



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.



NCH Solid Core Liquid Line Filter Driers

Models Available

MODEL	OUTER DIA. ØA		BODY LENGTH B		STOPPER TO STOPPER ENGTH 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 6		
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	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
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 11		
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
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		



NCH 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	1216	1106	1146	1016	951	746	786	586	1266	1162
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														



NCH Solid Core Liquid Line Filter Driers

NMH Certifications and Approvals

- CE
- CRN Approved
- UL Certified

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