



FILTER DRIERS



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INDEX

FILTER DRIERS

Liquid Line Filter Drier [NMH Series]	1-4
Combo Filter Drier with Sight Glass [NMHSG Series]	5-7
Liquid Line Filter Drier [NCH Series]	8-11
Combo Filter Drier with Sight Glass [NCHSG Series]	12-14
Suction Line Filter Drier [NCHSF Series]	15-17
Bi-Flow Filter Drier [NCHBF Series]	18-19
Suction Line Filter [NSF Series]	20

FILTER DRIER CORE & SHELL

Replaceable Filter Drier Core	21
Suction Line Filter	21
Replaceable Core Shell [NRC Series]	22

LIQUID LINE FILTER DRIER NMH (BEAD TYPE)

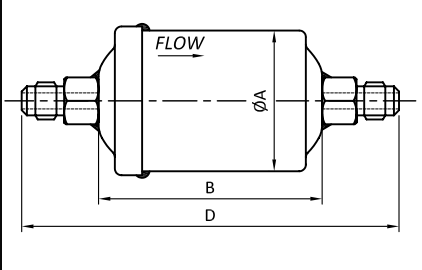
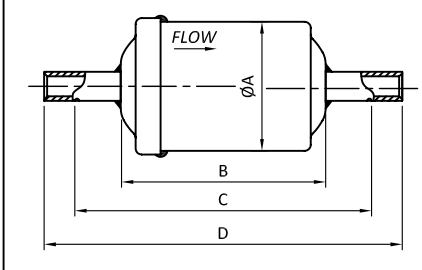
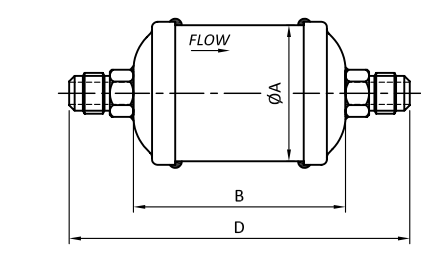
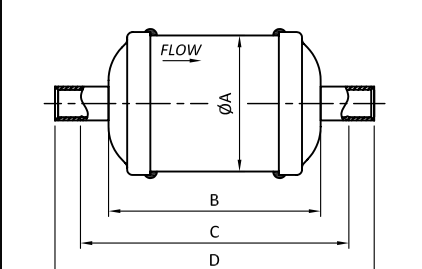
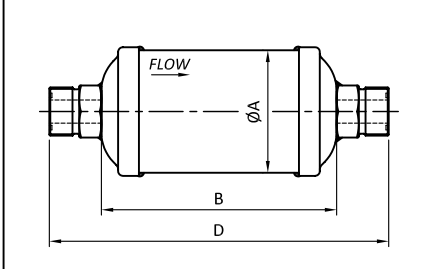
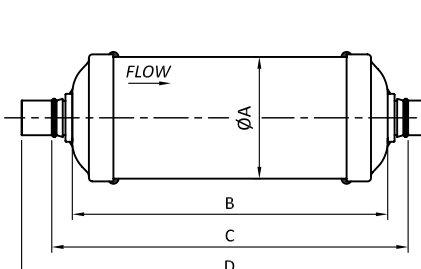
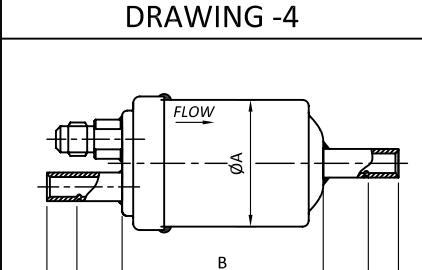
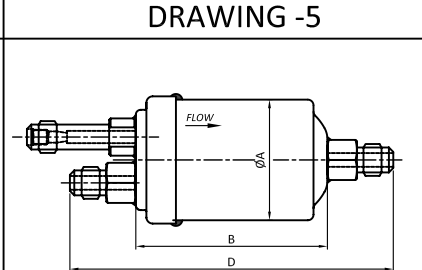
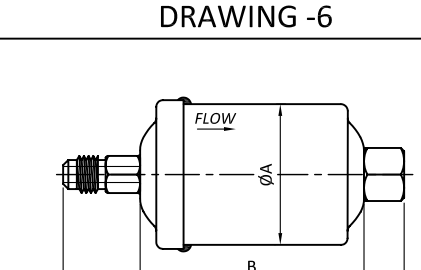
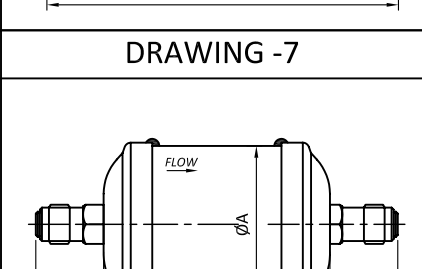
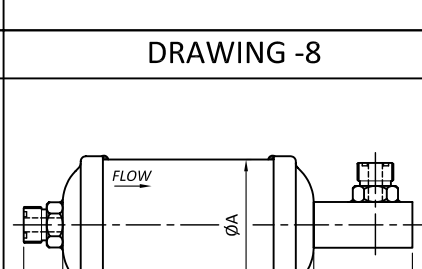
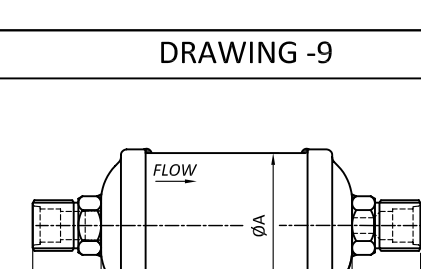


File No. SA44486



*Only few models shown for representation purpose only

DIMENSIONAL DATA

		
DRAWING -1	DRAWING -2	DRAWING -3
		
DRAWING -4	DRAWING -5	DRAWING -6
		
DRAWING -7	DRAWING -8	DRAWING -9
		
DRAWING -10	DRAWING -11	DRAWING -12

Connection Type (Solder) ←
 Connection Size (1/2") ←
 Desiccant Quantity (cubic inch) ←
NMH - 16 4S
 Heavy Duty →
 Bead Type (Molecular Sieves) →
 NDL →

LIQUID LINE FILTER DRIER NMH SERIES (BEAD TYPE) MODELS AVAILABLE



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (inch)	REFER DRAWING NO.		
		mm	Inch	mm	Inch	mm	Inch	mm	Inch				
1	NMH-032F	Ø 42	Ø 1.6	67	2.64	--	--	113	4.45	1/4" SAE	DRAWING - 1		
2	NMH-032MFF					--	--	102	4.00	1/4" SAE (F/M)	DRAWING - 9		
3	NMH-032S					97	3.82	117	4.61	1/4" ODF	DRAWING - 2		
4	NMHSV-032F					--	--	113	4.45	1/4" SAE	DRAWING - 8		
5	NMHSV-032S					97	3.82	117	4.61	1/4" ODF	DRAWING - 7		
6	NMH-033F					--	--	121	4.76	3/8" SAE	DRAWING - 1		
7	NMH-033S					97	3.82	117	4.61	3/8" ODF	DRAWING - 2		
8	NMH-052F	Ø 63.5	Ø 2.5	78	3.07	--	--	124	4.88	1/4" SAE	DRAWING - 3		
9	NMH-052S					108	4.25	128	5.04	1/4" ODF	DRAWING - 4		
10	NMH-053F					--	--	132	5.20	3/8" SAE	DRAWING - 3		
11	NMH-053S					108	4.25	128	5.04	3/8" ODF	DRAWING - 4		
12	NMH-053R			--	--	116	4.56	11/16-16 ORFS	DRAWING - 5				
13	NMH-082F			99	3.90	--	--	145	5.71	1/4" SAE	DRAWING - 3		
14	NMH-082S							129	5.08	149	5.87	1/4" ODF	DRAWING - 4
15	NMH-083F					--	--	153	6.02	3/8" SAE	DRAWING - 3		
16	NMH-083S					129	5.08	149	5.87	3/8" ODF	DRAWING - 4		
17	NMH-084F					--	--	159	6.26	1/2" SAE	DRAWING - 3		
18	NMH-084S					129	5.08	149	5.87	1/2" ODF	DRAWING - 4		
19	NMH-163F					122	4.8	--	--	176	6.93	3/8" SAE	DRAWING - 3
20	NMH-163S									152	5.98	172	6.77
21	NMH-163R							--	--	160	6.30	11/16-16 ORFS	DRAWING - 5
22	NMH-164F	--	--					182	7.17	1/2" SAE	DRAWING - 3		
23	NMH-164S	152	5.98	172	6.77			1/2" ODF	DRAWING - 4				
24	NMH-164R	--	--	162	6.38			13/16-16 ORFS	DRAWING - 5				
25	NMH-165F	--	--	190	7.48			5/8" SAE	DRAWING - 3				
26	NMH-165S	152	5.98	172	6.77			5/8" ODF	DRAWING - 4				
27	NMH-165R	--	--	176	6.93	1"-14 ORFS	DRAWING - 5						
28	NMHL-162R	Ø 76.2	Ø 3	110	4.33	--	--	148	5.82	9/16-18 ORFS	DRAWING - 5		
29	NMHL-163F					--	--	164	6.45	3/8" SAE	DRAWING - 3		
30	NMHL-163R					--	--	148	5.82	11/16-16 ORFS	DRAWING - 5		
31	NMHL-163RL			113	4.44	--	--	177	6.97	11/16-16 ORFS	DRAWING - 11		
32	NMHL-164R			110	4.33	--	--	150	5.90	13/16-16 ORFS	DRAWING - 5		
33	NMHL-164 ORF			--	--	176	6.92	1/2" SAE	DRAWING - 10				
34	NMH-303F			190	7.48	--	--	244	9.61	3/8" SAE	DRAWING - 3		
35	NMH-303S							220	8.66	240	9.45	3/8" ODF	DRAWING - 4
36	NMH-303R					--	--	228	8.98	11/16-16 ORFS	DRAWING - 5		
37	NMHL-303-ORN					--	--	244	9.61	3/8" 'O' RING	DRAWING - 12		
38	NMH-304F					--	--	250	9.84	1/2" SAE	DRAWING - 3		
39	NMH-304S					220	8.66	240	9.45	1/2" ODF	DRAWING - 4		
40	NMH-304R					--	--	230	9.05	13/16-16 ORFS	DRAWING - 5		
41	NMH-305F					--	--	258	10.16	5/8" SAE	DRAWING - 3		
42	NMH-305S					220	8.66	240	9.45	5/8" ODF	DRAWING - 4		
43	NMH-305R	--	--			244	9.61	1"-14 ORFS	DRAWING - 5				
44	NMH-306F	--	--			264	10.39	3/4" SAE	DRAWING - 3				
45	NMH-306S	220	8.66			240	9.45	3/4" ODF	DRAWING - 4				
46	NMH-307S*	220	8.66	264	10.39	7/8" ODF	DRAWING - 6						
47	NMH-309S*	220	8.66	274	10.79	1-1/8" ODF	DRAWING - 6						
48	NMH-412 ORN	Ø 88.9	Ø 3.5	253.6	9.98	--	--	288	11.33	1/4" "O" RING	DRAWING - 12		
49	NMH-413F			198	7.80	--	--	258	10.15	3/8" SAE	DRAWING - 3		
50	NMH-413S					228	8.98	248	9.76	3/8" ODF	DRAWING - 4		
51	NMH-414F			198	7.79	--	--	258	10.16	1/2" SAE	DRAWING - 3		
52	NMH-414S					228	8.98	248	9.76	1/2" ODF	DRAWING - 4		
53	NMH-415F					--	--	266	10.47	5/8" SAE	DRAWING - 3		
54	NMH-415S					228	8.98	248	9.76	5/8" ODF	DRAWING - 4		
55	NMH-415R					--	--	252	9.92	1"-14 ORFS	DRAWING - 5		
56	NMH-415-4F			--	--	262	10.31	5/8" SAE (IN) & 1/2" SAE(OUT)	DRAWING - 3				
57	NMH-415-4R			188	7.4	--	--	235	9.25	1"-14 ORFS (IN) & 13/16-16 ORFS(OUT)	DRAWING - 5		
58	NMH-416-5R	198	7.79	--	--	255	10.03	1"-1/4 ORFS (IN) & 1"-14 ORFS (OUT)	DRAWING - 5				
59	NMH-417S*			228	8.98	272	10.71	7/8" ODF	DRAWING - 6				
60	NMH-419S*			228	8.98	282	11.10	1-1/8" ODF	DRAWING - 6				
61	NMH-757S*			311	12.24	341	13.42	385	15.16	7/8" ODF	DRAWING - 6		
62	NMH-759S*	341	13.42			395	15.55	1-1/8" ODF	DRAWING - 6				

- 1) INTERNAL ASSEMBLY - BEAD TYPE
- 2) MAXIMUM WORKING PRESSURE - 45 bar (653 psig)
- 3) SAE,ORFS & 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- 4) ODF TYPE CONNECTION IS IN COPPER
- 5) *MARK CONNECTION STEEL, PLATED

LIQUID LINE FILTER DRIER NMH (BEAD TYPE) SELECTION RECOMMENDATIONS



SR NO.	Description	Connections Inlet / outlet	Flow Capacity Ton @ 1psi ΔP (for kw multiply Ton by 3.5)				Water Capacity drops of water									
			R-134a	R-22 & R-410A	R-407C	R-404A & R-507	R-134a		R-22		R-407C		R-410A		R-404A & R-507	
							75F	125° F	75F	125° F	75F	125° F	75F	125° F	75F	125° F
1	NMH - 032F	1/4" SAE	2	2.2	2.1	1.4	41	39	40	35	34	26	22	20	40	39
2	NMH - 032MFF	1/4" SAE (F/M)														
3	NMH-SV - 032F	1/4" SAE														
4	NMH - 032S	1/4" ODF														
5	NMH-SV - 032S	1/4" ODF														
6	NMH-033F	3/8" SAE	3	3.3	3.2	2.2	121	110	116	99	100	80	66	61	123	110
7	NMH - 033S	3/8" ODF														
8	NMH - 052F	1/4" SAE														
9	NMH - 052S	1/4" ODF														
10	NMH - 053F	3/8" SAE														
11	NMH - 053S	3/8" ODF	4.6	4.8	4.8	3.5	265	245	250	225	205	165	170	130	275	260
12	NMH - 053R	11/16-16 ORN														
13	NMH - 082F	1/4" SAE														
14	NMH- 082S	1/4" ODF														
15	NMH - 083F	3/8" SAE														
16	NMH - 083S	3/8" ODF	6.7	7.5	7	5	384	348	375	320	312	246	212	194	359	348
17	NMH - 084F	1/2" SAE														
18	NMH - 084S	1/2" ODF														
19	NMH - 163F	3/8" SAE														
20	NMH - 163S	3/8" ODF														
21	NMH - 163R	11/16-16 ORFS														
22	NMH - 164F	1/2" SAE														
23	NMH - 164S	1/2" ODF														
24	NMH - 164R	13/16-16ORFS														
25	NMH - 165F	5/8" SAE	9.5	9	8.8	6.1	681	628	668	572	562	446	528	364	646	625
26	NMH - 165S	5/8" ODF														
27	NMH - 165R	1" - 14 ORFS														
28	NMHLD - 162R	9/16-18 ORFS														
29	NMHLD - 163F	3/8" SAE														
30	NMHLD - 163R	11/16-16ORFS														
31	NMHLD - 163RL	11/16-16ORFS														
32	NMHLD - 164R	13/16-16 ORFS														
33	NMHLD - 164 ORF	1/2" SAE (Groove)	10.8	11.5	11.8	7.8	2214	2072.00	2194	1905	1855	1496	1490	1140	2068	2072
34	NMH - 303F	3/8" SAE														
35	NMH - 303S	3/8" ODF														
36	NMH - 303R	11/16-16 ORFS														
37	NMH - 303-ORN	3/8" O RING														
38	NMH - 304F	1/2" SAE														
39	NMH - 304S	1/2" ODF														
40	NMH - 304R	13/16-16 ORFS														
41	NMH - 305F	5/8" SAE	20.5	22.5	21.8	14.9	60	61	62	63	64	65	66	67	68	69
42	NMH - 305S	5/8" ODF														
43	NMH - 305R	1" -14 ORFS														
44	NMH - 306F	3/4" SAE														
45	NMH - 306S	3/4" ODF														
46	NMH - 307S	7/8" ODF														
47	NMH - 309S	1-1/8" ODF														
48	NMH - 412 ORN	1/4" O RING														
49	NMH - 413F	3/8" SAE	23.4	25.7	23.8	17.1	60	61	62	63	64	65	66	67	68	69
50	NMH - 413S	3/8" ODF														
51	NMH - 414F	1/2" SAE														
52	NMH - 414S	1/2" ODF														
53	NMH - 415F	5/8" SAE														
54	NMH - 415S	5/8" ODF														
55	NMH - 415R	1-14 ORFS														
56	NMH - 415-4F	5/8"SAE(IN) & 1/2"SAE(OUT)														
57	NMH - 415-4R	1-14 ORFS (IN) & 13/16-16 ORFS(OUT)														
58	NMH - 416-SR	1"-1/4" ORFS (IN) & 1"-14 ORFS (OUT)														
59	NMH - 417S	7/8" ODF														
60	NMH - 419	1-1/8" ODF														
61	NMH - 757S	7/8" ODF														
62	NMH- 759S	1-1/8 ODF														

All ratings are in accordance with ANSI/AHRI Standard 710-2009
1. Water Capacities are based on following standard rating conditions :
 Water in refrigerant at EPD for :
 R-134a/R-407C/R-410A/R-404A/R-507A is 50 ppm,
 R-22 is 60 ppm.

2. Flow Capacities are based on following standard rating conditions :
 Flow Rate per Ton of Refrigeration at 86°F Liquid & 5.0°F Saturated Vapor for :
 R-134a is 3.1 lb/min/ton,
 R-407C is 3.0 lb/min/ton,
 R-410A is 2.8 lb/min/ton,
 R-404A is 4.1 lb/min/ton,
 R-507A is 4.2 lb/min/ton,
 R-22 is 3.0 lb/min/ton.

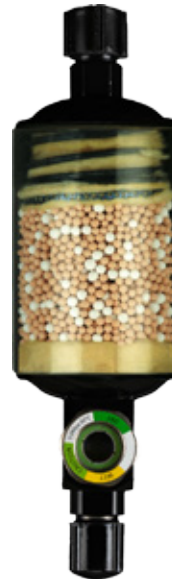
LIQUID LINE FILTER DRIER
 NMHSG SERIES (WITH SIGHT GLASS)
 IMAGE & DRAWING



File No. SA44486

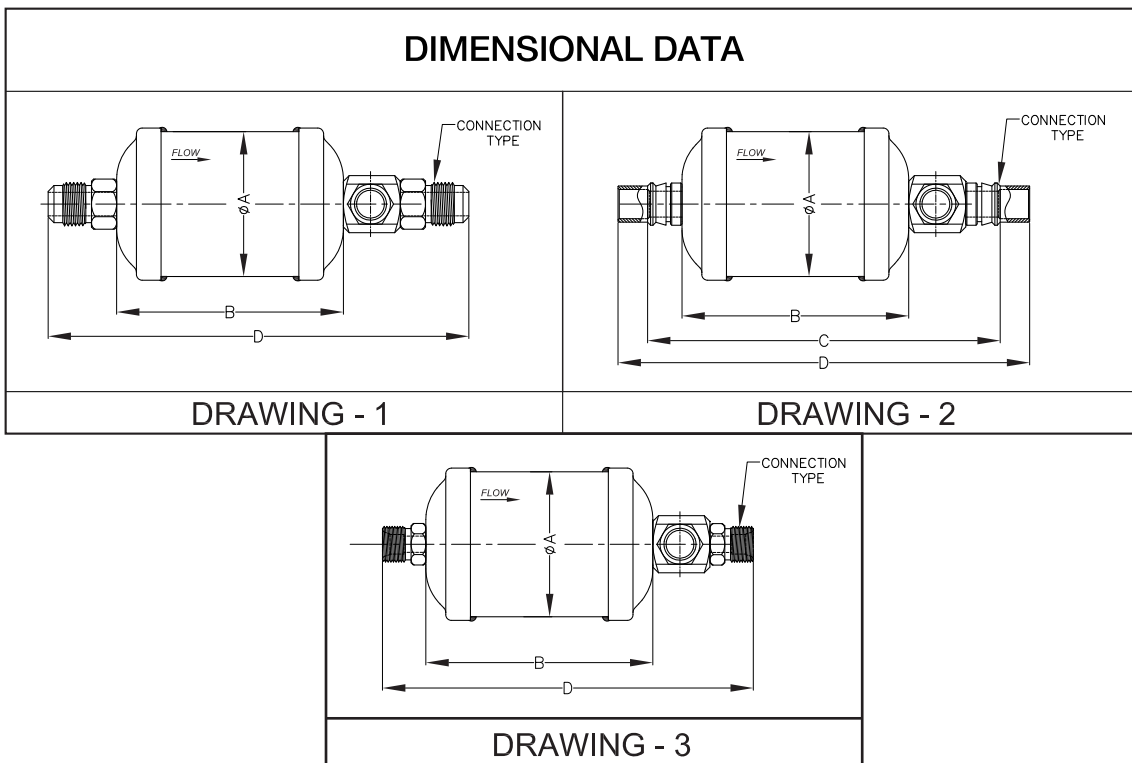


Filter Drier with SAE connection & Sight Glass



Internal View

DIMENSIONAL DATA



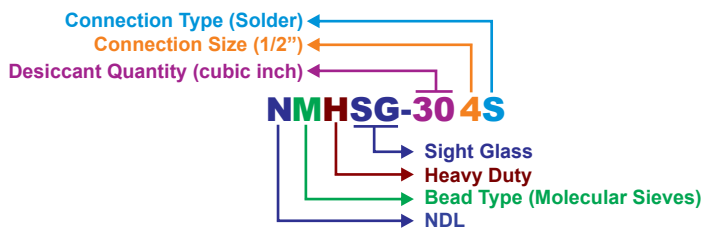
*Only few models shown for representation purpose only

LIQUID LINE FILTER DRIER NMHSG SERIES (WITH SIGHT GLASS) MODELS AVAILABLE



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (inch)	REFER DRAWING NO.
		mm	inch	mm	inch	mm	inch	mm	inch		
1	NMHSG-052F	Ø63.5	Ø2.5	78	3.07	--	--	162	6.37	1/4" SAE	DRAWING - 1
2	NMHSG-052S*					146	5.75	166	6.54	1/4" ODF	DRAWING - 2
3	NMHSG-053F					--	--	170	6.69	3/8" SAE	DRAWING - 1
4	NMHSG-053S*					146	5.75	166	6.54	3/8" ODF	DRAWING - 2
5	NMHSG-082F			99	3.90	--	--	183	7.21	1/4" SAE	DRAWING - 1
6	NMHSG-082S*					167	6.57	187	7.36	1/4" ODF	DRAWING - 2
7	NMHSG-083F					--	--	191	7.52	3/8" SAE	DRAWING - 1
8	NMHSG-083S*					167	6.57	187	7.36	3/8" ODF	DRAWING - 2
9	NMHSG-084F					--	--	197	7.76	1/2" SAE	DRAWING - 1
10	NMHSG-084S*					167	6.57	193	7.60	1/2" ODF	DRAWING - 2
11	NMHSG-163F	122	4.80	--	--	214	8.43	3/8" SAE	DRAWING - 1		
12	NMHSG-163S*			190	7.48	210	8.26	3/8" ODF	DRAWING - 2		
13	NMHSG-164F			--	--	220	8.66	1/2" SAE	DRAWING - 1		
14	NMHSG-164S*			190	7.48	216	8.51	1/2" ODF	DRAWING - 2		
15	NMHSG-164-ORN			--	--	205	8.07	1/2" O-Ring	DRAWING - 3		
16	NMHSG-165F			--	--	228	8.98	5/8" SAE	DRAWING - 1		
17	NMHSG-165S*			190	7.48	220	8.66	5/8" ODF	DRAWING - 2		
18	NMHSG-303F			Ø76.2	Ø3	190	7.48	--	--	282	11.11
19	NMHSG-303S*	258	10.16					278	10.95	3/8" ODF	DRAWING - 2
20	NMHSG-304F	--	--					288	11.34	1/2" SAE	DRAWING - 1
21	NMHSG-304S*	258	10.16					284	11.18	1/2" ODF	DRAWING - 2
22	NMHSG-305F	--	--					296	11.66	5/8" SAE	DRAWING - 1
23	NMHSG-305S*	258	10.16					288	11.34	5/8" ODF	DRAWING - 2
24	NMHSG-306F	--	--					302	12.13	3/4" SAE	DRAWING - 1
25	NMHSG-306S*	258	10.16					296	11.66	3/4" ODF	DRAWING - 2
26	NMHSG-307S*	260	10.24					304	11.97	7/8" ODF	DRAWING - 2
27	NMHSG-309S*	260	10.24					314	12.36	1-1/8" ODF	DRAWING - 2
28	NMHSG-414F	Ø88.9	Ø4	196	7.80	--	--	296	11.66	1/2" SAE	DRAWING - 1
29	NMHSG-414S*					266	10.47	292	11.49	1/2" ODF	DRAWING - 2
30	NMHSG-415F					--	--	304	11.97	5/8" SAE	DRAWING - 1
31	NMHSG-415S*					266	10.47	296	11.66	5/8" ODF	DRAWING - 2
32	NMHSG-417S*					268	10.56	312	12.28	7/8" ODF	DRAWING - 2
33	NMHSG-419S*					268	10.56	322	12.67	1-1/8" ODF	DRAWING - 2

- 1) INTERNAL ASSEMBLY - BEAD TYPE
- 2) MAXIMUM WORKING PRESSURE - 45 bar (653 psig)
- 3) SAE,ORFS & 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- 4) ALL ODF TYPE CONNECTION IS IN STEEL & NICKEL PLATED
- 5) *MARK CONNECTION STEEL, PLATED



LIQUID LINE FILTER DRIER NMHSG SERIES (WITH SIGHT GLASS) SELECTION RECOMMENDATIONS



Description	Connections Inlet /outlet	Flow Capacity Ton @ 1psi ΔP (for kw multiply Ton by 3.5)				Water Capacity drops of water									
		R-134a	R-22 & R -410A	R - 407C	R-404A & R-507	R-134a		R - 22		R - 407C		R -410A		R - 404A & R - 507	
						75F	125° F	75F	125° F	75F	125° F	75F	125° F	75F	125° F
NMHSG - 052F	1/4" SAE	2.5	2.4	2.5	1.8										
NMHSG - 052S	1/4" ODF	3.5	3.6	3.5	2.5										
NMHSG - 053F	3/8" SAE	3.5	3.8	3.8	2.5	121	110	116	99	100	80	66	61	123	110
NMHSG - 053S	3/8" ODF	4.6	4.8	4.8	3.5										
NMHSG - 082F	1/4" SAE	2.4	2.6	2.5	1.9										
NMHSG - 082S	1/4" ODF	3	3.5	3.5	2.5										
NMHSG - 083F	3/8" SAE	4	4.5	4.5	3	265	245	250	225	205	165	170	130	275	260
NMHSG - 083S	3/8" ODF	4.5	4.9	4.9	3.5										
NMHSG - 084F	1/2" SAE	6.7	7.5	7	5										
NMHSG - 084S	1/2" ODF	7.1	7.7	7.5	5										
NMHSG - 163F	3/8" SAE	4	4.2	4.2	3										
NMHSG - 163S	3/8" ODF	4.5	4.8	4.7	3.2										
NMHSG - 164F	1/2" SAE	8.5	9.5	9.2	6.2										
NMHSG - 164S	1/2" ODF	8.5	9.5	9	6.2	384	348	375	320	312	246	212	194	359	348
NMHSG - 164-ORN	1/2" O - Ring	8.5	9.2	9	6.2										
NMHSG - 165F	5/8" SAE	9.7	10.5	10.3	7										
NMHSG - 165S	5/8" ODF	10.1	10.9	10.7	7.3										
NMHSG - 303F	3/8" SAE	4.5	4.8	4.6	3.5										
NMHSG - 303S	3/8" ODF	6.4	6.8	6.7	4.8										
NMHSG - 304F	1/2" SAE	8.5	9	8.6	6										
NMHSG - 304S	1/2" ODF	10.5	10.9	10.6	7.5										
NMHSG - 305F	5/8" SAE	10.8	11.8	11.3	7.9	681	628	668	572	562	446	528	364	646	625
NMHSG - 305S	5/8" ODF	10.8	11.8	11.3	7.9										
NMHSG - 306F	3/4" SAE	15	16.5	15.7	7.9										
NMHSG - 306S	3/4" ODF	15	16.5	15.7	10.9										
NMHSG - 307S	7/8" ODF	16.9	18.5	17.9	12.5										
NMHSG - 309S	1-1/8" ODF	19.9	21.5	20.8	14.5										
NMHSG - 414F	1/2" SAE	10.5	11.5	11.5	7.6										
NMHSG - 414S	1/2" ODF	10.9	11.8	11.8	7.9										
NMHSG - 415F	5/8" SAE	12.5	13.5	12.6	8.8	962	877	934	797	784	623	733	477	897	872
NMHSG - 415S	5/8" ODF	12.2	13.6	13	8.8										
NMHSG - 417S	7/8" ODF	20.5	22.5	21.8	14.9										
NMHSG - 419S	1-1/8" ODF	27.8	30.5	29.8	20.5										

All ratings are in accordance with ANSI/AHRI Standard 710-2009

1. Water Capacities are based on following standard rating conditions :

Water in refrigerant at EPD for :

R-134a/R-407C/R-410A/R-404A/R-507A is 50 ppm,

R-22 is 60 ppm.

2. Flow Capacities are based on following standard rating conditions :

Flow Rate per Ton of Refrigeration at 86°F Liquid & 5.0°F Saturated Vapor for :

R-134a is 3.1 lb/min/ton,

R-407C is 3.0 lb/min/ton,

R-410A is 2.8 lb/min/ton,

R-404A is 4.1 lb/min/ton,

R-507A is 4.2 lb/min/ton,

R-22 is 3.0 lb/min/ton.

LIQUID LINE FILTER DRIER NCH SERIES (SOLID CORE TYPE)

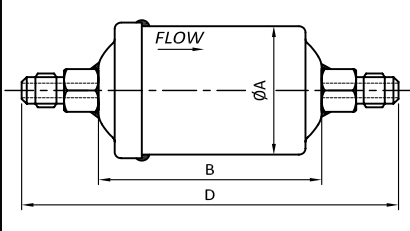
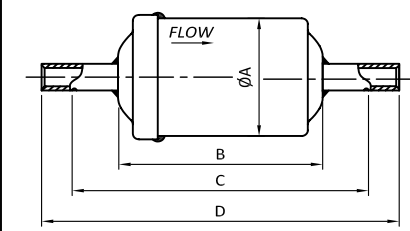
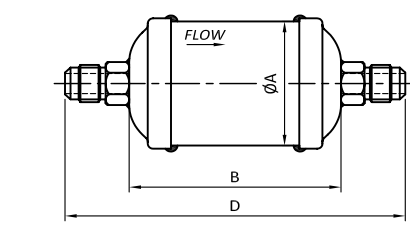
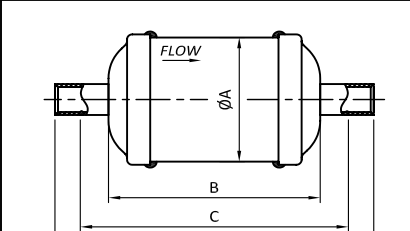
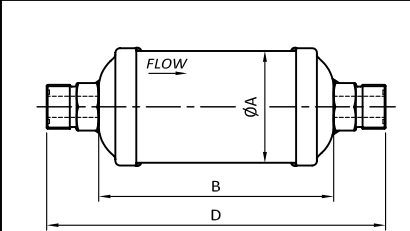
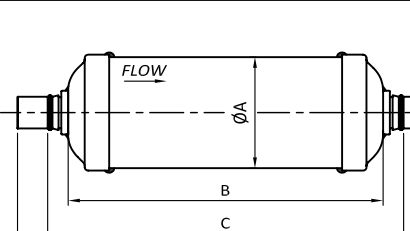
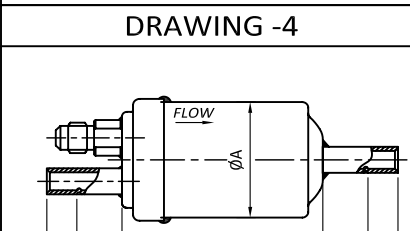
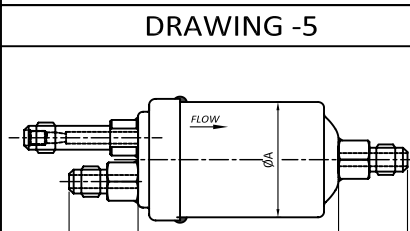
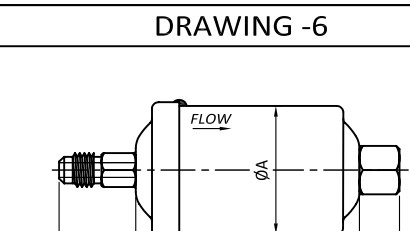
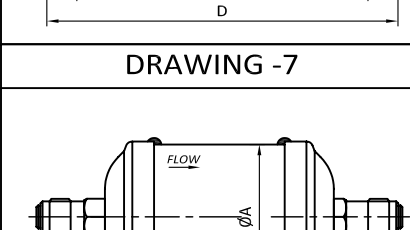
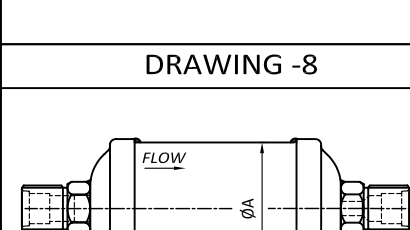
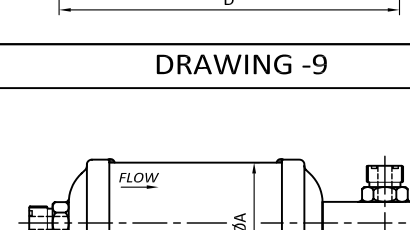


File No. SA44486



*Only few models shown for representation purpose only

DIMENSIONAL DATA

		
DRAWING -1	DRAWING -2	DRAWING -3
		
DRAWING -4	DRAWING -5	DRAWING -6
		
DRAWING -7	DRAWING -8	DRAWING -9
		
DRAWING -10	DRAWING -11	DRAWING -12

Connection Type (Flare) →
 Connection Size (1/2") →
 Desiccant Quantity (cubic inch) →
NCH - 16 4F
 → Heavy Duty
 → Core Type
 → NDL

LIQUID LINE FILTER DRIER NCH SERIES (SOLID CORE TYPE) MODELS AVAILABLE



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (inch)	REFER DRAWING NO.		
		mm	Inch	mm	Inch	mm	Inch	mm	Inch				
1	NCH-032F	Ø 42	Ø 1.6	67	2.64	--	--	113	4.45	1/4" SAE	DRAWING - 1		
2	NCH-032MFF					--	--	102	4.01	1/4" (F/M)	DRAWING - 9		
3	NCH-032S					97	3.82	117	4.61	1/4" ODF	DRAWING - 2		
4	NCHSV-032F					--	--	113	4.45	1/4" SAE	DRAWING - 8		
5	NCHSV-032S					97	3.82	117	4.61	1/4" ODF	DRAWING - 7		
6	NCH-033F					--	--	121	4.76	3/8" SAE	DRAWING - 1		
7	NCH-033S					97	3.82	117	4.61	3/8" ODF	DRAWING - 2		
8	NCH-052F	Ø 63.5	Ø 2.5	78	3.07	--	--	124	4.88	1/4" SAE	DRAWING - 3		
9	NCH-052S					108	4.25	128	5.04	1/4" ODF	DRAWING - 4		
10	NCH-053F					--	--	132	5.20	3/8" SAE	DRAWING - 3		
11	NCH-053S					108	4.25	128	5.04	3/8" ODF	DRAWING - 4		
12	NCH-053R					--	--	116	4.56	11/16-16 ORFS	DRAWING - 5		
13	NCH-082F			99	3.90	--	--	145	5.71	1/4" SAE	DRAWING - 3		
14	NCH-082S							129	5.08	149	5.87	1/4" ODF	DRAWING - 4
15	NCH-083F							--	--	153	6.02	3/8" SAE	DRAWING - 3
16	NCH-083S							129	5.08	149	5.87	3/8" ODF	DRAWING - 4
17	NCH-084F							--	--	159	6.26	1/2" SAE	DRAWING - 3
18	NCH-084S					129	5.08	149	5.87	1/2" ODF	DRAWING - 4		
19	NCH-163F	122	4.80			--	--	176	6.93	3/8" SAE	DRAWING - 3		
20	NCH-163S							152	5.98	172	6.77	3/8" ODF	DRAWING - 4
21	NCH-163R							--	--	160	6.30	11/16-16 ORFS	DRAWING - 5
22	NCH-164F							--	--	182	7.17	1/2" SAE	DRAWING - 3
23	NCH-164S			152	5.98			172	6.77	1/2" ODF	DRAWING - 4		
24	NCH-164R			--	--	162	6.38	13/16-16 ORFS	DRAWING - 5				
25	NCH-165F			--	--	190	7.48	5/8" SAE	DRAWING - 3				
26	NCH-165S			152	5.98	172	6.77	5/8" ODF	DRAWING - 4				
27	NCH-165R			--	--	176	6.93	1"-14 ORFS	DRAWING - 5				
28	NCHLD-162R	Ø 76.2	Ø 3	110	4.33	--	--	148	5.83	9/16-16 ORFS	DRAWING - 5		
29	NCHLD-163F					--	--	164	6.46	3/8" SAE	DRAWING - 3		
30	NCHLD-163R					--	--	148	5.83	11/16-16 ORFS	DRAWING - 5		
31	NCHLD-163RL			--	--	177	6.97	11/16-16 ORFS	DRAWING - 12				
32	NCHLD-164R			110	4.33	--	--	150	5.91	13/16-16 ORFS	DRAWING - 5		
33	NCHLD-164 ORF					--	--	176	6.93	1/2" SAE	DRAWING - 10		
34	NCH-303F			190	7.48	--	--	244	9.61	3/8" SAE	DRAWING - 3		
35	NCH-303S							220	8.66	240	9.45	3/8" ODF	DRAWING - 4
36	NCH-303R							--	--	228	8.98	11/16-16 ORFS	DRAWING - 5
37	NCHL-303ORN							--	--	244	9.61	3/8" 'O' RING	DRAWING - 11
38	NCH-304F							--	--	250	9.84	1/2" SAE	DRAWING - 3
39	NCH-304S							220	8.66	240	9.45	1/2" ODF	DRAWING - 4
40	NCH-304R							--	--	230	9.06	13/16-16 ORFS	DRAWING - 5
41	NCH-304 ORF	--	--					256	10.08	1/2" SAE (Groove)	DRAWING - 10		
42	NCH-305F	--	--					258	10.16	5/8" SAE	DRAWING - 3		
43	NCH-305S	220	8.66					240	9.45	5/8" ODF	DRAWING - 4		
44	NCH-305R	--	--					244	9.61	1"-14 ORFS	DRAWING - 5		
45	NCH-305 ORN	--	--					250	9.84	5/8" 'O' RING	DRAWING - 11		
46	NCH-306F	--	--					264	10.39	3/4" SAE	DRAWING - 3		
47	NCH-306S	220	8.66					240	9.45	3/4" ODF	DRAWING - 4		
48	NCH-307S*	220	8.66					264	10.39	7/8" ODF	DRAWING - 6		
49	NCH-309S*	220	8.66					274	10.79	1-1/8" ODF	DRAWING - 6		
50	NCH-413F	Ø 88.9	Ø 3.5	198	7.80	--	--	258	10.15	3/8" SAE	DRAWING - 3		
51	NCH-413S					224.3	8.83	248	9.76	3/8" ODF	DRAWING - 4		
52	NCH-414-ORF					--	--	254	10.00	1/2" SAE (Flare Groove)	DRAWING - 10		
53	NCH-414F			198	7.80	--	--	258	10.16	1/2" SAE	DRAWING - 3		
54	NCH-414S							228	8.98	248	9.76	1/2" ODF	DRAWING - 4
55	NCH-415F							--	--	266	10.47	5/8" SAE	DRAWING - 3
56	NCH-415S							228	8.98	248	9.76	5/8" ODF	DRAWING - 4
57	NCH-415-4F							--	--	262	10.31	5/8" SAE (IN) & 1/2" SAE (OUT)	DRAWING - 3
58	NCH-415-4R			--	--	235	9.25	1"-14 ORFS(IN) & 13/16-16 ORFS(OUT)	DRAWING - 5				
59	NCH-416-5R			198	7.80	--	--	255	10.04	1"-1/4 ORFS(IN) & 1"-14ORFS(OUT)	DRAWING - 5		
60	NCH-417S*							228	8.98	272	10.71	7/8" ODF	DRAWING - 6
61	NCH-419S*	228	8.98					282	11.10	1-1/8" ODF	DRAWING - 6		
62	NCH-757S*	341	13.43					385	15.16	7/8" ODF	DRAWING - 6		
63	NCH-759S*#	341	13.43					398	15.67	1-1/8" ODF	DRAWING - 6		

- 1) INTERNAL ASSEMBLY - CORE TYPE
- 2) MAXIMUM WORKING PRESSURE - 45 bar (653 psig)
- 3) SAE,ORFS & 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- 4) ODF TYPE CONNECTION IS IN COPPER
- 5) *MARK CONNECTION STEEL, PLATED

LIQUID LINE FILTER DRIER NCH SERIES (SOLID CORE TYPE) SELECTION RECOMMENDATIONS



SR NO.	Description	Connections Inlet /outlet	Flow Capacity Tan @ 1psi ΔP (for kw multiply Ton by 3.5)				Water Capacity drops of water										
			R-134a	R-22 & R-410A	R-407C	R-404A & R-507	R-134a		R-22		R-407C		R-410A		R-404A & R-507		
							75F	125F	75F	125F	75F	125F	75F	125F	75F	125F	
1	NCH - 032F	1/4" SAE															
2	NCH - 032FF	1/4" SAE (F/M)															
3	NCH - 032S	1/4" ODF	2	2	2	1.42											
4	NCHSV - 032F	1/4" SAE					80	74	75	69	63	52	53	42	82	78	
5	NCHSV - 032S	1/4" ODF															
6	NCH-033F	3/8" SAE	4.85	4.85	5.42	3.7											
7	NCH - 033S	3/8" ODF															
8	NCH - 052F	1/4" SAE															
9	NCH - 052S	1/4" ODF	2	2.28	2.28	1.42											
10	NCH - 053F	3/8" SAE					201	186	186	136	156	126	131	101	206	196	
11	NCH - 053S	3/8" ODF	5.14	5.42	5.42	4											
12	NCH - 053R	11/16-16 ORFS															
13	NCH - 082F	1/4" SAE	2	2.28	2.28	1.42											
14	NCH- 082S	1/4" ODF															
15	NCH - 083F	3/8" SAE	5.42	6	6	4											
16	NCH - 083S	3/8" ODF					265	245	250	225	205	165	170	130	275	260	
17	NCH - 084F	1/2" SAE															
18	NCH - 084S	1/2" ODF	7.42	8.28	8.28	5.71											
19	NCH - 163F	3/8" SAE															
20	NCH - 163S	3/8" ODF	6.2	6.8	6.8	4.57											
21	NCH - 163R	11/16-16 ORFS															
22	NCH - 164F	1/2" SAE															
23	NCH - 164S	1/2" ODF	8.5	9.4	9.4	6.2											
24	NCH - 164R	13/16-16ORFS															
25	NCH - 165F	5/8" SAE															
26	NCH - 165S	5/8" ODF	12.2	13.4	13.4	8.57											
27	NCH - 165R	1" - 14 ORFS															
28	NCHLD - 162R	9/16-18 ORFS	7.4	8	8	5.7											
29	NCHLD - 163F	3/8" SAE															
30	NCHLD - 163R	11/16-16ORFS	9.6	10.5	10.5	7.4											
31	NCHLD - 163RL	11/16-16ORFS					490	463	360	342	400	364	350	314	672	364	
32	NCHLD - 164R	13/16-16 ORFS															
33	NCHLD - 164 ORF	1/2" SAE	13.31	14.5	14.5	9.7											
34	NCH - 303F	3/8" SAE															
35	NCH - 303S	3/8" ODF	6	6.57	6.57	4.28											
36	NCH - 303R	11/16-16 ORFS															
37	NCH -303-ORN	3/8" O RING															
38	NCH - 304F	1/2" SAE															
39	NCH - 304S	1/2" ODF															
40	NCH - 304R	13/16-16 ORFS	8.85	9.71	9.71	6.28											
41	NCH-304 ORF	1/2" SAE (Groove)															
42	NCH - 305F	5/8" SAE															
43	NCH - 305S	5/8" ODF															
44	NCH - 305R	1" -14 ORFS	12.85	14	14	9.42											
45	NCH-305 ORN	5/8" O' Ring															
46	NCH - 306F	3/4" SAE	17.71	19.42	19.42	12.85											
47	NCH - 306S	3/4" ODF															
48	NCH - 307S*#	7/8" ODF	17.71	19.42	19.42	12.85											
49	NCH - 309S*#	1-1/8" ODF															
50	NCH - 413F	3/8" SAE	9	10.2	10.2	6.5											
51	NCH -413S	3/8" ODF															
52	NCH-414-ORF	1/2" SAE (Flare Groove)															
53	NCH - 414F	1/2" SAE	9.14	10	10	6.57											
54	NCH - 414S	1/2" ODF															
55	NCH - 415F	5/8" SAE															
56	NCH - 415S	5/8" ODF					1216	1106	1146	1016	951	746	786	586	1266	1162	
57	NCH - 415-4F	5/8"SAE(IN) & 1/2 SAE(OUT)	15.14	16.57	16.57	10.57											
58	NCH - 415-4R	1-14 ORFS (IN) & 13/16-16 ORFS(OUT)															
59	NCH - 416-5R	1"-1/4 ORFS (IN) & 1"-14 ORFS (OUT)	20.57	22.57	22.57	15.57											
60	NCH-417S*#	7/8" ODF	26	28.57	28.57	18.57											
61	NCH-419*#	1-1/8" ODF															
62	NCH -757S*#	7/8"ODF	23.4	26	25.7	17.14											
63	NCH -759S*#	1-1/8" ODF	26.8	29.7	29.2	19.40	2106	1946.00	1962	1806	1641	1316	1356	1036	2176	2056	

All ratings are in accordance with ANSI/AHRI Standard 710-2009

1. Water in refrigerant at EPD for :
R-134a/R-407C/R-410A/R-404A/R-507A is 50 ppm,
R-22 is 60 ppm.

2. Flow Capacities are based on following standard rating
Flow Rate per Ton of Refrigeration at 86°F Liquid & 5.0°F Saturated Vapor for :
R-134a is 3.1 lb/min/ton,
R-407C is 3.0 lb/min/ton,
R-410A is 2.8 lb/min/ton,
R-404A is 4.1 lb/min/ton,
R-507A is 4.2 lb/min/ton,
R-22 is 3.0 lb/min/ton.

LIQUID LINE FILTER DRIER
NCHSG SERIES (WITH SIGHT GLASS)
IMAGE & DRAWING



File No. SA44486

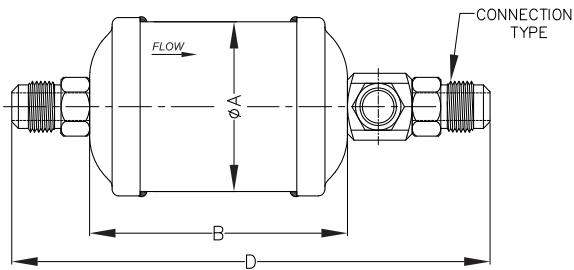


Filter Drier with SAE connection & Sight Glass

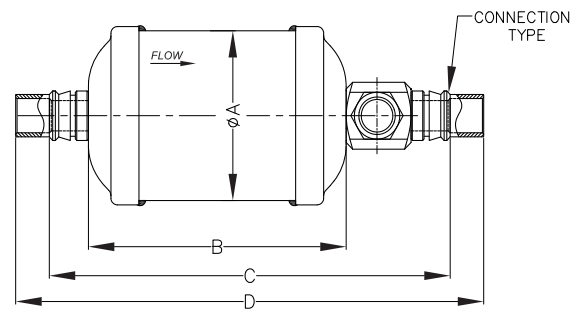


Internal View

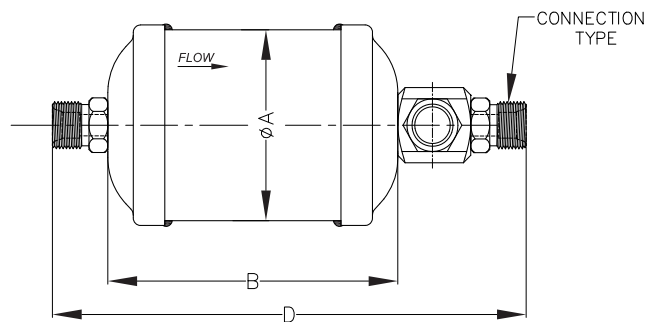
DIMENSIONAL DATA



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DRAWING - 2



DRAWING - 3

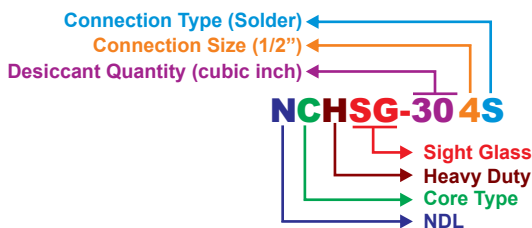
*Only few models shown for representation purpose only

LIQUID LINE FILTER DRIER NCHSG SERIES (WITH SIGHT GLASS) MODELS AVAILABLE



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH		D CONNECTION TYPE (inch)	REFER DRAWING NO.			
		mm	Inch	mm	Inch	mm	Inch	mm	Inch					
1	NCHSG-052F	Ø 63.5	Ø 2.5	78	3.07	--	--	162	6.38	1/4" SAE	DRAWING - 1			
2	NCHSG-052S*					--	--	--	--	--	--	--	--	DRAWING - 2
3	NCHSG-053F					--	--	170	6.69	3/8" SAE	DRAWING - 1			
4	NCHSG-053S*					146	5.75	166	6.54	3/8" ODF	DRAWING - 2			
5	NCHSG-082F			99	3.90	--	--	183	7.20	1/4" SAE	DRAWING - 1			
6	NCHSG-082S*					167	6.57	187	7.36	1/4" ODF	DRAWING - 2			
7	NCHSG-083F					--	--	191	7.52	3/8" SAE	DRAWING - 1			
8	NCHSG-083S*					167	6.57	187	7.36	3/8" ODF	DRAWING - 2			
9	NCHSG-084F					--	--	197	7.76	1/2" SAE	DRAWING - 1			
10	NCHSG-084S*					167	6.57	193	7.60	1/2" ODF	DRAWING - 2			
11	NCHSG-163F					122	4.80	--	--	214	8.43	3/8" SAE	DRAWING - 1	
12	NCHSG-163S*							190	7.48	210	8.27	3/8" ODF	DRAWING - 2	
13	NCHSG-164F			--	--			220	8.66	1/2" SAE	DRAWING - 1			
14	NCHSG-164S*			190	7.48			216	8.50	1/2" ODF	DRAWING - 2			
15	NCHSG-164-ORN			--	--			205	8.07	1/2" O-Ring	DRAWING - 3			
16	NCHSG-165F			--	--			228	8.98	5/8" SAE	DRAWING - 1			
17	NCHSG-165S*			190	7.48			220	8.66	5/8" ODF	DRAWING - 2			
18	NCHSG-303F	Ø 76.2	Ø 3	129	5.07			--	--	205	8.07	11/16-16 ORFS	DRAWING - 3	
19	NCHSG-303F			--	--	282	11.10	3/8" SAE	DRAWING - 1					
20	NCHSG-303S*			258	10.16	278	10.94	3/8" ODF	DRAWING - 2					
21	NCHSG-304F			--	--	288	11.34	1/2" SAE	DRAWING - 1					
22	NCHSG-304S*			258	10.16	284	11.18	1/2" ODF	DRAWING - 2					
23	NCHSG-305F			--	--	296	11.65	5/8" SAE	DRAWING - 1					
24	NCHSG-305S*			258	10.16	288	11.34	5/8" ODF	DRAWING - 2					
25	NCHSG-306F			--	--	308	12.13	3/4" SAE	DRAWING - 1					
26	NCHSG-306S*			258	10.16	296	11.65	3/4" ODF	DRAWING - 2					
27	NCHSG-307S*			260	10.24	304	11.97	7/8" ODF	DRAWING - 2					
28	NCHSG-309S*	260	10.24	314	12.36	1-1/8" ODF	DRAWING - 2							
29	NCHSG-414F	Ø 88.9	Ø 3.5	198	7.80	--	--	296	11.65	1/2" SAE	DRAWING - 1			
30	NCSG-414S*					266	10.47	292	11.50	1/2" ODF	DRAWING - 2			
31	NCHSG-415F					--	--	304	11.97	5/8" SAE	DRAWING - 1			
32	NCHSG-415S*					266	10.47	296	11.65	5/8" ODF	DRAWING - 2			
33	NCHSG-417S*#					268	10.55	312	12.28	7/8" ODF	DRAWING - 2			
34	NCHSG-419S*#					268	10.55	322	12.68	1-1/8" ODF	DRAWING - 2			

- 1) INTERNAL ASSEMBLY - CORE TYPE
- 2) MAXIMUM WORKING PRESSURE - 45 bar (653 psig)
- 3) SAE,ORFS & 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- 4) ALL ODF TYPE CONNECTION IS IN STEEL & NICKEL PLATED
- 5) *MARK CONNECTION STEEL, PLATED



LIQUID LINE FILTER DRIER NCHSG SERIES (WITH SIGHT GLASS) SELECTION RECOMMENDATIONS



SR NO.	Description	Connections Inlet/ outlet	Flow Capacity Ton @ 1psi ΔP (for kw multiply Ton by 3.5)				Water Capacity drops of water											
			R-134a	R-22 & R-410A	R-407C	R-404A & R-507	R-134a		R-22		R-407C		R-410A		R-404A & R-507			
							75F	125° F	75F	125° F	75F	125° F	75F	125° F	75F	125° F		
1	NCHSG - 052F	1/4" SAE	2	2.28	2.28	1.42	201	186	186	136	156	126	131	101	206	196		
2	NCHSG - 052S	1/4" ODF																
3	NCHSG - 053F	3/8" SAE																
4	NCHSG - 053S	3/8" ODF	5.14	5.42	5.42	4												
5	NCHSG - 082F	1/4" SAE	2	2.28	2.28	1.42	265	245	250	225	205	165	170	130	275	260		
6	NCHSG - 082S	1/4" ODF																
7	NCHSG - 083F	3/8" SAE																
8	NCHSG - 083S	3/8" ODF	5.42	6	6	4												
9	NCHSG - 084F	1/2" SAE	7.42	8.28	8.28	5.71	396	366	271	336	306	246	256	196	406	286		
10	NCHSG - 084S	1/2" ODF																
11	NCHSG - 163F	3/8" SAE																
12	NCHSG - 163S	3/8" ODF	6.2	6.8	6.8	4.57												
13	NCHSG - 164F	1/2" SAE	8.5	9.4	9.4	6.2	490	463	360	342	400	364	350	314	672	364		
14	NCHSG - 164S	1/2" ODF																
15	NCHSG - 164-ORN	13/16-16ORFS																
16	NCHSG - 165F	5/8" SAE	12.2	13.4	13.4	8.57	877	812	822	752	687	552	567	432	907	857		
17	NCHSG - 165S	5/8" ODF																
18	NCHLDSGLL - 163R	11/16-16 ORFS																
19	NCHSG - 303F	3/8" SAE	6	6.57	6.57	4.28	1216	1106	1146	1016	951	746	786	586	1266	1162		
20	NCHSG - 303S	3/8" ODF																
21	NCHSG - 304F	1/2" SAE																
22	NCHSG - 304S	1/2" ODF	8.85	9.71	9.71	6.28												
23	NCHSG - 305F	5/8" SAE	12.85	14	14	9.42	17.71	19.42	19.42	12.85	17.71	19.42	19.42	12.85	9.14	10	10	6.57
24	NCHSG - 305S	5/8" ODF																
25	NCHSG - 306F	3/4" SAE																
26	NCHSG - 306S	3/4" ODF	17.71	19.42	19.42	12.85												
27	NCHSG - 307S*#	7/8" ODF	17.71	19.42	19.42	12.85	9.14	10	10	6.57	15.14	16.57	16.57	10.57	26	28.57	28.57	18.57
28	NCHSG - 309S*#	1-1/8" ODF																
29	NCHSG - 414F	1/2" SAE																
30	NCHSG - 414S	1/2" ODF	9.14	10	10	6.57												
31	NCHSG - 415F	5/8" SAE	15.14	16.57	16.57	10.57	1216	1106	1146	1016	951	746	786	586	1266	1162		
32	NCHSG - 415S	5/8" ODF																
33	NCHSG-417S*#	7/8" ODF																
34	NCHSG-419*#	1-1/8" ODF	26	28.57	28.57	18.57												

All ratings are in accordance with ANSI/AHRI Standard 710-2009

1. Water in refrigerant at EPD for :

R-134a/R-407C/R-410A/R-404A/R-507A is 50 ppm,
R-22 is 60 ppm.

2. Flow Capacities are based on following standard rating

Flow Rate per Ton of Refrigeration at 86°F Liquid & 5.0°F Saturated Vapor for :

R-134a is 3.1 lb/min/ton,

R-407C is 3.0 lb/min/ton,

R-410A is 2.8 lb/min/ton,

R-404A is 4.1 lb/min/ton,

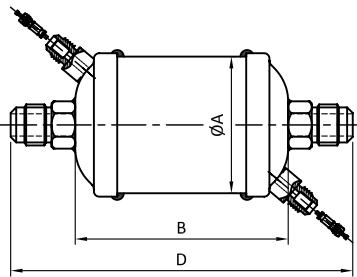
R-507A is 4.2 lb/min/ton,

R-22 is 3.0 lb/min/ton.

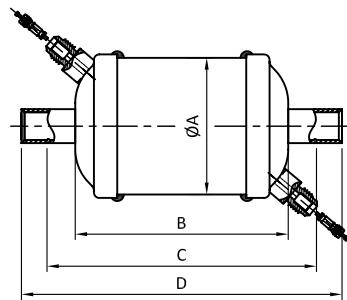
SUCTION LINE FILTER DRIER
 NCHSF SERIES (SOLID CORE TYPE)
 IMAGE & DRAWING



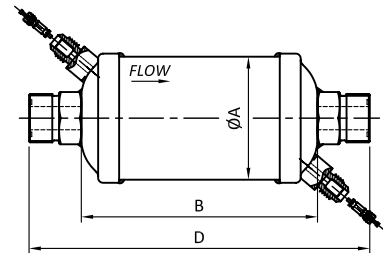
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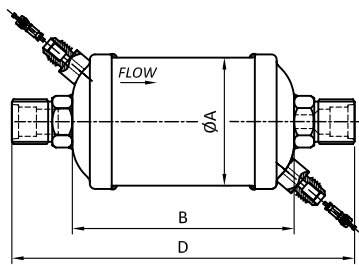
DRAWING -1



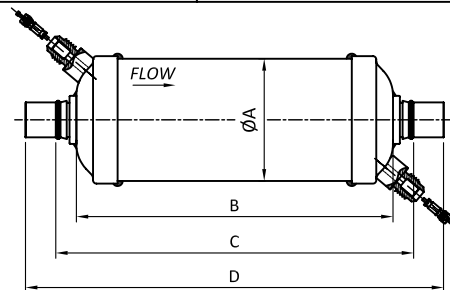
DRAWING -2



DRAWING -3



DRAWING -4

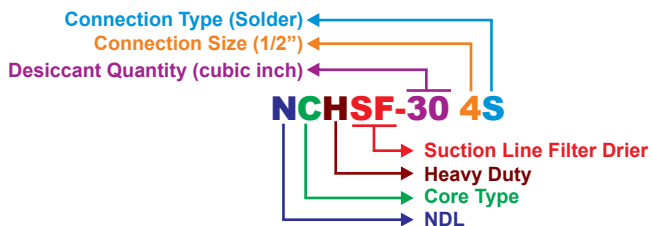


DRAWING -5

SUCTION LINE FILTER DRIER NCHSF SERIES (SOLID CORE TYPE) MODELS AVAILABLE



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (inch)	REFER DRAWING NO.				
		mm	Inch	mm	Inch	mm	Inch	mm	Inch						
1	NCHSF-052F	Ø 63.5	Ø 2.5	78	3.07086614	--	--	124	4.88	1/4" SAE	DRAWING - 1				
2	NCHSF-052S					108	4.25	128	5.04	1/4" ODF	DRAWING - 2				
3	NCHSF-053F					--	--	132	5.20	3/8" SAE	DRAWING - 1				
4	NCHSF-053S					108	4.25	128	5.04	3/8" ODF	DRAWING - 2				
5	NCHSF-082F			99	3.90	--	--	145	5.71	1/4" SAE	DRAWING - 1				
6	NCHSF-082S					129	5.08	149	5.87	1/4" ODF	DRAWING - 2				
7	NCHSF-083F					--	--	153	6.02	3/8" SAE	DRAWING - 1				
8	NCHSF-083S					129	5.08	149	5.87	3/8" ODF	DRAWING - 2				
9	NCHSF-084F			122	4.80	--	--	159	6.26	1/2" SAE	DRAWING - 1				
10	NCHSF-084S					129	5.08	149	5.87	1/2" ODF	DRAWING - 2				
11	NCHSF-163F					--	--	176	6.93	3/8" SAE	DRAWING - 1				
12	NCHSF-163S					152	5.98	172	6.77	3/8" ODF	DRAWING - 2				
13	NCHSF-163R			--	--	160	6.29	11/16-16ORFS	DRAWING - 3						
14	NCHSF-163ORN			--	--	176	6.92	3/8" O RING	DRAWING - 4						
15	NCHSF-164F			Ø 76.2	Ø 3	190	7.48	--	--	182	7.17	1/2" SAE	DRAWING - 1		
16	NCHSF-164S							152	5.98	172	6.77	1/2" ODF	DRAWING - 2		
17	NCHSF-164R							--	--	170	6.69	13/16-16ORFS	DRAWING - 3		
18	NCHSF-165F							--	--	190	7.48	5/8" SAE	DRAWING - 1		
19	NCHSF-165S							152	5.98	172	6.77	5/8" ODF	DRAWING - 2		
20	NCHSF-165R							--	--	170	6.69	1"-14 ORFS	DRAWING - 3		
21	NCHSF-166S							152	5.98	172	6.77	3/4" ODF	DRAWING - 2		
22	NCHSF-167S							152	5.98	196	7.72	7/8" ODF	DRAWING - 5		
23	NCHSF-303F	Ø 88.9	Ø 3.5					198	7.80	--	--	244	9.61	3/8" SAE	DRAWING - 1
24	NCHSF-303S									220	8.66	240	9.45	3/8" ODF	DRAWING - 2
25	NCHSF-303R			--	--	228	8.97			11/16-16ORFS	DRAWING - 3				
26	NCHSF-303ORN			--	--	244	9.60			3/8" O RING	DRAWING - 4				
27	NCHSF-304F			--	--	250	9.84			1/2" SAE	DRAWING - 1				
28	NCHSF-304S			220	8.66	240	9.45			1/2" ODF	DRAWING - 2				
29	NCHSF-304R			--	--	238	9.37			13/16-16ORFS	DRAWING - 3				
30	NCHSF-305F			--	--	258	10.16			5/8" SAE	DRAWING - 1				
31	NCHSF-305S			220	8.66	240	9.45			5/8" ODF	DRAWING - 2				
32	NCHSF-305R			--	--	244	9.61			1"-14 ORFS	DRAWING - 3				
33	NCHSF-306F			--	--	270	10.63			3/4" SAE	DRAWING - 1				
34	NCHSF-306S			220	8.66	240	9.45			3/4" ODF	DRAWING - 2				
35	NCHSF-307S*#			220	8.66	264	10.39			7/8" ODF	DRAWING - 5				
36	NCHSF-309S*#			220	8.66	274	10.79			1 1/8" ODF	DRAWING - 5				
37	NCHSF-414F	Ø 88.9	Ø 3.5	198	7.80	--	--	258	10.16	1/2" SAE	DRAWING - 1				
38	NCHSF-414S					228	8.98	248	9.76	1/2" ODF	DRAWING - 2				
39	NCHSF-415F					--	--	266	10.47	5/8" SAE	DRAWING - 1				
40	NCHSF-415S					228	8.98	248	9.76	5/8" ODF	DRAWING - 2				
41	NCHSF-415-4F					--	--	262	10.31	1/2" SAE(OUT)&5/8 SAE(IN)	DRAWING - 1				
42	NCHSF-415-4R					--	--	235	9.25	13/16-16ORFS(OUT) & 1"-14 ORFS(IN)	DRAWING - 3				
43	NCHSF-417S*#					228	8.98	272	10.71	7/8" ODF	DRAWING - 5				
44	NCHSF-419S*#					228	8.98	282	11.10	1-1/8" ODF	DRAWING - 5				



- INTERNAL ASSEMBLY - CORE TYPE
- MAXIMUM WORKING PRESSURE - 35 bar (508 psig)
- # MARK MAXIMUM WORKING PRESSURE -35 bar (508 psig)
- SAE,ORFS & 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- ODF TYPE CONNECTION IS IN COPPER
- * MARK CONNECTION STEEL, PLATED

SUCTION LINE FILTER DRIER NCHSF SERIES (SOLID CORE TYPE) SELECTION RECOMMENDATIONS



SR NO.	Description	Connections Inlet / Outlet	Flow Capacity Ton @ 1psi ΔP (for kw multiply Ton by 3.5)				Water Capacity drops of water										
			R-134a	R-22 & R-410A	R-407C	R-404A & R-507	R-134a		R-22		R-407C		R-410A		R-404A & R-507		
							75F	125° F	75F	125° F	75F	125° F	75F	125° F	75F	125° F	
1	NCHSF - 052F	1/4" SAE	2	2.28	2.28	1.42	201	186	186	136	156	126	131	101	206	196	
2	NCHSF - 052S	1/4" ODF															
3	NCHSF - 053F	3/8" SAE	5.14	5.42	5.42	4	265	245	250	225	205	165	170	130	275	260	
4	NCHSF - 053S	3/8" ODF															
5	NCHSF - 082F	1/4" SAE	2	2.28	2.28	1.42	396	366	271	336	306	246	256	196	406	286	
6	NCHSF - 082S	1/4" ODF															
7	NCHSF - 083F	3/8" SAE	5.42	6	6	4	877	812	822	752	687	552	567	432	907	857	
8	NCHSF - 083S	3/8" ODF															
9	NCHSF - 084F	1/2" SAE	7.42	8.28	8.28	5.71	12.85	14	14	9.42	17.71	19.42	19.42	12.85	17.71	19.42	12.85
10	NCHSF - 084S	1/2" ODF															
11	NCHSF - 163F	3/8" SAE	6.2	6.8	6.8	4.57	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
12	NCHSF - 163S	3/8" ODF															
13	NCHSF - 163R	11/16-16 ORFS	8.5	9.4	9.4	6.2	1216	1106	1146	1016	951	746	786	586	1266	1162	
14	NCHSF-163ORN	3/8" O Ring															
15	NCHSF-164F	1/2" SAE	12.2	13.4	13.4	8.57	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
16	NCHSF - 164S	1/2" ODF															
17	NCHSF - 164R	13/16-16ORFS	6	6.57	6.57	4.28	26	28.57	28.57	18.57	26	28.57	28.57	18.57	26	28.57	28.57
18	NCHSF - 165F	5/8" SAE															
19	NCHSF - 165S	5/8" ODF	8.85	9.71	9.71	6.28	15.14	16.57	16.57	10.57	15.14	16.57	16.57	10.57	26	28.57	28.57
20	NCHSF - 165R	1" - 14 ORFS															
21	NCHSF-166S	3/4" ODF	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
22	NCHSF-167S	7/8" ODF															
23	NCHSF - 303F	3/8" SAE	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
24	NCHSF - 303S	3/8" ODF															
25	NCHSF -303R	11/16-16 ORFS	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
26	NCHSF -303-ORN	3/8" O RING															
27	NCHSF - 304F	1/2" SAE	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
28	NCHSF - 304S	1/2" ODF															
29	NCHSF - 304R	13/16-16 ORFS	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
30	NCHSF - 305F	5/8" SAE															
31	NCHSF - 305S	5/8" ODF	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
32	NCHSF - 305R	1" -14 ORFS															
33	NCHSF - 306F	3/4" SAE	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
34	NCHSF - 306S	3/4" ODF															
35	NCHSF - 307S*#	7/8" ODF	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
36	NCHSF - 309S*#	1-1/8" ODF															
37	NCHSF - 414F	1/2" SAE	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
38	NCHSF - 414S	1/2" ODF															
39	NCHSF - 415F	5/8" SAE	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
40	NCHSF - 415S	5/8" ODF															
41	NCHSF - 415-4F	5/8"SAE(IN) & 1/2 SAE(OUT)	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
42	NCHSF - 415-4R	1-14 ORFS (IN) & 13/16-16 ORFS(OUT)															
43	NCHSF-417S*#	7/8" ODF	17.71	19.42	19.42	12.85	9.14	10	10	6.57	9.14	10	6.57	15.14	16.57	16.57	10.57
44	NCHSF-419*#	1-1/8" ODF															

All ratings are in accordance with ANSI/AHRI Standard 710-2009

1. Water in refrigerant at EPD for :

R-134a/R-407C/R-410A/R-404A/R-507A is 50 ppm,

R-22 is 60 ppm.

2. Flow Capacities are based on following standard rating

Flow Rate per Ton of Refrigeration at 86°F Liquid & 5.0°F Saturated Vapor for :

R-134a is 3.1 lb/min/ton,

R-407C is 3.0 lb/min/ton,

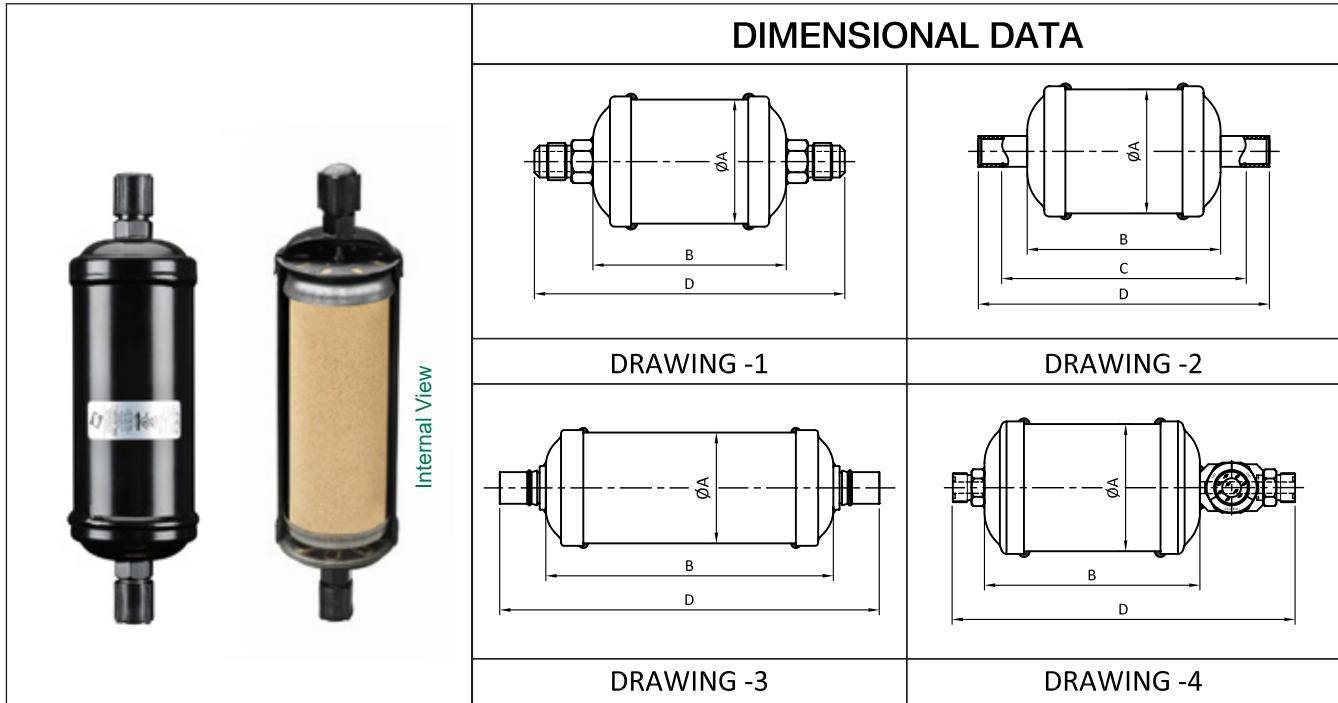
R-410A is 2.8 lb/min/ton,

R-404A is 4.1 lb/min/ton,

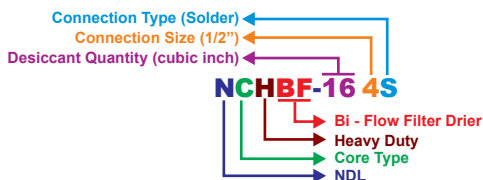
R-507A is 4.2 lb/min/ton,

R-22 is 3.0 lb/min/ton.

BI - FLOW FILTER DRIER
NCHBF SERIES (BI - DIRECTION)
IMAGE, DRAWING & MODELS AVAILABLE



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (inch)	REFER DRAWING NO.		
		mm	Inch	mm	Inch	mm	Inch	mm	Inch				
1	NCHBF-052F	Ø 63.5	Ø 2.5	76	2.99	--	--	122	4.80	1/4" SAE	DRAWING - 1		
2	NCHBF-052S					106	4.17	126	4.96	1/4" ODF	DRAWING - 2		
3	NCHBF-053F					--	--	130	5.12	3/8" SAE	DRAWING - 1		
4	NCHBF-053S					102.3	4.03	126	4.96	3/8" ODF	DRAWING - 2		
5	NCHBF-082F			97	3.82	76	2.99	--	--	143	5.63	1/4" SAE	DRAWING - 1
6	NCHBF-082S							127	5.00	147	5.79	1/4" ODF	DRAWING - 2
7	NCHBF-083F					--	--	151	5.94	3/8" SAE	DRAWING - 1		
8	NCHBF-083S					123.3	4.85	147	5.79	3/8" ODF	DRAWING - 2		
9	NCHBFSG-083 ORN					--	--	180	7.09	3/8" 'O' RING	DRAWING - 4		
10	NCHBF-084F					--	--	157	6.18	1/2" SAE	DRAWING - 1		
11	NCHBF-084S	123.3	4.85	147	5.79	1/2" ODF	DRAWING - 2						
12	NCHBF-163F	Ø 76.2	Ø 3	117	4.61	--	--	171	6.73	3/8" SAE	DRAWING - 1		
13	NCHBF-163S					143.3	5.64	167	6.57	3/8" ODF	DRAWING - 2		
14	NCHBF-164F					--	--	177	6.97	1/2" SAE	DRAWING - 1		
15	NCHBF-164S					143.3	5.64	167	6.57	1/2" ODF	DRAWING - 2		
16	NCHBF-165F			--	--	185	7.28	5/8" SAE	DRAWING - 1				
17	NCHBF-165S			143.3	5.64	167	6.57	5/8" ODF	DRAWING - 2				
18	NCHBF-303F			191	7.52	76	2.99	--	--	245	9.65	3/8" SAE	DRAWING - 1
19	NCHBF-303S							217.3	8.56	241	9.49	3/8" ODF	DRAWING - 2
20	NCHBF-304F							--	--	251	9.88	1/2" SAE	DRAWING - 1
21	NCHBF-304S					217.3	8.56	241	9.49	1/2" ODF	DRAWING - 2		
22	NCHBF-305F	--	--			259	10.20	5/8" SAE	DRAWING - 1				
23	NCHBF-305S	217.3	8.56			241	9.49	5/8" ODF	DRAWING - 2				
24	NCHBF-306F	--	--			265	10.43	3/4" SAE	DRAWING - 1				
25	NCHBF-306S	217.3	8.56			241	9.49	3/4" ODF	DRAWING - 2				
26	NCHBF-307S*	221	8.70			265	10.43	7/8" ODF	DRAWING - 3				
27	NCHBF-309S*	221	8.70	275	10.83	1 1/8" ODF	DRAWING - 3						



- INTERNAL ASSEMBLY -CORE TYPE
- MAXIMUM WORKING PRESSURE - 45 bar (653 psig)
- SAE,ORFS & 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- ODF TYPE CONNECTION IS IN COPPER
- *MARK CONNECTION STEEL, PLATED

LIQUID LINE FILTER DRIER NCHBF SERIES (WITH SIGHT GLASS) SELECTION RECOMMENDATIONS



SR. NO.	Description Connections Inlet/outlet		Flow Capacity ² Ton @ 1psi ΔP (for kW, multiply Ton by 3.5)				Water Capacity ¹ drops of water									
			R-134a	R-22	R-407C & R-410A	R-404 & R-507	R-134a		R-22		R-407C		R-410A		R-404A & R-507	
							75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
1	052F	1/4 SAE	1.92	2.2	2.2	1.4										
2	052S	1/4 ODF					78	73	73	66	58	42	39	35	80	76
3	053F	3/8 SAE	3.8	4	3.9	2.95										
4	053S	3/8 ODF														
5	082F	1/4 SAE	3.64	5.1	5	2.58										
6	082S	1/4 ODF														
7	083F	3/8 SAE	4.6	5.1	5	3.4	168	155	159	144	106	79	85	75	174	165
8	083S	3/8 ODF														
9	083ORN	3/8" ORN	5.73	6.7	6.6	4.41										
10	084F	1/2 SAE	4.75	5.2	5.1	3.66										
11	084S	1/2 ODF														
12	163F	3/8 SAE	7.43	8.1	7.9	5.41	439	415	323	294	237	179	178	160	602	326
13	163S	3/8 ODF														
14	164F	1/2 SAE	7.33	8.7	8.5	5.64										
15	164S	1/2 ODF														
16	165F	5/8 SAE	5.29	5.8	5.7	3.77										
17	165S	5/8 ODF														
18	303F	3/8 SAE	8.7	9.7	9.5	6.23										
19	303S	3/8 ODF														
20	304F	1/2 SAE	12.9	14.2	13.9	9.4	624	577	585	532	452	345	415	293	645	609
21	304S	1/2 ODF														
22	305F	5/8 SAE	14.59	16	15.7	10.58										
23	305S	5/8 ODF														
24	306F	3/4 SAE	15.22	16.7	16.4	11.05										
25	306S	3/4 ODF														
26	307S	7/8 ODF	16.41	18	17.5	11.91										
27	309S	1 1/8 ODF														

All ratings are in accordance with ANSI/AHRI Standard 710-2009

1. Water in refrigerant at EPD for :

R-134a/R-407C/R-410A/R-404A/R-507A is 50 ppm,

R-22 is 60 ppm.

2. Flow Capacities are based on following standard rating conditions

Flow Rate per Ton of Refrigeration at 86°F Liquid & 5.0°F Saturated Vapor for :

R-134a is 3.1 lb/min/ton,

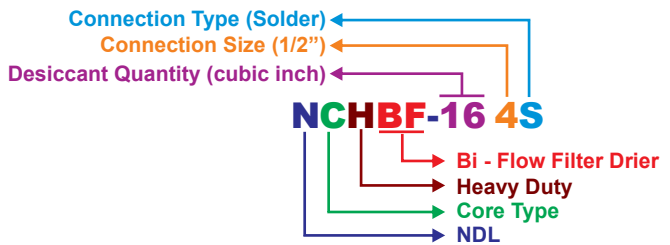
R-407C is 3.0 lb/min/ton,

R-410A is 2.8 lb/min/ton,

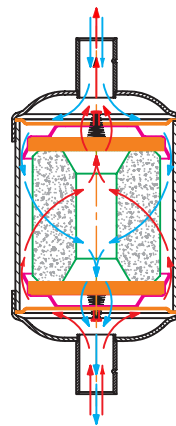
R-404A is 4.1 lb/min/ton,

R-507A is 4.2 lb/min/ton,

R-22 is 3.0 lb/min/ton.



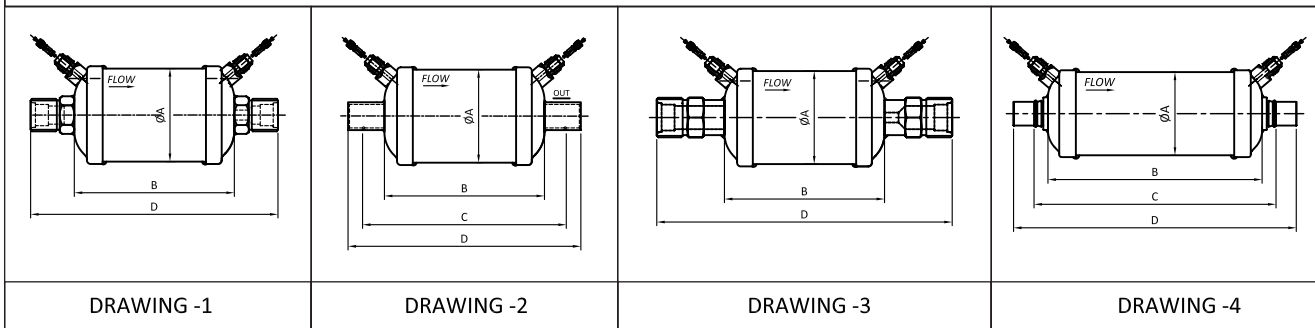
INTERNAL WORKING OF BI-FLOW FILTER DRIER



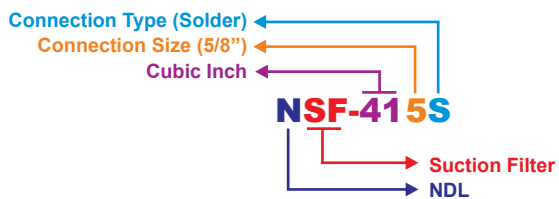
SUCTION LINE FILTER
NSF SERIES
 IMAGE, DRAWING & MODELS AVAILABLE



DIMENSIONAL DATA



SR NO.	MODEL	OUTER DIA ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (inch)	REFER DRAWING NO.
		mm	inch	mm	inch	mm	inch	mm	inch		
1	NSF-163S	63.5	2.5	110	4.34	136.3	5.37	160	6.3	3/8"ODF	DRAWING -2
2	NSF-164S	63.5	2.5	110	4.34	136.3	5.37	160	6.3	1/2" ODF	DRAWING -2
3	NSF-165S	63.5	2.5	110	4.34	136.3	5.37	160	6.3	5/8" ODF	DRAWING -2
4	NSF-165ORN	63.5	2.5	110	4.34	136.3	5.37	170	6.7	5/8" O RING	DRAWING -1
5	NSF-166ORN	63.5	2.5	110	4.34	136.3	5.37	203	8	3/4" O RING	DRAWING -3
6	NSF-415S	88.9	3.5	159	6.25	189	7.44	209	8.2	5/8" ODF	DRAWING -2
7	NSF-416S	88.9	3.5	159	6.25	189	7.44	209	8.2	3/8"ODF	DRAWING -2
8	NSF-417S	88.9	3.5	159	6.25	189	7.44	233	9.2	7/8"ODF	DRAWING -4
9	NSF-419S	88.9	3.5	159	6.25	189	7.44	243	9.6	1"-1/8 ODF	DRAWING -4



- 1) INTERNAL ASSEMBLY - FILTER
- 2) MAXIMUM WORKING PRESSURE - 35 bar (508 psig)
- 3) 'O'RING TYPE CONNECTION ARE IN STEEL,NICKEL PLATED
- 4) ODF TYPE CONNECTION IS IN COPPER
- 5) * MARK CONNECTION STEEL, PLATED

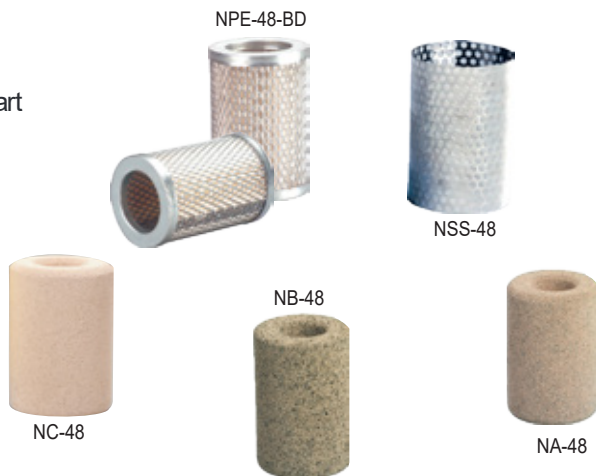
SUCTION LINE FILTER & REPLACEABLE FILTER DRIER CORE IMAGE, DRAWING & MODELS AVAILABLE



Universal replacement cores and filter cores for use in our Replacable and Core shells and similar competitive Take-Apart type filter drier shells.

Features

- Water capacities to suit special system conditions
- Exceptional acid capacities for normal system protection, or to effectively clean-up following a compressor burnout
- Activated carbon blend for soluble contaminant and wax removal (NB Series)



Ordering Information and Capacity Tables

Sr.No	Description	Recommended Refrigerant Type	Function	Capacity													
				R-134A		R-22		R-407C		R-404A/R-507		R-410A		R-502		R-744	
				75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	14°F	75°F
1	NA-48	CFC,HCFC,HFC	Premium Universal Replacement	1463	1343	1358	1233	1188	904	1517	1427	1122	813	1532	1323	1362	1596
2	NA-100	CFC,HCFC,HFC	Premium Universal Replacement	3184	2933	2960	2697	2509	1934	3298	3117	-	-	3205	2803	-	-
3	NC-48	CFC,HCFC	High Acid and water Removal	777	619	687	501	512	328	829	615	437	260	739	546	315	369
4	NC-100	CFC,HCFC	High Acid and water Removal	1279	959	1106	774	835	481	1379	965	773	419	1275	872	-	-
5	NB-48	CFC,HCFC,HFC	Burnout cleanup	445	338	385	260	334	190	480	332	286	150	511	352	377	444
6	NB-100	CFC,HCFC,HFC	Burnout cleanup	1239	934	1079	714	723	417	1336	911	659	353	1104	762	-	-
7	NPE-48-BD	CFC,HCFC,HFC	Filter (Suction with Fabric)	NA													
8	NPE-100-BD	CFC,HCFC,HFC	Filter (Suction with Fabric)														
9	NSS-48	CFC,HCFC,HFC	Filter (Suction Only)														
10	NSS-100	CFC,HCFC,HFC	Filter (Suction Only)														

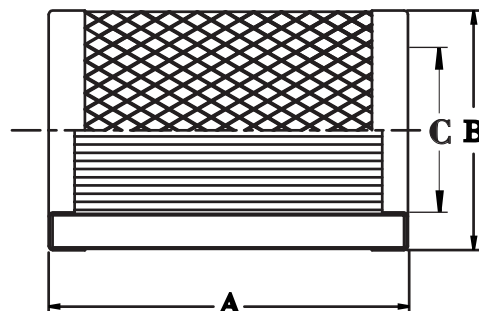
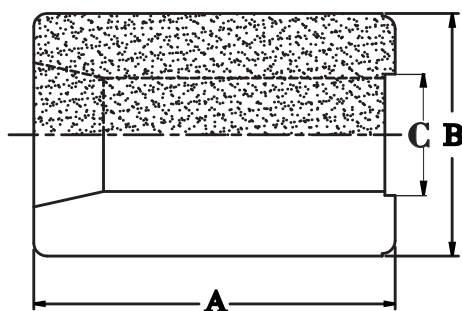
1. Water Capacities are based on:

Equilibrium Point Dryness (EPD) of:
50 parts per million for R-134a, R404-A/R-410A and R-407C
60 parts per million for R-22
15 parts per million for R-12

2. 20 drops of water = 1 gram = 1 cc

3. Include one neoprene composite lid gasket and one core gasket.
All cores include a universal neoprene composite gasket kit which includes 2 sizes of replacement lid gaskets, and gaskets for the top and bottom of the core or filter

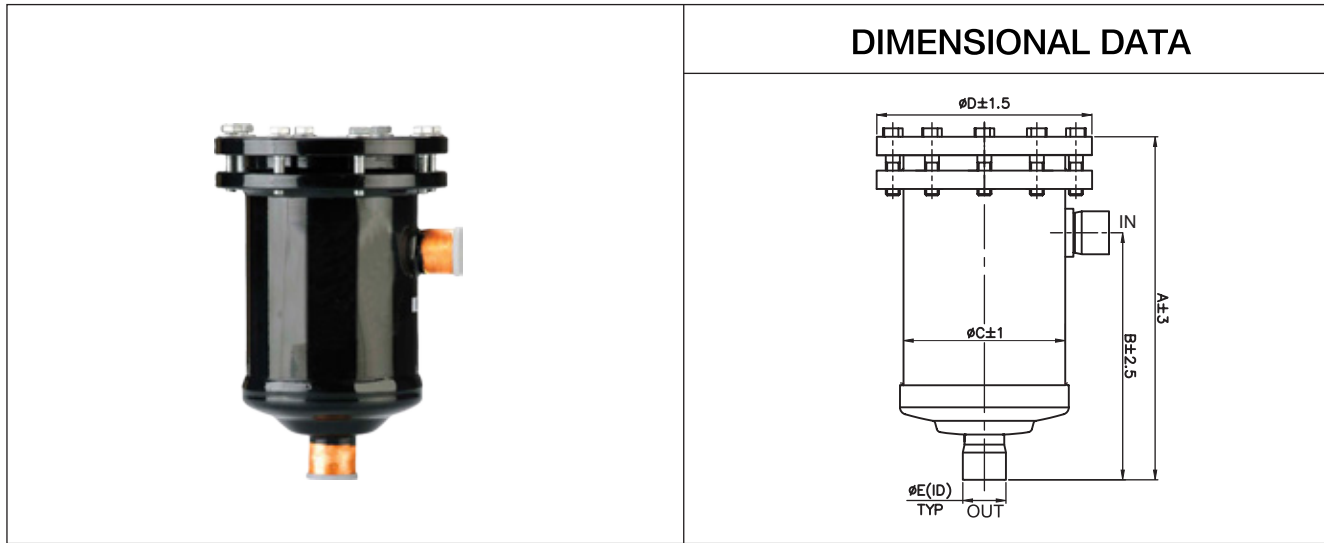
DIMENSIONAL DATA



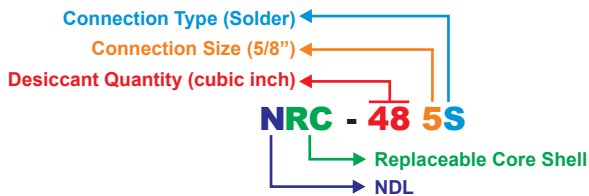
Sr.No.	Model No.	Dimension						Weight (lbs)
		A		B		C		
		mm	Inch	mm	Inch	mm	Inch	
1	NPE-48-BD	139	5.47	64	2.52	94.00	3.70	0.61
2	NSS-48	139	5.47	64	2.52	94.00	3.70	0.68
3	NPE-100-BD	165	6.50	55	2.17	120.00	4.72	0.84
4	NSS-100	165	6.50	55	2.17	120.00	4.72	0.56

Sr.No.	Model No.	Dimension						Weight (lbs)
		A		B		C		
		mm	Inch	mm	Inch	mm	Inch	
1	NA-48	140	5.51	95	3.74	60	2.36	1.79
2	NB-48	140	5.51	95	3.74	60	2.36	1.79
3	NC-48	140	5.51	95	3.74	60	2.36	1.79
4	NA-100	160	6.30	123	4.84	50	1.97	3.39
5	NB-100	160	6.30	123	4.84	50	1.97	3.39
6	NC-100	160	6.30	123	4.84	50	1.97	3.39

NA - 48
→ Cubic Inch
→ Series



Sr. No.	NDL Models No.	A		B		Ø C		Ø D		Conn. Size (E) ID	Qty for Cores	Liquid Flow Capacity for 22 Tons@psi
		(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)			
1	NRC - 485S	240	9.45	155	6.10	114	4.49	152	5.98	5/8"	1	21
2	NRC - 487S	242	9.53	157	6.18	114	4.49	152	5.98	7/8"	1	38
3	NRC - 489S	244	9.61	159	6.26	114	4.49	152	5.98	1-1/8"	1	53
4	NRC - 4811S	247	9.72	162	6.38	114	4.49	152	5.98	1-3/8"	1	61
5	NRC - 4813S	249	9.80	164	6.46	114	4.49	152	5.98	1-5/8"	1	85
6	NRC - 4817S	256	10.08	161	6.34	114	4.49	152	5.98	2-1/8"	1	120
7	NRC - 4821S	269	10.59	170	6.69	114	4.49	152	5.98	2-5/8"	1	120
8	NRC - 965S	372	14.65	297	11.69	114	4.49	152	5.98	5/8"	2	22
9	NRC - 967S	384	15.12	302	11.89	114	4.49	152	5.98	7/8"	2	41
10	NRC - 969S	389	15.31	304	11.97	114	4.49	152	5.98	1-1/8"	2	63
11	NRC - 9611S	392	15.43	307	12.09	114	4.49	152	5.98	1-3/8"	2	79
12	NRC - 9613S	394	15.51	309	12.17	114	4.49	152	5.98	1-5/8"	2	85
13	NRC - 9617S	400	15.75	305	12.01	114	4.49	152	5.98	2-1/8"	2	120
14	NRC - 9621S	406.5	16.00	303.5	11.95	114	4.49	152	5.98	2-5/8"	2	97
15	NRC - 9624S	403	15.87	300	11.81	114	4.49	152	5.98	3"	2	68
16	NRC - 9625S	409	16.10	310	12.20	114	4.49	152	5.98	3-1/8"	2	112
17	NRC - 1449S	524	20.63	439	17.28	114	4.49	152	5.98	1-1/8"	3	51
18	NRC - 14411S	527	20.75	442	17.40	114	4.49	152	5.98	1-3/8"	3	88
19	NRC - 14413S	529	20.83	444	17.48	114	4.49	152	5.98	1-5/8"	3	97
20	NRC - 14417S	536	21.10	441	17.36	114	4.49	152	5.98	2-1/8"	3	112
21	NRC - 19211S	678	26.69	593	23.35	114	4.49	152	5.98	1-3/8"	4	94
22	NRC - 19213S	680	26.77	595	23.43	114	4.49	152	5.98	1-5/8"	4	103
23	NRC - 19217S	686	27.01	592	23.31	114	4.49	152	5.98	2-1/8"	4	115
24	NRC - 19221S	692.5	27.26	589.5	23.21	114	4.49	152	5.98	2-5/8"	4	112
25	NRC - 19224S	689	27.13	586	23.07	114	4.49	152	5.98	3"	4	117



- 1) MAXIMUM WORKING PRESSURE - 45 bar (653 psig)
- 2) TEMPERATURE RANGE : -40°C to +70°C
- 3) *MARK CONNECTION STEEL & NICKEL PLATED
- 4) 1/4" NPT CONNECTION IS AVAILABLE IN DRY ALL CORE SHELL

Nomenclature for **NDL**[®] Filter & Filter Driers COMPLETE™

