Instrument

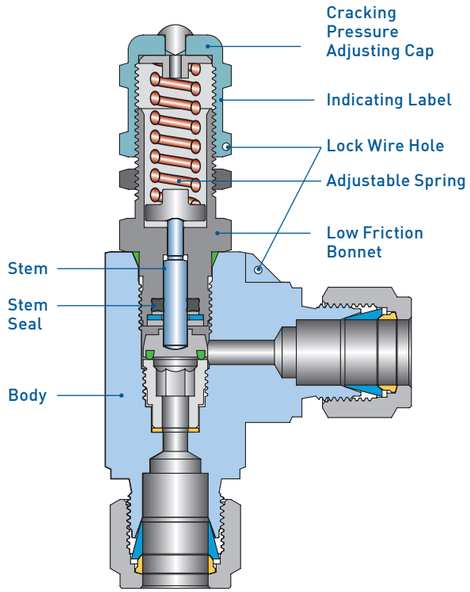
Relief Valve
VR

Relief Valve VR

CONTENTS

Features

Compact designed one piece body to reduce space
Low friction bonnets to increase both accuracy and to improve consistency of cracking and reseal pressure
Lock wire to secure a given pressure setting
Identifying color coded springs and labels indicate spring cracking pressure
Selective and replaceable springs with narrow pressure ranges
RA3 series - One spring for all set pressure range
RA6 series - 7 Replaceable springs for a variable pressure range

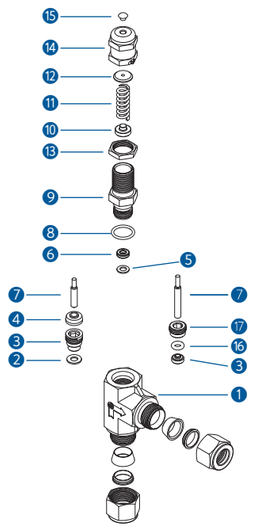


VR3 series

3000psig (207bar)

VR6 series

6000psig (413bar)



Materials of Construction

No.	Description	Materials	
	Valve Series	VR3	VR6
1	Body	316SS	
2	Gasket	304SS Teflon coat	-
3	Seat	316SS	
4	Bonded Disc	316SS	
5	Washer	316SS	
6	Stem Seal	FKM	
7	Stem	316SS	
8	O-ring	FKM	
9	Bonnet	316SS	
10	Lower Spring Support	316SS	
11	Spring	302SS	
12	Upper Spring Support	316SS	
13	Lock Nut	304SS	
14	Cap	316SS	
15	Plug	316SS	
16	O-ring	-	FKM
17	Insert	-	316SS

Cleaning

UNILOK relief valves are free from machine oils, loose particles and grease throughout the close cleaning process.

Testing

Every relief valve is 100% factory tested with nitrogen for cracking and reseal performance.

Important Notification

Proper installation, materials compatibility, operation and maintenance of these valves are the responsibility of the user. The total system design must be taken into consideration to ensure optimal performance and safety.

UNILOK relief valves that were not actuated for some time may contain pressure higher than the set pressure.

Cracking pressure is not affected by the outlet pressure.

How To Order

UNILOK VR series relief valves are ordered by part number as shown below.

Example: The following part number, ***VR3MU-08N08T-SS*** is designated for VR3 series low pressure relief valve with 1/2" male NPT x 1/2" UNILOK tube fitting, 316SS.

V	R3	MU	-	08N08T	-	SS	-	
UNILOK Valve	Valve Type	Connection Type		Connection Size		Body Materials		Spring Type

Valve Type	
R3	Low Pressure, 300psig
R6	High Pressure, 6000psig

Connection Type	
U	UNILOK Tube Fitting
F	Female NPT or ISO7/1(PT)
M	Male NPT or ISO7/1(PT)

Connection Size				
Fractional(Inch) Tube O.D. Designation				
Tube O.D.	inch	1/4	3/8	1/2
	mm	6.35	9.52	12.70
Designator		04T	06T	08T

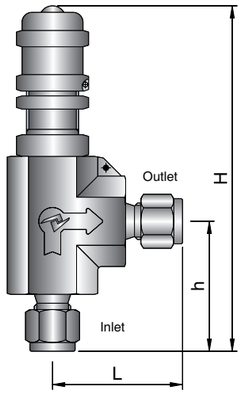
Metric Tube O.D. Designation				
Tube O.D.	mm	6	8	12
Designator		M06T	M08T	M12T

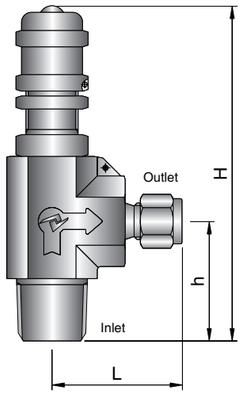
Pipe Size Designation (NPT or ISO7/1-PT)			
Pipe Size	1/4	3/8	1/2
Designator	04N/R	06N/R	08N/R

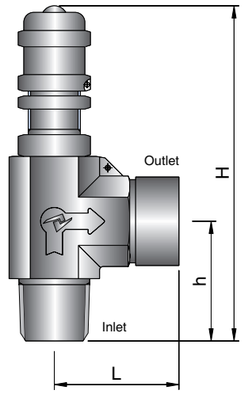
Spring Type		
Designator	Color	Cracking Pressure (psig)
Y	Yellow	350 ~ 750
P	Purple	750 ~ 1500
O	Orange	1500 ~ 2250
B	Brown	2250 ~ 3000
W	White	3000 ~ 4000
R	Red	4000 ~ 5000
G	Green	5000 ~ 6000

Options are only for VR6 series.
VR3 series spring is yellow color and cracking pressure range with 10~250psig.

VR series







Ordering Information & Dimensions

Part No.		End Connections		Dimensions (mm)			
		Inlet	Outlet	Orifice	L	h	H
VR3 or VR6	U-04T-	1/4" UNILOK		VR3 : 4.8 VR6 : 3.5	39.6	39.6	109.4
	U-06T-	3/8" UNILOK			43.8	43.8	113.6
	U-08T-	1/2" UNILOK			46.5	46.5	116.4
	U-M06T-	6mm UNILOK			39.6	39.6	109.4
	U-M08T-	8mm UNILOK					
	U-M12T-	12mm UNILOK			46.5	46.5	116.4
	MF-04N-	1/4" Male NPT	1/4" Female NPT		32.5	32.5	102.3
	MF-06N-	3/8" Male NPT	3/8" Female NPT		34.5		
	MF-08N-	1/2" Male NPT	1/2" Female NPT		38.0	36.5	106.3
	MU-08N08T-	1/2" Male NPT	1/2" UNILOK		46.5		
	MU-08NM12T-	1/2" Male NPT	12mm UNILOK				

Specification

Specification	VR3 series	VR6 Series
Maxium Working Pressure	300 psig 20.6 bar	6000 psig 413 bar
Temperature Range	-23 ~ 204℃ -10 ~ 400℉	
Cracking Pressure Range	10~250 psig 0.7~18 bar	350~6000 psig 25~413 bar

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of VR series valves. Add "R" as a suffix instead of "N"

Reseal Pressure

0.3pt	Test Set Pressure		Minimum Resealing Pressure (%)
	psig	bar	
VR3	10 ~ 20	0.7 ~ 1.3	50
	175 ~ 225	12.0 ~ 15.5	90
VR6	100 ~ 200	6.8 ~ 13.7	50
	850 ~ 1000	58.5 ~ 68.9	84

Minimum Resealing Pressure - As a percentage of test set pressure

Spring Color Coding and Cracking Pressure Range

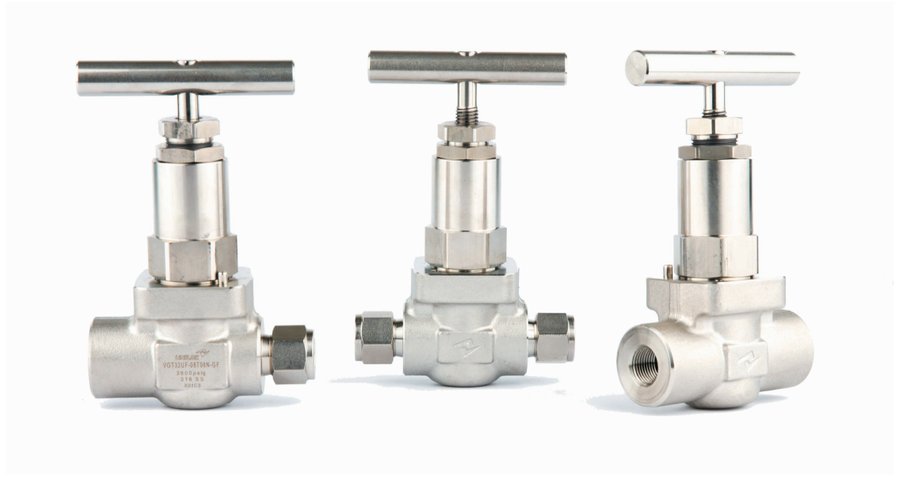
Series	Color	Cracking Pressure Range	
		psig	bar
VR3	Yellow	10 ~ 250	0.7 ~ 18
VR6	Yellow	350 ~ 750	24 ~ 52
	Purple	750 ~ 1500	52 ~ 103
	Orange	1500 ~ 2250	103 ~ 155
	Brown	2250 ~ 3000	155 ~ 206
	White	3000 ~ 4000	206 ~ 275
	Red	4000 ~ 5000	275 ~ 344
	Green	5000 ~ 6000	344 ~ 413

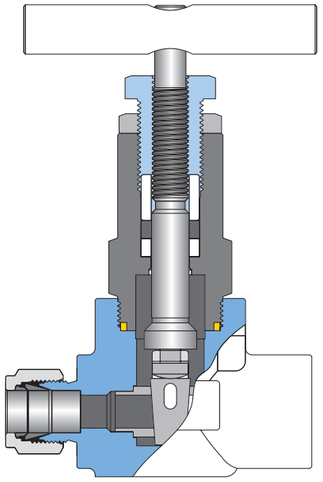
Dimensions are for reference only and are subject to change without prior notice.

Best Engineering For You

Gate Valve
VGT3

Other Valves



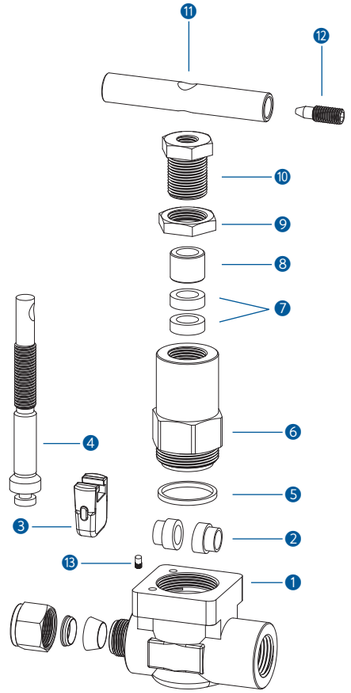


Features

- Design Spec : ANSI/ASME B16.34
- Pressure Rating : Up to 3,600 psig (248bar) @21℃
- Temperature Rating :
  From -23℃ to 232℃ (-65℉ to 350℉) with PTFE packing, up to 648℃ (1200℉) with grafoil packing
- Body Materials : Standard 316 stainless steel, A105 and alloy400
- Compact forged body design
- Back seat design provides anti-blow out of stem and seal
- The hard faced seat ring and wedge enable longer life cycle
- Packing bolt allows easy packing adjustment for leak tight seal
- Handle Low operating torques

Materials of Construction

No.	Description	Materials		
	Body Material	316SS	A105	Alloy 400
1	Body	316SS/A182	A105	Alloy 400/B564
2	SEAT RING	316SS/A479		Alloy 400 / B164
3	DISC	CF8M/A479		UNS N04400
4	STEM	316SS/A479		Alloy 400/B164
5	BONNET PACKING	Grafoil		
6	BONNET	316SS/A479	A105	Alloy 400/B164
7	PACKING	PTFE (Available Grafoil)		
8	GLAND	316SS/A479		
9	LOCK NUT	316SS/A479		
10	PACKING BOLT	316SS/A479		
11	HANDLE	316SS		
12	HANDLE SCREW	304SS		
13	PIN	304SS		



Cleaning

UNILOK valves are free from machine oils, loose particles and grease throughout the close cleaning process.

Testing

Every valve is 100% factory tested with air and nitrogen at 1000psig(69bar) for leakage at the seat and packing.

Each test is performed to a maximum allowable leak rate of 0.1scc/min.

Sour Environment Services

UNILOK tube comply with NACE MR-0175/ISO 15156 for sour oilfield application or NACE MR-0103 for petroleum refining operations.

To order, add-N to the end of part number.

Sour Environment

The packing adjustment may be required during the valve's service life.

Proper installation, materials compatibility, operation and maintenance of these valves are the responsibility of the user. The total system design must be taken into consideration to ensure optimal performance and safety.

ServicesHow To Order

UNILOK VGT3 series gate valves are ordered by part number as shown below.

V	GT32	U	-	04T	-	SS		-	
UNILOK Valve	Valve Type	Connection Type		Connection Size		Body Materials	NACE		Packing Materials

Valve Type	
GT3	INSTRUMENT GATE VALVE

Connection Type	
U	UNILOK Tube Fitting
F	Female NPT or ISO7/1(PT)
WS-	Socket Weld-Pipe

Connection Size						
Fractional(Inch) Tube O.D. Designation						
Tube O.D.	inch	1/4	3/8	1/2	3/4	1
	mm	6.35	9.52	12.70	19.05	25.40
Designator		04T	06T	08T	12T	16T

Metric Tube O.D. Designation						
Tube O.D.	mm	6	10	12	20	25
Designator		M06T	M10T	M12T	M20T	M25T

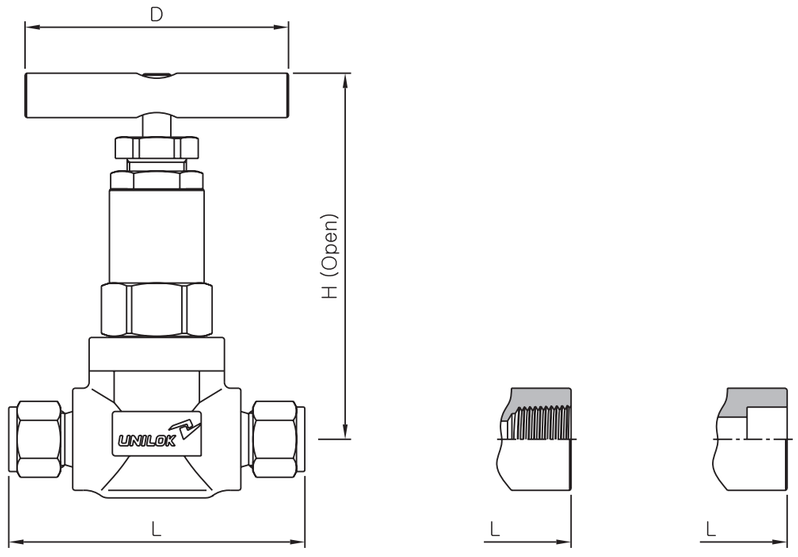
Pipe Size Designation (NPT or ISO7/1-PT)					
Pipe Size	1/4	3/8	1/2	3/4	1
Designator	04N/R	06N/R	08N/R	12N/R	16N/R

Weld Size Designation					
Pipe Size	1/4	3/8	1/2	3/4	1
Designator	04P	06P	08P	12P	16P

Body Materials	
SS	316 SS
MO	Alloy 400

NACE Application	
None	-
N	NACE Application

Packing Materials	
None	PTFE
GF	Grafoil



INSTRUMENT

Plug Valve
VP3

Ordering Information & Dimensions

Part No.		End Connections		Port	Orifice	Cv	Dimensions (mm)		
		Inlet	Outlet				L	H	D
VGT31	F-04N-	1/4" Female NPT		Full	6.4	2.6	70.0	100.0	64.0
	F-06N-	3/8" Female NPT		Reduced					
	U-06T-	3/8" UNILOK					78.0		
	U-08T-	1/2" UNILOK		Full			83.0		
	WS-04P-	1/4" Pipe SW					70.0		
	WS-06P-	3/8" Pipe SW		Reduced					
VGT32	F-06N-	3/8" Female NPT		Full	10.0	6.1	86.0	140.0	89.0
	F-08N-	1/2" Female NPT		Reduced					
	U-08T-	1/2" UNILOK					100.0		
	U-10T-	5/8" UNILOK							
	WS-06P-	3/8" Pipe SW		Full			86.0		
	WS-08P-	1/2" Pipe SW		Reduced					
VGT33	F-08N-	1/2" Female NPT		Full	12.7	11.3	100.0	170.0	110.0
	F-12N-	3/4" Female NPT		Reduced					
	U-12T-	3/4" UNILOK					115.0		
	U-16T-	1" UNILOK					125.0		
	WS-08P-	1/2" Pipe SW		Full			100.0		
	WS-12P-	3/4" Pipe SW		Reduced					
VGT34	F-12N-	3/4" Female NPT		Full	19.0	26.3	127.0	210.0	140.0
	F-16N-	1" Female NPT		Reduced					
	U-16T-	1" UNILOK					146.0		
	WS-12P-	3/4" Pipe SW		Full			127.0		
	WS-16P-	1" Pipe SW		Reduced					

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of VGT3 series valves. Add "R" as a suffix instead of "N"

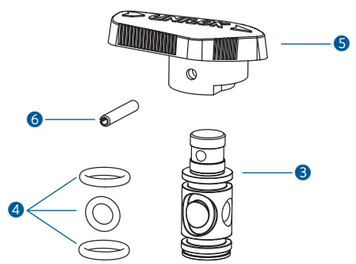
Dimensions are for reference only and are subject to change without prior notice.

Plug Valve VP3

CONTENTS

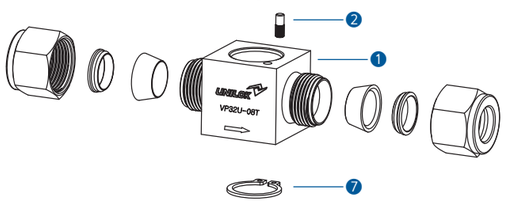
Features

· Working Pressure Rating up to 3000 psig (206 bar) @37℃(100˚F)
· Temperature Rating from -23℃ to 204℃ (-10˚F to 400˚F)
· Quarter-turn operation
· Straight-through flow path
· 316 stainless steel and brass body materials
· Reliable simple design
· Handle Low operating torques
· 100% factor tested



Materials of Construction

No.	Description	Materials	
	Body Material	316SS	A105
1	Body	316SS/A479	Brass/B16
2	Pin	316SS/A479	
3	Plug	316SS/A479	PTFE-Coated
		Brass/B16	PTFE-Coated
4	O-Ring	PTFE Coated FKM	
5	Handle	Nylon	
6	Spring Pin	316SS	
7	Snap Ring	Stainless Steel	



Pressure Temperature Rating

Series	VP31, VP32	VP31	VP32
Material	316 SS	Brass	
	PTFE Coated FKM		
Temperature, ℃ (˚F)	Working Pressure, psig (bar)		
-23℃ ~ 204℃ (-10˚F ~400˚F)	3,000 psig (206 bar)	3,000 psig (206 bar)	2,000 psig (137 bar)
65℃ (150˚F)	3,000 psig (206 bar)	2,500 psig (172 bar)	2,000 psig (137 bar)
93℃ (200˚F)	3,000 psig (206 bar)	2,000 psig (137 bar)	2,000 psig (137 bar)
121℃ (250˚F)	2,000 psig (137 bar)	1,500 psig (103 bar)	1,500 psig (103 bar)
148℃ (300˚F)	1,000 psig (68.9 bar)	1,000 psig (68.9 bar)	1,000 psig (68.9 bar)
204℃ (400˚F)	1,000 psig (68.9 bar)	400 psig (27.5 bar)	400 psig (27.5 bar)

Flow Data

Part No.		End Connections		CV	Pressure Drop to Atmosphere, psi (bar)					
					Air Flow, std ft3/min (std L/min) @ 70°F (21°C)			Water Flow, US gal/min (std L/min) @ 70°F (21°C)		
		Inlet	Outlet		1 (0.068)	5 (0.34)	10 (0.68)	1 (0.068)	5 (0.34)	10 (0.68)
VP31	U-02T-	1/8" UNILOK		0.1	0.3 (8.4)	0.8 (22)	1.1 (31)	0.1 (8.4)	0.2 (0.75)	0.3 (1.1)
	U-04T-	1/4" UNILOK		1.6	0.6 (165)	13.0 (362)	18.0 (500)	1.6 (6.2)	3.6 (13.5)	5.1 (19.2)
	M-02N-	1/8" Male NPT		1.0	3.7 (102)	81.0 (225)	11.0 (315)	1.0 (3.7)	2.2 (8.5)	3.2 (12.1)
	M-04N-	1/4" Male NPT		1.0						
	F-02N-	1/8" Female NPT		1.2	4.4 (120)	9.7 (272)	13.0 (370)	1.2 (4.5)	2.7 (10.2)	3.8 (14.2)
	F-04N-	1/4" Female NPT		0.9	3.3 (93)	7.3 (205)	10.0 (285)	0.9 (3.4)	2.0 (7.5)	2.8 (10.4)
VP32	U-06T-	3/8" UNILOK		6.4	23.0 (660)	52.0 (1470)	72.0 (2040)	6.4 (24)	14.0 (53)	20.0 (76)
	U-08T-	1/2" UNILOK		4.4	16.0 (460)	35.0 (1000)	49.0 (1390)	4.4 (16.5)	9.8 (37)	13.0 (50)
	M-08N-	1/2 Male NPT		2.4	9.0 (252)	19.0 (540)	27.0 (765)	2.4 (9.0)	5.4 (20)	7.6 (28.5)
	F-08N-	1/2" Female NPT		2.7	10.0 (285)	21.0 (600)	30.0 (850)	2.7 (10)	6.0 (22)	8.5 (32)

Technical Data

Series	Meterial	Orifice	Pressure Rating @ 70°F (21°C)	Temperature Rating
VP31	316 SS	4.4	3,000 psig (206 bar)	-23°C ~ 204°C (-10°F ~ 400°F)
	Brass			
VP32	316 SS	7.2	3,000 psig (206 bar)	
	Brass		2,000 psig (137 bar)	

* Differential pressure is limited to 150 psig (10.3 bar)
Maximum if reverse flow occurs
Reverse-flow throttling may damage O-ring.

Cleaning

UNILOK valves are free from machine oils, loose
Particles and grease throughout the close cleaning process.

Testing

Every plug valve is 100% factory tested for shutoff at 600 psig (41.3 bar)

How To Order

UNILOK VP3 series Plug valves are ordered by part number as shown below.

V	R3	MU	-	04N04T	-	SS	-	
UNILOK Valve	Valve Type	Connection Type		Connection Size		Body Materials		O-ring Materials

Valve Type	
P31	Plug Valve (4.4mm Orifice)
P32	Plug Valve (7.2mm Orifice)

Connection Type	
U	UNILOK Tube Fitting
F	Female NPT or ISO7/1(PT)
M	Male NPT or ISO7/1(PT)

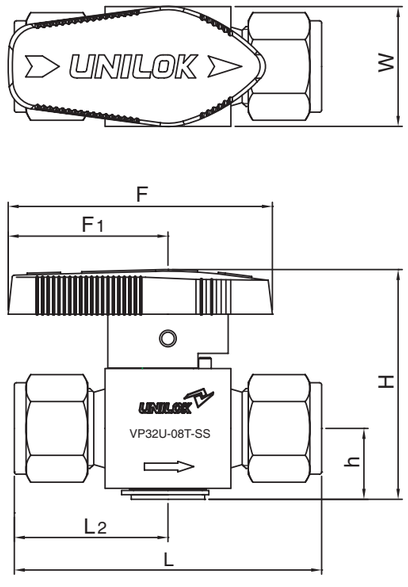
Connection Size					
Fractional(Inch) Tube O.D. Designation					
Tube O.D.	inch	1/8	1/4	3/8	1/2
	mm	3.17	6.35	9.52	12.70
Designator		02T	04T	06T	08T

Metric Tube O.D. Designation					
Tube O.D.	mm	6	8	10	12
Designator		M06T	M08T	M10T	M12T

Pipe Size Designation (NPT or ISO7/1-PT)				
Pipe Size	1/2	1/4	3/8	1/2
Designator	02N/R	04N/R	06N/R	08N/R

Body Materials	
SS	316 SS
BS	Brass

O-ring Materials	
None	PTFE Coated FKM



INSTRUMENT

Pressure Reducing Valve
VPR

Ordering Information & Dimensions

Part No.		End Connections		Dimensions (mm)							
		Inlet	Outlet	Orifice	L	L1	h	H	F	F1	W
VP31	U-02T-	1/8" UNILOK		4.4	50.6	25.3	11.7	39.2	46.5	29.0	19.0
	U-04T-	1/4" UNILOK			55.0	27.5					
	U-M06T-	6mm UNILOK									
	M-02N-	1/8" Male NPT			38.8	19.4					
	M-04N-	1/4" Male NPT			48.4	24.2					
	F-02N-	1/8" Female NPT			45.2	22.6					
	F-04N-	1/4" Female NPT			53.0	26.5					
	MU-04N04T-	1/4" Male NPT	1/4" UNILOK		51.7	24.2					
	MF-04N-	1/4" Male NPT	1/4" Female NPT		50.7	24.2					
VP32	U-06T-	3/8" UNILOK		7.2	67.6	33.8	16.9	54.4	61.3	38.1	28.5
	U-08T-	1/2" UNILOK			73.2	36.6					
	U-M08T-	8mm UNILOK			67.6	33.8					
	U-M10T-	10mm UNILOK			68.0	34.0					
	U-M12T-	12mm UNILOK			75.2	37.6					
	M-08N-	1/2" Male NPT			67.0	33.5					
	F-08N-	1/2" Female NPT			73.2	36.6					

ISO 7/1 Tapered Threads(PT) are available for all fractional sizes of VP3 series valves.
Add "R" as a suffix instead of "N".

Dimensions are for reference only and are subject to change without prior notice.

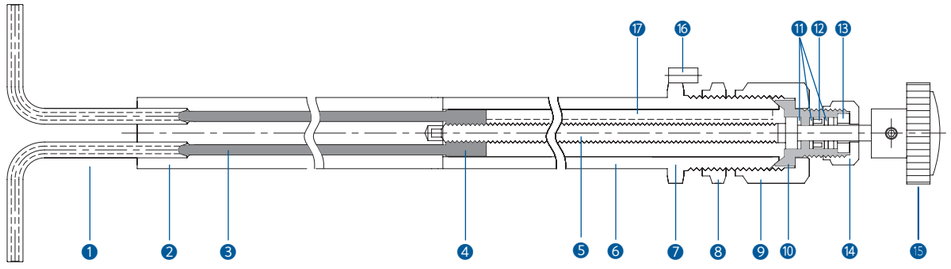
Features

No Plugging
Easy Cleaning & Maintaining
Simple adjusting under various pressure conditions
No corrosion

Specification

Max Operating Temperature : 50℃(122℉)~149℃(300℉)
Max Operating Pressure : 5000psi at 149℃(300℉)
Sample Flow Range : 150ml/min~4000ml/min
Pressure Reducing Range : 5~5000 psi
Installation : Panel Mounting
Connection : Tube, Socket Weld, 37°Flare & Elbow

Materials of Construction

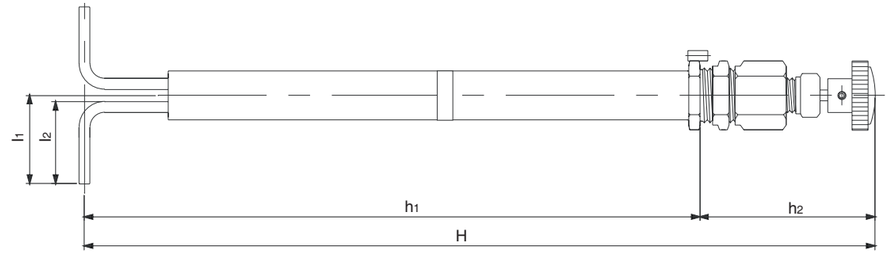


No.	Description	Materials	No.	Description	Materials	No.	Description	Materials
1	Tube	316SS	7	Bushing Body	316SS	13	Spindle Gland	Brass
2	Seat Body	304SS	8	Panel Nut	304SS	14	Spindle Nut	316SS
3	Long Stem	316SS	9	Body Nut	316SS	15	Handle	Xenoy
4	Stem Holder	316SS	10	Spindle Bushing	316SS	16	Loader	304SS
5	Spindle	316SS	11	Gasket Ring	Brass/PTFE	17	Holder Loader	316SS
6	Middle Body	316SS	12	Packing Seal	PTFE			

Application

In modern power generation plants & general industrial boilers, chemical analysis of water and steam samples requires precise control of flow and pressure. High pressure reduction occurs unique sampling problems.

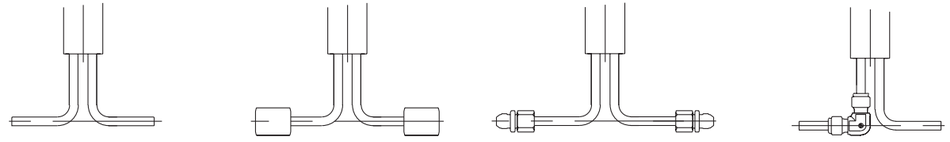
UNILOK VPR series is a valve specially designed to solve these kinds of problems.



Ordering Information & Dimensions

Part No.		End Connection	Materials				
			H	h_1	h_2	l_1	l_2
VPR	04T-	1/4" UNILOK	461.0	359.0	102.0	51.6	48.0
	04P-	1/4" Tube SW					
	04F-	1/4" 37°Flare					
	04E-	1/4" Union Elbow					

End Connection Type



Tube

Tube
Socket Weld

37°Flare

Union Elbow
to Tude

Important Notification

Proper installation, materials compatibility, operation and maintenance of these valves are the responsibility of the user. The total system design must be taken into consideration to ensure optimal performance and safety.

In-Line & Tee Filter
VF

In-Line & Tee Filter VF

CONTENTS

Features

Traps undesirable materials for protection of system components from fluid particles as well as contaminants

Replaceable sintered 316SS filter element with micron filtering ranges - 0.5, 2, 7, 15, 60 & 90 microns

Compact body design

Wide choices of port sizes and end connections

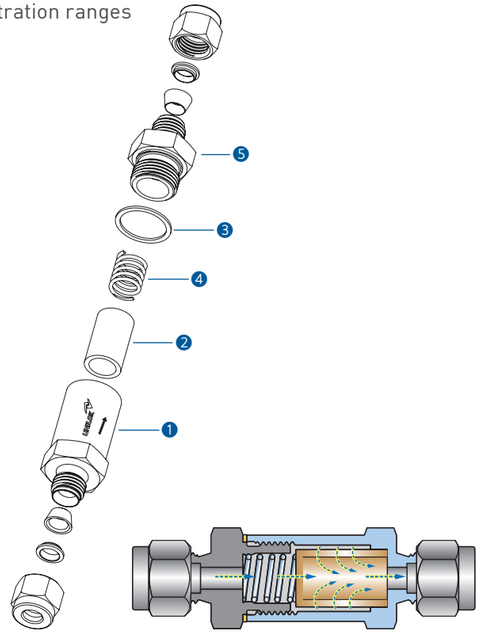
Materials of Construction

No.	Description	Materials	
Series		FT- T	FI - Inline
1	Body	316SS	
2	Sintered Filter	316SS	
3	Gasket	316SS plated with silver	
4	Spring	302SS	
5	Outlet Body	-	316SS
6	Bonnet	316SS	-
7	Nut	316SS	-

VFI series In-line Filters

Maximum working pressure up to 3000psig (206bar) at 100˚F(37˚C)

For limited space and when filter element don t have to be replaced often Compact design with broaden filtration ranges



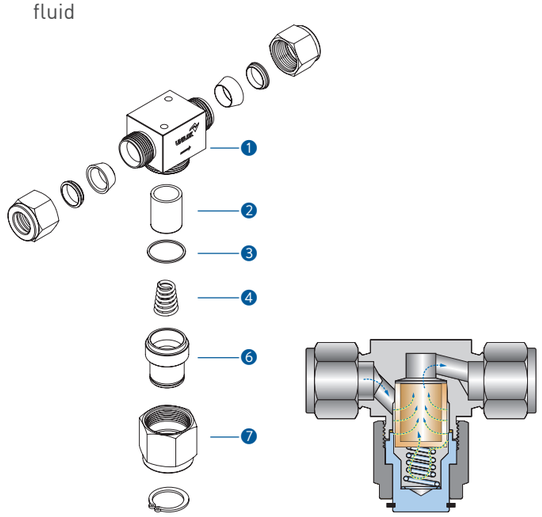
VFT series T Filters

Maximum working pressure up to 6000psig (413bar) at 100˚F(37˚C)

Easy replacement of filter element on-line

Union bonnet design for safe high pressure application

Bypass option for sampling or purging of process fluid



Definitions

Filter Element

Made of sintered stainless steel , porous with lots of tiny holes

Traps media contamination which is bigger than the porous in the filter element

Filtration Area

Actual surface area of the filter element to trap media contamination

Micron

Pore diameter of filter element or particle diameter of media contamination 1 micron = 0.001mm or 0.00004 inch

Cleaning

UNILOK filters are free from machine oils, loose particles and grease throughout the close cleaning process.

The special cleaning for high purity application is available upon request.

Testing

Every VF series filter is 100% factory tested with air and nitrogen at 1000psig (69bar) to a requirement of no detectable leakage.

Important Notification

Proper installation, materials compatibility, operation and maintenance of these filters are the responsibility of the user. The total system design must be taken into consideration to ensure optimal performance and safety.

When undesirable contaminants are trapped by filter element, the system pressure build up occurs. It comes earlier when the flow volume is high and the media is not clean. In this case, the filter elements need to be replaced and clean metal components when replacement for minimal pressure drop as well as system purity.

How To order

UNILOK VF series filters are ordered by part number as shown below.

Example: The following part number, ***VFT3U-08T-SS-60-B02N*** is designated for FT series filter with both 1/2 UNILOK tube fittings, 316SS, 60 micron filter element, 1/8 Female NPT by-pass option.

U	FT3	U	-	08T	-	SS	-	60	-	B02N
UNILOK Filter	Filter Type	Connection Type		Connection Size		Body Materials		Filtration Ranges		By-pass Option

Thread Type Designation	
FI	In-line Filter
FT	T Filter

Connection Type	
U	UNILOK Tube Fitting
F	Female NPT or ISO7/1(PT)
M	Male NPT or ISO7/1(PT)

Body Materials	
SS	316SS
BS	Brass

Connection Size					
Fractional(Inch) Tube O.D. Designation					
Tube O.D.	inch	1/8	1/4	3/8	1/2
	mm	3.17	6.35	9.52	12.70
Designator		02T	04T	06T	08T

Metric Tube O.D. Designation						
Tube O.D.	mm	3	6	8	10	12
Designator		M03T	M06T	M08T	M10T	M12T

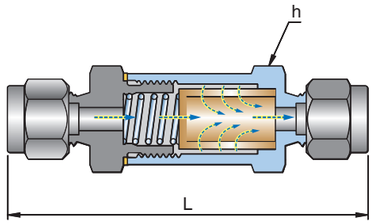
Pipe Size Designation (NPT or ISO7/1-PT)				
Pipe Size	1/8	1/4	3/8	1/2
Designator	02N/R	04N/R	06N/R	08N/R

Filtration Ranges	
Designator	Norminal Micron
05	0.5
2	2
7	7
15	15
60	60
90	90

By-pass Option	
None	None
B02N	By-pass with Female 1/8"NPT
B04N	By-pass with Female 1/4"NPT

VFI series

(In-line Filters)



Maximum working pressure up to 3000psig (206bar) at 100˚F(37˚C)
For limited space and when filter element don't have to be replaced often
Compact design with broaden filtration ranges

Ordering Information & Dimensions

Part Number		End Connection		Orifice (mm)	Dimensions (mm)	
		Inlet	Outlet		L	h
VFI1	U-02T-	1/8" UNILOK		2.4	59.7	14.3
	U-M03T-	3mm UNILOK			60.5	
	F-02N-	1/8" Female NPT			54.9	
VFI2	U-04T-	1/4" UNILOK		4.7	74.9	19.0
	U-M06T-	6mm UNILOK			75.2	
	F-04N-	1/4" Female NPT			72.9	
	M-04N-	1/4" Male NPT			68.3	
VFI3	U-06T-	3/8" UNILOK		7.1	81.8	25.4
	F-06N-	3/8" Female NPT			77.2	
	M-06N-	3/8" Male NPT			71.6	
VFI4	U-08T-	1/2" UNILOK		10.3	86.9	
	U-M10T-	10mm UNILOK			82.2	

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of VFI series filters. Add "R" as a suffix instead of "N"

Effective Filtration Area

Series	Effective Filtration Area	
	sq. inch	sq. meter
VFI1	0.55	0.00035
VFI2	1.30	0.00083
VFI3, VFI4	2.00	0.00128

Filter Elements & Ordering Designator

The elements can trap 95% of undesirable particles larger than the nominal pore size.

Ordering Designator	Norminal Pore Size(㎛)	Pore Size Range(㎛)
05	0.5	0.5 ~ 2
2	2	1 ~ 4
7	7	5 ~ 10
15	15	11 ~ 25
60	60	50 ~ 75
90	90	75 ~ 100

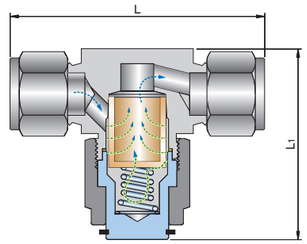
Technical Data

Series	Max Working Pressure at 100˚F(37˚C)				Working Temperature Rating	
	316SS		Brass		316SS	Brass
	psig	bar	psig	bar		
VFI1	3000	206	3000	206	-20 ~ 900˚F -28 ~ 482˚C	-20 ~ 300˚F -28 ~ 148˚C
VFI2	3000	206	3000	206		
VFI3, VFI4	2500	172	2000	137		

Dimensions are for reference only and are subject to change without prior notice.

VFT series

(T Filters)



Maximum working pressure up to 6000psig (413bar) at 100˚F(37˚C)
Easy replacement of filter element on-line
Union bonnet design for safe high pressure application
Bypass option for sampling or purging of process fluid

Ordering Information & Dimensions

Part Number		End Connection		Orifice (mm)	Dimensions (mm)	
		Inlet	Outlet		L	L_1
VFI1	U-02T-	1/8" UNILOK		2.4	57.7	47.5
	U-04T-	1/4" UNILOK		4.4	62.7	
	U-M06T-	6mm UNILOK			62.5	
	F-02N-	1/8" Female NPT			50.8	
	F-04N-	1/4" Female NPT			54.1	
	M-02N-	1/4" Male NPT			54.1	
VFI2	U-06T-	3/8" UNILOK		5.4	72.1	56.0
	M-08N-	8mm UNILOK			72.1	
VFI3	U-08T-	1/2" UNILOK		6.4	77.2	56.0
	U-M10T-	10mm UNILOK			72.6	
	U-M12T-	12mm UNILOK			77.2	
	M-06N-	3/8" Male NPT			60.5	
	M-08N-	1/2" Male NPT			69.9	

ISO7/1 Tapered Threads (PT) are available for all fractional sizes of VFT series filters. Add "R" as a suffix instead of "N".

Filter Elements & Ordering Designator

The elements can trap 95% of undesirable particles larger than the nominal pore size.

Ordering Designator	Norminal Pore Size(㎛)	Pore Size Range(㎛)
05	0.5	0.5 ~ 2
2	2	1 ~ 4
7	7	5 ~ 10
15	15	11 ~ 25
60	60	50 ~ 75
90	90	75 ~ 100

Technical Data

Series	Max Working Pressure at 100°F(37˚C)				Working Temperature Rating	
	316SS		Brass		316SS	Brass
	psig	bar	psig	bar		
VFT1, VFT2	6000	413	2000	137	-20 ~ 900˚F -28 ~ 482˚C	-20 ~ 300˚F -28 ~ 148˚C
VFI3						

Dimensions are for reference only and are subject to change without prior notice.