

# JFS Series

TRI-SHiELD™ Filter Separator & Dry Gas Filter Cartridges for solid contaminant removal and pre-coalescing.

Jonell Systems patent pending TRI-SHiELD™ media cartridges for filter separators and dry gas filters are typically used in applications like compressor inlet, contactor protection, pipelines and meter stations.

They are used for removing a wide range of solid contaminants including sand, iron oxide, iron sulphide from dry gas and for pre-coalescing droplets for easier second stage removal in filter separators.

## Features and benefits

- The blend of Tri-Lobal and cylindrical fibers in combination with the engineered gradient depth all in the same media matrix provides superior dirt loading compared to conventional depth cartridges.
- Coreless designs allow for easier disposal.
- Media layers can be customized for challenging applications and multiple surface coating options provide filtration flexibility.
- Textured cartridge with a coarse finish designed to improve filtration performance.




Criteria	Performance	Cartridge Design Advantage
Pressure Drop	Up to 25% less pressure drop at start-up compared to standard polyester depth media.	Engineered media with Tri-Lobal fibers for improved void space.
Dirt Holding	Up to 20% more capacity at same recommended change-out.	Different denier fiber styles, sizes and layering of TRI-SHiELD media in gradient depth for improved contaminant loading capacity.
Filtering Area	Large	Multiple customized layers effectively create larger surface area for solids loading for a wide particle distribution including difficult semi-solid such as paraffins.

\* Tested against comparable PECO PEACH Cartridges and other depth filtration technology.

PECO & PEACH are registered trademarks of Parker Hannifin Filtration (US) Inc. There is no affiliation between Jonell Filtration Products, Inc. and Parker Hannifin Filtration (US) Inc.

# Specifications

Products	Specifications	Filter Separator & Dry Gas Filter Cartridge
	Flow Direction	Outside to inside
	Nominal Sizes	3.0", 4.50", 5.50"
	Nominal Lengths	12", 24", 28", 36", 43", 48", 72", 79"
	Media Type	Depth Style Polyester Depth Style Polypropylene
	Hardware Materials	Core: Coreless, Tin Plated, Stainless Gasket: Same as Media type, Buna, Viton End caps: Stainless, Tin
	End Cap Configuration	Closed end with bolt hole Double open ended
	Efficiency	Up to 99.98% of 0.3µ & larger
	Maximum Temperature	240-degree F for Polyester (above 200-degree F requires a core) 180-degree F for Polypropylene
	Recommended Change-out PSID	12 - 15 PSID
	Common Applications	Compressor Suction/Discharge Gas Transmission Gas Gathering Metering/Custody Transfer Glycol Contactor Protection Amine Contactor Protection

Other configurations, micron ratings and options available. **Contact Jonell Systems to discuss your unique needs.**

# Nomenclature

**JFS**   **3**   **36**   —   **E**   **T**   **B**   —   **CE**   —   **FF**

Product Line   Nominal Sizes   Nominal Length   TRI-SHIELD Media Type   Core   Gasket   Configuration   Performance Level

Code	Description
Blank	3.00"*
3	4.50"
5	5.50"

\* The 3.00" element is coreless only.

12"
24"
36"
48"
72"

Code	Description
E	Depth Style Polyester
F	Depth Style Polypropylene

Code	Description
C	Coreless
T	Tin Plated
S	Stainless

Code	Description
P	Same as Media type
B	Buna
V	Viton

Code	Description
Blank	DOE
CE	Closed End with Bolt Hole
EXT	CE w/extension

Code	Description
FF	0.3µ
UF	0.5µ
SF	1µ (Standard Offering)
BF	5µ
CF	10µ

# About us

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# JRGC Series

TRI-SHiELD™ Vertical Reverse Flow Coalescer Cartridges for removal of fine aerosols and low surface tension liquids.

Jonell Systems patent pending TRI-SHiELD media JRGC series is designed for vertical coalescers used in coalescing applications such as compressor discharge, contactor protection, contactor discharge to remove difficult contaminants including fine aerosols and low surface tension liquids such as amines, glycol and lube oils.

## Features and benefits

- The blend of Tri-Lobal and cylindrical fibers in combination with the engineered gradient depth all in the same media matrix provides superior dirt loading and enhances coalescing compared to conventional depth cartridges.
- Media layers can be customized for challenging applications and multiple surface coating options provide filtration flexibility.
- Protects critical equipment and enables increased uptime with fewer unexpected failures resulting in an improved total cost of ownership.
- Textured cartridge with a coarse finish designed to improve filtration performance.




Criteria	Performance	Cartridge Design Advantage
Pressure Drop	Up to 25% less pressure drop at start-up compared to standard polyester depth media.	Engineered media with Tri-Lobal fibers for improved void space.
Efficiency	15X fewer contaminants downstream of the filtration solution.	Provides a larger effective surface area per media volume while creating an environment for stable droplet growth.
Capture Probability	High	Contaminant particles lose energy and velocity as they attempt to maneuver the gradient media matrix.

\* Tested against comparable PECO PEACH Cartridges and other depth filtration technology.

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# Specifications

Products	Specifications	Vertical Reverse Flow Coalescer Cartridge	
	Flow Direction	Inside to outside	
	Nominal Sizes	3.50", 4.50", 5.50"	
	Standard Lengths	12", 24", 36", 48" *Other lengths available upon request	
	Media Type	Depth Style Polyester Depth Style Polypropylene Drain layer: Needled Polyester	
	Hardware Materials	Core: Tin Plated, Stainless Gasket: Buna, Viton End caps: Tin Plated, Stainless, Nylon	
	End Cap Configuration	Closed end with bolt hole Double open ended	
	Efficiency	Up to 99.99% 0.3µ & larger of both liquid & solids	
	Maximum Temperature	240-degree F for Polyester (above 200-degree F requires a core) 180-degree F for Polypropylene	
	Recommended Change-out PSID	12-15 PSID	
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Other configurations, micron ratings and options available. **Contact Jonell Systems to discuss your unique needs.**

## Nomenclature

<b>JRGC</b>	<b>3</b>	<b>36</b>	<b>P</b>	<b>-</b>	<b>E</b>	<b>T</b>	<b>B</b>	<b>-</b>	<b>CE</b>	<b>-</b>	<b>FF</b>																																																																																																							
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## About us

Jonell Systems, a Filtration Group brand, partners with oil, gas and energy companies worldwide to address end to end filtration challenges to improve process safety, reliability, productivity and ultimately profitability. With a wide range of vessels and cartridges with multiple media options, we have solutions to make the world safer, healthier and more productive.

# JGC(P/C) Series

TRI-SHIELD™ Horizontal Multi-stage Coalescer Cartridges for high dirt and high efficiency coalescing applications.

Engineered in our patented Twist-LOK™ design, Jonell Systems patent pending TRI-SHIELD media JGC cartridges are well suited for critical applications that require high coalescing efficiencies or in challenging applications with high dirt and high liquid loading including semi solids, iron sulphide and paraffins.

## Features and benefits


- The blend of Tri-Lobal and cylindrical fibers in combination with the engineered gradient depth all in the same media matrix provides superior dirt loading and enhances coalescing compared to conventional depth cartridges.
- Media layers can be customized for challenging applications and multiple surface coating options provide filtration flexibility.
- Protects critical equipment and enables increased uptime with fewer unexpected failures resulting in an improved total cost of ownership.
- Textured cartridge with a coarse finish designed to improve filtration performance.



Criteria	Performance	Cartridge Design Advantage
Pressure Drop	Up to 25% less pressure drop at start-up compared to standard polyester depth media.	Engineered media with Tri-Lobal fibers for improved void space.
Efficiency	15X fewer contaminants downstream of the filtration solution	Provides a larger effective surface area per media volume while creating an environment for stable droplet growth.
Dirt Holding	Up to 20% more capacity at same recommended change-out.	Different denier fiber styles, sizes and layering of TRI-SHIELD media in gradient depth for improved contaminant loading capacity.
Capture Probability	High	Contaminant particles lose energy and velocity as they attempt to maneuver the gradient media matrix.
Filtering Area	Large	Multiple customized layers effectively create larger surface area for solids loading for a wide particle distribution including difficult semi-solid such as paraffins.

\* Tested against comparable PECO PEACH Cartridges and other depth filtration technology. PECO & PEACH are registered trademarks of Parker Hannifin Filtration (US) Inc. There is no affiliation between Jonell Filtration Products, Inc. and Parker Hannifin Filtration (US) Inc.

## Specifications

Products	Specifications	Horizontal Coalescer Cartridge
	Flow Direction	Stage 1: Outside to Inside Stage 2: Inside to Outside
	Nominal Sizes	4.50"
	Standard Lengths	73", 82", 94"
	Media Type	Depth Style Polyester Depth Style Polypropylene
	Hardware Materials	Core: Coreless, Tin Plated, Stainless Gasket: Buna, Viton, TES O-ring End Caps: Nylon
	End Cap Configuration	Closed end with bayonet or handle
	Efficiency	Up to 99.99% 0.3μ & larger of both liquid & solids
	Maximum Temperature	240-degree F for Polyester (above 200-degree F requires a core) 180-degree F for Polypropylene
	Recommended Change-out PSID	12-15 PSID
	Applications	Compressor Suction/Discharge Custody Transfer Meters Natural Gas gathering Glycol Contactor Amine Contactor Molecular Sieve Contactor Fuel Gas Conditioning Syn Gas Cleanup Natural Gas Transmission

Other configurations, micron ratings and options available. **Contact Jonell Systems to discuss your unique needs.**

## Nomenclature

<b>JGC</b>	<b>P</b>	<b>N</b>	<b>73</b>	<b>H</b>	<b>-</b>	<b>E</b>	<b>C</b>	<b>B</b>	<b>-</b>	<b>SF</b>	<b>FF</b>
Product Line	Element Stage	First Fit	Nominal Length			TRI-SHIELD Media Type	Core	Gasket		Performance Level	
<b>Code</b>	<b>Description</b>		73"			<b>Code</b>	<b>Description</b>	<b>Code</b>	<b>Description</b>		
P	Pre-filter		82"			E	Depth Style Polyester	B	Buna		
C	Coalescer		94"			F	Depth Style Polypropylene	V	Viton		
								T	TES O-ring		
<b>Code</b>	<b>Description</b>					<b>Code</b>	<b>Description</b>			<b>Code</b>	<b>Description</b>
Blank	Bayonet					C	Coreless			TF	99.99% 0.3μ & Larger of solid particulate 99.98% 0.1μ & Larger of liquid droplets 99.99% 0.3μ & Larger of liquid droplets
H	Handle					T	Tin Core			FF	99.99% 0.3μ & Larger of both solid particulate & liquid droplets
						S	Stainless			SF	(Standard Offering) 99.99% 0.3μ & Larger of solid particulate 99.8% 0.3μ & Larger of liquid droplets
										BF	5μ Nominal

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# JGCS Series

TRI-SHIELD™ Horizontal Multi-stage Coalescer Cartridges for high dirt and high efficiency coalescing applications.

Jonell Systems patent pending TRI-SHIELD media JGCS single piece cartridges, are suitable for critical applications that require high coalescing efficiencies or in challenging applications with high dirt and high liquid loading including semi solids, iron sulphide and paraffins.

## Features and benefits

- The blend of Tri-Lobal and cylindrical fibers in combination with the engineered gradient depth all in the same media matrix provides superior dirt loading and enhances coalescing compared to conventional depth cartridges.
- Media layers can be customized for challenging applications and multiple surface coating options provide filtration flexibility.
- Protects critical equipment and enables increased uptime with fewer unexpected failures resulting in an improved total cost of ownership.
- Textured cartridge with a coarse finish designed to improve filtration performance.




Criteria	Performance	Cartridge Design Advantage
Pressure Drop	Up to 25% less pressure drop at start-up compared to standard polyester depth media.	Media matrix has greater void space compared to traditional fiber blends due to shape of fibers used.
Efficiency	15X fewer contaminants downstream of the filtration solution	Provides a larger effective surface area per media volume while creating an environment for stable droplet growth.
Dirt Holding	Up to 20% more capacity at same recommended change-out.	Different denier fiber styles, sizes and layering of TRI-SHIELD media in gradient depth for improved contaminant loading capacity.
Capture Probability	High	Contaminant particles lose energy and velocity as they attempt to maneuver the gradient media matrix.
Filtering Area	Large	Multiple customized layers effectively create larger surface area for solids loading for a wide particle distribution including difficult semi-solid such as paraffins.

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	Hardware Materials	Core: Coreless, Tin Plated, Stainless Gasket: Buna, Viton, TES O-ring End Caps: Nylon
	End Cap Configuration	Closed end with bayonet or handle
	Efficiency	Up to 99.99% 0.3μ & larger of both liquid & solids
	Maximum Temperature	240-degree F for Polyester (above 200-degree F requires a core) 180-degree F for Polypropylene
	Recommended Change-out PSID	12-15 PSID
	Applications	Compressor Suction/Discharge Custody Transfer Meters Natural Gas gathering Glycol Contactor Amine Contactor Molecular Sieve Contactor Fuel Gas Conditioning Syn Gas Cleanup Natural Gas Transmission

Other configurations, micron ratings and options available. **Contact Jonell Systems to discuss your unique needs.**

## Nomenclature

**JGCS** **73** **H** - **A** **E**\* **C** **B** **1** **SF** **FF**\*

Product Line    Nominal Length    TRI-SHiELD Media Type    Core    Gasket    # of U-CUP Gaskets    Performance Level

Code	Description
Blank	Bayonet
H	Handle

Code	Description
E	Depth Style Polyester
F	Depth Style Polypropylene

Code	Description
C	Coreless
T	Tin Core
S	Stainless

Code	Description
B	Buna
V	Viton
T	TES O-ring

Code	Description
1	One
2	Two

Code	Description
FF	99.99% 0.3μ & Larger of both liquid & solids
UF	99.99% 0.5μ & Larger of both liquid & solids
SF	(Standard offering) 99.5% 0.3μ & Larger of liquid & 99.99% and larger of solids

73"  
82"  
94"

\* Will be two letters if media types differ from First to Second Stage.

\* Second Stage rating when different from the First Stage rating. Blank if both stages are the same.

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