



NDL Industries

## APPLICATIONS

Commercial, Industrial, and Residential HVAC and Refrigeration

# Solid Core Suction Line Filter Driers (NCHSF)

Filter driers shield the refrigeration system by trapping solids, absorbing moisture and acid, and averting ice buildup on the expansion valve's orifice.



## NCHSF Specifications

### Advancing Welding Technology

Body design manufactured with advanced welding technology for leak-free joints and superior performance with high-pressure refrigerants.

### Tested Powder Coat

Finished with semi-gloss black epoxy-polyester powder coat paint tested to 1,000 hours of salt spray, exceeding ASTM standards.

### Effective Blend

Desiccant comprised of molecular sieve and activated alumina in a ratio of 80:20.

### Threaded Fittings

Strong and rust-free furnace-brazed threaded fittings.

### Wide Range Compatibility

Recommended for Commercial Air Conditioning, Commercial Refrigeration, Cold Chains, Precision Air Conditioners, Industrial Refrigeration, Food Retail.

### Enhanced Design

Furnace brazed pure copper ends, boasting both longer length and thicker walls when juxtaposed with other brands' offerings.

### Pressure Drop Minimization

Uses honey-comb design perforated plate to minimize pressure drops.

### High-Grade Sieves

Solid core type with XH-11 grade molecular sieves.



# NCHSF Solid Core Suction Line Filter Driers

## Selection Recommendations

MODEL	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-410A & 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				
NCHSF-052F	1/4" SAE	2	2.28	1.42	201	186	136	156	126	131	101	206	196						
NCHSF-052S	1/4" ODF																		
NCHSF-053F	3/8" SAE	5.14	5.42	4															
NCHSF-053S	3/8" ODF																		
NCHSF-082F	1/4" SAE	2	2.28	1.42	265	245	250	225	205	165	170	130	275	260					
NCHSF-082S	1/4" ODF																		
NCHSF-083F	3/8" SAE	5.42	6	4															
NCHSF-083S	3/8" ODF																		
NCHSF-084F	1/2" SAE	7.42	8.28	5.71	396	366	271	336	306	246	256	196	406	286					
NCHSF-084S	1/2" ODF																		
NCHSF-163F	3/8" SAE	6.2	6.8	4.57															
NCHSF-163S	3/8" ODF																		
NCHSF-164F	1/2" SAE	8.5	9.4	6.2	877	812	822	752	687	552	567	432	907	857					
NCHSF-164S	1/2" ODF																		
NCHSF-165F	5/8" SAE	12.2	13.4	8.57															
NCHSF-165S	5/8" ODF																		
NCHSF-303F	3/8" SAE	6	6.57	4.28	17.71	19.42	12.85	14	9.42	1216	1106	1146	1016	951	746	786	586	1266	1162
NCHSF-303S	3/8" ODF																		
NCHSF-303 ORN	3/8" O-Ring																		
NCHSF-304F	1/2" SAE	8.85	9.71	6.28															
NCHSF-304S	1/2" ODF																		
NCHSF-305F	5/8" SAE	12.85	14	9.42															
NCHSF-305S	5/8" ODF																		
NCHSF-306F	3/4" SAE	17.71	19.42	12.85															
NCHSF-306S	3/4" ODF																		
NCHSF-307S	7/8" ODF	26	28.57	18.57															
NCHSF-309S	1-1/8" ODF																		
NCHSF-414F	1/2" SAE	9.14	10	6.57															
NCHSF-414S	1/2" ODF																		
NCHSF-415F	5/8" SAE	15.14	16.57	10.57															
NCHSF-415S	5/8" ODF																		
NCHSF-417S	7/8" ODF	26	28.57	18.57															
NCHSF-419S	1-1/8" ODF																		



# NCHSF Solid Core Suction Line Filter Driers

## Models Available

MODEL	OUTER DIA. ØA		BODY LENGTH B		STOPPER TO STOPPER LENGTH C		OVERALL LENGTH D		CONNECTION TYPE (IN)	DRAWING NO.						
	MM	IN	MM	IN	MM	IN	MM	IN								
NCHSF-052F	Ø 63.5	Ø 2.5	78	3.07	-	-	124	4.88	1/4" SAE	Drawing 1						
NCHSF-052S					108	4.25	128	5.04	1/4" ODF	Drawing 2						
NCHSF-053F					-	-	132	5.20	3/8" SAE	Drawing 1						
NCHSF-053S					108	4.25	128	5.04	3/8" ODF	Drawing 2						
NCHSF-082F			99	3.90	99	3.90	-	-	145	5.71	1/4" SAE	Drawing 1				
NCHSF-082S							129	5.08	149	5.87	1/4" ODF	Drawing 2				
NCHSF-083F							-	-	153	6.02	3/8" SAE	Drawing 1				
NCHSF-083S							129	5.08	149	5.87	3/8" ODF	Drawing 2				
NCHSF-084F							-	-	159	6.26	1/2" SAE	Drawing 1				
NCHSF-084S							129	5.08	149	5.87	1/2" ODF	Drawing 2				
NCHSF-163F							122	4.80	122	4.80	-	-	176	6.93	3/8" SAE	Drawing 1
NCHSF-163S											152	5.98	172	6.77	3/8" ODF	Drawing 2
NCHSF-164F			-	-	190	7.17					1/2" SAE	Drawing 2				
NCHSF-164S			152	5.98	172	6.77					1/2" ODF	Drawing 1				
NCHSF-165F			-	-	148	7.48					5/8" SAE	Drawing 2				
NCHSF-165S			152	5.98	164	6.77					5/8" ODF	Drawing 1				
NCHSF-303F	Ø 76.2	Ø 3	190	7.48	-	-	244	9.61	3/8" SAE	Drawing 2						
NCHSF-303S					220	8.66	240	9.45	3/8" ODF	Drawing 1						
NCHSF-303 ORN					-	-	244	9.61	3/8" O-Ring	Drawing 3						
NCHSF-304F					-	-	244	9.61	1/2" SAE	Drawing 1						
NCHSF-304S					220	8.66	240	9.45	1/2" ODF	Drawing 2						
NCHSF-305F					-	-	258	10.16	5/8" SAE	Drawing 1						
NCHSF-305S					220	8.66	240	9.45	5/8" ODF	Drawing 2						
NCHSF-306F					-	-	264	10.39	3/4" SAE	Drawing 1						
NCHSF-306S					220	8.66	240	9.45	3/4" ODF	Drawing 2						
NCHSF-307S					220	8.66	264	10.39	7/8" ODF	Drawing 4						
NCHSF-309S					220	8.66	274	10.79	1-1/8" ODF	Drawing 4						
NCHSF-414F	Ø 88.9	Ø 3.5	198	7.80	-	-	258	10.16	1/2" SAE	Drawing 1						
NCHSF-414S					228	8.98	248	9.76	1/2" ODF	Drawing 2						
NCHSF-415F					-	-	266	10.47	5/8" SAE	Drawing 1						
NCHSF-415S					228	8.98	248	9.76	5/8" ODF	Drawing 2						
NCHSF-417S					228	8.98	272	10.71	7/8" ODF	Drawing 4						
NCHSF-419S					228	8.98	282	11.10	1-1/8" ODF	Drawing 4						



# NCHSF Solid Core Liquid Line Filter Driers

## NCHSF Certifications and Approvals

- CE
- UL Certified



### TW Filter Driers with Spectroline AR-GLO®

The complete solution to reduce warranty repair costs and reduce service callbacks.

- The included dye is compatible with all refrigerants, offering comprehensive protection for 6-ton\* air conditioning systems
- Installation can be done with the system running, minimizing downtime and disruption
- With the tracer wafer pre-installed, there's no need to handle messy liquid dyes, simplifying the process
- Leaks are easily spotted using a UV flashlight and fluorescence-enhancing safety glasses, streamlining repair efforts

## DIMENSIONAL DATA

