



Cleanness by Purpose

# Diaphragm Valve

*For High Pressure Service  
(21MPa)*

***DVKA series***



***IHARA SCIENCE CORPORATION***

# DVKA Metal Diaphragm Seal Valve (21MPa)

## 【Features】

DVKA Series Diaphragm Valves are designed compact to be applied for UHP high pressure services.

- Diaphragm made of Co-Ni alloy is mounted to realize highly airtight and high durability.
- Oil or Grease free treatment through precise cleaning on the internal media contact surface.
- Assembly and Packaging in the clean room.
- Indicator to find Open/Close easily is installed on the handle of manual valve.
- Please inquire us when required High-pressure gas authorization products.

## Specifications

Nominal Size	1/4"
Work Pressure	Vac.~21MPa
Work Temp.	-10~+80°C (Manual) -10~+40°C (Pneumatic)
Cv Value	0.1

(※1) In the case of PCTFE sheet.

(※2) In the case of VTF Male connection.

(※) Contact us for Lock Out Tag Out (LOTO) options.

Detected Leak	Inner(※1)	$\leq 3 \times 10^{-10} \text{Pa} \cdot \text{m}^3 / \text{sec.}$
	Outer	$\leq 1 \times 10^{-11} \text{Pa} \cdot \text{m}^3 / \text{sec.}$
Weight(※2)	(Manual)	270g
	(Automatic)	350g
Internal Volume (※3)	1.0cc	
Work Durability(※4)	(Manual)	Over 50,000
	(Automatic)	Over 400,000

(※3) In the case of VTF Male connection under valve Open.

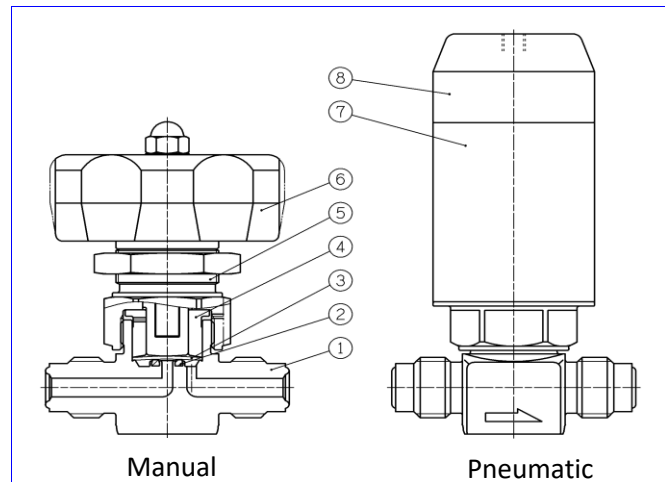
(※4) In-house Test: 21MPa N2 gas sealed.

## Materials of Main Parts

	Parts Name	Material
①	Body	316L SS
②	Seat	PCTFE(※1)
③	Diaphragm	Co-Ni Alloy
④	Diaphragm Retainer	630 SS
⑤	Bonnet	304 SS
⑥	Handle(※2)	Aluminum Alloy
⑦	Cylinder	
⑧	Cylinder Cover	

(※1)PI, PEEK, PFA, etc. are available on option.

(※2)Contact us for Lock Out Tag Out (LOTO) options.



## Nomenclature of Part Number

### DVKA - ① - ② - ③ - ④

Ex) DVKA - 4VM - NC - EP [1/4"VTF Male connectin, Automatic, Normal Close, Electrolytic polishing]

①	
Mark	Size*
4	1/4"

②	
Mark	Connection
VM	VTF (Male)
VF	VTF (Fem'l)
D	BI-Lok

③	
Mark	Operation
Blank	Manual
NC	Normal Close
NO	Normal Open

④	
Mark	Internal Finishing
EP	Electro-Polish ( $\leq \text{Ra } 5 \mu \text{ inch}$ )
BA	Machining ( $\leq \text{Ra } 10 \mu \text{ inch}$ )

## Dimensions (Manual)

		VTF( Male ) (mm)		
		Type	Size	L
		DVKA-4VM	1/4"	52
		VTF( Female ) (mm)		
		Type	Size	L
		DVKA-4VF	1/4"	71.6
		BI-Lok (mm)		
		Type	Size	L
		DVKA-4D	1/4"	58

## Dimensions ( Pneumatic )

		VTF( Male ) (mm)		
		Type	Size	L
		DVKA-4VM-NC	1/4"	52
		VTF( Female ) (mm)		
		Type	Size	L
		DVKA-4VF-NC	1/4"	71.6
		BI-Lok (mm)		
		Type	Size	L
		DVKA-4D-NC	1/4"	58



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You can get more information at Home Page.

<http://www.ihara-sc.co.jp>

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## WARNING

If you don't select and handle fittings, valves and related accessories in an adequate manner, it may damage human beings and applicable systems.

Within the responsibility and authorization of users and piping designers, fittings, valves and related accessories shall be adequately selected, assembled, used and maintained based on the applicable conditions and product conformity to the system to be applied.

Please read carefully our operation manual and feel free to contact with Ihara if you have any question or request.

## [Product Warranty]

### 1) Warranty Period

The warranty period of our products is one (1) year from putting into service or one and half (1.5) years after delivery whichever comes earlier.

However, the products of special specification and/or the cases used under deviating from the specification shall be exempted.

Please inquire us for the products that specify the service life or replacing parts.

### 2) Scope of Warranty

Any failure and damage under maker's responsibility will be found during the warranty period, the substitute and/or replacement parts shall be provided free of charge. The warranty shall not be extended to a claim for the liquidated damages.

■ The contents of this catalogue are subject to change without prior notice due to product improvement, etc.