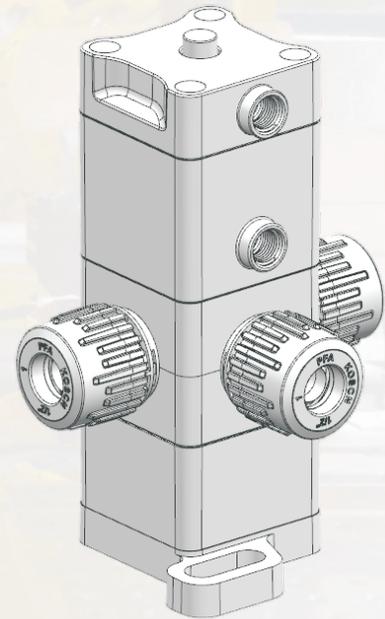


DV 313

Pneumatic 3-way valve



KOSCN Control Valves DV Pneumatic three-way valve is a valve that controls the fluid path. It has different structural types of single seat and double seat. It is based on the mechanical principle of fluid dynamics and control valve to achieve accurate control of the fluid path and flow rate. At the same time, the products have ultra-pure electronic grade standards, which can be widely used in biopharmaceutical and semiconductor industries.

Easy installation and maintenance

- * All-plastic appearance structure, NC and NO free choice
- * Miniaturized design, easy installation, no maintenance
- * UNF standard FlareLINK interface thread, higher adaptability and interchangeability
- * There are options for manual local control functions

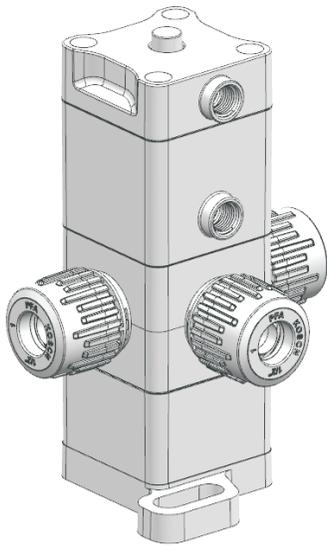
High safety performance

- * Complies with FDA 177-1520 / 177-1550 dissolution testing requirements
- * Ultra-pure products comply with SEMI F057 standards
- * The PTFE diaphragm has a low Particulate characteristic

High Flexibility

- * Wetted material PTFE, PFA
- * Diaphragm material PTFE
- * Nut material PVDF or PFA
- * Seal kit FKM/EPDM optional
- * Structure material PVDF、PP or PPS
- * Scalable manual limit and position feedback sensor





Performance data

Item	Unit	Data
A to B service pressure	bar	0...5,0
C-end Back pressure	bar	0...4,0
A to C service pressure	bar	0...5,0
B-end Back pressure	bar	0...2,0
Control pressure	kgf/cm ²	4,0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
CV		1,9
Operating temperature	°C	5...80
Ambient temperature	°C	0...60 (sensor 0...50)
Material	Valve body	PTFE
	Diaphragm	PTFE
	Actuating element	PVDF / PPN / PTFE
	Baseplate	PVDF / PPS
	Bolt	SUS Coating

Product code

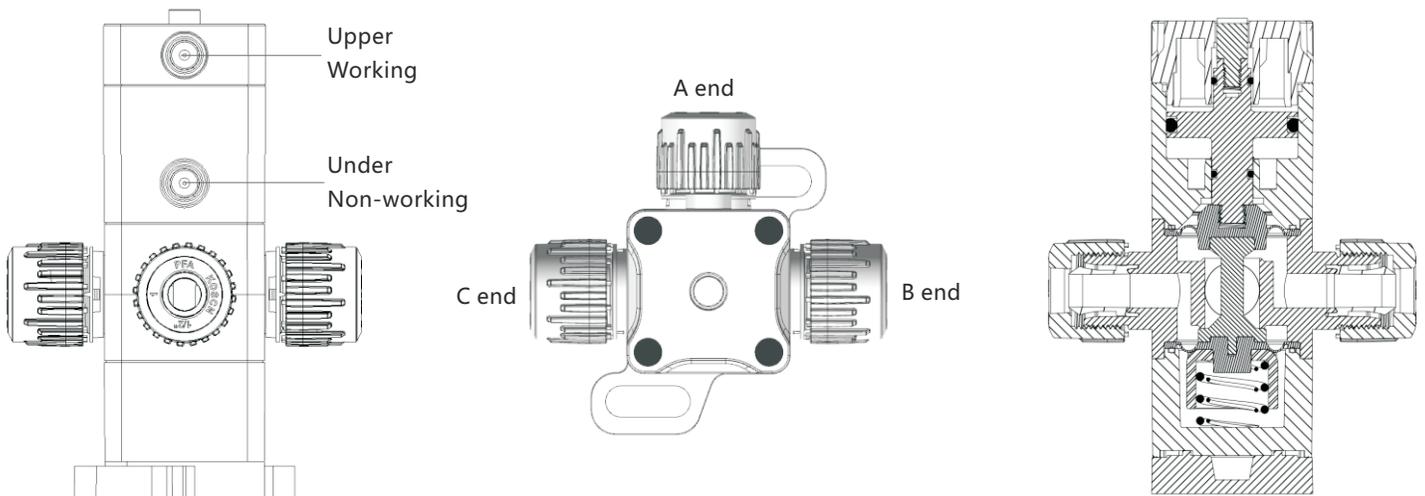
Size (Inch)	BODY		Actuating element	Spring housing	Baseplate
	PFA	PTFE			
1/8		313.8602403	PVDF	PVDF	PVDF
1/4		313.8602406	PVDF	PVDF	PVDF
3/8	313.7602410		PVDF	PVDF	PVDF
1/2	313.7602412		PVDF	PVDF	PVDF
1/2	313.7602412J		PP	PTFE	PPGF
1/2	313.7602412H		PPS	PTFE	PPS
3/4		313.8602419	PVDF	PVDF	PVDF

Function Description

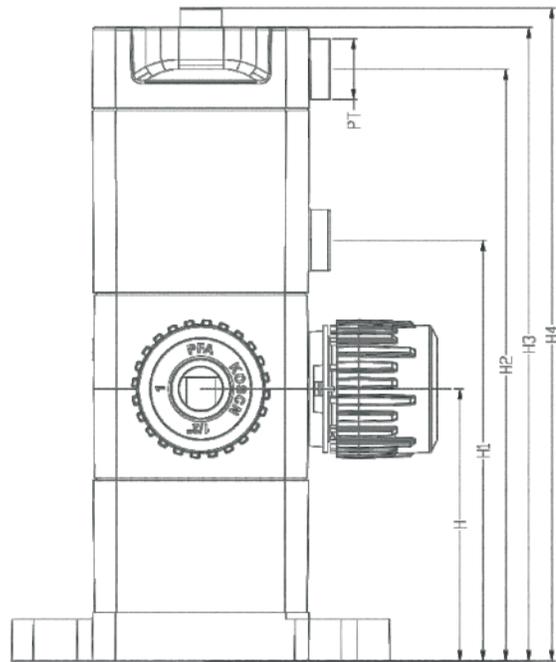
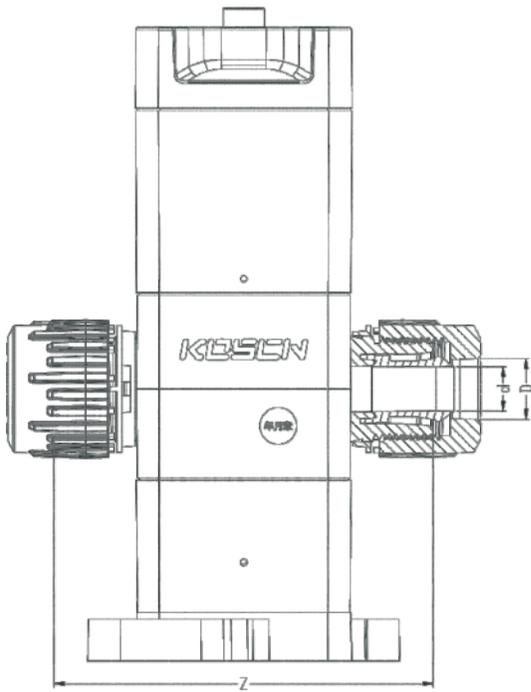
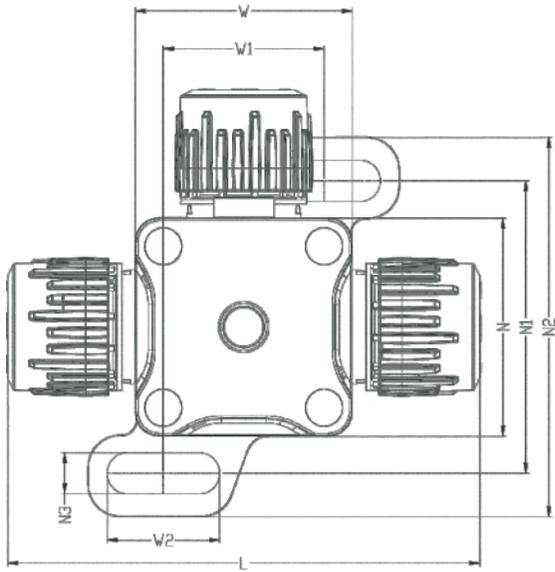
T-type pneumatic three-way valve, single seat, piston type, for medium shunt and reversing switch

When there is no air source drive, end A and end B are connected

When the upper air source is driven, end A and C end are connected



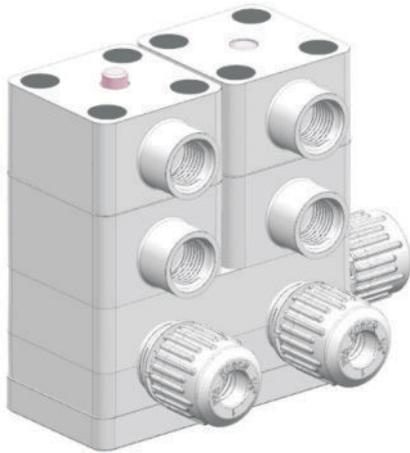
DV313 , PNEUMATIC 3-WAY VALVES



Unit: mm

Inch	D	d	PT	H	H1	H2	H3	H4	N	N1	N2	N3	W	W1	W2	L	Z
1/8	3,8	2,0	1/8	53	77	106	114	116	37	49,0	63,0	6,5	37	25,5	14,5	65	56,0
1/4	7,7	4,0	1/8	53	77	106	114	116	37	49,0	61,0	6,3	37	26,5	15,5	75	58,4
3/8	10,5	6,4	1/8	59	91	128	137	140	47	63,5	82,0	9,0	47	31,0	21,0	104	99,0
1/2	13,9	9,5	1/8	59	91	128	137	140	47	63,5	82,0	9,0	47	31,0	21,0	108	102,0
3/4	20,5	15,9	1/8	82	120	175	176	180	60	77,5	96,0	9,0	60	45,0	24,5	130	103,0

DV313 , 2-SEAT PNEUMATIC 3-WAY VALVES



Performance data

Item	Unit	Data
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
NC/NO control pressure	kgf/cm ²	4,0...5,0
DA control pressure	kgf/cm ²	3,0...4,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Configurable sensors	VDC	24 (PNP or NPN)
Operating temperature	°C	5...120
Ambient temperature	°C	0...60 (sensor 0...50)
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PVDF
	Baseplate	PVDF / SUS
	Bolt	SUS Coating

Product code

Size (Inch)	Insert Bushing		Insert Bushing		作用方式	
	PFA-UHP	PFA	PFA-UHP	PFA	①	②
F 型三通阀-RIGHT			F 型三通阀-LEFT			
1/4	313.7622406	313.7622406C	313.7822406	313.7822406C	NO	NC
1/4	313.7632406	313.7632406C	313.7832406	313.7832406C	NC	NO
1/4	313.7642406	313.7642406C	313.7842406	313.7842406C	NC	NC
1/4	313.7652406	313.7652406C	313.7852406	313.7852406C	NO	NO
h 型三通阀						
1/4	313.7722406	313.7722406C			NO	NC
1/4	313.7732406	313.7732406C			NC	NO
1/4	313.7742406	313.7742406C			NC	NC
1/4	313.7752406	313.7752406C			NO	NO

Function Description

F-type two-seat three-way valve, one into two, standard valve structure flow channel.

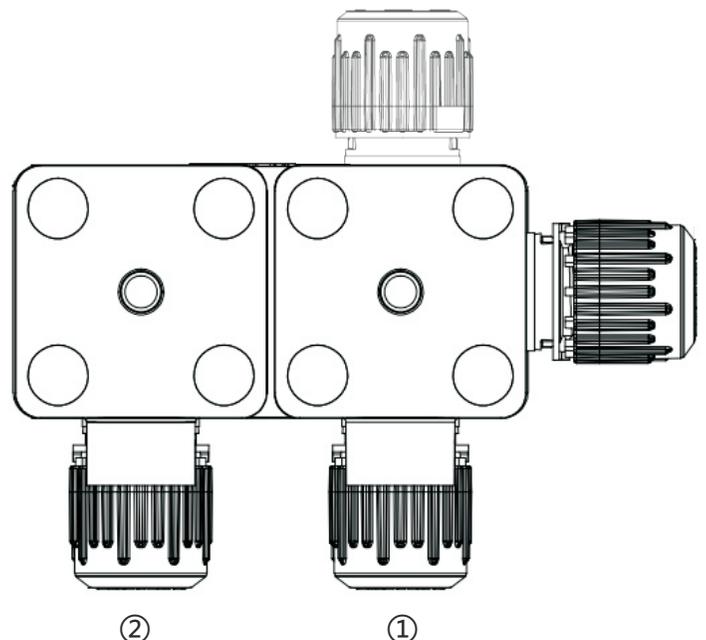
Position feedback sensor can be configured

① Valve position:

pneumatic cutting function, optional mode of action

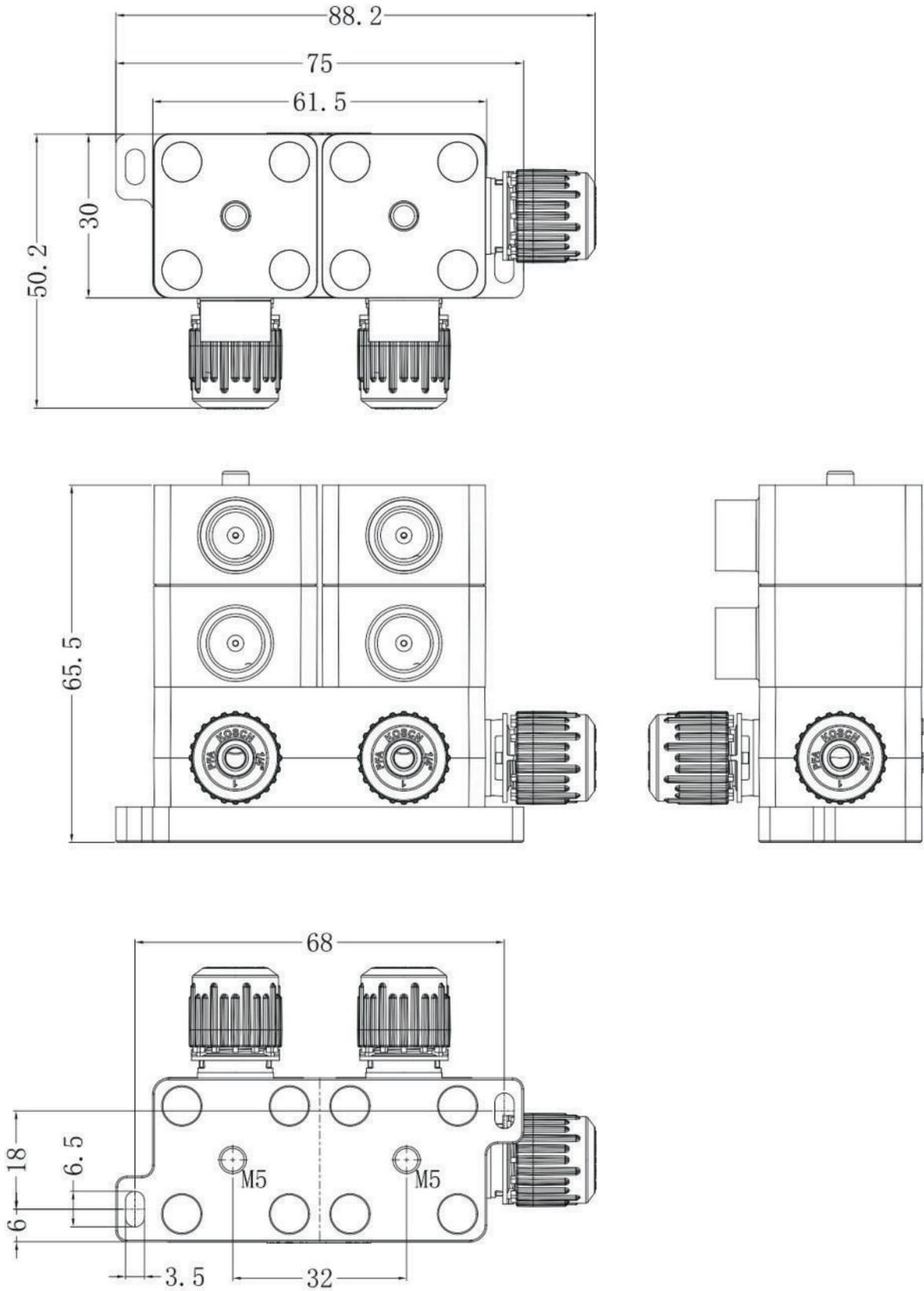
② Valve position:

pneumatic cutting function, optional mode of action



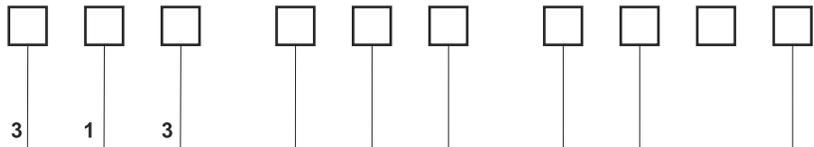
DV313 , 2-SEAT PNEUMATIC 3-WAY VALVES

1/4 F-type Size



Order code

DV313 3-way valve



Valve body material									
PVDF									6
PFA									7
PTFE									8
Diaphragm material									
One seat T type									6
Two seat F type - Right									6
Two seat h type									7
Two seat F type - Left									8
Working mode									
1 seat T type, Right NO									0
1 seat T type, Left NO									1
2 seat F type, NO-NC									2
2 seat F type, NC-NO									3
2 seat F type, NC-NC									4
2 seat F type, NO-NO									5
2 seat F type, NO-NC (Manual flow regulation is available)									6
2 seat F type, NC-NO (Manual flow regulation is available)									7
2 seat F type, NC-NC (Manual flow regulation is available)									8
2 seat F type, NO-NO (Manual flow regulation is available)									9
Connection mode									
Flare LINK: PVDF NUT									0
Insert Bushing									2
Flare LINK: PFA NUT									4
Thread									9
Connection standard									
ANSI UNF									4
BSP/G									6
NPT									8
Interface size									
1/16"									02
1/8"									03
1/4"									06
3/8"									10
1/2"									12
3/4"									19
1"									26



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