

**UHP**

## Diaphragm Valve VCD



## Diaphragm Valve VCD

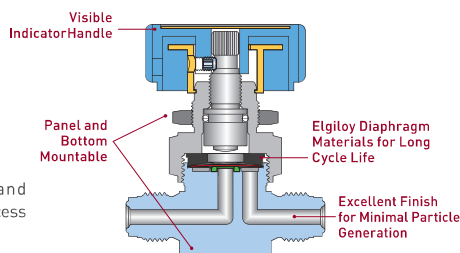
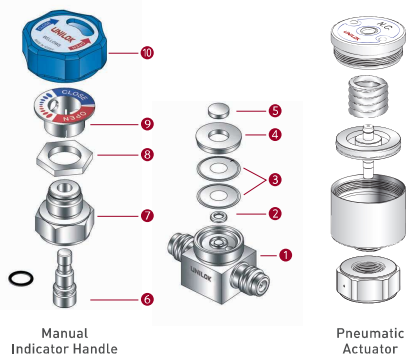
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### Features

Compact designed body with minimal dead space  
Body materials comply with SEMI F-20, "Specification 316LSS Materials for UHP (Ultra High Purity) Grade Semiconductor Manufacturing Applications"  
Maximum flow capacity  
Minimal particle generation  
Minimal contributions of moisture, oxygen and hydrocarbon with UNILOK's own special cleaning process in a certified clean room  
Excellent finish level of wetted areas with UNILOK's own electro polish process  
Elgiloy® diaphragm material with strong durability as well as corrosion resistance for long cycle life  
PTFE seat material with remarkable chemical and thermal resistance

### Standard Type Low Pressure Diaphragm Valves



### Materials of Construction

No.	Description	Materials	
		Manual	Pneumatic
1	Body	316LSS	316LSS
2	Seat	PCTFE	PCTFE
3	Diaphragm	Elgiloy	Elgiloy
4	Bushing	316SS	316SS
5	Button	316SS	316SS
6	Stem	316SS	-
7	Bonnet	316SS	-
8	Panel Nut	316SS	-
9	Indicator	Polyester	-
10	Handle	Aluminum	-
11	Actuator	-	Aluminum

### Internal Surface Finish Levels

Description	Surface Finish(μm)	
	Average	Maximum
BA	< 0,4	< 1,6
EP	< 0,125	< 0,4

### Helium Leak Test

Every VCD series valves are inboard helium leak tested to a rate of  $1 \times 10^{-9}$  cm<sup>3</sup>/sec at seat and all seals.

### Particle Contribution Test

According to ASTM F1394-92.

### Moisture Contribution Test

According to SEMA-90120397B-STD.

### Cleaning

All components are precisely cleaned with 18MΩ deionized water after the passivation procedure in accordance with our own UHP cleaning process  
Reference specification : SEMI E49.6.

### How To Order

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

VC
DL
C
-
04M
-
PO
-
SL
-
EP

UNILOK  
Clean Valves
Valve  
Type
Connection  
Type
Flow  
Path Pattern
Connection  
Size
Operation  
Type
Bleed  
Option
Material
Surface  
Finish Level

Valve Type	
DL	Standard Low Pressure
DH	Standard High Pressure
DS	Shut off
DDH	Directional High Pressure
DF	Forged Body
DHF	High Flow Low Pressure
DMHF	High Flow Medium Pressure
DHMF	High Flow High Pressure
DBL	Block Low Pressure
DBH	Block High Pressure

Connection Type	
U	UNILOK Tube Fitting
C-*M	Male UCR
C-*F	Female UCR
C-*MR	Swivel Male UCR
WB-	Butt Weld - Tube

Connection Size					
Fractional(Inch) Tube O.D. Designation					
Tube O.D.	inch	1/4	3/8	1/2	3/4
	mm	6,35	9,52	12,70	19,05
Designator		04T	06T	08T	12T
Pipe Size Designation (NPT or ISO7/1-PT)					
Pipe Size	1/4	1/2	3/4		
Designator	04	08	12		

Operation Type	
None	Manual Indicator Handle
RI	Manual Round Indicator Handle
MD	Manual Directional Handle
MI	Manual Indicator + Directional Handle
PO	Pneumatic - Normal Open
PC	Pneumatic - Normal Close
POC	Block Type Pneumatic 1-N.O. 2-N.C
PCO	Block Type Pneumatic 1-N.C. 2-N.O

Bleed Option	
None	No Bleed
3	Constant Bleed Ø0.3
6	Constant Bleed Ø0.6

Material	
DM	316LSS - Double Melting
SM	316LSS - Single Melting
SL	316LSS

Surface Finish Level	
BA	BA - Bright Annealing
EP	EP - Electro Polished

**Flow Path Pattern Designator**  
See the details in page 309.

UCR - Metal Face Seal

VCDL series

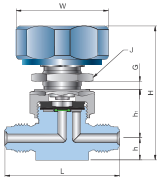
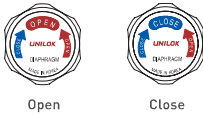
(Standard Type Low Pressure Diaphragm Valve - Manual Operation)

Specification

Size	1/4"	3/8", 1/2"	3/4"
Orifice Size	4,3	6,5	6,5
Cv Value	0,3	0,7	0,7
Max. Working Pressure	10 bar [145 psig]		
Max. Working Temperature	-10-80°C [14-176°F]		
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	≤1x10 <sup>-9</sup> atm.cc/s		
External Leakage Allowance - He (Holding Time - Min 1 min)	≤1x10 <sup>-9</sup> atm.cc/s		

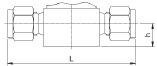


Handle Position

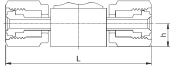


Male UCR

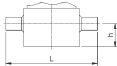
Bottom Mounting



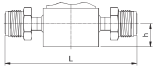
UNILOK Tube Fitting



Female UCR



Tube Butt Weld



Swivel Male UCR

Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)									
		Inlet	Outlet	L	h	h <sub>2</sub>	H	F	E	K	W(Ø)	G	J(Ø)
VCDL	U-04T-	1/4" UNILOK		62,0	11,1	24,7	68,6	26,0	25,4	M5	47,0	5,0	21,0
	U-06T-	3/8" UNILOK		74,8	16,0	31,8	80,5	37,0	28,0				
	U-08T-	1/2" UNILOK		80,2	16,0	31,8	80,5	37,0	28,0				
	U-12T-	3/4" UNILOK		108,0	22,0	36,3	91,0	37,0	28,0				
	C-04M-	1/4" Male UCR		58,4	11,1	24,7	68,6	26,0	25,4				
	C-08M-	1/2" Male UCR		73,6	16,0	31,8	80,5	37,0	28,0				
	C-12M-	3/4" Male UCR		88,0	22,0	36,3	91,0	37,0	28,0				
	C-04MR-	1/4" Swivel Male UCR		100,0	11,1	24,7	68,6	26,0	25,4				
	C-04F-	1/4" Female UCR		70,6	11,1	24,7	68,6	26,0	25,4				
	C-08F-	1/2" Female UCR		83,0	16,0	31,8	80,5	37,0	28,0				
	WB-04T-	1/4" Tube Butt Weld		44,2	11,1	24,7	68,6	26,0	25,4				
	WB-06T-	3/8" Tube Butt Weld		73,6	16,0	31,8	80,5	37,0	28,0				
	WB-08T-	1/2" Tube Butt Weld		73,6	16,0	31,8	80,5	37,0	28,0				
	WB-12T-	3/4" Tube Butt Weld		88,0	22,0	36,3	91,0	37,0	28,0				

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

VCDL series

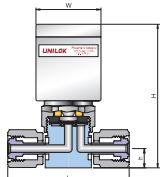
(Standard Type Low Pressure Diaphragm Valve - Pneumatic Actuating Operation)

Specification

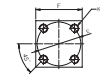
Size	1/4"	3/4"
Orifice Size	4,3	6,5
Cv Value	0,3	0,7
Max. Working Pressure	10 bar [145 psig]	
Max. Working Temperature	-10-80°C [14-176°F]	
Actuator Pressure Rating	4-7 bar [58-101 psig]	
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	≤1x10 <sup>-9</sup> atm.cc/s	
External Leakage Allowance - He (Holding Time - Min 1 min)	≤1x10 <sup>-9</sup> atm.cc/s	



Actuator Configuration



Female UCR



Bottom Mounting



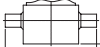
UNILOK Tube Fitting



Male UCR



Normal Open



Tube Butt Weld



Normal Close



Swivel Male UCR

Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)									
		Inlet	Outlet	L	h	H	W(Ø)	F	E				
VCDL	U-04T-	1/4" UNILOK		62,0	11,1	83,5	37,8	26,0	25,4	M5	47,0	5,0	21,0
	U-06T-	3/8" UNILOK		74,8	16,0	94,4	53,0	37,0	28,0				
	U-08T-	1/2" UNILOK		80,2	16,0	94,4	53,0	37,0	28,0				
	C-04M-	1/4" Male UCR		58,4	11,1	83,5	37,8	26,0	25,4				
	C-08M-	1/2" Male UCR		73,6	16,0	93,5	53,0	37,0	28,0				
	C-04F-	1/4" Female UCR		70,6	11,1	83,5	37,8	26,0	25,4				
	C-08F-	1/2" Female UCR		83,0	16,0	94,4	53,0	37,0	28,0				
	WB-04T-	1/4" Tube Butt Weld		44,2	11,1	83,5	37,8	26,0	25,4				
	WB-06T-	3/8" Tube Butt Weld		73,6	16,0	94,4	53,0	37,0	28,0				
	WB-08T-	1/2" Tube Butt Weld		73,6	16,0	94,4	53,0	37,0	28,0				
	WB-12T-	3/4" Tube Butt Weld		88,0	22,0	94,4	53,0	37,0	28,0				

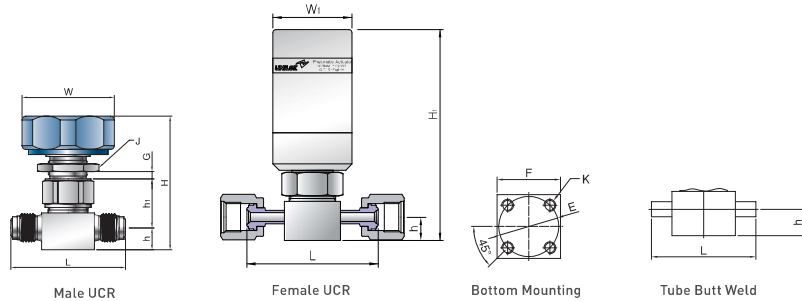
Dimensions are for reference only and are subject to change without prior notice.

## VCDH series

(Standard Type High Pressure Diaphragm Valve - Manual Operation & Pneumatic Actuating Operation)

### Specification

Size	1/4"
Orifice Size	2,5
Cv Value	0,1
Max. Working Pressure	206 bar [3000psig]
Max. Working Temperature	-10~40°C [14~104°F]
Actuator Pressure Rating	5~7 bar [73~101 psig]
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 1 \times 10^{-9}$ atm.cc/s
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-9}$ atm.cc/s



### Ordering Information & Dimensions

Part No.	End Connection		Dimensions (mm)										
	Inlet	Outlet	L	h	h <sub>1</sub>	H	H <sub>1</sub>	F	E	K	W(Ø)	W <sub>1</sub> (Ø)	G
VCDH	C-04T-	1/4" UNILOK	62,0	11,1	24,7	68,6	102,0	26,0	20,4	M5	47,0	38,0	5,0
	C-04M-	1/4" Male UCR	58,4										
	C-04F-	1/4" Female UCR	70,6										
	WB-04T-	1/4" Tube Butt Weld	44,3										

### Handle Position and Actuator Configuration

Both are the same as VCDL series.

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

## VCDS series

(Shut Off Type Low Pressure Diaphragm Valve - Manual Operation)

### Specification

Size	1/4"	3/8", 1/2"
Orifice Size	4,3	6,5
Cv Value	0,3	0,7
Max. Working Pressure	10 bar [145 psig]	
Max. Working Temperature	-10~40°C [14~104°F]	
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 1 \times 10^{-9}$ atm.cc/s	
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-9}$ atm.cc/s	



### Handle Position

Quick and quarter turn handle actuation



Open



Close

### Colored Handle

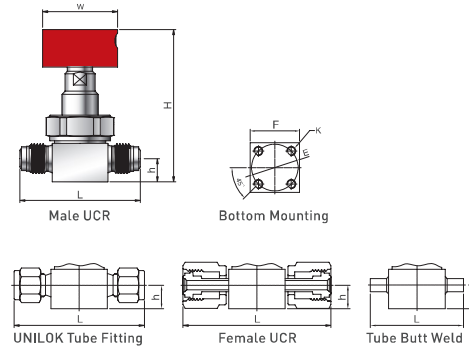
Colored handle are available for VCDS series valves. To order, add handle color designator next to connection size designator.



-MIR Red

-MIG Green

-MIW White



### Ordering Information & Dimensions

Part No.	End Connection		Dimensions (mm)									
	Inlet	Outlet	L	h	H	F	E	W(Ø)	K			
VCDS	U-04T-	1/4" UNILOK	62,0	11,1	75,2	26,0	25,4	36,9	M5			
	U-06T-	3/8" UNILOK	74,8	16,0	103,0	37,0	28,0	50,0				
	U-08T-	1/2" UNILOK	80,2	16,0	103,0	37,0	28,0	50,0				
	C-04M-	1/4" Male UCR	57,0	11,1	75,2	26,0	25,4	36,9				
	C-08M-	1/2" Male UCR	73,6	16,0	103,0	37,0	28,0	50,0				
	C-04F-	1/4" Female UCR	70,6	11,1	75,2	26,0	25,4	36,9				
	C-08F-	1/2" Female UCR	83,0	16,0	103,0	37,0	28,0	50,0				
	WB-04T-	1/4" Tube Butt Weld	44,2	11,1	75,2	26,0	25,4	36,9				
	WB-06T-	3/8" Tube Butt Weld	73,6	16,0	103,0	37,0	28,0	50,0				
	WB-08T-	1/2" Tube Butt Weld	73,6	16,0	103,0	37,0	28,0	50,0				

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## VCDH series

(Directional Type High Pressure Diaphragm Valve – Manual Operation)

### Specification

Size	1/4"
Cv Value	0.1
Max. Working Pressure	207bar (3000psig)
Max. Working Temperature	-10~40°C (14~104°F)
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 1 \times 10^{-9}$ atm.cc/s
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-7}$ atm.cc/s

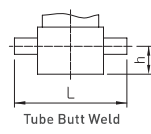
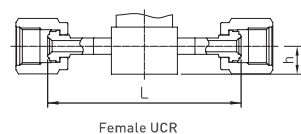
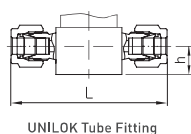
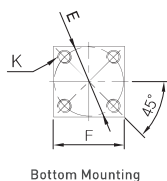
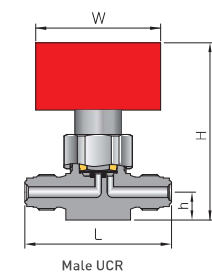
### Handle Position

Quick and quarter turn handle actuation



### Colored Handle

Colored handle are available for VCDH series valves.  
To order, and handle color designator next to connection size designator.



### Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)						
		Inlet	Outlet	L	h	H	W	F	E(Ø)	K
VCDH	U-04T	1/4" UNILOK		62.0	11.1	71.0	50.0	26.0	25.4	M5
	C-04M-	1/4" Male UCR		58.4	11.1	71.0	50.0	26.0	25.4	M5
	C-04F-	1/4" Female UCR		70.6	11.1	71.0	50.0	26.0	25.4	M5
	WB-04T-	1/4" Tube Butt Weld		44.2	11.1	71.0	50.0	26.0	25.4	M5

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

## VCDHF series

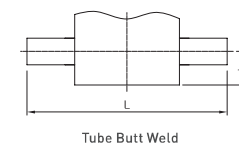
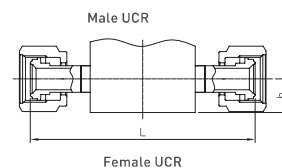
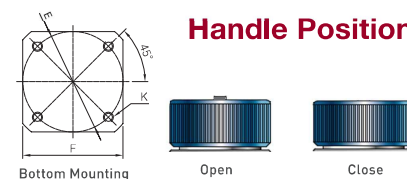
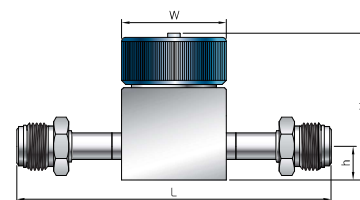
(High Flow Type Low Pressure Diaphragm Valve – Manual Operation)

### Specification

Size	1/2"	3/4"	1"
Cv Value	2.8	3.5	
Max. Working Pressure	18.6bar (270psig)		
Max. Working Temperature	-10~80°C (14~176°F)		
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 1 \times 10^{-3}$ atm.cc/s		
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-7}$ atm.cc/s		



### Handle Position



### Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)						
		Inlet	Outlet	L	h	H	W(Ø)	F	E(Ø)	K
VCDHF	C-08MR-	1/2" Swivel Male UCR		138.7	16.0	68.9	50.0	50.0	50.0	M5
	C-12MR-	3/4" Swivel Male UCR		157.0	17.5	74.4	50.0	50.0	50.0	M5
	C-16MR-	1" Swivel Male UCR		166.0	17.5	74.4	50.0	50.0	50.0	M5
	C-08F-	1/2" Female UCR		138.7	16.0	68.9	50.0	50.0	50.0	M5
	C-12F-	3/4" Female UCR		157.0	17.5	74.4	50.0	50.0	50.0	M5
	C-16F-	1" Female UCR		166.0	17.5	74.4	50.0	50.0	50.0	M5
	WB-08T-	1/2" Tube Butt Weld		150.0	16.0	68.9	50.0	50.0	50.0	M5
	WB-12T-	3/4" Tube Butt Weld		150.0	17.5	74.4	50.0	50.0	50.0	M5
	WB-16T-	1" Tube Butt Weld		150.0	17.5	74.4	50.0	50.0	50.0	M5

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

## VCDMHF / VCDHHF series

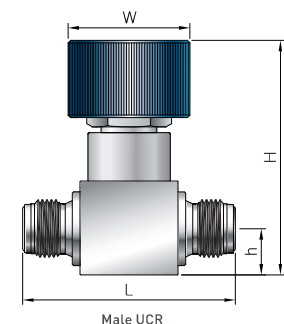
(High Flow Type High Pressure Diaphragm Valve – Manual Operation)

### Specification

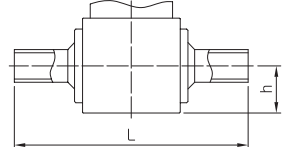
Size	1/2"	
Cv Value	1.3	0.8
Max. Working Pressure	103bar (1500psig)	207bar (3000psig)
Max. Working Temperature	-40~65°C [-40~150°F]	
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 4 \times 10^{-2}$ atm.cc/s	
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-2}$ atm.cc	



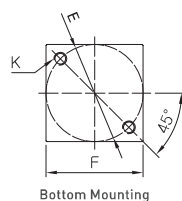
### Handle Position



Male UCR



Tube Butt Weld



Bottom Mounting

### Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)						
		Inlet	Outlet	L	h	H	W(Ø)	F	E(Ø)	K
VCDMHF	C-08M-	1/2" Male UCR		82.6	18.0	91.3	47.3	38.0	38.0	M5
	WB-08T-	1/2" Tube Butt Weld		90.9	18.0	91.3	47.3	38.0	38.0	M5
VCDHHF	C-08M-	1/2" Male UCR		82.6	18.3	92.4	47.3	38.0	38.0	M5
	WB-08T-	1/2" Tube Butt Weld		90.9	18.0	92.4	47.3	38.0	38.0	M5

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

## VCDMHF / VCDHHF series

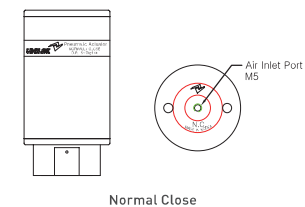
(High Flow Type High Pressure Diaphragm Valve – Pneumatic Actuating Operation)

### Specification

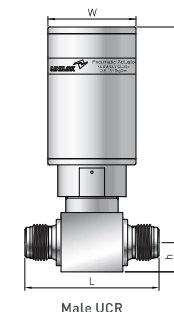
Size	1/2"	
Cv Value	1.0	0.8
Max. Working Pressure	83bar (1200psig)	207bar (3000psig)
Max. Working Temperature	-40~65°C [-40~150°F]	
Actuator Pressure Rating	5~7 bar [73~101psig]	
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 4 \times 10^{-2}$ atm.cc/s	
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-2}$ atm.cc/s	



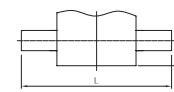
### Actuator Configuration



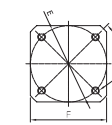
Normal Close



Male UCR



Tube Butt Weld



Bottom Mounting

### Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)						
		Inlet	Outlet	L	h	H	W(Ø)	F	E(Ø)	K
VCDMHF	C-08M-	1/2" Male UCR		82.6	18.0	160.5	47.3	38.0	38.0	M5
	WB-08T-	1/2" Tube Butt Weld		90.9	18.0	160.5	47.3	38.0	38.0	M5
VCDHHF	C-08M-	1/2" Male UCR		82.6	18.3	161.6	47.3	38.0	38.0	M5
	WB-08T-	1/2" Tube Butt Weld		90.9	18.0	161.6	47.3	38.0	38.0	M5

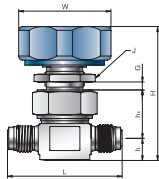
Dimensions are for reference only and are subject to change without prior notice.

## VCDF series

(Forged Body Low Pressure Diaphragm Valve - Manual Operation)

### Specification

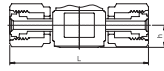
Size	1/4"	3/8", 1/2"	3/4"
Orifice Size	4.3	6.5	6.5
Cv Value	0.3	0.7	0.7
Max. Working Pressure	10 bar (145 psig)		
Max. Working Temperature	-10~80°C (14~176°F)		
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 1 \times 10^{-3}$ atm.cc/s		
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-3}$ atm.cc/s		



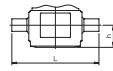
Male UCR



UNILOK Tube Fitting



Female UCR



Tube Butt Weld

### Ordering Information & Dimensions

Part No.		End Connection		Dimensions (mm)								
		Inlet	Outlet	L	h	h <sub>1</sub>	H	E	K	W(Ø)	G	J(Ø)
VCDF	U-04T-	1/4" UNILOK		62.0	11.1	24.7	68.6	17.0	M5	47.0	5.0	21.0
	U-06T-	3/8" UNILOK		74.8	16.0	31.8	80.5	28.0				
	U-08T-	1/2" UNILOK		80.2	16.0	31.8	80.5	28.0				
	U-12T-	3/4" UNILOK		108.0	22.0	36.3	91.0	28.0				
	C-04M-	1/4" Male UCR		58.4	11.1	24.7	68.6	17.0				
	C-08M-	1/2" Male UCR		73.6	16.0	31.8	80.5	28.0				
	C-12M-	3/4" Male UCR		88.0	22.0	36.3	91.0	28.0				
	C-04F-	1/4" Female UCR		70.6	11.1	24.7	68.6	17.0				
	C-08F-	1/2" Female UCR		83.0	16.0	31.8	80.5	28.0				
	WB-04T-	1/4" Tube Butt Weld		44.2	11.1	24.7	68.6	17.0				
	WB-06T-	3/8" Tube Butt Weld		73.6	16.0	31.8	80.5	28.0				
	WB-08T-	1/2" Tube Butt Weld		73.6	16.0	31.8	80.5	28.0				
WB-12T-	3/4" Tube Butt Weld		88.0	22.0	36.3	91.0	28.0					

### Handle Position

Handle position is the same as VCDL series.

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

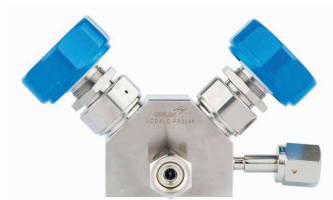
## VCDBL series

(Block Type Low Pressure Diaphragm Valve - Manual Operation & Pneumatic Actuating Operation)

### Specification

Size	1/4"	3/8", 1/2"
Orifice Size	4.3	6.5
Cv Value	0.3	0.7
Max. Working Pressure	10 bar (145 psig)	
Max. Working Temperature	-10~80°C (14~176°F)	
Actuator Pressure Rating	5~7 bar (73~101 psig)	
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	$\leq 1 \times 10^{-3}$ atm.cc/s	
External Leakage Allowance - He (Holding Time - Min 1 min)	$\leq 1 \times 10^{-3}$ atm.cc/s	

### Manual Operation

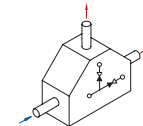


### Pneumatic Actuating Operation

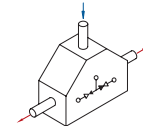


### Flow Path Patterns

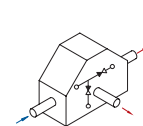
UNILOK VCDBL series valves have various flow paths. To order, add flow path designator next to connection size designator.



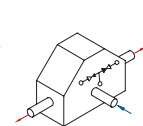
FP1A



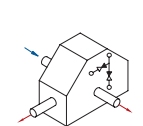
FP1B



FP2A



FP2B



FP3

### Handle Position



Open



Close

### Actuator Configuration



Normal Open

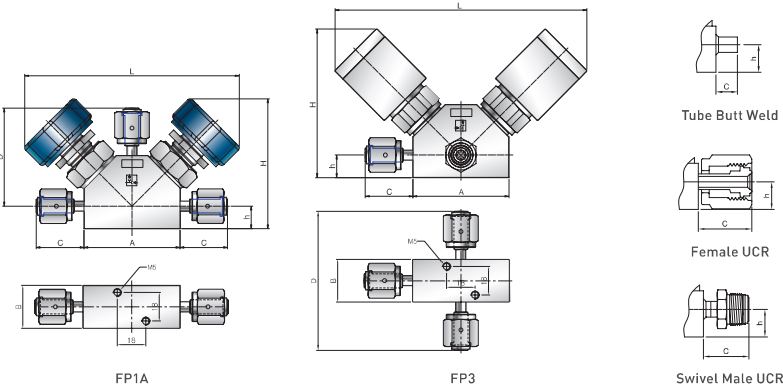


Normal Close

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



Manual Operation      Pneumatic Actuating Operation



Ordering Information & Dimensions

Manual Operation

Part No.				End Connection		Dimensions (mm)						
				Inlet	Outlet	A	B	C	D	h	H	L
VCDS	C-	FP1A-	04MR-	1/4" Swivel Male UCR		61.0	26.9	30.3	62.3	14.3	73.8	119.0
	C-		04F-	1/4" Female UCR								
	WB-		04T-	1/4" Tube Butt Weld								

Pneumatic Actuating Operation

Part No.				End Connection		Dimensions (mm)						
				Inlet	Outlet	A	B	C	D	h	H	L
VCDBL	C-	FP3-	04MR-	1/4" Swivel Male UCR		61.0	26.9	30.3	77.0	14.3	86.1	143.6
	C-		04F-	1/4" Female UCR								
	WB-		04T-	1/4" Tube Butt Weld								

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

VCD series

(Block Type High Pressure Diaphragm Valve - Manual Operation & Pneumatic Actuating Operation)

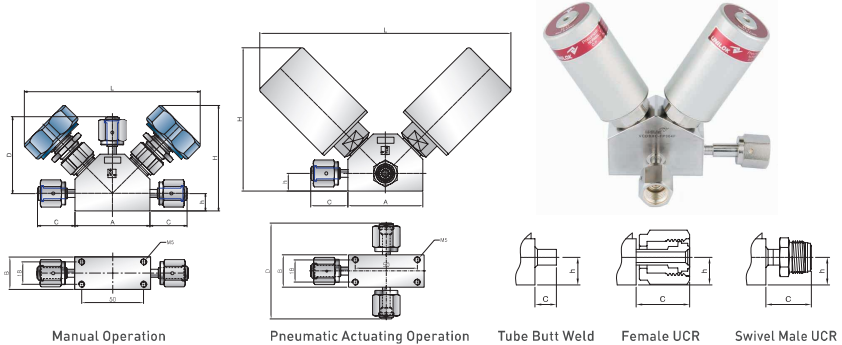
Specification

Size	1/4"
Orifice Size	2.5
Cv Value	0.1
Max. Working Pressure	10 bar [145 psig]
Max. Working Temperature	-10~40°C [14~107°F]
Actuator Pressure Rating	5~7 bar [73~101 psig]
Internal Leakage Allowance - He (Holding Time - Min 30 sec)	≤ 1x10 <sup>-9</sup> atm.cc/s
External Leakage Allowance - He (Holding Time - Min 1 min)	≤ 1x10 <sup>-9</sup> atm.cc/s

Manual Operation



Pneumatic Actuating Operation



Ordering Information & Dimensions

Manual Operation

Part No.				End Connection		Dimensions (mm)						
				Inlet	Outlet	A	B	C	D	h	H	L
VCDBH	C-	FP1A-	04MR-	1/4" Swivel Male UCR		61.0	26.0	30.3	62.3	11.0	84.4	139.3
	C-		04F-	1/4" Female UCR								
	WB-		04T-	1/4" Tube Butt Weld								

Pneumatic Actuating Operation

Part No.				End Connection		Dimensions (mm)						
				Inlet	Outlet	A	B	C	D	h	H	L
VCDBL	C-	FP3-	04MR-	1/4" Swivel Male UCR		61.0	26.0	30.3	77.0	11.0	114.0	139.3
	C-		04F-	1/4" Female UCR								
	WB-		04T-	1/4" Tube Butt Weld								

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