

#### **APPLICATIONS**

Commercial, Industrial, and Residential HVAC and Refrigeration

# Solid Core Bi-Flow Filter Driers (NCHBF)

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



### **NCHBF 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.

#### **High-Grade Sieves**

Solid core type with XH-11 grade molecular sieves.

#### 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, with longer lengths and thicker walls compared to other brands.

#### **Pressure Drop Minimization**

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

#### **Tailored Solution**

Designed specifically for us on liquid line in reversible heat pump applications.



#### **NCHBF Certifications and Approvals**

- CE
- UL Certified

Press Compatible options available (NCHBF-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

#### Selection Recommendations

	CONNECTIONS INLET/OUTLET	FLOW CAPACITY TAN @ 1PSI ΔP (FOR KW MULTIPLY TON BY 3.5 )				WATER CAPACITY DROPS OF WATER									
MODEL						R-134A R-2		22 R-407C		07C	R-410A		R-404A & R-507		
		R-134A	R-22 & R-410A	R-407C	R-410A & R-507	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
NCHBF-052F	1/4" SAE	1.92	2	2	1.4										
NCHBF-052S	1/4" ODF	1.92	2.2		1.4	78	73		66	58	42	39	35	80	76
NCHBF-053F	3/8" SAE	3.8	4	3.9	2.95	70	'	3	00	50	42	39	33	80	76
NCHBF-053S	3/8" ODF				2.95										
NCHBF-082F	1/4" SAE	3.64	5.1	5	2.58		155	159	144	106	79	85	75	174	165
NCHBF-082S	1/4" ODF		5.1	5	2.58	168									
NCHBF-083F	3/8" SAE	4.6	5.1	5	3.4										
NCHBF-083S	3/8" ODF														
NCHBF-084F	1/2" SAE	5.73	6.7	6.6	4.41										
NCHBF-084S	1/2" ODF														
NCHBF-163F	3/8" SAE	4.75	5.2	5.1	3.66	439	415	323	294	237	179	178	160	602	326
NCHBF-163S	3/8" ODF	4.75													
NCHBF-164F	1/2" SAE	7.43	8.1	7.9	5.41										
NCHBF-164S	1/2" ODF	7.45													
NCHBF-165F	5/8" SAE	7.33	8.7	8.5	5.64										
NCHBF-165S	5/8" ODF														
NCHBF-303F	3/8" SAE	5.29	5.8	5.7	3.77	624	577	585	532	452	345	415	293	645	609
NCHBF-303S	3/8" ODF	3.29			3.77										
NCHBF-304F	1/2" SAE	8.7	9.7	9.5	6.23										
NCHBF-304S	1/2" ODF														
NCHBF-305F	5/8" SAE	12.9	14.2	13.9	9.4										
NCHBF-305S	5/8" ODF														
NCHBF-306F	3/4" SAE	14.59	16	15.7	10.58										
NCHBF-306S	3/4" ODF	14.59													
NCHBF-307S	7/8" ODF	15.22	16.7	16.4	11.05										
NCHBF-309S	11/8 ODF	16.41	18	17.5	11.91										



## Solid Core Bi-Flow Filter Driers

#### Models Available

MODEL	OUTER DIAMETER ØA		BODY LENGTH B		STOPPER TO STO		OVERALL LENGTH D		CONNECTION TYPE (IN)	DRAWING NUMBER	
	ММ	IN	ММ	IN	ММ	IN	ММ	IN			
NCHBF-052F	Ø 63.5	Ø 2.5″	76	2.99"	-	-	122	4.80"	1/4" SAE	Drawing 1	
NCHBF-052S					106	4.17"	126	4.96"	1/4" ODF	Drawing 2	
NCHBF-053F					-	-	130	5.12"	3/8" SAE	Drawing 1	
NCHBF-053S					102.3	4.03"	126	4.96"	3/8" ODF	Drawing 2	
NCHBF-082F			97	3.82"	-	-	143	5.63"	1/4" SAE	Drawing 1	
NCHBF-082S					127	5.00"	147	5.79"	1/4" ODF	Drawing 2	
NCHBF-083F					-	-	151	5.94"	3/8" SAE	Drawing 1	
NCHBF-083S					123.3	4.85"	147	5.79"	3/8" ODF	Drawing 2	
NCHBF-084F					-	-	157	6.18"	1/2" SAE	Drawing 1	
NCHBF-084S					123.3	4.85"	147	5.79"	1/2" ODF	Drawing 2	
NCHBF-163F		Ø 3″	117	4.61"	-	-	171	6.73"	3/8" SAE	Drawing 1	
NCHBF-163S					143.3	5.64"	167	6.57"	3/8" ODF	Drawing 2	
NCHBF-164F					-	-	177	6.97"	1/2" SAE	Drawing 1	
NCHBF-164S					143.3	5.64"	167	6.57"	1/2" ODF	Drawing 2	
NCHBF-165F					-	-	185	7.28"	5/8" SAE	Drawing 1	
NCHBF-165S					143.3	5.64"	167	9.57"	5/8" ODF	Drawing 2	
NCHBF-303F			191	7.52"	-	-	246	9.65"	3/8" SAE	Drawing 1	
NCHBF-303S	Ø 76.2				217.3	8.56"	241	9.49"	3/8" ODF	Drawing 2	
NCHBF-304F					-	-	251	9.88"	1/2" SAE	Drawing 1	
NCHBF-304S					217.3	8.56"	241	9.49"	1/2" ODF	Drawing 2	
NCHBF-305F					-	-	259	10.20"	5/8" SAE	Drawing 1	
NCHBF-305S					217.3	8.56"	241	9.49"	5/8" ODF	Drawing 2	
NCHBF-306F					-	-	265	10.43"	3/4" SAE	Drawing 1	
NCHBF-306S					217.3	8.56"	241	9.49"	3/4" ODF	Drawing 2	
NCHBF-307S					221	8.70"	265	10.43"	7/8" ODF	Drawing 3	
NCHBF-309S					2215.	8.70"	275	10.83"	11/8 ODF	Drawing 3	









