



NDL Industries

## APPLICATIONS

Commercial, Industrial, and Residential HVAC and Refrigeration

# Solid Core Liquid Line Filter Driers (NCH)

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



## NCH 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 70:30.

### 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.



# Solid Core Liquid 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
NCH-032F	1/4" SAE	2				80	74	75	69	63	52	53	42	82	78
NCH-032F-M*F	1/4" SAE (F/M)														
NCH-032S	1/4" ODF														
NCH-033F	3/8" SAE	4.85		5.42	3.7	80	74	75	69	63	52	53	42	82	78
NCH-033S	3/8" ODF														
NCH-052F	1/4" SAE	2	2.28		1.42	201	186		136	156	126	131	101	206	196
NCH-052S	1/4" ODF														
NCH-053F	3/8" SAE	5.14		5.42	4										
NCH-053S	3/8" ODF														
NCH-082F	1/4" SAE	2	2.28		1.42	265	245	250	225	205	165	170	130	275	260
NCH-082S	1/4" ODF														
NCH-083F	3/8" SAE	5.42		6	4										
NCH-083S	3/8" ODF														
NCH-084F	1/2" SAE	7.42		8.28	5.71	396	366	271	336	306	246	256	196	406	286
NCH-084S	1/2" ODF														
NCH-163F	3/8" SAE	6.2	6.8		4.57										
NCH-163S	3/8" ODF														
NCH-163R	11/16-16 ORFS														
NCH-164F	1/2" SAE	8.5		9.4	6.2	877	812	822	752	687	552	567	432	907	857
NCH-164S	1/2" ODF														
NCH-164R	13/16-16 ORFS														
NCH-165F	5/8" SAE	12.2		13.4	8.57										
NCH-165S	5/8" ODF														
NCH-165R	1"-14 ORFS														
NCH-303F	3/8" SAE	6		6.57	4.28	877	812	822	752	687	552	567	432	907	857
NCH-303S	3/8" ODF														
NCH-303R	11/16-16 ORFS														
NCH-303 ORN	3/8" O-Ring														
NCH-304F	1/2" SAE	8.85		9.71	6.28	1216	1106	1146	1016	951	746	786	586	1266	1162
NCH-304S	1/2" ODF														
NCH-305F	5/8" SAE	12.85		14	9.42										
NCH-305S	5/8" ODF														
NCH-305R	1"-14 ORFS														
NCH-306F	3/4" SAE	17.71		19.42	12.85										
NCH-306S	3/4" ODF														
NCH-307S	7/8" ODF														
NCH-309S	1-1/8" ODF														
NCH-414F	1/2" SAE	9.14		10	6.57	1216	1106	1146	1016	951	746	786	586	1266	1162
NCH-414S	1/2" ODF														
NCH-415F	5/8" SAE	15.14		16.57	10.57										
NCH-415S	5/8" ODF														
NCH-417S	7/8" ODF	26		28.57	18.57										
NCH-419S	1-1/8" ODF														



# Solid Core Liquid 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						
NCH-032F	Ø 42	Ø 1.6	67	2.64	-	-	113	4.45	1/4" SAE	Drawing 1				
NCH-032F-M*F					-	-	102	4.01	1/4" SAE (F/M)	Drawing 7				
NCH-032S					97	3.82	117	4.61	1/4" ODF	Drawing 2				
NCH-033F					-	-	121	4.76	3/8" SAE	Drawing 1				
NCH-033S					97	3.82	117	4.61	3/8" ODF	Drawing 2				
NCH-052F	Ø 63.5	Ø 2.5	78	3.07	-	-	124	4.88	1/4" SAE	Drawing 3				
NCH-052S					108	4.25	128	5.04	1/4" ODF	Drawing 4				
NCH-053F					-	-	132	5.20	3/8" SAE	Drawing 3				
NCH-053S					108	4.25	128	5.04	3/8" ODF	Drawing 4				
NCH-082F			99	3.90	-	-	145	5.71	1/4" SAE	Drawing 3				
NCH-082S							129	5.08	149	5.87	1/4" ODF	Drawing 4		
NCH-083F					-	-	153	6.02	3/8" SAE	Drawing 3				
NCH-083S					129	5.08	149	5.87	3/8" ODF	Drawing 4				
NCH-084F					-	-	159	6.26	1/2" SAE	Drawing 3				
NCH-084S					129	5.08	149	5.87	1/2" ODF	Drawing 4				
NCH-163F	Ø 63.5	Ø 2.5	122	4.80	-	-	176	6.93	3/8" SAE	Drawing 3				
NCH-163S					152	5.98	172	6.77	3/8" ODF	Drawing 4				
NCH-163R					-	-	162	6.30	11/16-16 ORFS	Drawing 5				
NCH-164F					-	-	190	7.17	1/2" SAE	Drawing 3				
NCH-164S					152	5.98	172	6.77	1/2" ODF	Drawing 4				
NCH-164R					-	-	176	6.38	13/16-16 ORFS	Drawing 5				
NCH-165F					-	-	148	7.48	5/8" SAE	Drawing 3				
NCH-165S					152	5.98	164	6.77	5/8" ODF	Drawing 4				
NCH-165R					-	-	148	6.93	1"-14 ORFS	Drawing 5				
NCH-303F					Ø 76.2	Ø 3	190	7.48	-	-	244	9.61	3/8" SAE	Drawing 3
NCH-303S	220	8.66	240	9.45					3/8" ODF	Drawing 4				
NCH-303R	-	-	228	8.98					11/16-16 ORFS	Drawing 5				
NCH-303 ORN	-	-	244	9.61					3/8" O-Ring	Drawing 8				
NCH-304F	-	-	244	9.61					1/2" SAE	Drawing 3				
NCH-304S	220	8.66	240	9.45					1/2" ODF	Drawing 4				
NCH-305F	-	-	258	10.16					5/8" SAE	Drawing 3				
NCH-305S	220	8.66	240	9.45					5/8" ODF	Drawing 4				
NCH-305R	-	-	244	9.61					1"-14 ORFS	Drawing 5				
NCH-306F	-	-	264	10.39					3/4" SAE	Drawing 3				
NCH-306S	220	8.66	240	9.45					3/4" ODF	Drawing 4				
NCH-307S	220	8.66	264	10.39					7/8" ODF	Drawing 6				
NCH-309S	220	8.66	274	10.79					1-1/8" ODF	Drawing 6				
NCH-414F	Ø 88.9	Ø 3.5	198	7.80					-	-	258	10.16	1/2" SAE	Drawing 3
NCH-414S									228	8.98	248	9.76	1/2" ODF	Drawing 4
NCH-415F					-	-	266	10.47	5/8" SAE	Drawing 3				
NCH-415S					228	8.98	248	9.76	5/8" ODF	Drawing 4				
NCH-417S					228	8.98	272	10.71	7/8" ODF	Drawing 6				
NCH-419S					228	8.98	282	11.10	1-1/8" ODF	Drawing 6				



# Solid Core Liquid Line Filter Driers

## NCH Certifications and Approvals

- CE-approved
- CRN-approved
- UL-listed

Press Compatible options available  
(NCH-Z)



## 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

DRAWING -1	DRAWING -2	DRAWING -3	DRAWING -4
DRAWING -5	DRAWING -6	DRAWING -7	DRAWING -8



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