

Air Filtration

CLEARPOINT® energy saving compressed air filtration

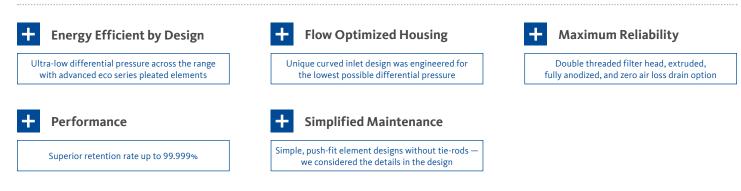


CLEARPOINT® Filters

At a Glance

During compressed air generation and distribution, contaminants are introduced to the air stream at various stages of the compressed air network. Compressed air filters, which come in various grades, remove these contaminants, as well as humidity and oil from the compressed air stream. This is a critical step as these can lead to a deterioration in quality, machine failure, or even to a loss of production or to products that must be disposed of.

Features and Benefits



How it Works

1 Compressed Air Inlet

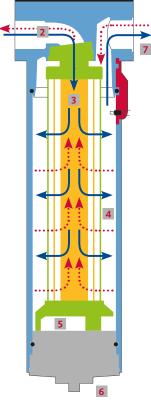
The compressed air enters the inlet of the CLEARPOINT[®] filter housing, which have all been designed to compliment the connections of the different compressor manufacturers making port-matching easier during installation.

2 Curved Inlet

Up to 75% less flow resistance is achieved through a unique curved inlet design as the compressed air flows into the physical medium of the filter element.

3 Filtration Process

The untreated compressed air that is laden with liquid oil, oil aerosols, dirt, scale, and other debris and particulate matter now passes through an innovative, high bed depth filter material designed so the maximum amount of particles are desposited in the material with maximum retention. The exterior of the soft pleat medium is an open cell, synthetic support mesh to ensure the required rigidity for the various filter systems without sacrificing any filter surface area.



4 Treated Compressed Air

The compressed air has now passed all the way through the filter medium and is considered as treated.

5 Condensate Collection Zone

A large condensate collection zone at the base of the housing coupled with the unique legs of the filter end cap create a generous void to prevent the entrainment of already separated condensate.

6 Condensate Removal

Any condensate present in the filter housing is drained either by a float drain or zero air loss BEKOMAT[®]. A hexagonal profile has also been included at the base of the filter housing allowing it to be easily opened for element changes and maintenance.

7 Compressed Air Outlet

The fully treated compressed air that is now free of fluids, solids, and other pollutants flows downstream to other inline components or the point-of-use.

Coalescing filtration flow (inside / out)

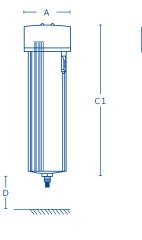
CLEARPOINT [®] Filters Compare												
Ţ		Ũ	Ī									
Threaded Series	Flanged Series	Activated Carbon Series	PN50 High Pressure Series	HP High Pressure Series	H In-line Heater Series							
Flow Rates												
25 - 1,900 scfm	1,900 - 21,000 scfm	80 - 330 scfm	100 - 2,750 scfm	25 - 2,000 scfm	30 - 60 scfm							
Maximum Operatir	ng Pressure											
232 psig	200 psig	232 psig	725 psig	1,450 - 7,250 psig	232 psig							
itandard Pipe Conr	ection Sizes											
3/8" - 3" NPT	4" - 12" Flange	½" - 1 ½" NPT	3/8" - 2" NPT	3/8" - 2" NPT	3/8" - 2" NPT							
lousing Material												
	Poweder coated	Anodized, powder	Anodized, powder	Stainless steel	Anodized, powder							
Anodized, powder coated aluminum	carbon steel	coated aluminum	coated aluminum		coated aluminum							
Anodized, powder coated aluminum Available Options			coated aluminum		coated aluminum							

Product Family



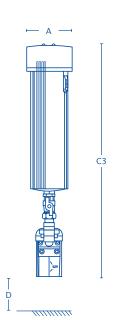
CLEARPOINT® Threaded Coalescing and Particulate Filters with float drain or BEKOMAT® and with or without differential pressure gauge and new eco series elements

- > Advanced CLEARPOINT[®] eco series elements
- > Validated in accordance with ISO 12500-1 and 3
- CRN approved
- > Filter for natural gas (CNG) on request
- > Max. operating pressure: 232 psig
- > Max. operating temperature: 140 °F



 \square

C 2



G

C4

CLEARPOINT®	S040	S045	S050	S055	S075	S100	M010	M012	M015
Pipe size (NPT)	3/8"	1/2"	1⁄2"	1⁄2"	3/4"	1"	1"	1"	1 1/2"
Flow rate (scfm)	25	30	50	80	100	125	160	200	250
Element Size	04*	04*	05*	06*	07*	07*	10*	12*	15*
Dimension data									
A (inches)	2.95	2.95	2.95	2.95	3.94	3.94	3.94	3.94	5.75
C1 (inches)	7.09	7.09	8.27	10.43	11.02	11.02	13.78	15.16	14.17
C2 (inches)	9.65	9.65	10.83	12.99	13.58	13.58	16.34	17.72	16.73
C3 (inches)	15.55	15.55	16.73	18.90	19.49	19.49	22.24	23.62	22.83
C4 (inches)	18.11	18.11	19.29	21.46	22.05	22.05	24.80	26.18	25.39
D (inches)	5.91	5.91	5.91	5.91	5.91	5.91	5.91	5.91	6.30
Weight (lbs)	1.65	1.65	1.87	2.65	3.75	4.18	4.63	4.85	9.04

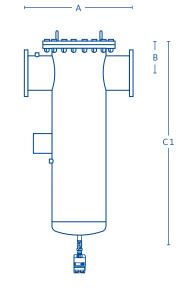
CLEARPOINT®	M018	M019	M020	M022	M023	M025	M027	M030	M032
Pipe size (NPT)	1½"	1 1/2"	2"	2"	2"	2 1⁄2"	2 1⁄2"	3"	3"
Flow rate (scfm)	330	450	500	600	800	1000	1300	1500	1900
Element Size	18*	20*	20*	22*	23*	25*	27*	30*	32*
Dimension data									
A (inches)	5.75	5.75	5.75	5.75	5.75	10.24	10.24	10.24	10.24
C1 (inches)	16.46	18.43	18.43	22.24	26.89	26.42	30.51	35.24	41.14
C2 (inches)	19.02	20.99	20.99	24.80	29.45	29.98	33.07	37.80	43.70
C3 (inches)	24.92	26.89	26.89	30.71	35.35	34.88	38.98	39.76	49.61
C4 (inches)	27.48	29.45	29.45	33.27	37.91	37.44	41.54	42.32	52.17
D (inches)	6.30	6.30	6.30	6.30	6.30	7.87	7.87	7.87	7.87
Weight (lbs)	9.92	10.61	11.24	13.45	15.65	43.87	49.82	57.10	65.92

* ELEMENT GRADE	ELEMENT TYPE	MICRON RATING	OIL CARRYOVER	DRY & PRESSURE (psid)	WET ∆ PRESSURE (psid)
Grade CX	Coarse	25 µm	5 mg/m³	.44	.73
Grade FX	Fine	1 µm	.1 mg/m³	.73	2.17
Grade SX	Superfine	.01 µm	.01 mg/m³	.87	2.90
Grade A	Activated Carbon Element	.01 µm	.003 mg/m ³	-	1.02

Со	rrection Facto	r													
Ор	erating Pressure (psig)	20	40	60	80	90	100	110	120	130	140	160	180	200	230
Cor	rection Factor	.30	.48	.65	.82	.91	1.00	1.09	1.17	1.26	1.35	1.52	1.70	1.87	2.13

CLEARPOINT® Flange Coalescing and Particulate Filters with BEKOMAT® and connection kit with differential pressure gauge

- > Advanced CLEARPOINT[®] eco series elements
- > Validated in accordance with ISO 12500
- $\,$ > Designed according to ASME Sec. VII, Div. 1
- > UM stamp standard and CRN optional
- > Max. operating pressure: 232 psig
- > Max. operating temperature: 140 °F



CLEARPOINT®	L100	L102	L150	L156	L200	L204	L254	L304
Pipe size (ANSI)	4"	4"	6"	6"	8"	8"	10"	12"
Flow rate (scfm)	1900	2800	3800	6500	7500	9300	13000	21000
Element Size					38*			
Dimension data								
A (inches)	21.25	21.25	23.50	23.75	28.00	30.31	34.65	38.98
B (inches)	6.88	7.13	8.00	8.25	9.50	9.75	9.88	10.87
C1 (inches)	46.50	47.38	46.88	50.38	53.00	56.34	60.18	64.26
D (inches)	13.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Weight (lbs)	195	266	283	328	534	623	727	825

Τ D

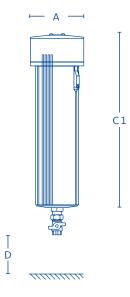
*	ELEMENT GRADE	ELEMENT TYPE	MICRON RATING	OIL CARRYOVER	OIL VAPOR	DRY & PRESSURE (psid)	WET Δ PRESSURE (psid)	APPROVALS
	Grade CX	Coarse	25 µm	5 mg/m ³	-	.44	.73	ASME Coded Vessel
	Grade FX	Fine	1μm	.1 mg/m³	-	.73	2.17	with "UM" Stamp as
	Grade SX	Superfine	.01 µm	.01 mg/m³	-	.87	2.9	standard
	Grade A	Activated Carbon	.01 µm	-	.003 mg/m ³	1.45	-	(CRN Optional)

Correction Factor	r													
Operating Pressure (psig)	20	40	60	80	90	100	110	120	130	140	160	180	200	
Correction Factor	.30	.48	.65	.82	.91	1.00	1.09	1.17	1.26	1.35	1.52	1.70	1.87	

CLEARPOINT® Threaded Activated Carbon Cartridge Filters

with manual ball valve

- > With activated carbon filter cartridge
- > Removal of solid particles up to $1 \, \mu m$
- Residual oil vapor content down to .003 mg/m³
- CRN approved
- > Max. inlet moisture: 30% (dryer required upstream)
- > Max. operating pressure: 232 psig
- > Max. operating temperature: 140 °F



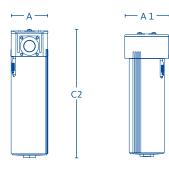
CLEARPOINT®	S055	M010	M018
Pipe size (NPT)	1/2"	3/4"	1 ½"
Flow rate (scfm)	80	160	330
Element Size	06V	10V	18V
Dimension data			
A (inches)	2.95	3.94	5.75
C1 (inches)	10.43	13.78	16.46
D (inches)	5.91	5.91	6.30
Weight (lbs)	2.65	4.63	9.92

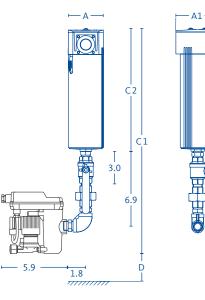
ELEMENT GRADE	ELEMENT TYPE	MICRON RATING	OIL CARRYOVER	Δ PRESSURE (psid)
Grade V	Activated Carbon Cartridge	1 µm	.003 mg/m ³	.54

Correction Factor	r													
Operating Pressure (psig)	20	40	60	80	90	100	110	120	130	140	160	180	200	230
Correction Factor	.30	.48	.65	.82	.91	1.00	1.09	1.17	1.26	1.35	1.52	1.70	1.87	2.13

CLEARPOINT® PN50 Threaded Coalescing and Particulate High Pressure Filters with open port or BEKOMAT® connection kit (drain sold separately) without pressure gauge

- > Advanced CLEARPOINT[®] eco series elements
- > Validated in accordance with ISO 12500-1 and 3
- > Max. operating temperature: 140 °F
- > Max. operating pressure: 725 psig





CLEARPOINT® PN50	HP50S040	HP50S050	HP50S055	HP50S075	HP50M010	HP50M012	HP50M015	HP50M018	HP50M020	HP50M022	HP50M023
Pipe size	3/8"	1/2"	1⁄2"	3⁄4"	1"	1"	1½"	1½"	2"	2"	2"
Flow rate (scfm)	100	190	300	440	600	710	1000	1210	1720	2065	2750
Element Size	04*	05*	06*	07*	10*	12*	15*	18*	20*	22*	23*
Dimension data											
A (inches)	2.95	2.95	2.95	3.95	3.95	3.95	5.75	5.75	5.75	5.75	5.75
A1 (inches)	2.36	2.36	2.36	3.15	3.15	3.15	4.72	4.72	4.72	4.72	4.72
C1 (inches)	16.50	16.50	19.90	20.50	23.20	24.60	23.80	25.90	27.80	31.60	36.30
C2 (inches)	7.10	8.30	10.40	11.00	13.80	15.20	14.40	16.50	18.40	22.20	26.90
D (inches)	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
Weight (lbs)	1.65	1.85	2.65	3.75	4.63	4.85	9.04	9.92	11.24	13.45	15.65

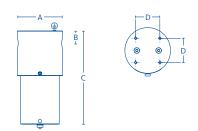
* ELEMENT GRADE	ELEMENT TYPE	MICRON RATING	OIL CARRYOVER	OIL VAPOR	DRY & PRESSURE (psid)
Grade CX	Coarse	25 µm	5 mg/m³		.54
Grade FX	Fine	1 µm	.1 mg/m³		.86
Grade SX	Superfine	.01 µm	.01 mg/m ³		1.04
Grade A	Activated Carbon	.01 µm	-	.003 mg/m ³	.70

Correction Factor									
Operating Pressure (psig)	60	90	100	150	200	300	450	600	725
Correction Factor	.14	.18	.24	.35	.43	.59	.73	.88	1.00

CLEARPOINT® HP High Pressure Filters

with open port without pressure gauge up to 7,250 psig

- > Stainless steel housing
- > Max. operating temperature: 140 °F (HP350S075 and HP350M010 only)
- > Max. operating temperature: 248 °F (all other models)
- > Max. inlet pressure: 1,450 7,250 psig



CLEARPOINT [®] HP 100	HP100S040	HP100S045	HP100S050	HP100S055	HP100S075	HP100M010	HP100M015	HP100M020	
Max. Operating Pressure (psig)	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	
Pipe size (NPT)	3/ "	3/8"	1⁄2"	1/2"	3⁄4"	1"	11/2"	2"	
Flow rate (scfm)	25	60	160	270	400	700	1000	2000	
Dimension data									
A (inches)	2.36	3.11	3.07	3.07	4.49	4.49	6.85	6.85	
B (inches)	.65	.81	.91	.91	1.16	1.16	1.97	1.97	
C (inches)	4.61	5.51	8.43	10.39	10.63	16.54	18.94	30.87	
D (inches)	.98	1.39	1.57	1.57	2.36	2.36	3.94	3.94	
Weight (lbs)	4.41	9.92	8.82	12.13	23.15	30.20	74.96	92.60	
CLEARPOINT [®] HP 350	HP350S030	HP350S040	HP350S045	HP350S050	HP350S075	HP350M010	HP350M012	HP350M015	
Max. Operating Pressure (psig)	5,075	5,075	5,075	5,075	5,075	5,075	5,075	5,075	
Pipe size (NPT)	1/4"	3/"	3/"	1⁄2"	3⁄4"	1"	1"	1½"	
Flow rate (scfm)	30	75	205	350	520	920	1300	2600	
Dimension data									
A (inches)	2.36	3.11	3.46	3.46	5.47	5.47	6.65	6.65	
B (inches)	.65	.81	.91	.91	1.47	1.47	1.94	1.94	
C (inches)	4.61	5.51	8.43	10.39	11.26	17.17	18.90	30.83	
D (inches)	.98	1.39	1.57	1.57	3.15	3.15	3.15	3.15	
Weight (lbs)	4.41	9.92	14.33	16.53	45.19	59.52	99.23	156.53	
CLEARPOINT [®] HP 500	HP50	005030	HP500S040		HP500S045		HP500S050		
Max. Operating Pressure (psig)	7,250		7,250	7,250		7,250		7,250	
Pipe size (NPT)	1/4"		3/11 8		3/8"		1/2"		
Flow rate (scfm)	30		80		220		380		
Dimension data									
A (inches)	2.36		3.11		4.45		4.45		
B (inches)	.65		.81		.98		.98		
C (inches)	4.61		5.51		8.70		10.67		
D (inches)	.98		1.39		2.36		2.36		
Weight (lbs)	4.41		9.92		26.46		28.66		

ELEMENT GRADE	ELEMENT TYPE	MICRON RATING	OIL CARRYOVER	OIL VAPOR	DRY & PRESSURE (psid)
Grade CX	Coarse	25 µm	5 mg/m ³	-	.54
Grade FX	Fine	1 µm	.1 mg/m³	-	.86
Grade SX	Superfine	.01 µm	.01 mg/m³	-	1.04
Grade A	Activated Carbon	.01 µm	-	.003 mg/m³	.70

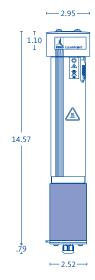
Correction Factor

Operating Pressure (1,450 psig)	300	450	600	725	9	00	1,100	1,200	1,300	1,450	
Correction Factor	.45	.56	.64	.71	.7	78	.84	.90	.95	1.00	
Operating Pressure (5,075 psig)	3,000			3,600		4,500			5,075		
Correction Factor		.84	.89		.94			1.00			
Operating Pressure (7,250 psig)	4,50	4,500 5,0		5,80		300 6,5		6,500	i	7,250	
Correction Factor	.89)	.93	.93 .91		.96		6 .98		1.00	

CLEARPOINT® H Compressed Air Heaters

with adjustable temperature control

- > For the adjustable heating of compressed air
- > Adjustable temperature from 86 °F to 140 °F
- > Ready for connection with a three-prong plug
- > Encapsulated corrosion-free stainless-steel heating cartridges
- Available touch protection option
- > Optional 250 VAC / 50 Hz power supply available
- > Max. operating pressure: 232 psig



CLEARPOINT®H	5040	\$050
Pipe size (NPT)	3/8"	1/2"
Max. volume flow at 100 psig	30 scfm	60 scfm
Setting range compressed-air outlet temperature (°F)*	+86 °F - +140 °F	+86 °F - +140 °F
Max. perm. operating overpressure (psig)	232	232
Pressure difference	< 2.18 psig	< 2.9 psig
Voltage**	115 VAC / 60 Hz +/-10 %	115 VAC / 60 Hz +/-10 %
Inlet temperature (°F)	+36°F - +122°F	+36 °F - +122 °F
Ambient temperature (°F)	+36°F - +122°F	+36 °F - +122 °F
Internal safety switch-off temperature (°F)	+183°F	+183°F
Max. housing temperature (°F)	+176°F	+176°F
Max. compressed-air outlet temperature (°F)*	+140°F	+140°F
Power (W) ***	420 (750)	420 (750)
Volume (I)	0.42	0.42
Weight (lbs)	5.3	5.3
Protection class	IP 54	IP 54

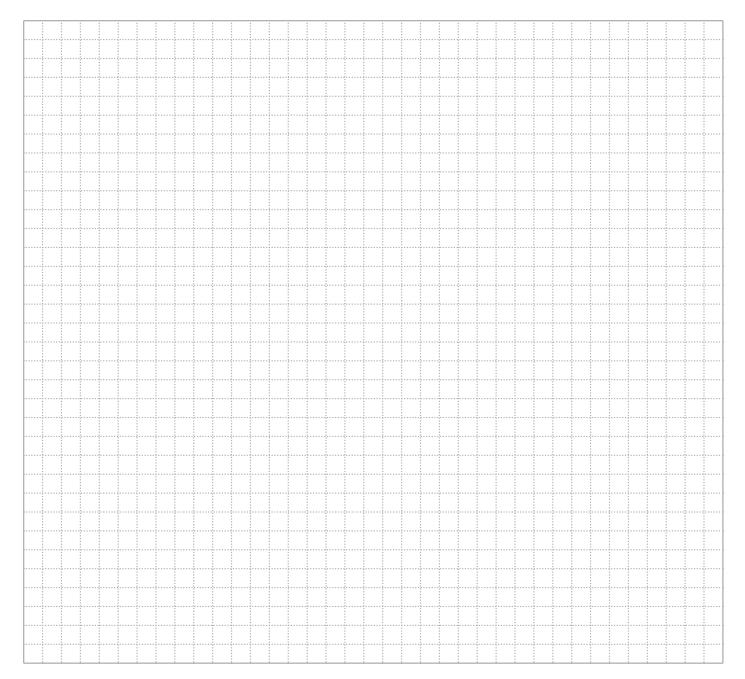
* Depending on volume flow

** Other voltages on request

*** At +68°F: making current max. 4 A, making capacity max. 750 W

Reliable | Efficient | Innovative

What can we do for you?





BEKO TECHNOLOGIES CORP. 900 Great Southwest Pkwy SW Atlanta, GA 30336 USA

Phone +1 (404) 924-6900 Fax +1 (404) 629-6666 www.bekousa.com





Subject to technical changes without prior notice; the information provided does not represent characteristics of state at the time of sale. (a) Registered Trademarks of BEKO TECHNOLOGIES GmbH, Neuss, Germany and BEKO TECHNOLOGIES CORP, Atlanta, GA USA.