Threaded Compressed Air Filters - Series AFW

Features

- Flow rates up to 1,500 SCFM, connections to 3" NPT
- Differential pressure indicators and float type auto drains standard
- · Float and drain can be changed from outside bowl
- · Suitable for use with mineral and synthetic oils as well as oil-free

Specifications - Filters

Filter 1)	Element 1)	Flow Rate	Dimensions Inch			1	Max. Working	_Maximum	NPT Connections		Weight (Lbs)
T IIICI		(SCFM)	Α	В	C ⁵⁾	D	Pressure	Temperature	In/out	Side	(Lbs)
AFW175A-N10DG-E*2)	AFW-EL175A-E*	175	5	1.26	14.6	3.15			1"		4.4
AFW280A-N12DG-E*2)		280							1-1/4"		10.8
AFW400A-N14DG-E*2)	AFW-EL450A-E*	400	6.69	2.08	20		232 psi	176°F	1-1/2"	1/4" NPT	10.8
AFW450A-N20DG-E*		450					(w/ auto drain)	(w/ auto drain)	2"	(w/ auto drain)	10.8
AFW700A-N20DG-E*	AFW-EL700A-E*	700			27.87	2.04				1/8" NPT (female	12.1
AFW850A-N24DG-E*	AFW-EL900A-E*	850			28.97	3.94	300 psi	248°F	2-1/2"	connection on	23.1
AFW900A-N30DG-E*	AFW-EL900A-E	900	8.66 2.75			(w/o auto drain)	(w/o auto drain)		auto drain)	23.1	
AFW1250A-N30DG-E*	AFW-EL1250A-E*	1,200		2.75	33.74				3"		25.4
AFW1500A-N30DG-E*	AFW-EL1500A-E*	1,500			39.56						27.6

Specify filtration grade in part number by replacing *. 5 = 5 μm, 1 = 1 μm, A = 0.01 μm, C = activated carbon / 0.01 μm
 If 145 psi pressure rating is acceptable, the equivalent AFF / AM* model is preferred.
 Housing has 3/4" G bottom connection and is provided with a 1/4" NPT adapter bushing.

Centrifugal Water Separators - Series AFW-WS

Features

- Flow rates up to 1,500 SCFM
- Float type auto drains standard up to 1500 SCFM
- Threaded connections to 3" NPT
- · Float and drain can be changed from outside bowl
- · Suitable for use with mineral and synthetic oils as well as oil-free

Specifications - Centrifugal Water Separators

Model number	Flow rate		Dimensions			Max. working	Max.	Connec	Weight	
Wiodel Hamber	(SCFM)	Α	В	С	D	pressure	temperature	In/out	Bottom 1)	(lbs)
AFW175A-N10D-WS	175	5	1.3	11.2	3.1			1" NPT	1/4" NPT	3.75
AFW275A-N12D-WS	275					232 psig	176°F	1-1/4" NPT	(w/o auto drain)	
AFW400A-N14D-WS	400	6.7	2.1	20		(w/ auto drain)	(w/ auto drain)	1-1/2" NPT	1/8" NPT	10.80
AFW700A-N20D-WS	700				3.9	300 psig	248°F	2" NPT	(female con-	
AFW850A-N25D-WS	850	8.7	2.8	16.5		(w/o auto drain)	(w/o auto drain)	2-1/2" NPT	nection on	17.64
AFW1500A-N30D-WS	1,500	0.7	2.8	10.5				3" NPT	auto drain)	17.64

¹⁾ Housing has 3/4" G bottom connection and is provided with a 1/4" NPT adapter bushing.

Consult Factory for Higher-Flow Flanged Filter or Water Separator Units

Element Specifications

Filtration Grade	E5	E1	EA	EC					
Description	General Purpose	Pre-filtration / Coalescing	High Efficiency Coalescing	Activated carbon					
Particle Removal	5 μm	1 μm	0.01 μm	0.01 <i>μ</i> m					
Maximum Particle size class*	4	3	1	1					
Maximum Oil Content*	4	3	1	1					
Maximum Oil Carryover at 68°F (20°C)	5 mg/m ³ (4.2 ppm)	0.3 mg/m ³ (0.25 ppm)	0.01 mg/m ³ (0.008 ppm)	0.003 mg/m ³ (0.003 ppm)					
Pressure Loss - Clean & Dry	0.6 psi	0.8 psi	1.2 psi	1.7 psi					
Pressure Loss - Saturated	Loss - Saturated 1.1 psi		1.8 psi	N/A					
Expected element change interval		At least every 6 months							
Maximum Temperature (w/ auto drain)		122°F **							
Maximum Temperature (w/o auto drain)		248°F							
Element end cap color	Green	Red	Blue	Black					

In accordance with ISO 8573-1:2010



⁴⁾ Minimum operating temperature: 35°F5) Add 2.8" for differential pressure indicator

²⁾ Min. recommended operating temperature: 35°F
3) Typical pressure loss at rated flow: 0.7 psi

^{**} Maximum recommended operating temperature 77°F

Accessories

Pagarintian	Applicable body size					
Description		AFW175A	AFW275A~700A	AFW850A~1500A		
Mounting bracket kit	AFW-MBK175A	AFW-MBK700A	AFW-MBK1500A			
Connection kit for joining 2 housings together	AFW-CK175A-2A	AFW-CK700A-2A	AFW-CK1500A-2A			
Connection kit for joining 3 housings together	AFW-CK175A-3A	AFW-CK700A-3A	AFW-CK1500A-3A			
Connection kit for joining 4 housings together	AFW-CK175A-4A	AFW-CK175A-4A AFW-CK700A-4A AFW-CK1				
Description	Applicable body size (old style)					
Description	AFW150	AFW225~650	AFW1000~1500			
Mounting bracket kit (2 per kit)	AFW-BK150	AFW-BK650	AFW-BK1500			
Connection kit		AFW-CK150 AFW-CK650		AFW-CK1500		
	1/2"	AFW-E150-N04				
	3/4"	AFW-E150-N06	N/A			
Port plate kits *		AFW-E150-N10		N/A		
	1-1/2"	AFW-E150-N14	AFW-E650-N14			
	2"	N/A	AFW-E650-N200			

Replacement Parts

Description	AFW175A	AFW275A~700A	AFW850A~1500A				
Optional type, N.O. drain valve, internally accessible		AFW-ADVS16					
Externally accessible, N.O. drain valve		AFW-ADVSE16					
Externally accessible, N.C. drain valve for use in low flow applications		AFW-ADVSE16C					
Optional type 1/4" manually operated drain valve, internally accessible		AFW-MDV25					
Externally accessible 1/4" manually operated drain valve							
3/4" G thread to 1/4" NPT drain port adapter							
Differential pressure indicator							
O-ring seal kit	AFW-OSK175A	AFW-OSK700A	AFW-OSK1500A				
Spinner for water separator	AFW-CM-3052-03	AFW-CM-3122-05	AFW-CM-3251-06				
Previous generation filter replacement parts	AFW150	AFW225~650	AFW1000~1500				
Float type auto drain, <i>plastic</i> , AFW150~1500, 2016 and older							
Float type auto drain, metal, AFW150~1500, 2016 and older							
Differential pressure indicator							
Differential pressure remote alarm							
Previous generation water separator replacement parts	AFW175	AFW275~325	AFW400~700	AFW850~150			
Spinner	AFW-CM-059-108	AFW-CM-128-158	AFW-CM-159-208	AFW-CM-254-3			

Correction Factor

For maximum flow rate, multiply model flow rate shown in the specification table by the correction factor shown below corresponding to the working pressure. This applies to all filtration grades as well as the water separator models.

Example: AFW650-N20-E1
Rated flow = 650 SCFM, working pressure = 115 psi
Correction factor = 1.07 ▶ max flow = 650 x 1.07 = 696 SCFM

low corresponding to the working pressure. This Correction factor = 1.07 ▶ max flow = 650 x 1.07 = 696 SCFI

Operating pressure psig (MPa)	58 (0.4)	72 (0.5)	87 (0.6)	100 (0.7)	115 (0.8)	145 (1.0)	174 (1.2)	203 (1.4)	232 (1.6)	290 (2.0)
Correction factor	0.76	0.84	0.92	1	1.07	1.19	1.31	1.41	1.51	1.6