5057		16	6	023Z5056		
DML 082.5s	5/16	023Z5117			8	023Z5117		
DML 083s	3/8	023Z5058			10	023Z5059		
DML 084s	1/2	023Z5061	023Z8061		12	023Z5060		
DML 085s	5/8	023Z5072			16	023Z5072		
DML 162s	1/4	023Z5063	023Z8133	12	6	023Z5062		12
DML 162.5s	5/16	023Z5119			8	023Z5119		
DML 163s	3/8	023Z5064	023Z8134		10	023Z5065		
DML 164s	1/2	023Z5067	023Z8067		12	023Z5066		
DML 165s	5/8	023Z5068	023Z8068		16	023Z5068	023Z8068	
DML 166s	3/4	023Z5071	023Z8071		19	023Z5071	023Z8071	
DML 167s	7/8	023Z5069			22	023Z5069		
DML 303s	3/8	023Z0067		8	10	023Z0197		8
DML 304s	1/2	023Z0068			12	023Z0199		
DML 305s	5/8	023Z0069	023Z3069		16	023Z0069	023Z3069	
DML 306s	3/4	023Z0070			19	023Z0070		
DML 307s	7/8	023Z0071	023Z3071		22	023Z0071	023Z3071	
DML 309s	1 1/8	023Z0072			28	023Z0201		
DML 414s	1/2	023Z0111		6	12	023Z0228		6
DML 415s	5/8	023Z0112			16	023Z0112		
DML 417s	7/8	023Z0113	023Z3113		22	023Z0113	023Z3113	
DML 419s	1 1/8	023Z0114	023Z3114		28	023Z0203		
DML 604s	1/2	023Z0224			12	023Z0229		
DML 607s	7/8	023Z0073			22	023Z0073		
DML 609s	1 1/8	023Z0074			28	023Z0205		
DML 757s	7/8	023Z0117	023Z3117	4	22	023Z0117	023Z3117	4
DML 759s	1 1/8	023Z0118	023Z3118		28	023Z0207		

* Wire mesh in filter drier outlet

DML

Identification

Example for type codes

D C L 05 3 s

Type codes

Filter drier	D	
Solid core	C	80 / 20% composite core
	M	100% Molecular Sieve core
Application	L	Liquid line
Size (volume)	03	3 in ³
	05	5 in ³
	08	8 in ³
	16	16 in ³
	30	30 in ³
	41	41 in ³
	60	60 in ³
Connection (filter connection in 1/8 of an inch increments)	2	1/4 in. / 6mm
	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
Connection type	(blank)	Flare connection
	s	Solder connection

Selection

Type selection is made considering the application

- 1) For CFC systems, DCL filter driers are recommended. In these systems, circumstances may require the use of a filter drier with acid adsorbing properties.
- 2) Use of filter driers containing activated alumina are not recommended in systems with oils containing additives.

		DCL	DML
Refrigerant	HFC	Can be used	Recommended
	HCFC	Recommended	Can be used
	CFC	Recommended	Not recommended ¹⁾
Oil	Mineral or AB	Recommended	Can be used
	POE or PAG, pure	Can be used	Recommended
	POE or PAG, with additives	Not recommended ²⁾	Recommended

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.

a. Amount of charge: 55 lbs R134a at t_i = 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_e = 5.7 TR
To obtain a mass flow corresponding to 5.7 TR cooling capacity with a DML 16 filter drier, a

3/8 inch connection must be chosen. Larger connections can be chosen in accordance with the liquid line dimension.

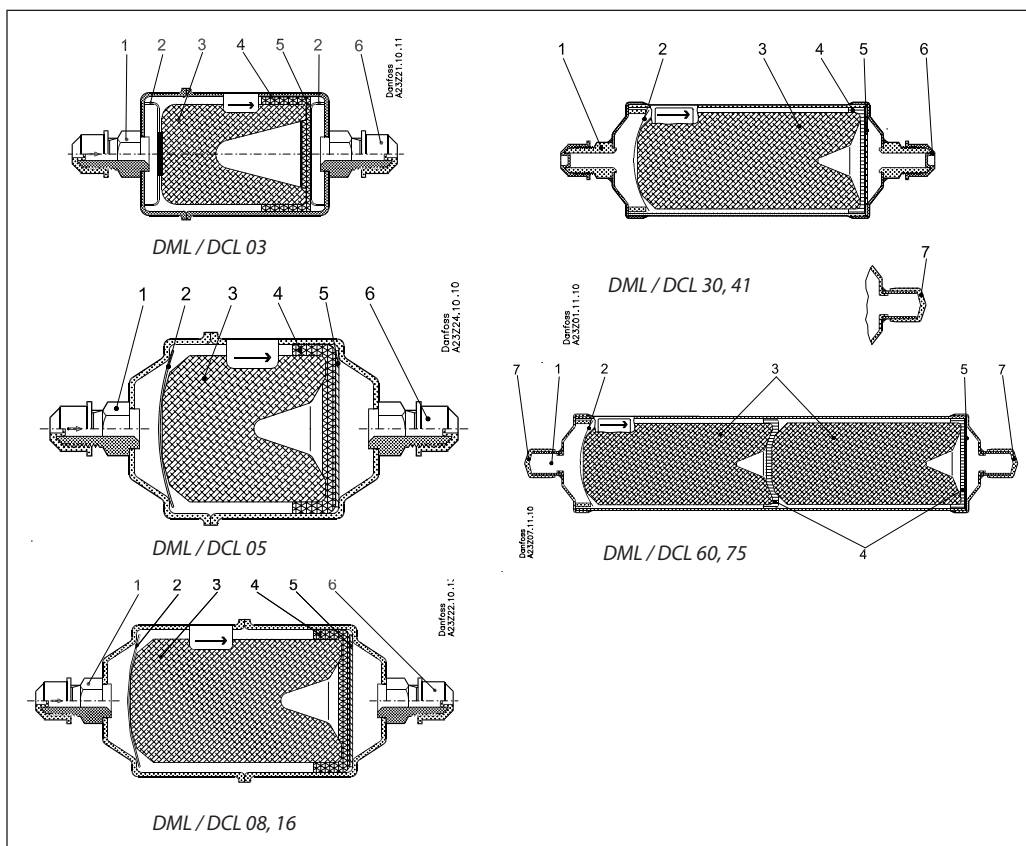
c. Result
DML 163 or DML 163s can be used.

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.

Type	Drying capacity [lbs refrigerant] ¹⁾						Liquid capacity [tons] ²⁾			Max. Working Pressure PS [psig]
	R134a		R404A R507		R22, R407C R410A		R134a	R404A R507	R22 R407C R410A	
	75°F	125°F	75°F	125°F	75°F	125°F				
DML 032/032s	12.1	11.0	16.5	9.9	9.9	8.8	2.0	1.4	2.0	610
DML 032.5s	12.1	11.0	16.5	9.9	9.9	8.8	2.6	2.0	2.6	610

DML 162/162s	59.5	56.2	95.9	52.9	59.5	50.7	2.6	1.4	2.3	610
DML 162.5s	59.5	56.2	95.9	52.9	59.5	50.7	2.6	2.3	3.1	610
DML 163/163s	59.5	56.2	95.9	52.9	59.5	50.7	6.3	4.6	6.9	610
DML 164/164s	59.5	56.2	95.9	52.9	59.5	50.7	8.6	6.3	9.4	610
DML 165/165s	59.5	56.2	95.9	52.9	59.5	50.7	12.3	8.6	13.4	610
DML 166/166s	59.5	56.2	95.9	52.9	59.5	50.7	12.6	8.6	13.4	507
DML 167/167s	59.5	56.2	95.9	52.9	59.5	50.7	12.6	8.6	13.4	507

Design and function



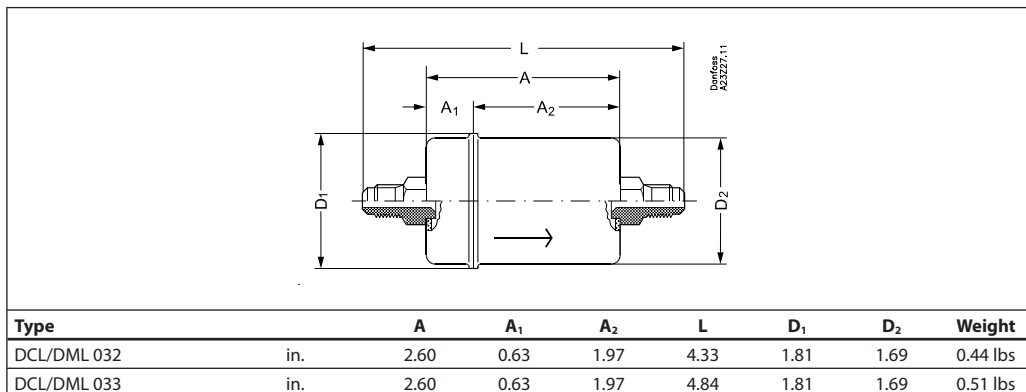
- 1. Inlet
- 2. Spring
- 3. Solid core
- 4. Polyester mat
- 5. Perforated plate
- 6. Seal cap, flare connection
- 7. Seal cap, solder connection

The relatively large diameter of the 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.

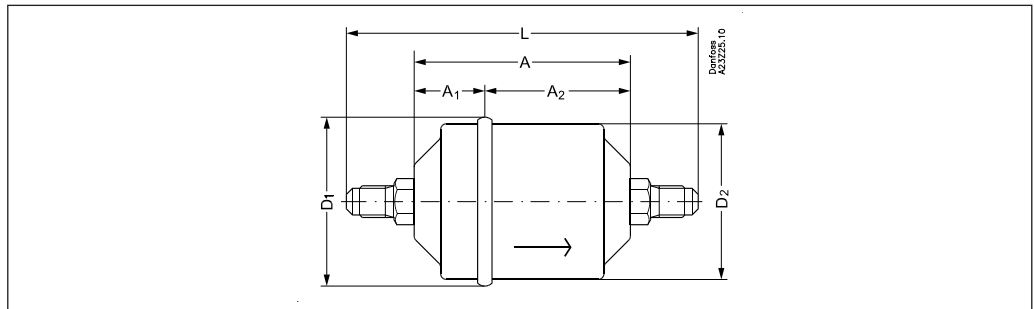
Dimensions and weights

Flare connections

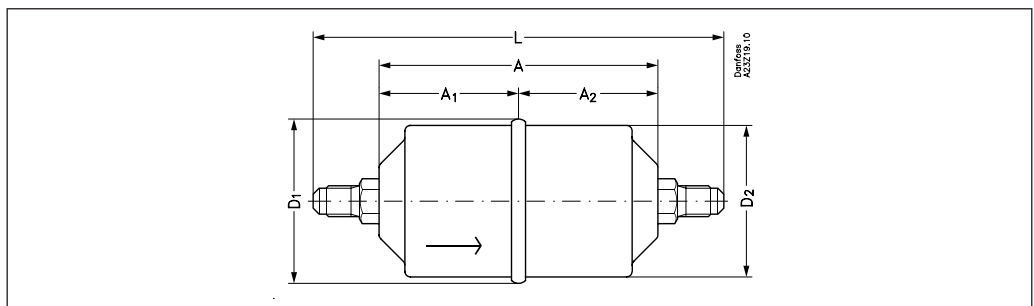


Dimensions and weights
(cont.)

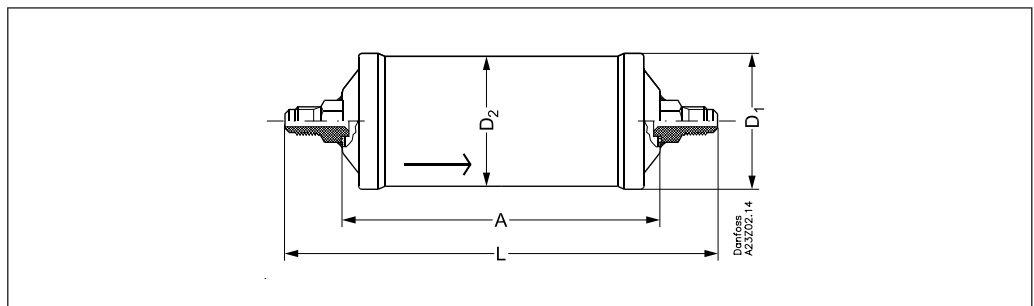
Flare connections



Type		A	A ₁	A ₂	L	D ₁	D ₂	Weight
DCL/DML 052	in.	2.95	0.96	1.99	4.69	2.28	2.13	0.86 lbs
DCL/DML 053	in.	2.95	0.96	1.99	5.20	2.28	2.13	0.92 lbs



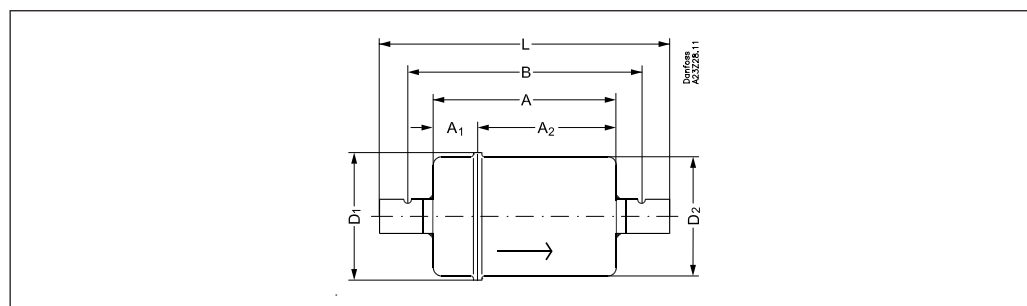
Type		A	A ₁	A ₂	L	D ₁	D ₂	Weight
DCL/DML 082	in.	3.98	1.99	1.99	5.71	2.28	2.13	0.88 lbs
DCL/DML 083	in.	3.98	1.99	1.99	6.22	2.28	2.13	0.97 lbs
DCL/DML 084	in.	3.98	1.99	1.99	6.54	2.28	2.13	1.06 lbs
DML 085	in.	3.98	1.99	1.99	6.89	2.28	2.13	1.14 lbs
DCL/DML 162	in.	4.33	2.17	2.17	6.06	3.15	2.99	1.74 lbs
DCL/DML 163	in.	4.33	2.17	2.17	6.57	3.15	2.99	1.80 lbs
DCL/DML 164	in.	4.33	2.17	2.17	6.89	3.15	2.99	1.91 lbs
DCL/DML 165	in.	4.33	2.17	2.17	7.24	3.15	2.99	2.00 lbs
DCL/DML 166	in.	4.33	2.17	2.17	7.17	3.15	2.99	2.18 lbs



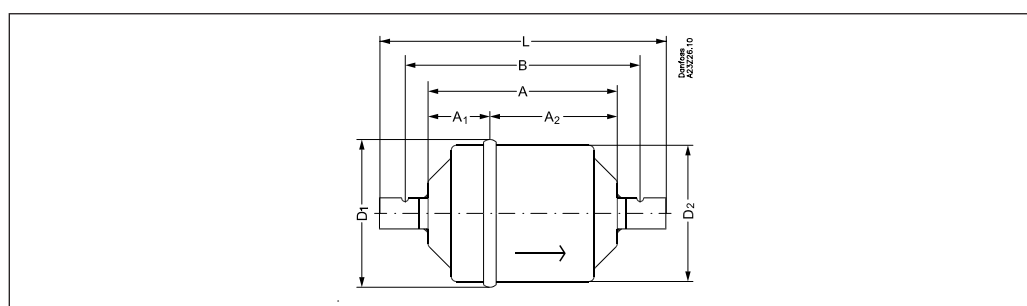
Type		A	A ₁	A ₂	L	D ₁	D ₂	Weight
DCL/DML 303	in.	7.32	-	-	9.57	3.15	2.99	2.93 lbs
DCL/DML 304	in.	7.32	-	-	9.88	3.15	2.99	3.04 lbs
DCL/DML 305	in.	7.32	-	-	10.24	3.15	2.99	3.12 lbs
DCL/DML 306	in.	7.32	-	-	10.16	3.15	2.99	3.28 lbs
DCL/DML 413	in.	7.36	-	-	9.61	3.66	3.50	4.09 lbs
DCL/DML 414	in.	7.36	-	-	9.92	3.66	3.50	4.20 lbs
DCL/DML 415	in.	7.36	-	-	10.28	3.66	3.50	4.29 lbs

Dimensions and weights
(cont.)

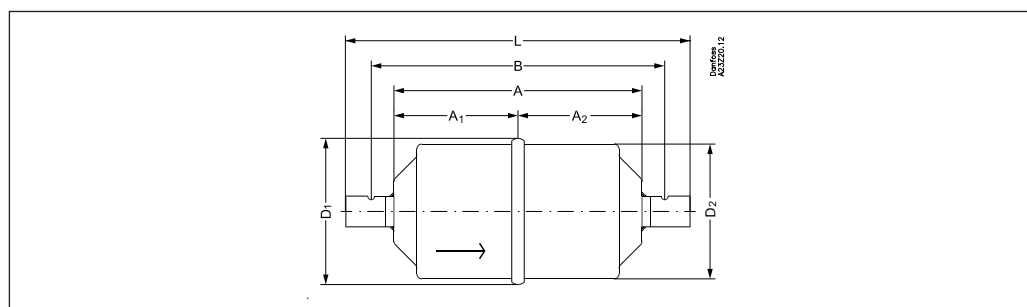
Solder connections



Type		A	A ₁	A ₂	B	L	D ₁	D ₂	Weight
DCL/DML 032s	in.	2.60	0.63	1.97	3.23	3.86	1.81	1.69	0.39 lbs
DCL/DML 032.5s	in.	2.60	0.63	1.97	3.31	4.02	1.81	1.69	0.42 lbs
DCL/DML 033s	in.	2.60	0.63	1.97	3.35	4.09	1.81	1.69	0.42 lbs
DCL/DML 034s	in.	2.60	0.63	1.97	3.43	4.25	1.81	1.69	0.44 lbs



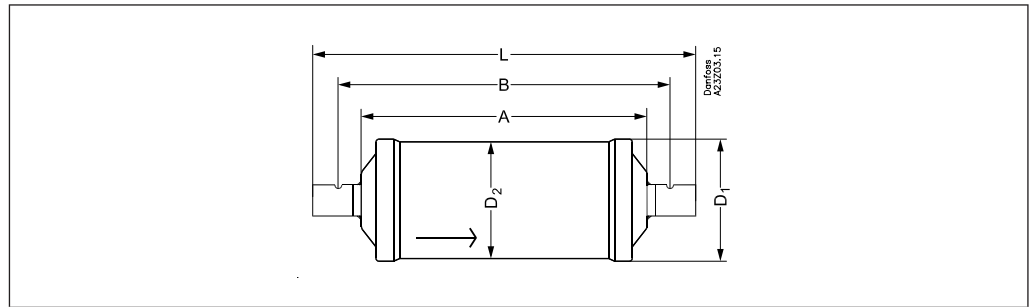
Type		A	A ₁	A ₂	B	L	D ₁	D ₂	Weight
DCL/DML 052s	in.	2.95	0.96	1.99	3.58	4.21	2.28	2.13	0.81 lbs
DCL/DML 052.5s	in.	2.95	0.96	1.99	3.66	4.37	2.28	2.13	0.84 lbs
DCL/DML 053s	in.	2.95	0.96	1.99	3.70	4.45	2.28	2.13	0.84 lbs
DML 054s	in.	2.95	0.96	1.99	3.78	4.61	2.28	2.13	0.86 lbs
DML 055s	in.	2.95	0.96	1.99	3.90	4.84	2.28	2.13	0.88 lbs



Type		A	A ₁	A ₂	B	L	D ₁	D ₂	Weight
DCL/DML 082s	in.	3.98	1.99	1.99	4.61	5.24	2.28	2.13	0.84 lbs
DCL/DML 082.5s	in.	3.98	1.99	1.99	4.69	5.39	2.28	2.13	0.86 lbs
DCL/DML 083s	in.	3.98	1.99	1.99	4.72	5.47	2.28	2.13	0.86 lbs
DCL/DML 084s	in.	3.98	1.99	1.99	4.80	5.63	2.28	2.13	0.88 lbs
DML 085s	in.	3.98	1.99	1.99	4.92	5.87	2.28	2.13	0.90 lbs
DCL/DML 162s	in.	4.33	2.17	2.17	4.96	5.59	3.15	2.99	1.69 lbs
DCL/DML 162.5s	in.	4.33	2.17	2.17	5.04	5.75	3.15	2.99	1.72 lbs
DCL/DML 163s	in.	4.33	2.17	2.17	5.08	5.83	3.15	2.99	1.72 lbs
DCL/DML 164s	in.	4.33	2.17	2.17	5.16	5.98	3.15	2.99	1.74 lbs
DCL/DML 165s	in.	4.33	2.17	2.17	5.28	6.22	3.15	2.99	1.76 lbs
DCL/DML 166s	in.	4.33	2.17	2.17	5.51	6.69	3.15	2.99	1.80 lbs
DCL/DML 167s	in.	4.33	2.17	2.17	5.35	6.77	3.15	2.99	1.85 lbs

Dimensions and weights
(cont.)

Solder connections



Type		A	A ₁	A ₂	B	L	D ₁	D ₂	Weight
DCL/DML 303s	in.	7.32	-	-	8.07	8.82	3.15	2.99	2.84 lbs
DCL/DML 304s	in.	7.32	-	-	8.15	8.98	3.15	2.99	2.86 lbs
DCL/DML 305s	in.	7.32	-	-	8.27	9.21	3.15	2.99	2.88 lbs
DCL/DML 306s	in.	7.32	-	-	8.50	9.69	3.15	2.99	2.93 lbs
DCL/DML 307s	in.	7.32	-	-	8.35	9.76	3.15	2.99	2.97 lbs
DCL/DML 309s	in.	7.32	-	-	8.15	9.80	3.15	2.99	2.99 lbs
DCL/DML 414s	in.	7.36	-	-	8.19	9.02	3.66	3.50	4.47 lbs
DCL/DML 415s	in.	7.36	-	-	8.31	9.25	3.66	3.50	4.49 lbs
DCL/DML 417s	in.	7.36	-	-	8.39	9.80	3.66	3.50	4.58 lbs
DCL/DML 419s	in.	7.36	-	-	8.19	9.84	3.66	3.50	4.60 lbs
DCL/DML 604s	in.	13.27	-	-	14.09	14.92	3.15	2.99	5.15 lbs
DCL/DML 607s	in.	13.27	-	-	14.29	14.71	3.15	2.99	5.26 lbs
DCL/DML 609s	in.	13.27	-	-	14.09	14.75	3.15	2.99	5.28 lbs
DCL/DML 757s	in.	13.31	-	-	14.33	15.75	3.66	3.50	7.44 lbs
DCL/DML 759s	in.	13.31	-	-	14.13	15.79	3.66	3.50	7.46 lbs

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 710-86 for recommended initial and final PPM values for different refrigerants.

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