

Technical brochure

Filter drier

DCR - with replaceable solid core



Danfoss **ELIMINATOR** filter driers with replaceable solid core, type DCR, are for use in liquid and/or suction lines in refrigeration, freezing and air-conditioning systems.

Besides being able to meet the demanding requirements of high working pressure levels when operating with R410A and CO₂, the new DCR programme offers flexibility with respect to different pressure versions.

Features

DCR housing:

- DCR housing (incl. core holder) are made entirely of steel and are thus compatible with all refrigerants.
- DCR housings have undergone phosphate pre-treatment and have a corrosion-resistant powder-paint finish.
- DCR housings are helium leak tested.

Top covers for DCR housings:

- Zinc-chromated steel top covers with or without external access connection.

Inserts for DCR housings - strainer

48 - F strainer - compatible with all refrigerants:

- Retains dirt particles larger than 15 µm.
- For use direct in DCR housings.
- Utilised in the suction or liquid line.

Inserts for DCR housings - solid cores

48 - DM - 100% molecular sieve solid core suitable for HFC refrigerants:

- Provides high moisture adsorption at low and high condensing temperatures.
- Effective protection against impurities.

48 - DC - 80% molecular sieve and 20% activated alumina solid core suitable for HCFC refrigerants and compatible with HFC refrigerants:

- Adsorbs moisture and acid in the system throughout the entire temperature range.

48 - DA - 30% molecular sieve and 70% activated alumina solid core suitable after compressor burn-out and compatible with HCFC / HFC refrigerants:

- High acid adsorption and standard water adsorption.

All solid cores have an optimised uniform grain size ensuring effective dirt removal and low pressure drop. The robust solid cores withstand pressure surge and vibration.

Approvals

CE marked in accordance with the European Pressure Equipment Directive - 97/23/EC

CEUS listed 207 and C22.2 no. 140.3

EN 12284

Technical data

Type	PS / MWP	Refrigerant	Temperature range
DCR 048	46 bar (667 psig)* / 46 bar (667 psig)*	HCFC / HFC	-40 → +70°C / -40 → +160°F
DCR 096			
DCR 144	35 bar (400 psig)*1 / 46 bar (667 psig)* 46 bar (667 psig)*2		
DCR 192	28 bar (400 psig)*1 / 46 bar (667 psig)* 40 bar (580 psig)*2		

Important note references:

- *1 For usage with strainer or as a receiver application
- *2 For "drier" application using all the permissible cores
- * for either 1* or 2*

Type of connector and recommended soldering material

	Copper ODF solder connector Copper pipe
	Steel ODF solder connector Copper pipe
	Steel butt weld connector Steel pipe

Solder connector	Recommended soldering material
Copper	Sil-fos 15
Steel	Silver-flo 55 + Easy-flow flux

Core Selection

		DC	DM
Refrigerant	HFC	Can be used	Recommended
	HCFC	Recommended	Can be used
Oil	Mineral or AB	Recommended	Can be used
	POE or PAG, pure	Can be used	Recommended
	POE or PAG, eith additives	Not recommended	Recommended

Capacity

48-DM & 100-DM

Type	Number of cores	Drying capacity [kg refrigerant] ¹⁾										Liquid capacity [kW] ²⁾				
		R134a		R404A		R507		R407C		R410A		R134a	R404A	R507	R22 / R407C	R410A
		24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C					
DCR 0485	1											80.6	59.4	57.5	84.5	87.9
DCR 0487												128.0	92.5	89.6	132.6	136.8
DCR 0489												184.3	132.6	128.4	190.4	195.9
DCR 04811		82.5	78.0	88.7	84.0	90.3	83.4	82.7	76.4	75.2	69.3	249.3	180.5	174.8	258.5	266.8
DCR 04813												304.1	222.0	215.1	317.1	328.5
DCR 04817												434.3	324.1	314.3	459.4	480.7
DCR 04821											320.4	234.4	227.1	334.5	346.8	
DCR 0967	2											119.6	85.7	83.0	123.2	126.6
DCR 0969												189.5	136.4	131.9	195.6	201.2
DCR 09611		165.0	155.0	177.3	168.1	180.5	166.8	165.3	152.8	150.5	138.7	259.7	187.2	181.4	268.6	276.7
DCR 09613												331.9	240.8	233.3	344.7	356.1
DCR 09617												477.2	349.1	338.3	498.2	516.6
DCR 1449		3											184.4	132.7	128.5	190.5
DCR 14411	247.5		233.9	266.0	252.7	270.8	250.1	248.0	229.1	225.7	208.0	272.5	196.9	190.7	282.2	290.9
DCR 14413												340.1	246.8	239.1	353.2	364.9
DCR 14417												442.3	323.0	313.0	461.3	478.0
DCR 19211	4											290.0	211.6	205.0	302.3	313.1
DCR 19213		329.9	311.9	354.7	336.2	361.0	333.5	330.6	305.5	300.9	277.0	359.8	261.7	253.6	374.2	387.0
DCR 19217												505.6	366.0	354.6	524.3	541.0
DCR 300	3	555.9	525.5	597.6	566.5	608.3	561.9	557.1	514.8	507.1	467.2					
DCR 400	4	741.2	700.6	796.8	755.3	811.0	749.2	742.8	686.4	676.1	623.0					

48-DC & 100-DC

Type	Number of cores	Drying capacity [kg refrigerant] ¹⁾										Liquid capacity [kW] ²⁾				
		R134a		R404A		R507		R22/R407C		R410A		R134a	R404A	R507	R22 / R407C	R410A
		24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C					
DCR 0485	1											80.6	59.4	57.5	84.5	87.9
DCR 0487												128.0	92.5	89.6	132.6	136.8
DCR 0489												184.3	132.6	128.4	190.4	195.9
DCR 04811		64.7	61.2	69.6	65.9	70.8	65.4	64.9	59.9	59.0	54.4	249.3	180.5	174.8	258.5	266.8
DCR 04813												304.1	222.0	215.1	317.1	328.5
DCR 04817												434.3	324.1	314.3	459.4	480.7
DCR 04821											320.4	234.4	227.1	334.5	346.8	
DCR 0967	2											119.6	85.7	83.0	123.2	126.6
DCR 0969												189.5	136.2	131.9	195.6	201.2
DCR 09611		129.4	122.3	139.1	131.9	141.6	130.8	129.7	119.9	118.1	108.8	259.7	187.2	181.4	268.6	276.7
DCR 09613												331.9	240.8	233.3	344.7	356.1
DCR 09617												477.2	349.1	338.3	498.2	516.6
DCR 1449		3											184.4	132.7	128.5	190.5
DCR 14411	194.1		183.5	208.7	197.8	212.4	196.2	194.6	179.8	177.1	162.2	272.5	196.9	190.7	282.2	290.9
DCR 14413												340.1	246.8	239.1	353.2	364.9
DCR 14417												442.3	323.0	313.0	461.3	478.0
DCR 19211	4											290.0	211.6	205.0	302.3	313.1
DCR 19213		258.9	244.7	278.3	263.8	283.2	261.7	259.4	239.7	236.1	217.6	359.8	261.7	253.6	374.2	387.0
DCR 19217												505.6	366.0	354.6	524.3	541.0
DCR 19221												442.5	321.7	311.7	460.2	475.8
DCR 300	3	433.5	409.7	466.0	441.7	474.3	438.1	434.4	401.4	395.3	364.3					
DCR 400	4	577.9	546.3	621.3	588.9	632.4	584.2	579.1	535.2	527.1	485.7					

¹⁾ Drying capacity is based on the following moisture contents before and after drying:
 R22: From 1050 ppm W to 60 ppm W in accordance with ARI 710-86.
 R134a: From 1050 ppm W to 75 ppm W. If refrigerant is to be dried to 50 ppm W, reduce the stated capacities by 15%.
 R404A, R407C & R507: From 1020 ppm W to 30 ppm W.
 R410A: From 1050 ppm W to 60 ppm W.
²⁾ Liquid capacity given in accordance with ARI 710-2002 evaporating temperature $t_e = -15^\circ\text{C}$, condensing temperature $t_c = +30^\circ\text{C}$ and pressure drop across filter drier $\Delta p = 0.07 \text{ bar}$.

Capacity (cont.)



48-DA

Type	Number of cores	Drying capacity [g of water] ³⁾												Acid capacity ⁴⁾ [g]
		Evaporating temperature t _e [°C]												
		-40	-20	4.4	-30	-20	4.4	-40	-20	4.4	-40	-20	4.4	
		R22/ R407C			R134a			R404A / R507			R410A			
DCR 048	1	28	19	12	45	38	27	47	30	19	42	35	25	26.6
DCR 096	2	56	37	24	90	77	54	94	60	37	84	70	50	53.3
DCR 144	3	84	56	36	135	115	81	142	90	56	126	105	75	79.9
DCR 192	4	112	74	48	180	153	108	189	120	75	168	140	100	106.5

³⁾ Drying capacity is expressed during drying in:
 R22: EPD = 10 ppm W, corresponding to a dew point temperature = -50°C
 R134a: EPD = 50 ppm W, corresponding to a dew point temperature = -37°C
 R404A: EPD = 10 ppm W, corresponding to a dew point temperature = -40°C
 R407C: EPD = 10 ppm W, corresponding to a dew point temperature = -40°C
⁴⁾ Adsorption capacity of oleic acid at 0.05 TAN (Total Acid Number)

Recommended plant capacity in suction line - burn-out

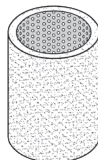


48-DA

Type	Recommended plant capacity [kW]											
	Evaporating temperature t _e [°C]											
	-40	-20	4.4	-30	-20	4.4	-40	-20	4.4	-40	-20	4.4
	Pressure drop [Δp bar]											
	0.04	0.10	0.21	0.04	0.07	0.14	0.04	0.10	0.21	0.04	0.10	0.21
	R22/ R407C			R134a			R404A/ R507			R410A		
DCR 0485	3.1	8.9	21.0	3.0	5.4	13.0	2.4	7.1	17.5	3.1	8.9	21.0
DCR 0487	5.8	16.1	37.8	5.6	9.9	23.4	4.5	12.9	31.2	5.8	16.1	37.8
DCR 0489	7.8	21.6	50.7	7.5	13.3	31.5	6.0	17.2	41.8	7.8	21.6	50.7
DCR 04811	10.0	27.3	63.3	9.6	16.8	39.5	7.7	21.8	51.9	10.0	27.3	63.3
DCR 04813	10.0	27.3	63.3	9.6	16.8	39.5	7.7	21.8	51.9	10.0	27.3	63.3
DCR 04817	10.0	27.3	63.3	9.6	16.8	39.5	7.7	21.8	51.9	10.0	27.3	63.3
DCR 04821	10.0	27.3	63.3	9.6	16.8	39.5	7.7	21.8	51.9	10.0	27.3	63.3
DCR 0965	3.3	9.1	21.4	3.2	5.7	13.4	2.5	7.4	18.0	3.3	9.2	21.6
DCR 0967	5.8	16.2	38.1	5.6	9.9	23.6	4.5	12.9	31.4	5.8	16.2	38.1
DCR 0969	8.7	24.6	58.3	8.4	15.0	35.9	6.8	19.7	48.1	8.7	24.6	58.3
DCR 09611	11.9	33.4	79.3	11.4	20.4	48.9	9.3	26.8	65.4	11.9	33.4	79.3
DCR 09613	14.1	39.9	95.2	13.6	24.3	58.5	11.0	32.0	78.7	14.1	39.9	95.2
DCR 09617	14.1	39.9	95.2	13.6	24.3	58.5	11.0	32.0	78.7	14.1	39.9	95.2
DCR 09621	14.1	39.9	95.2	13.6	24.3	58.5	11.0	32.0	78.7	14.1	39.9	95.2
DCR 1445	3.5	10.0	22.8	3.4	6.0	14.0	2.7	7.7	18.9	3.5	10.0	22.8
DCR 1447	6.6	18.9	42.9	6.3	11.2	26.4	5.1	14.5	35.6	6.6	18.9	42.9
DCR 1449	8.8	25.1	57.2	8.4	15.0	35.2	6.8	19.4	47.5	8.8	25.1	57.2
DCR 14411	13.2	38.1	92.2	12.7	23.0	56.2	10.3	30.7	76.6	13.2	38.1	92.2
DCR 14413	13.2	38.1	92.2	12.7	23.0	56.2	10.3	30.7	76.6	13.2	38.1	92.2
DCR 14417	13.2	38.1	92.2	12.7	23.0	56.2	10.3	30.7	76.6	13.2	38.1	92.2
DCR 14421	13.2	38.1	92.2	12.7	23.0	56.2	10.3	30.7	76.6	13.2	38.1	92.2
DCR 1925	4.2	11.5	27.3	4.0	7.1	16.8	3.2	9.2	22.7	4.2	11.5	27.3
DCR 1927	7.9	21.6	51.4	7.6	13.4	31.6	6.1	17.4	42.7	7.9	21.6	51.4
DCR 1929	10.6	28.9	68.9	10.2	18.0	42.1	8.2	23.3	57.2	10.6	28.9	68.9
DCR 19211	14.8	41.8	99.4	14.3	25.5	61.2	11.6	33.6	82.2	14.8	41.8	99.4
DCR 19213	18.0	51.1	122.1	17.4	31.1	75.0	14.1	41.1	101.0	18.0	51.1	122.1
DCR 19217	18.0	51.1	122.1	17.4	31.1	75.0	14.1	41.1	101.0	18.0	51.1	122.1
DCR 19221	18.0	51.1	122.1	17.4	31.1	75.0	14.1	41.1	101.0	18.0	51.1	122.1

Data given in accordance with ARI-Standard 710-2002 for t_e = 4.4°C and t_c = 32.2°C.

Strainer mounted in suction line



48-F

Refrigerant	R22/ R407C			R134a			R404A / R507			R410A		
Evaporating temperature [°C]	-40	-20	4.4	-30	-20	4.4	-40	-20	4.4	-40	-20	4.4
Pressure drop [Δp bar]	0.04	0.10	0.21	0.04	0.07	0.14	0.04	0.10	0.21	0.04	0.10	0.21
Recommended system capacity [kW]	15	47	113	15	28	69	12	38	93	15	47	113

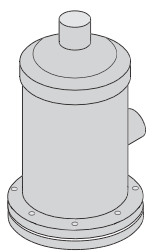
Strainer mounted in liquid line

Refrigerant	R22/ R407C	R134a	R404A / R507	R410A
Recommended system capacity [kW]	390	350	260	390

Liquid capacity is given in accordance with ARI 710-2002 at:
 Evaporating temperature t_e = -15°C
 Condensing temperature t_c = +30°C
 Pressure drop across filter drier Δp = 0.07 bar

The data given apply to DCR 04811 with 48-F core.

Ordering



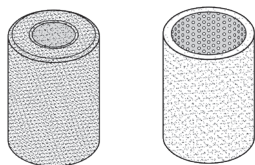
Normal pressure versions

DCR housings + top cover

Type	Number of cores	Steel connectors			Code number	Max. working pressure (MWP)	PS
		Solder		Butt weld			
		ODF in.	ODF mm				
DCR 0485	1	5/8	16	1/2	023U7050	46 bar*	46 bar*
DCR 0487		7/8	22	3/4	023U7051		
DCR 0489			28	1	023U7052		
DCR 0489		1 1/8		1	023U7053		
DCR 04811		1 3/8	35	1 1/4	023U7054		
DCR 04813		1 5/8		1 1/2	023U7055		
DCR 04813			42	1 1/2	023U7056		
DCR 04817		2 1/8	54	2	023U7057		
DCR 04821		2 5/8		2 1/2	023U7076		
DCR 0967	2	7/8	22	3/4	023U7058	46 bar*	46 bar*
DCR 0969			28	1	023U7059		
DCR 0969		1 1/8		1	023U7060		
DCR 09611		1 3/8	35	1 1/4	023U7061		
DCR 09613		1 5/8		1 1/2	023U7062		
DCR 09613			42	1 1/2	023U7063		
DCR 09617		2 1/8	54	2	023U7064		
DCR 1449	3		28	1	023U7065	46 bar*	35 bar (*1) 46 bar (*2)
DCR 1449		1 1/8		1	023U7066		
DCR 14411		1 3/8	35	1 1/4	023U7067		
DCR 14413		1 5/8		1 1/2	023U7068		
DCR 14413			42	1 1/2	023U7069		
DCR 14417		2 1/8	54	2	023U7070		
DCR 19211	4	1 3/8	35	1 1/4	023U7071	46 bar*	28 bar (*1) 40 bar (*2)
DCR 19213		1 5/8		1 1/2	023U7072		
DCR 19213			42	1 1/2	023U7073		
DCR 19217		2 1/8	54	2	023U7074		

Type	Number of cores	Copper connectors		Code number	Max. working pressure (MWP)	PS
		Solder				
		ODF in.	ODF mm			
DCR 0485s	1	5/8	16	023U7250	46 bar*	46 bar*
DCR 0487s		7/8	22	023U7251		
DCR 0489s			28	023U7252		
DCR 0489s		1 1/8		023U7253		
DCR 04811s		1 3/8	35	023U7254		
DCR 04813s		1 5/8		023U7255		
DCR 04813s			42	023U7256		
DCR 04817s		2 1/8	54	023U7257		
DCR 04821s		2 5/8		023U7276		
DCR 0967s	2	7/8	22	023U7258	46 bar*	46 bar*
DCR 0969s			28	023U7259		
DCR 0969s		1 1/8		023U7260		
DCR 09611s		1 3/8	35	023U7261		
DCR 09613s		1 5/8		023U7262		
DCR 09613s			42	023U7263		
DCR 09617s		2 1/8	54	023U7264		
DCR 09621s	2 5/8		023U7281			
DCR 1449s	3		28	023U7265	46 bar*	35 bar (*1) 46 bar (*2)
DCR 14411s		1 3/8	35	023U7267		
DCR 14413s		1 5/8		023U7282		
DCR 14413s			42	023U7269		
DCR 14417s	2 1/8	54	023U7270			
DCR 19213s	4	1 3/8		023U7272	46 bar*	28 bar (*1) 40 bar (*2)
DCR 19213s			42	023U7273		
DCR 19217s		2 1/8	54	023U7274		

DCR inserts



Type	Material	Code no.		
		8 pcs.		1 piece with gasket
		with gasket	without gasket	
48-DM solid core	100% molecular sieve	023U1392	023U1393	023U1391
48-DC solid core	80% molecular sieve & 20% Al ₂ O ₃	023U4381	023U4382	023U4380
48-DA solid core	30% molecular sieve & 70% Al ₂ O ₃	023U5381	023U5382	023U5380
48-F strainer		023U1921		
		6 pcs.		
100-DM solid core	100% molecular sieve	023U7562		
100-DC solid core	80% molecular sieve & 20% Al ₂ O ₃	023U7563		

Core surface

DM 048, DC 048 and DA 048	=	683 cm ²
DM 096, DC 096 and DA 096	=	1366 cm ²
DM 144, DC 144 and DA 144	=	2049 cm ²
DM 192, DC 192 and DA 192	=	2732 cm ²
DM 300 and DC 300	=	3165 cm ²
DM 400 and DC 400	=	4220 cm ²
48-F	=	405 cm ²

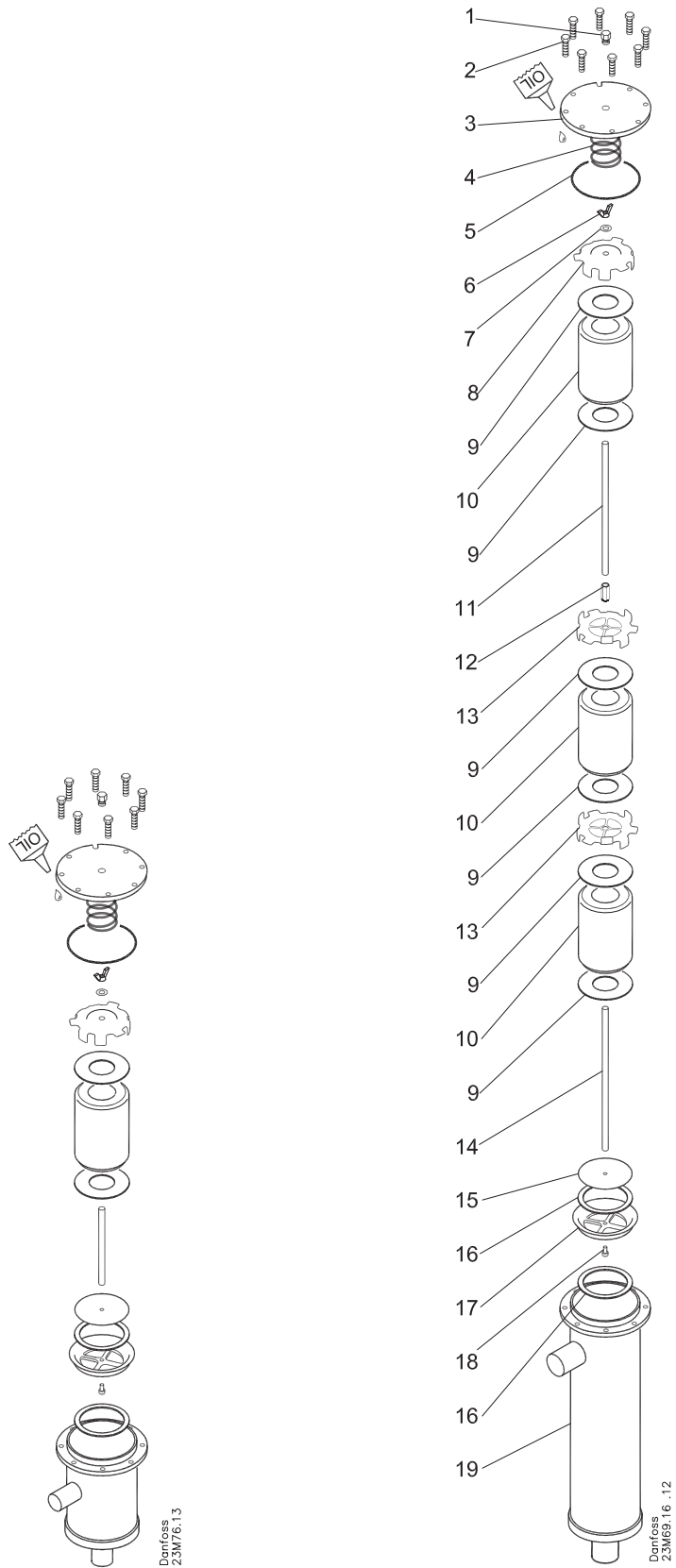
Core volume

DM 048, DC 048 and DA 048	=	716 cm ³
DM 096, DC 096 and DA 096	=	1432 cm ³
DM 144, DC 144 and DA 144	=	2148 cm ³
DM 192, DC 192 and DA 192	=	2864 cm ³
DM 300 and DC 300	=	4761 cm ³
DM 400 and DC 400	=	6348 cm ³

Design

Example:

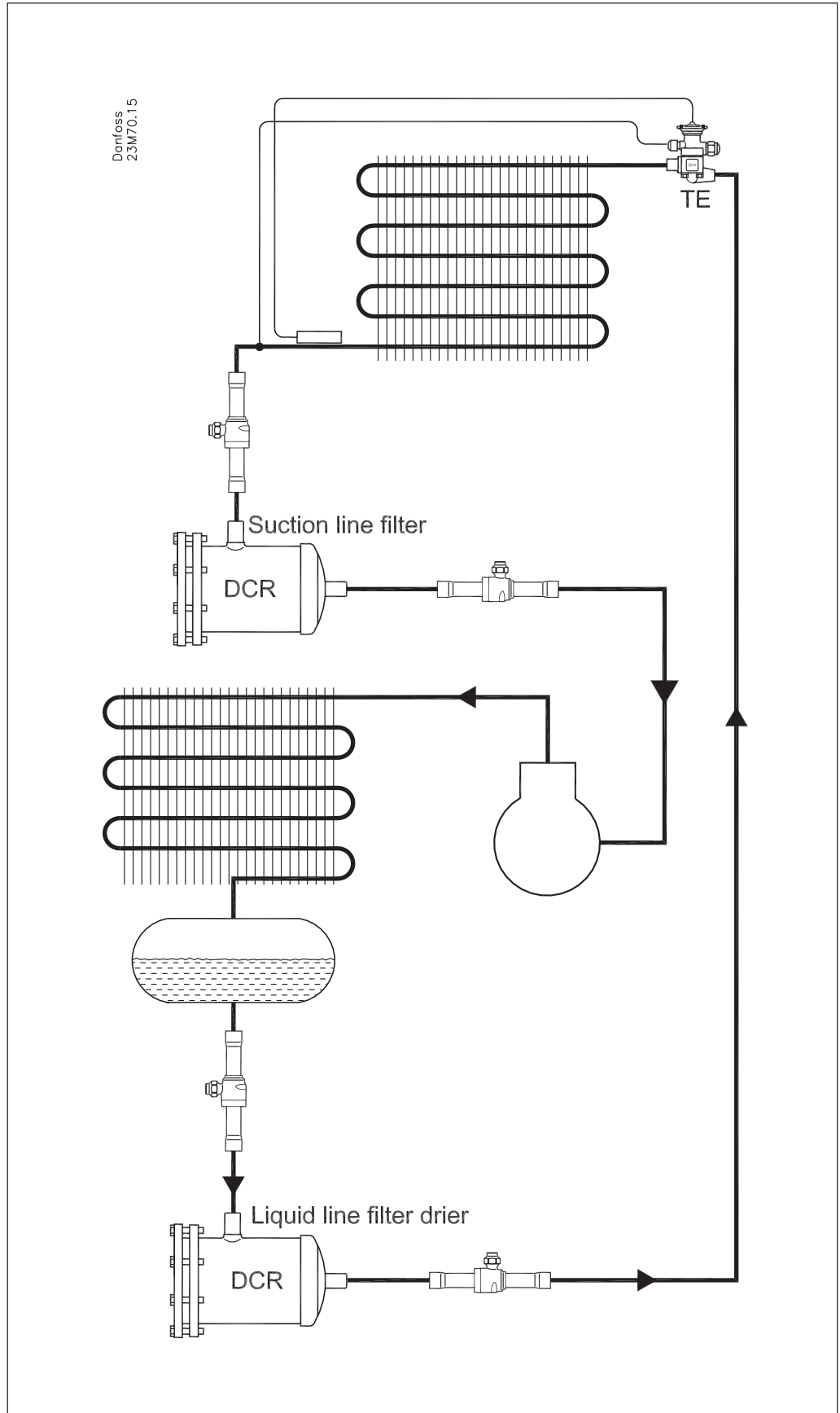
1. Plug 1/4 in. NPT
2. Top cover bolts
M8 × 35, class 10.9 or
M12 × 40, class 8.8 (high pressure)
3. Top cover
4. Spring
5. Top cover gasket
Ø121.8 × Ø113.6 × 0.8 mm
6. Wing nut
M10 (torque max. 3 Nm)
7. Lock washer
8. Top plate
9. Felt gasket
Ø95.5 × Ø45.5 × 2 mm
10. Solid core
11. Extension rod
12. Extension nut
13. Core plate
14. Distance rod
15. Wire mesh
16. Felt gasket
Ø95.5 × Ø78 × 2 mm
17. Core holder
18. Hex socket head screw M6
19. Filter drier shell



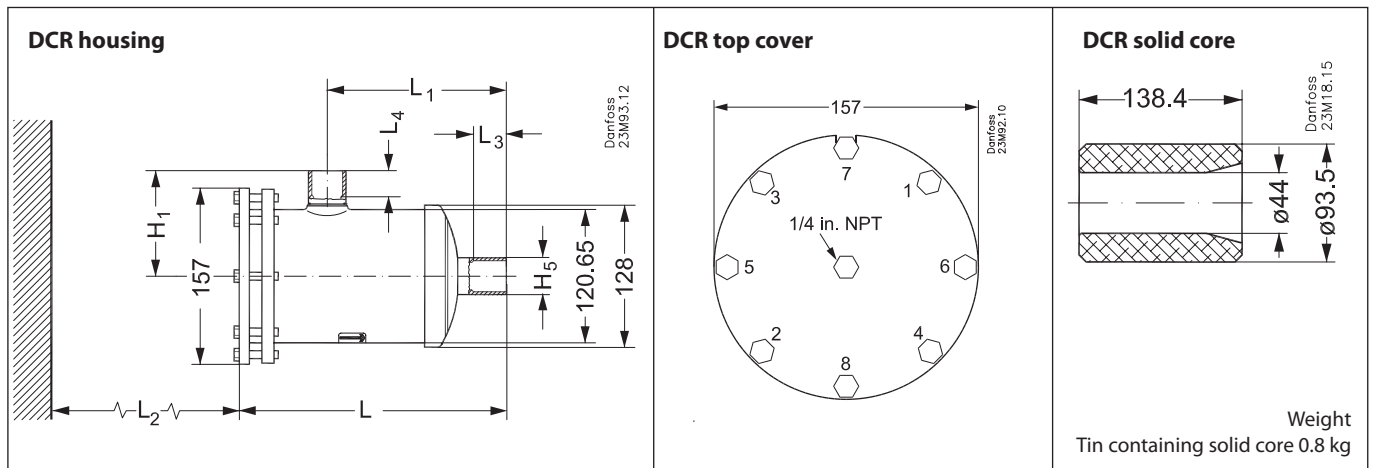
Danfoss
2.3M/76-13

Danfoss
2.3M65.16-12

Application



Dimensions and weights for normal-pressure version



Type	Number of cores	DCR with steel connectors							DCR with copper connectors							Weight* kg
		L mm	L ₁ mm	L ₂ mm	L ₃ mm	L ₄ mm	H ₁ mm	H ₅ mm	L mm	L ₁ mm	L ₂ mm	L ₃ mm	L ₄ mm	H ₁ mm	H ₅ mm	
DCR 0485(s)	1	245.6	165.2	170	12	12	96.8	21	262.6	182.2	170	12	12	112.8	19	5.2
DCR 0487(s)		239.8	159.4		17	17	90.3	27	262.3	181.9		17	17	112.8	25	
DCR 0489(s)		243.3	162.9		22	22	94.3	34	264.8	184.4		20	20	115.8	32	
DCR 0489(s)		243.3	162.9		22	22	94.3	34	264.8	184.4		20	20	115.8	32	
DCR 04811(s)		245.7	165.3		25	25	97.3	42	267.2	186.8		25	25	118.8	39	
DCR 04813(s)		251.0	170.6		29	29	103.3	48	268.5	188.1		29	29	120.8	46	
DCR 04813(s)		251.0	170.6		29	29	103.3	48	268.5	188.1		29	29	120.8	46	
DCR 04817(s)		256.9	176.5		33	33	110.8	60	270.9	190.5		34	34	124.8	58	
DCR 04821(s)	254.7	174.3	38	38	115.8	73	267.7	187.3	34	34	128.8	71				
DCR 0965(s)	2	384.6	304.2	310	12	12	95.8	21	401.6	321.2	310	12	12	112.8	19	6.6
DCR 0967(s)		378.8	298.4		17	17	90.3	27	401.3	320.9		17	17	112.8	25	
DCR 0969(s)		382.3	301.9		22	22	94.3	34	403.8	323.4		20	20	115.8	32	
DCR 0969(s)		382.3	301.9		22	22	94.3	34	403.8	323.4		20	20	115.8	32	
DCR 09611(s)		406.2	325.8		25	25	97.3	42	406.2	325.8		25	25	118.8	39	
DCR 09613(s)		390.0	309.6		29	29	103.3	48	407.5	327.1		29	29	120.8	46	
DCR 09613(s)		390.0	309.6		29	29	103.3	48	407.5	327.1		29	29	120.8	46	
DCR 09617(s)		409.9	329.5		33	33	110.8	60	409.9	329.5		34	34	124.8	58	
DCR 09621(s)	393.7	313.3	38	38	115.8	73	406.7	326.3	34	34	128.8	71				
DCR 1445(s)	3	526.6	446.2	310	12	12	95.8	21	543.6	463.2	310	12	12	112.8	19	7.8
DCR 1447(s)		520.8	440.4		17	17	90.3	27	543.3	462.9		17	17	112.8	25	
DCR 1449(s)		524.3	443.9		22	22	94.3	34	545.8	465.4		20	20	115.8	32	
DCR 1449(s)		524.3	443.9		22	22	94.3	34	545.8	465.4		20	20	115.8	32	
DCR 14411(s)		548.2	467.8		25	25	97.3	42	548.2	467.8		25	25	118.8	39	
DCR 14413(s)		532.0	451.6		29	29	103.3	48	549.5	469.1		29	29	120.8	46	
DCR 14413(s)		532.0	451.6		29	29	103.3	48	549.5	469.1		29	29	120.8	46	
DCR 14417(s)		537.9	457.5		33	33	110.8	60	551.9	471.5		34	34	124.8	58	
DCR 14421(s)	535.7	455.3	38	38	115.8	73	548.7	468.3	34	34	128.8	71				
DCR 1925(s)	4	666.6	586.2	310	12	12	95.8	21	683.6	603.2	310	12	12	112.8	19	9.1
DCR 1927(s)		660.8	580.4		17	17	90.3	27	683.3	602.9		17	17	112.8	25	
DCR 1929(s)		664.3	583.9		22	22	94.3	34	685.8	605.4		20	20	115.8	32	
DCR 1929(s)		664.3	583.9		22	22	94.3	34	685.8	605.4		20	20	115.8	32	
DCR 19211(s)		666.7	586.3		25	25	97.3	42	688.2	607.8		25	25	118.8	39	
DCR 19213(s)		672.0	591.6		29	29	103.3	48	689.5	609.1		29	29	120.8	46	
DCR 19213(s)		672.0	591.6		29	29	103.3	48	689.5	609.1		29	29	120.8	46	
DCR 19217(s)		691.9	611.5		33	33	110.8	60	691.9	611.5		34	34	124.8	58	
DCR 19221(s)	675.7	595.3	38	38	115.8	73	688.7	608.3	34	34	128.8	71				

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