RTi
Food Grade
Filter Applications

i097_0917

Unit Overview

Safeguard your operations from rust, dirt, water, and oil. The pre-filters will remove contaminants at a very high efficiency - up to 99.99% for 0.01 microns. Liquid releases from the filter cartridge to an automatic drain as rapidly as it enters the filter. This allows the filter to continue removing liquids for an unlimited time without loss of efficiency or flow capacity. The final stage of filtration removes all viable organisms with an efficiency rating of 99.99% at 0.01 microns.

The special Food Grade certified powder-coated filters are excellent for wash down environments, which is typical in the food processing and dairy industries. The powder coating itself is non-toxic. The filters meet the requirements of 21 CFR 110, while the coating ingredients meet at least one section of FDA Title 21, with the exception of food items containing 8+% alcohol. In 3-stage point-of-use filtration systems, the first two stages are designed to remove contaminants at a very high efficiency. Liquid releases from the filter cartridges to automatic drains as rapidly as it enters the filter. This allows the filters to continue removing liquids for an unlimited time without loss of efficiency or flow capacity. The third and final stage of filtration removes all viable organisms, creating clean and sterile air.

Our stainless steel units are great in food plants with critical air supply and wash down locations. Easily remove water, dirt, and oil contamination from applications without worry of corrosion. They are also good with removing water and dirt in gas systems. First stage elements utilize 'washable' stainless steel, where as second stage elements utilize high efficiency borosilicate fiber. They come with either an automatic float drain or nickel-plated brass manual drain. These units remove the contaminants from compressed air applications with direct or indirect food contact in processing equipment such as air knives, bagging machines, food and ingredient conveying, purging of process lines, etc. As mentioned above, the first two stages are designed to remove contaminants at a very high efficiency, which will ultimately create clean and sterile air.

RTi complies with ISO 8573 for Grade 1 solid particles and Grade 1 oil removal. We also offer a test kit for checking compressed air humidity and particulate with test kit part number RTi-QAT and replacement membranes part number RTi-QAT-MD. For independent testing please consult your local laboratory for analysis.

Eliminizer®:   *Water & Dirt Removal (+Oil in Combo)*
Eliminex®:   *Water & Dirt Removal (+Oil in Combo)*
Coalescer: *Light Water, Light Dirt, & Oil Removal*
Oil-Extractor: *Water, Dirt, & Oil Removal*

RTi-QAT kit contents

ISO Chart

What is ISO8573-1:2010? ISO8573-1:2010 is the international standard for compressed air quality.
Class 1 Particulate: In each cubic meter of compressed air, the particulate count should not exceed 20,000 particles in the 0.1-0.5 micron size range, 400 particulates in the 0.5 -1 micron size range and 10 particulates in the 1-5 micron size range.
Class 2 Water: A pressure dewpoint (PDP) of -40°C or better is required and no liquid water is allowed.
Class 3 Oil: In each cubic meter of compressed air, not more than 0.01 mg of oil is allowed. This is a total level for liquid oil, oil aerosol, and oil vapor.

		Solid Particulate				Water		Oil
		Maximum number of particles per m³			Mass Concentration mg/m³	Vapor Pressure Dewpoint	Liquid g/m³	Total Oil (aerosol liquid/vapor) mg/m³
		0.1-0.5 micron	0.5-1 micron	1-5 micron				
ISO8573-1:2010 CLASS	0	As specified by the equipment user or supplier and more stringent than Class 1						
	1	≤ 20,000	≤ 400	≤ 10	-	≤ -70°C	-	0.01
	2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40°C	-	0.1
	3	-	≤ 90,000	≤ 1,000	-	≤ -20°C	-	1
	4	-	-	≤ 10,000	-	≤ +3°C	-	5
	5	-	-	≤ 100,000	-	≤ +7°C	-	-

Food Grade 3 Stage Order Guide

Port Size	Part #	Height *(in.)*	Width *(in.)*	Depth *(in.)*
½"	4P-061-F04-T3Ci	11.5	12.0	3.8
1"	4P-151-F08-T3Ci	15.0	15.8	4.6

These special Food Grade certified powder-coated filters are excellent for wash down environments, which is typical in the food processing and dairy industries. The powder coating itself is non-toxic. The filters meet the requirements of 21 CFR 110, while the coating ingredients meet at least one section of FDA Title 21, with the exception of food items containing 8+% alcohol. Both units include aluminum housings with food grade powder-coating, as well as auto drains in the first and second stages.

4P-061-F04-T3Ci *Elements*:
1st Stage: 4P-060
2nd Stage: 3C-060
3rd Stage: 3C-061

4P-151-F08-T3Ci *Elements*:
1st Stage: 4P-150
2nd Stage: 3C-150
3rd Stage: 3C-151

Food Grade 1 & 2 Stage Order Guide

	Port Size	Part Number	Height *(in.)*	Width *(in.)*	Depth *(in.)*	Bowl O-Rings	1st Stage Element	2nd Stage Element
Eliminizer®	⅜"	3P-060-F03-F	11.5	8.0	3.8	N32-95-257	3P-060	N/A
	½"	3P-060-F04-F	11.5	8.0	3.8	N32-95-257	3P-060	N/A
	¾"	3P-090-F06-F	15.0	10.0	4.6	N32-95-256	3P-090	N/A
	1"	3P-150-F08-F	15.0	10.0	4.6	N32-95-256	3P-150	N/A
Eliminizer® Combo *(Class 1)*	⅜"	3P-060-F03-DC	11.5	8.0	3.8	N32-95-257	3P-060	3C-060
	½"	3P-060-F04-DC	11.5	8.0	3.8	N32-95-257	3P-060	3C-060
	¾"	3P-090-F06-DC	15.0	10.0	4.6	N32-95-256	3P-090	3C-090
	1"	3P-150-F08-DC	15.0	10.0	4.6	N32-95-256	3P-150	3C-150
Coalescers *(Class 1)*	⅜"	3C-061-F03-F	11.5	8.0	3.8	N32-95-257	3C-061	N/A
	½"	3C-061-F04-F	11.5	8.0	3.8	N32-95-257	3C-061	N/A
	¾"	3C-091-F06-F	15.0	10.0	4.6	N32-95-256	3C-091	N/A
	1"	3C-151-F08-F	15.0	10.0	4.6	N32-95-256	3C-151	N/A
Oil Extractor Combo *(Class 1)*	⅜"	4P-061-F03-DC	11.5	8.0	3.8	N32-95-257	4P-060	3C-061
	½"	4P-061-F04-DC	11.5	8.0	3.8	N32-95-257	4P-060	3C-061
	¾"	4P-090-F06-DC	15.0	10.0	4.6	N32-95-256	4P-090	3C-090
	1"	4P-150-F08-DC	15.0	10.0	4.6	N32-95-256	4P-150	3C-150

** To add an indicator, add "i" to the end of part number (**pictures shown have indicators**)*
** Indicator part number for Food Grade: N32-W1-DPi-FG
*** Automatic Float Drain: N32-95-973-FG. Manual Petcock Drain: PC-03
**** Optional Mounting Bracket: BK-1 (35 and 60 SCFM only)

Specifications

Port Sizes	⅜", ½",¾", 1"
Thread Styles	NPT
Flow Capacity	60/90/150 SCFM @ 100 PSI
Housing Type	FDA Powder Coated Aluminum
Filter Capacity	3P: 1 micron, 4P: 1 micron, 3C: 0.01 micron

1, 2, 3 Stage Stainless Steel Units

Stainless 3 Stage Order Guide

Port Size	Part #	Height (in.)	Width (in.)	Depth (in.)
½"	4P-061-S04-T3C	12.0	10.0	3.8
1"	4P-151-S08-T3C	19.0	15.5	4.6

Easily remove water, dirt, and oil contamination from applications without worry of corrosion. All units manufactured from 316 stainless steel. Units include stainless steel housings, as well as auto drains in the first and second stages.

4P-061-S04-T3C *Elements:*
  1st Stage: 4P-060
  2nd Stage: 3C-060
  3rd Stage: 3C-061

4P-151-S08-T3C *Elements:*
  1st Stage: 4P-150
  2nd Stage: 3C-150
  3rd Stage: 3C-151

NACE Compliant

Stainless 1 & 2 Stage Order Guide

	Port Size	Part Number	Height (in.)	Width (in.)	Depth (in.)	Bowl O-Rings	1st Stage Element	2nd Stage Element
Eliminex® (Class 5)	½"	1P-060-S04-F	12.0	3.8	3.8	KSG-171	1P-060	N/A
	½"	1P-175-S04-F	19.0	4.6	4.6	KSG-176	1P-175	N/A
	1"	1P-175-S08-F	19.0	4.6	4.6	KSG-176	1P-175	N/A
Eliminex® Combo (Class 1)	½"	1P-060-S04-DC	12.0	8.0	3.8	KSG-171	1P-060	3C-060
	1"	1P-090-S08-DC	19.0	10.0	4.6	KSG-176	1P-090	3C-090
	1"	1P-150-S08-DC	19.0	10.0	4.6	KSG-176	1P-150	3C-150
	1"	1P-250-S08-DC	19.0	10.0	4.6	KSG-176	1P-250	3C-250
Coalescers (Class 1)	½"	3C-060-S04-F	11.0	3.0	3.3	KSG-171	3C-060	N/A
	1"	3C-090-S08-F	15.6	3.8	4.0	KSG-176	3C-090	N/A
	1"	3C-150-S08-F	15.6	3.8	4.0	KSG-176	3C-150	N/A
	1"	3C-250-S08-F	15.6	3.8	4.0	KSG-176	3C-250	N/A
Oil Extractor Combo (Class 1)	½"	4P-060-S04-DC	11.0	6.4	3.3	KSG-171	4P-060	3C-060
	1"	4P-090-S08-DC	15.6	7.8	4.0	KSG-176	4P-090	3C-090
	1"	4P-150-S08-DC	15.6	7.8	4.0	KSG-176	4P-150	3C-150

* Automatic Float Drain: N32-95-973-FG. Manual Drain: SV1-3/8
** Optional Mounting Bracket: BK-1 (35 and 60 SCFM only)

Specifications

Port Sizes	½", 1"
Thread Styles	NPT
Flow Capacity	60/90/150/250 SCFM at 100 PSI
Housing Type	316 Stainless Steel
Filter Capacity	Combo Units: 0.01 micron