



V73 Series In-Line Filters V76 Series Tee Filters

No.V736-10 June 2019

Pressure Rating up to 3000 psig (206 bar), 6000 psig (413 bar)

Features

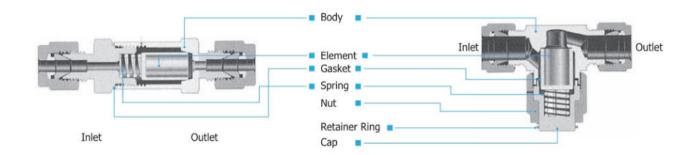
- · Traps fine contamination to maintain system purity
- · Gas and liquid filtration
- · Standard micron filtering ranges
- Sintered Elements: 0.5, 2, 7, 15, 60 and 90 micron
- · Strainer Elements: 40,140,230 and 440 micron
- Replaceable SS316 sintered and starainer elements
- · SS316 and Brass body construction
- · Choice of reliable DK-Lok, NPT & ISO pipe end connections
- · Heat Code Traceability

V73 Series In-line Filters

- In-line filters are applicable where space is limited and elements don't have to be replaced often.
- · Compact in-line design with large filtration area
- Maximum working pressure 3,000 psig @100°F(206 bar @38°C)

V76 Series Tee Filters

- · Filter Element replaceable with the valve in-line.
- · Safety union bonnet design for high pressure rating
- · Optional Bypass for sampling or purging of process fluid.
- Maximum working pressure 6,000 psig @100 °F(413 bar @38°C)



Materials of Construction

C	V73 Series		V76 Series			
Component	Grade/ASTM Specification					
Body	SS316 / A276	Brass / B16	SS316 / A276	Brass / B16		
Nut	-	-	SS316 / A276	Brass / B16		
Cap	-	-	SS316 / A276	Brass / B16		
Retainer Ring	-		Stainles	s Steel		
Element		SS316 (Sinte	ered, Strainer)			
Spring		SS302				
Gasket		SS316 / A24	0 silver plated			

Wetted components are listed in blue.

Filtration Definitions

· Filter Element:

The component within the filter which traps media contamination.

· Filtration Area:

The actual surface area of the filter element available to trap contamination.

· Micron:

A unit of measure to describe the mean pore diameter of the filter element or the mean particle diameter of media contamination. One micron = 0.001 mm or 0.00004 inch

V76 Series Tee Filter CNG Certifications

Certificates	ECE R110	ANSI / AGA NGV 3.1-1995 CGA NGV 12.3-M95	ISO 15500
Certificate No	110R-000196	2010-REPORT-032 (01)	2010-REPORT-031(00)
Classification	Class 0	CNG-Filter	CNG-Filter
Temperature	-40°C to 120°C (-40°F to 250°F)	-40°C to 121°C (-40°F to 250°F)	-40°C to 121°C (-40°F to 250°F)
Working Pressure	200 bar @ 120°C	273 bar @ 121°C	273 bar @ 121°C



V73/76 Series

Sintered Elements Technical Information

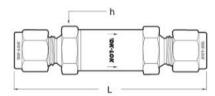
- · Stainless steel 316 sintered
- High heat resistance and thermal stability up to 1,500°F(815°C)
- · High permeability with low-pressure drop.
- · Shape-stability with self-supporting structural elements
- · Suitable for compression, vibration, and high impulse pressures.
- Precise filtration because pore size and distribution are exact and uniform.
- · Chemical resistance against acids and caustic solutions in various ranges of pH.

Element Designator	Nominal Pore Size, μm	Pore Size Range, μm	Element Porosity	Cv Factor	Max. Pressure Differential Across Clean Filters at 70°F (21°C)
05	0.5	0.5 - 2	17%	0.046	
2	2	1-4	22%	0.056	
7	7	5 - 10	27%	0.12	11(0i- (00 0 b)
15	15	11 - 25	36%	0.13	1160 psig (80.0 bar)
60	60	50 - 75	44%	0.38	
90	90	75 - 110	45%	0.50	

Element Replacement

- The sintered elements don't permit the contaminants in the gas and liquid to pass through the elements when they are bigger than the pore size of micron.
- · Contaminants are trapped by element pores and it results in pressure buildup.
- Contamination comes earlier when flow volume is high and media is not clean.
- The filtering elements need to be replaced for minimum pressure drop as well as system purity. Note: Clean filter valve components whenever the element is replaced.

V73 Series In-line Filters



Ordering Information and Dimensions

Basic	Ordering	End Connections	Orifice	Dimensions.	mm (in.)
	mber	Inlet and Outlet	inch (mm)	L	Н
	D-2T-	1/8 in. DK-Lok	0.00	59.7(2.35)	
V73A-	F-2N-	1/8 in. Female NPT	0.09	54.9(2.16)	9/16
	D-3M-	3mm DK-Lok	(2.4)	60.5(2.38)	
	D-4T-	1/4 in. DK-Lok		74.9(2.95)	
1/73D	M-4N-	1/4 in. Male NPT	0.19	68.3(2.69)	2/4
V73B-	F-4N-	1/4 in. Female NPT	(4.7)	72.9(2.87)	3/4
	D-6M-	6mm DK-Lok		75.2(2.96)	
VIIIC	M-8N-	1/2 in. Male NPT	0.28	81.3(3.20)	
V73C-	D-6T-	3/8 in. DK-Lok	(7.1)	81.5(3.21)	1
V73D-	D-8T-	1/2 in. DK-Lok	0.41 (10.3)	88.6(3.49)	1

Flow Capacities

Filter Series	Nominai	r ressure brop				
	Pore	20 psi	60 psi	120 psi		
	Micron	Water GPM @70°F (21°C)				
	05	0.01	0.44	0.13		
	2	0.11	0.26	0.44		
73A Series	7	0.14	0.33	0.53		
/ 3A Series	15	0.17	0.39	0.64		
	60	0.21	0.55	0.77		
	90	0.28	0.55	0.66		
	05	0.06	0.19	0.32		
	2	0.34	0.94	1.42		
73B Series	7	0.57	1.42	2.19		
/ 3D Series	15	0.71	1.42	2.30		
	60	1.27	3.61	5.04		
	90	1.70	4.60	6.68		
	05	0.13	0.44	0.83		
	2	0.37	1.20	1.75		
72.0 0	7	0.91	2.41	3.83		
73C Series 73D Series	15	1.19	2.85	4.49		
JU Jelles	60	2.83	7.34	10.95		
	90	3.25	8.32	12.05		
	40,140,230,440	4.7	14.8	18.8		

Pressure Drop

Technical Information

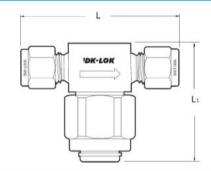
Filter Series	Pressure Rating @100 °F (38 °C), psig (bar)		Temperature	Rating, °F (°C)	Filtration Area in.2 (mm²)	
Body Material	SS316	Brass	SS316	Brass	Sintered	Strainer
V73A	2000 (206)	2000 (206)			0.55(350)	-
V73B	3000 (206)	3000 (206)	-20 to 900 (-28 to 482)	-20 to 300 (-28 to 148)	1.30(830)	1.0(640)
V73C, V73D	2500 (172)	2000 (137)	(-20 to 402)	(-20 (0 140)	2.0(1280)	1.7(1090)



IDK-LOK Filters

V73/76 Series

V76 Series Tee Filters



Top wounting Bolt Circle Details: 25.4 mm (1.00 inch) for V76A 28.7 mm (1.13 inch) for V76B, V76C Top View Location of the 2 threaded holes Hole details: MS x 0.8 pitch threads,

Ordering Information and Dimensions

	Basic	End Connections	Orifice	Dime	nsions, mn	n (in.)
Order	ing Number	Inlet & Outlet	mm (in.)	L	L1	Н
	F-2N-	1/8 in. Female NPT		50.8(2.0)		-
	D-2T-	1/8 in. DK-Lok		57.7(2.27)		7/16
1/76 A	D-4T-	1/4 in. DK-Lok	4.4	62.7(2.47)	47.5	9/16
V76A	M-4N-	1/4 in. Male NPT	(0.17)	54.1(2.13)	(1.87)	1
	F-4N-	1/4 in. Female NPT		54.1(2.13)		-
	D-6M-	6mm DK-Lok		62.5(2.46)		14mm
V76B	D-6T-	3/8 in. DK-Lok	5.4	72.1(2.84)	56	11/16
V/OB	D-8M-	8mm DK-Lok	(0.21)	72.1(2.84)	(2.2)	1-1/8
	M-6N-	3/8 in. Male NPT		60.5(2.38)		-
	D-10M-	10mm DK-Lok	6.4	72.6(2.86)	56	19mm
V76C	D-12M-	12mm DK-Lok	6.4	77.2(3.04)	56	1-1/8
	D-8T-	1/2 in. DK-Lok	(0.25)	77.2(3.04)	(2.2)	7/8
	M-8N-	1/2 in. Male NPT		69.9(2.75)		

All dimensions shown are for reference only and are subject to change. Dimensions with DK-Lok nuts are in finger-tight position.

Technical Information

	Pressure Rating @10	0 °F (38 °C), psig (bar)	Temperature Rating, °F (°C)		Filtratio	
Filter Series	SS316	Brass	SS316	Brass	Sintered	Strainer
V76A, V76B	6000(413)	2000(137)	-20 to 900	-20 to 300	1.3(830)	1.0(640)
V76C	6000(413)	2000(137)	(-28 to 482)	(-28 to 148)	2.0(1280)	1.7(1090)



By-pass port

By-pass port of female 1/8 in. or 1/4 in. NPT is available for sampling and purging of process fluid.

To use, replace the cap on Tee filter with the by-pass port.

Operation

Keep the cap downwards to prevent contaminants from entering the system during element replacement

Filter Series	Nom.	P	ressure Dro	р
	Pore	20 psi	60 psi	120 psi
	Micron	Water	GPM @ 70 °F	(21 °C)
	05	0.06	0.19	0.32
	2	0.11	0.26	0.44
V76A-F-2N	7	0.14	0.33	0.53
V76A-D-2T	15	0.17	0.39	0.64
	60	0.21	0.55	0.77
	90	0.28	0.55	0.66
	05	0.06	0.19	0.32
	2	0.34	0.94	1.42
V76A-D-4T	7	0.57	1.42	2.19
V76A-M-4N V76A-F-4N	15	0.71	1.42	2.30
V/0/1-41V	60	1.13	2.96	4.27
	90	1.56	3.72	5.37
	05	0.13	0.44	0.83
100000 2 5000	2	0.37	1.20	1.75
V76A-D-6M	7	0.91	2.41	3.83
V76A-D-6T V76B Series	15	1.19	2.85	4.49
V766 Series	60	2.12	5.26	7.34
V/OC Selles	90	2.40	6.02	8.33
	40,140,230,440	2.6	7.5	10.8

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VDK-LOK Filters

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V73/76 Series

Ordering information

Select desired basic ordering number, element designator, option and body material listed below.

V76A-D-4T V76B-D-6T

			-NE		-B
	Element		Filter with no element	By-pass	Body Material
Element Type	Element Designator	Nominal Micron	NE : Filter with no element	Nil: No By-pass option BF2N: 1/8 in, Female NPT	S:SS316 B:Brass
	0.5	0.5	element	BF4N: 1/4 in. Female NPT	D. Diass
	2	2	Note:	DF4N: 1/4 III. FEITIGIE INFT	
Sintered	7	7			
Sintered	15	15	NE option is applicable		
	60	60	to V76 series Tee filter		

-BF2N



Field Assembly Kit

Strainer

Element Kits

To order, select desired kit basic ordering number and element designator. Example: FE73A-05

only.

Basic O	ent Kit Ordering mber	Element Designator	Nominal Pore Size, μm	Pore Size Range, µm		applicable er Series
		05	0.5	05 - 2	FF72.4	\/72A
	2	2	1 - 4	FE73A-	V73A	
Cinton d	FE73A-	7	7	5 - 10	FE73B-	V73B
Sintered FE73B-	FE73G-	15	15	11 - 25		V76A
	12/30	60	60	50 - 75	FF72C	V73C, V73D
		90	90	75 - 110	FE73C-	V76B, V76C
		40	40	=		
Chuainan	Strainer FES73C-	140	140	-	FFC72C	V73C, V73D
Strainer		230	230	9	FES73C-	V76B, V76C
	440	440	2		A CONTROL OF CONTROL O	

Gasket and Spring Kits

To order, select desired gasket or spring kit ordering number

Filter Series	Gasket Kit Ordering Number	Spring Kit Ordering Number	Kit applicable Filter Series
	9WSH-73A-S	9SPR-73A-2	V73A
V73	9WSH-73B-S	9SPR-73B-2	V73B
Stainless Brass	9WSH-73C-S	9SPR-73C-2	V73C
	9WSH-73D-S	9SPR-73C-2	V73D
V76	76A-WSH-S	9SPR-76A-2	V76A
Stainless Brass	76B-WSH-S	9SPR-76B-2	V76B / V76C

We reserve the right to change specifications stated in this catalog for our continuing program of improvement.

Safe Filter Selection

The Selection of a Filter for any application or system design must be considered to ensure safe performance. Filter function, Filter rating, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.



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