

CNG/NGV Service Products

Dk-Lok Tube Fittings, Ball Valves, Filters and Check Valves



V76 Series Tee Filters

Body Material: SS316 Sizes: V76A. V76B, and V76C End Connections: Dk-Lok Tube Fitting 6 to 16 mm OD (1/4 to 5/8 in. OD) Pipe Thread 1/4 to 1/2 in. Male & Female NPT Pressure Classification: Class 0 Maximum Working Pressure: 26MPa (260 bar) Operating Temperatures: -40 to 120 °C NGV Filter Ordering Number: Use standard ordering number. i.e., V76A-D-6M-7-S.

Go to V76 Catalog.





V73 Series In-Line Filters V76 Series Tee Filters

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

Catalog No. V736-5 June 2008

Filters for System Purity

V73 Series In-line Filters



V76 Series Tee Filters



Features

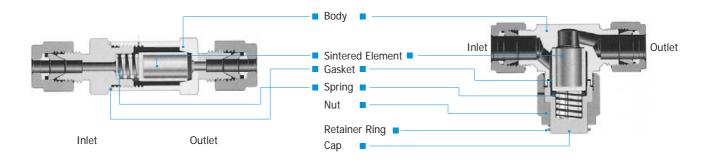
- Traps fine contamination to maintain system purity
- Gas and liquid filtration
- Standard micron filtering ranges : 0.5, 2, 7, 15, 60 and 90 microns
- Replaceable SS316 sintered elements
- SS316 and Brass body construction
- Choice of reliable Dk-Lok, NPT & ISO pipe end connections
- Heat Code Traceability

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 3000 psig @100°F(206 bar @38℃)

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 6000 psig @100°F(413 bar @38℃)



Materials of Construction

Component	V73 Series		V76 Series			
Component	Grade/ASTM Specification					
Body	SS316 / A276	Brass / B16	SS316 / A276	Brass / B16		
Nut	-	-	SS316 / A276 Brass /			
Сар	-	-	SS316 / A276	Brass / B16		
Retainer Ring	Stainless Steel					
Sintered Element	SS316					
Spring	SS302					
Gasket		SS316 / A240) 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 = 0.001mm or 0.00004 inch





Sintered Elements Technical Information

- Stainless steel 316 sintered
- High heat resistance and thermal stability up to 1500°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.

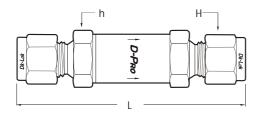
Element Designator	Nominal Pore Size, µm	Pore Size Range, µm	Element Porosity	Cv Factor	Max. Pressure Differential Across Clean Filters at 70°F (21°C)
05	0.5	0.5 - 2	17%	0.046	
2	2	1 - 4	22%	0.056	
7	7	5 - 10	27%	0.12	1160 psig (80.0 bar)
15	15	11 - 25	36%	0.13	
60	60	50 - 75	44%	0.38	
90	90	75 - 110	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.)			
Nun	nber	Inlet and Outlet	inch <mark>(mm</mark>)	L	Н	h	
	D-2T- 1/8 in. DK-LOK			59.7 (2.35)	7/16		
V73A-	F-2N-	1/8 in. Female NPT	1/8 in. Female NPT 0.09 (2.4)		-	9/16	
	D-3M-	3mm DK-LOK		60.5 (2.38)	12mm		
	D-4T-	1/4 in. DK-LOK		74.9 (<mark>2.95</mark>)	9/16		
1/720	M-2N-	1/4 in. Male NPT	0.19 (4.7)	68.3 (2.69)	-	3/4	
V73B-	F-4N-	1/4 in. Female NPT	0.19 (4.7)	72.9 (<mark>2.87</mark>)	-	3/4	
	D-6M-	6mm DK-LOK		75.2 (<mark>2.96</mark>)	14mm		
V73C-	M-8N-	1/2 in. Male NPT	0.00 (71)	81.3 (3.20)	1-1/16	1	
V/3C-	D-6T-	3/8 in. DK-LOK	0.28 (7.1)	81.5 (<mark>3.21</mark>)	-		
V73D-	D-8T-	1/2 in. DK-LOK	0.41 (10.3)	88.6 (3.49)	7/8	1	

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

Flow Capacities

	Nominal		Р	
Filter Series	Pore	20 psi	60 psi	120 psi
Series	Micron	Water (GPM @70°F	(21℃)
	05	0.01	0.44	0.13
	2	0.11	0.26	0.44
73A Series	7	0.14	0.33	0.53
I SA SELLES	15	0.17	0.39	0.64
	60	0.21	0.55	0.77
	90	0.28	0.55	0.66
73B Series	05	0.06	0.19	0.32
	2	0.34	0.94	1.42
	7	0.57	1.42	2.19
	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
73C Series	7	0.91	2.41	3.83
73D Series	15	1.19	2.85	4.49
	60	2.83	7.34	10.95
	90	3.25	8.32	12.05

Technical Information

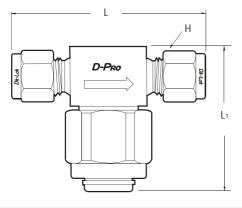
Filter Series	Pressure Rating @100°F (38°C) psig (bar)SS316Brass		Temperate °F (ure Rating °C)	Filtration Area with Sintered Element
Body Material			SS316	Brass	inch ² (mm ²)
V73A	3000 (206)	3000 (206) 3000 (206)	20.4- 000	20 to 200	0.55 (350)
V73B	3000 (200)	3000 (200)	-20 to 900 (-28 to 482)	-20 to 300 (-28 to 148)	1.30 (830)
V73C, V73D	2500 (172)	2000 (137)	(2.0 (1280)



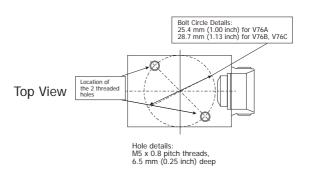


D-Pro° Filters

V76 Series Tee Filters



Top mounting



Ordering Information and Dimensions

E	Basic	End Connections	Orifice	Dimens	sions, mn	า (<mark>in</mark> .)	
Orderin	ng Number	Inlet & Outlet	inch (in.)	L L1		Н	
	F-2N-	1/8 in. Female NPT		50.8 (2.00)		-	
	D-2T-	1/8 in. DK-LOK	4.4	57.7 (<mark>2.27</mark>)		7/16	
	D-4T-	1/4 in. DK-LOK	(0.17)	62.7 (<mark>2.47</mark>)	47.5	9/16	
V76A	M-4N-	1/4 in. Male NPT	(0.17)	54.1 (2.13)	(1.87)	-	
F-4N-		1/4 in. Female NPT	1/4 in. Female NPT			-	
	D-6M-	6mm DK-LOK		62.5 (<mark>2.46</mark>)		14mm	
V76B	D-6T-	3/8 in. DK-LOK	5.4	72.1 (<mark>2.84</mark>)	56	11/16	
V/0D	D-8M-	8mm DK-LOK	(0.21)	72.1 (2.84)	(2.20)	16mm	
	M-6N-	3/8 in. Male NPT		60.5 (<mark>2.38</mark>)		-	
	D-10M-	10mm DK-LOK	6.4	72.6 (<mark>2.86</mark>)	56	19mm	
V76C	D-12M-	12mm DK-LOK	(0.25)	77.2 (3.04)	(2.20)	22mm	1
	D-8T-	1/2 in. DK-LOK		77.2 (3.04)		7/8	
	M-8N-	1/2 in. Male NPT		69.9 (<mark>2.75</mark>)	1	-	

All dimensions shown are for reference only and are subject to change. Dimensions with $Dk-Lok^{\text{th}}$ nuts are in finger-tight position.

Technical Information

Filter Series	Pressure Rating @100°F (38°C) psig (bar)		Temperature Rating °F (°C)		Filtration Area with Sintered Element	
	SS316 Brass		SS316	Brass	inch ² (mm ²)	
V76A, V76B	6000 (413)	2000 (137)	-20 to 900	-20 to 300	1.3 (830)	
V76C	6000 (413)	2000 (137)	(-28 to 482)	(-28 to 148)	2.0 (1280)	



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.

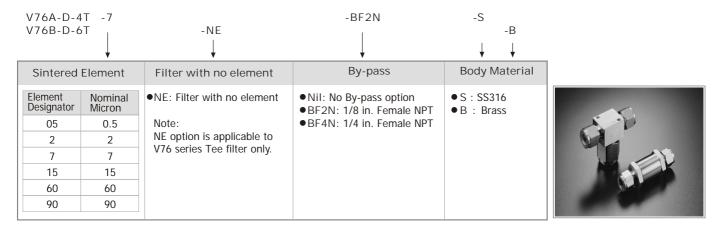
		Nom.		Р	
	Filter Series	Pore	20 psi	60 psi	120 psi
	Series	Micron	Water C	GPM @ 70°I	F(21°C)
		05	0.06	0.19	0.32
		2	0.11	0.26	0.44
	V76A-F-2N	7	0.14	0.33	0.53
	V76A-D-2T	15	0.17	0.39	0.64
es		60	0.21	0.55	0.77
Ξ		90	0.28	0.55	0.66
Capacities	2	05	0.06	0.19	0.32
õ	V76A-D-4T	2	0.34	0.94	1.42
Ca	V76A-M-4N	7	0.57	1.42	2.19
	V76A-F-4N	15	0.71	1.42	2.30
\leq	V70A-1-411	60	1.13	2.96	4.27
Flow		90	1.56	3.72	5.37
_		05	0.13	0.44	0.83
	V76A-D-6M	2	0.37	1.20	1.75
	V76A-D-6T	7	0.91	2.41	3.83
	V76B Series	15	1.19	2.85	4.49
	V76C Series	60	2.12	5.26	7.34
		90	2.40	6.02	8.33

D-Pro[®] Filters

V73/76 Series

Ordering information

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



Field Assembly Kit

Sintered Element Kits

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

Element Kit BasicOrdering Number	Kit applicable Filter Series	Element Designator	Nominal Pore Size, µm	Pore Size Range, µm
FE70A	N/70 A	05	0.5	05 - 2
FE73A-	V73A	2	2	1 - 4
FEZOD	V73B	7	7	5 - 10
FE73B-	V76A	15	15	11 - 25
FE300	V73C, V73D	60	60	50 - 75
FE73C-	V76B, V76C	90	90	75 - 110

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
N/70	9WSH-73A-S	9SPR-73A-2	V73A
V73 Stainless	9WSH-73B-S	9SPR-73B-2	V73B
Brass	9WSH-73C-S	9SPR-73C-S	V73C
Diass	9WSH-73D-S	9SPR-73D-2	V73D
V76	9WSH-76A-S	9SPR-76A-2	V76A
Stainless	9WSH-76B-S	9SPR-76B-2	V76B
Brass	9WSH-76C-S	9SPR-76C-2	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 Tech accepts no liability for any improper selection, installation, operation or maintenance.

