

Chemical Liquid Valves

DV 310 Pneumatic DV 311 Manual



KOSCN Control Valves DV is a miniaturized and compact control valve with excellent corrosion resistance, heat resistance, and a wide range of applications. The inner wall is smooth and the ion extraction is low, which is especially suitable for occasions with high cleanliness requirements. Different material options are closer to application scenarios and application costs, making them more cost-effective.

Easy installation and maintenance

- * All-plastic appearance structure, beautiful and corrosion-resistant
- * Miniaturized design, easy installation, no maintenance
- * UNF standard FlareLINK interface thread, higher adaptability and interchangeability
- * Mounting plate dimensions conform to SEMI standard F65-1101

High safety performance

- * Complies with FDA 177-1520 / 177-1550 dissolution testing requirements
- * The ultra-pure products of UHP comply with the SEMI F057 standard.
- * Triple-sealed valve cavity diaphragm structure can effectively cut off leakage
- * Curved PTFE diaphragm is more ductile and has a longer life
- * Observation and drainage ports for diaphragm rupture are provided

High Flexibility

- * Wetted material PTFE, PFA
- * Diaphragm material PTFE
- * Structure material PVDF, PPS, PP-Natural
- * Interface form FlareLink, Insert Bushing
- * Nut material Flare Link PVDF/PFA, Insert Bushing PFA
- * Drive direction the pilot port can be installed in four selectable directions
- * Automatic expansion, pneumatic expansion, manual limit position feedback sensors

Technical characteristics

Size	1/4", 3/8", 1/2", 3/4", 1" 1-1/4", 1-1/2"
Pressure	PN 5
Body material	PTFE PFA
Diaphragm	PTFE
Actuator	PVDF / PPS / PP-Natural
Structure	PVDF / PPS / PEEK / PP-Natural
Connector	UNF : Flare LINK Insert Bushing
Floor	SEMI F65-1101

Flow capacity

All data are for 20°C water with 1 bar pressure difference

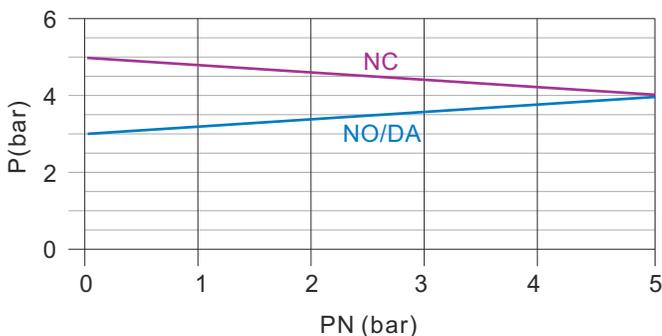
Inch	φmm	l/min Kv 100	m ³ /h
1/8"	2	1,00	0,06
1/4"	4	4,70	0,28
3/8"	6	10,00	0,60
1/2"	9	22,00	1,32
3/4"	16	62,00	3,72
1"	22	120,00	7,20
1-1/4"	28	190,00	11,40
1-1/2"	33	340,00	20,40

$$C_v = k_v \times 0,07 ; F_v = k_v \times 0,0585$$

Kv (l/min) ; Cv (gal/min) US ; Fv (gal/min) GB

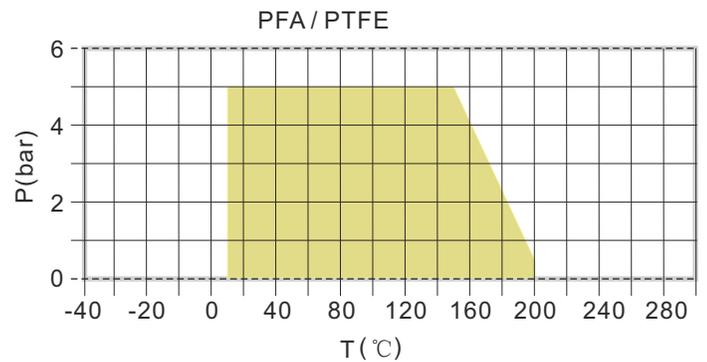
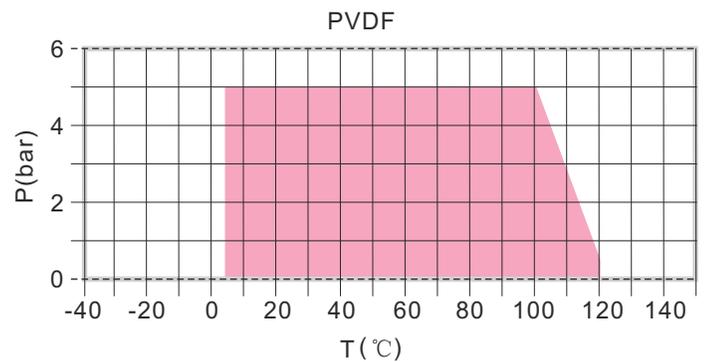
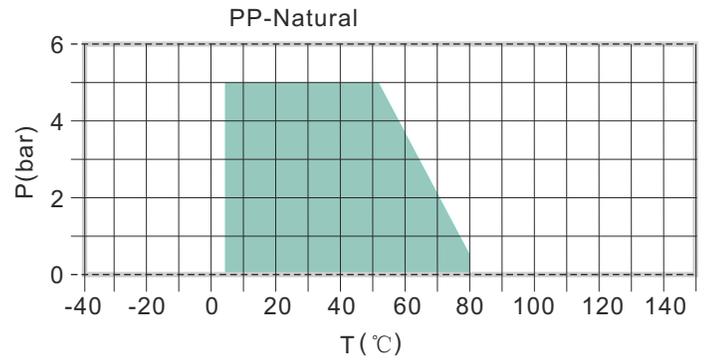
DV310 Control pressure

The maximum input value for pressurized air is 5 bar



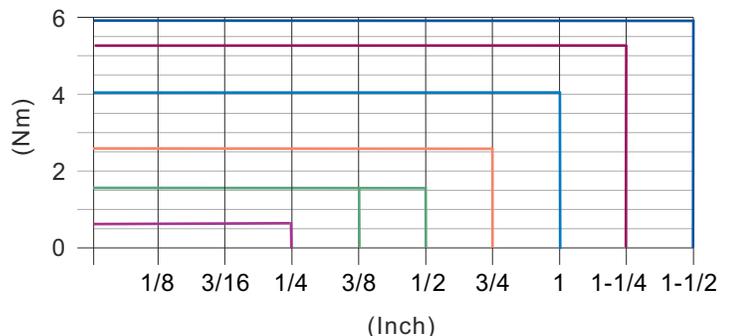
Pressure & temperature curve

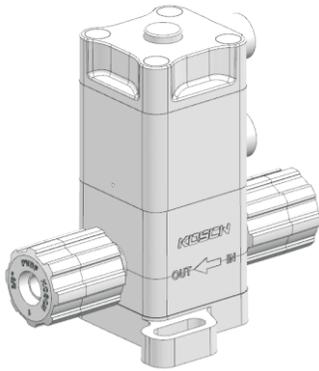
All data based on water for considering 25 years safe life time



DV311 Handwheel torque

Maximum torque required for complete closure





Performance data

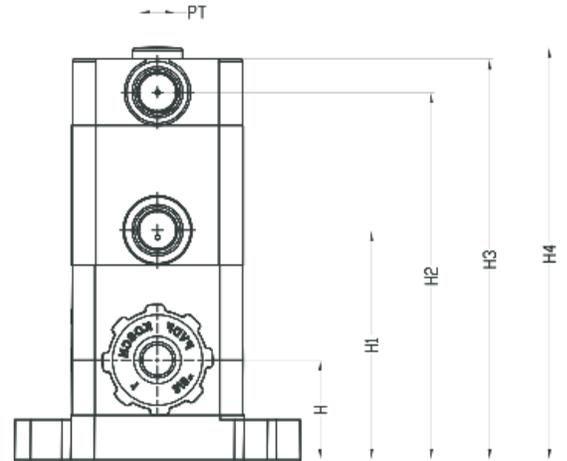
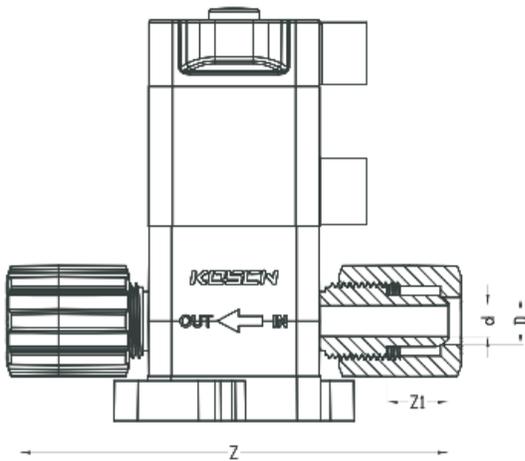
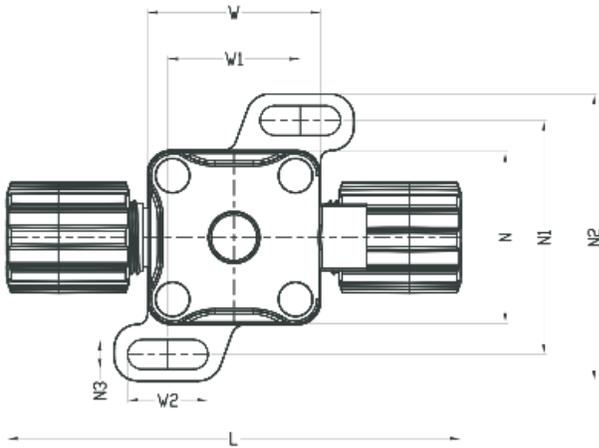
Item	Unit	Data
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...120 (Excluding HF)
Ambient temperature	°C	0...60
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PVDF
	Baseplate	PVDF
	Bolt	SS Coating

Product code

Size (Inch)	Insert Bushing		Flare LINK	
	PFA-UHP	PFA	PFA-UHP	PFA
NC				
1/8	310.762.2403	310.762.2403C		
1/4MINI	310.762.2406I	310.762.2406IC		
1/4	310.762.2406	310.762.2406C	310.762.0406	310.762.0406C
3/8	310.762.2410	310.762.2410C	310.762.0410	310.762.0410C
1/2	310.762.2412	310.762.2412C	310.762.0412	310.762.0412C
3/4	310.762.2419	310.762.2419C	310.762.0419	310.762.0419C
1	310.762.2426	310.762.2426C	310.762.0426	310.762.0426C
1-1/4	310.762.2431	310.762.2431C		
1-1/2	310.762.2438	310.762.2438C		
NO				
1/8	310.764.2403	310.764.2403C		
1/4MINI	310.764.2406I	310.764.2406IC		
1/4	310.764.2406	310.764.2406C	310.764.0406	310.764.0406C
3/8	310.764.2410	310.764.2410C	310.764.0410	310.764.0410C
1/2	310.764.2412	310.764.2412C	310.764.0412	310.764.0412C
3/4	310.764.2419	310.764.2419C	310.764.0419	310.764.0419C
1	310.764.2426	310.764.2426C	310.764.0426	310.764.0426C
1-1/4	310.764.2431	310.764.2431C		
1-1/2	310.764.2438	310.764.2438C		
DA				
1/8	310.766.2403	310.766.2403C		
1/4MINI	310.766.2406I	310.766.2406IC		
1/4	310.766.2406	310.766.2406C	310.766.0406	310.766.0406C
3/8	310.766.2410	310.766.2410C	310.766.0410	310.766.0410C
1/2	310.766.2412	310.766.2412C	310.766.0412	310.766.0412C
3/4	310.766.2419	310.766.2419C	310.766.0419	310.766.0419C
1	310.766.2426	310.766.2426C	310.766.0426	310.766.0426C
1-1/4	310.766.2431	310.766.2431C		
1-1/2	310.766.2438	310.766.2438C		

Flare LINK is configured with PVDF NUT by default. For PFA material, see the code table on the last page.

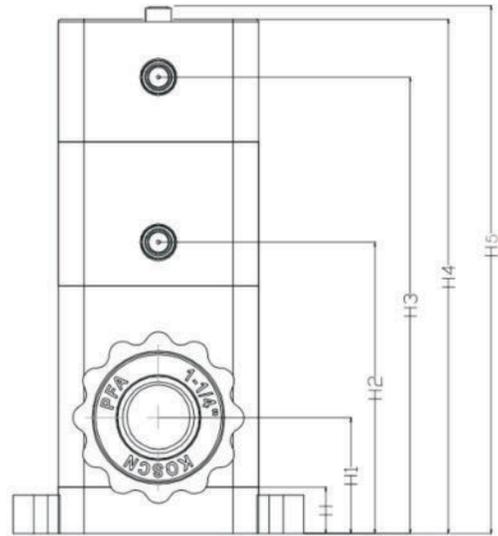
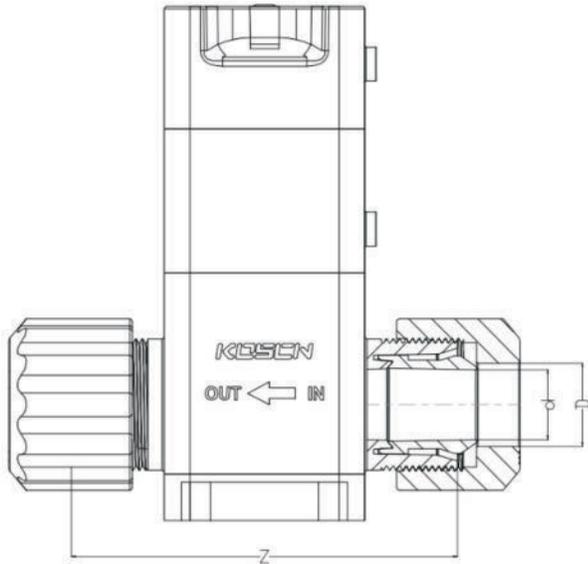
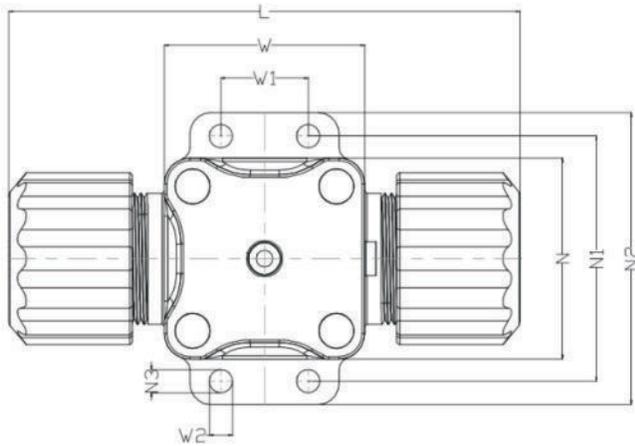
DV310 , Standard , SIZE



Unit: mm

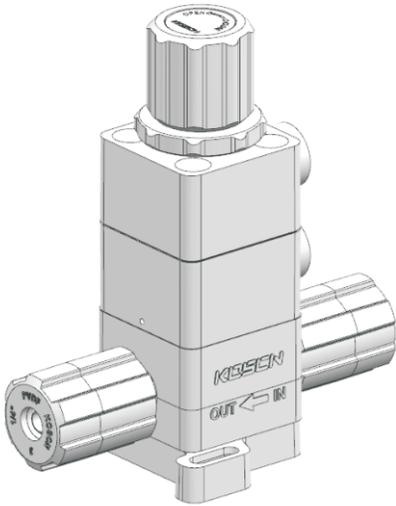
Inch	D	d	PT	H	H1	H2	H3	H4	N	N1	N2	N3	W	W1	W2	L	Z	Z1
1/8	3,2	2,0	1/8	16,5	39	54	62	64	25	33,0	41	3,5	25	17,0	10,5	54,0	47,5	-
1/4MINI	7,7	4,0	1/8	16,5	39	54	62	64	25	33,0	41	3,5	25	17,0	10,5	63,5	53,0	-
1/4	7,7	4,0	1/8	15,5	37	55	64	67	30	37,0	44	3,5	30	23,0	11,5	86,0	81,5	11,0
3/8	10,5	6,4	1/8	21,0	48	78	85	88	37	49,0	60	6,5	37	28,0	17,0	94,5	89,5	13,5
1/2	13,9	9,5	1/8	21,0	48	78	85	88	37	49,0	60	6,5	37	28,0	17,0	98,5	92,5	15,0
3/4	20,5	15,9	1/8	27,0	60	92	106	110	47	63,5	82	9,0	47	35,0	24,5	121,0	114,2	15,0
1	29,0	22,2	1/8	35,0	75	117	126	131	60	77,5	96	9,0	60	47,0	26,0	150,0	139,8	16,5

DV310 , Heavy Calibre , SIZE



Unit: mm

Inch	D	d	PT	H	H1	H2	H3	H4	H5	N	N1	N2	N3	W	W1	W2	L	Z
1-1/4	32,0	28,0	1/8	18,0	45,0	113	177	199	205	75	92	110	9,0	75	34,5	9,0	199	150
1-1/2	39,0	33,7	1/8	24,0	59,0	155	259	295	305	120	145	170	9,0	120	65,0	9,0	240	195
40A																		
50A																		



Performance data

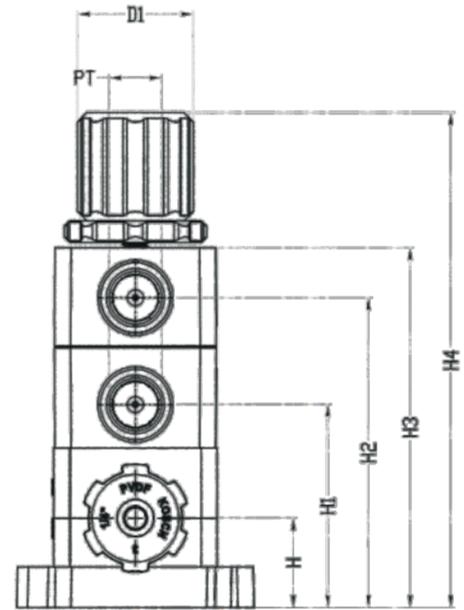
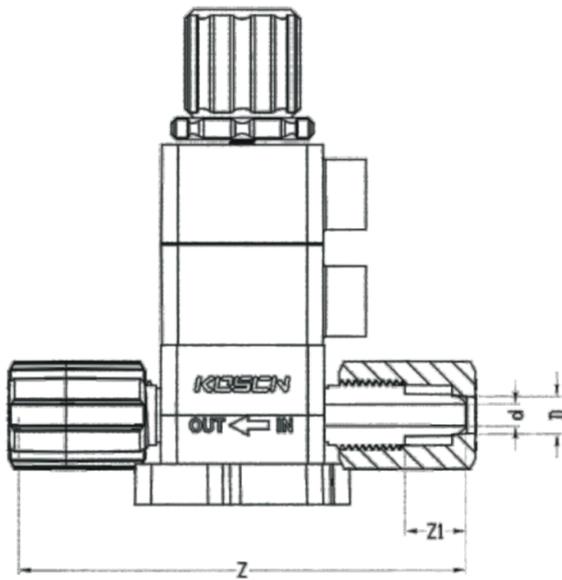
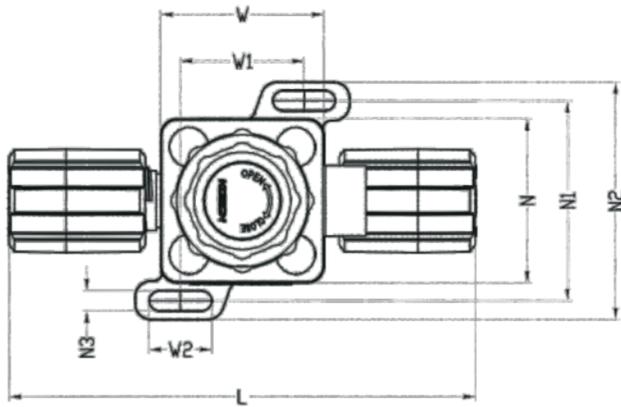
Item	Unit	Data
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...120 (Excluding HF)
Ambient temperature	°C	0...60
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PVDF
	Baseplate	PVDF
	Bolt	SS Coating

Product code

Size (Inch)	Insert Bushing		Flare LINK	
	PFA-UHP	PFA	PFA-UHP	PFA
NC Manual Limit-UP				
1/8				
1/4MINI				
1/4	310.763.2406	310.763.2406C	310.763.0406	310.763.0406C
3/8	310.763.2410	310.763.2410C	310.763.0410	310.763.0410C
1/2	310.763.2412	310.763.2412C	310.763.0412	310.763.0412C
3/4	310.763.2419	310.763.2419C	310.763.0419	310.763.0419C
1	310.763.2426	310.763.2426C	310.763.0426	310.763.0426C
1-1/4				
1-1/2				
NO Manual Limit-UP				
1/8				
1/4MINI				
1/4	310.765.2406	310.765.2406C	310.765.0406	310.765.0406C
3/8	310.765.2410	310.765.2410C	310.765.0410	310.765.0410C
1/2	310.765.2412	310.765.2412C	310.765.0412	310.765.0412C
3/4	310.765.2419	310.765.2419C	310.765.0419	310.765.0419C
1	310.765.2426	310.765.2426C	310.765.0426	310.765.0426C
1-1/4				
1-1/2				
DA Manual Limit-UP				
1/8				
1/4MINI				
1/4	310.767.2406	310.767.2406C	310.767.0406	310.767.0406C
3/8	310.767.2410	310.767.2410C	310.767.0410	310.767.0410C
1/2	310.767.2412	310.767.2412C	310.767.0412	310.767.0412C
3/4	310.767.2419	310.767.2419C	310.767.0419	310.767.0419C
1	310.767.2426	310.767.2426C	310.767.0426	310.767.0426C
1-1/4				
1-1/2				

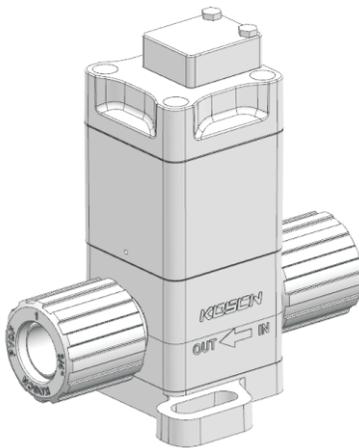
Flare LINK is configured with PVDF NUT by default. For PFA material, see the code table on the last page.

DV310 , PNEUMATIC , Manual Limit-UP , SIZE



Unit: mm

Inch	D	d	PT	H	H1	H2	H3	H4	N	N1	N2	N3	W	W1	W2	L	Z	D1
1/8																		
1/4 MINI																		
1/4	7,7	4,0	1/8	15,5	37	55	64	91	30	37,0	44	3,5	30	23,0	11,5	86,0	81,5	21
3/8	10,5	6,4	1/8	21,0	48	78	85	109	37	49,0	60	6,5	37	28,0	17,0	94,5	89,5	25
1/2	13,9	9,5	1/8	21,0	48	78	85	109	37	49,0	60	6,5	37	28,0	17,0	98,5	92,5	25
3/4	20,5	15,9	1/8	27,0	60	92	106	138	47	63,5	82	9,0	47	35,0	24,5	121,0	114,2	33
1	29,0	22,2	1/8	35,0	75	117	126	157	60	77,5	96	9,0	60	47,0	26,0	150,0	139,8	57
1-1/4																		
1-1/2																		



Performance data

Item	Unit	Data	
Service pressure	bar	0...5,0	
Backpressure	bar	0...5,0	
Leakage rate	cm ³ /min	0 (Based on water pressure)	
Operating temperature	°C	5...120 (Excluding HF)	
Ambient temperature	°C	0...50	
Switch	Rated voltage	VDC	24
	Model		NPN (PNP is optional)
	Cable length	M	1,0
	Class of protection		Cover plate

Product code

Size (Inch)	Insert Bushing		Flare LINK	
	PFA-UHP	PFA	PFA-UHP	PFA

NC Optoelectronic Switch

1/8				
1/4MINI				
1/4	310.762.2406A1	310.762.2406CA1	310.762.0406A1	310.762.0406CA1
3/8	310.762.2410A1	310.762.2410CA1	310.762.0410A1	310.762.0410CA1
1/2	310.762.2412A1	310.762.2412CA1	310.762.0412A1	310.762.0412CA1
3/4	310.762.2419A1	310.762.2419CA1	310.762.0419A1	310.762.0419CA1
1	310.762.2426A1	310.762.2426CA1	310.762.0426A1	310.762.0426CA1

NO Optoelectronic Switch

1/8				
1/4MINI				
1/4	310.764.2406A1	310.764.2406CA1	310.764.0406A1	310.764.0406CA1
3/8	310.764.2410A1	310.764.2410CA1	310.764.0410A1	310.764.0410CA1
1/2	310.764.2412A1	310.764.2412CA1	310.764.0412A1	310.764.0412CA1
3/4	310.764.2419A1	310.764.2419CA1	310.764.0419A1	310.764.0419CA1
1	310.764.2426A1	310.764.2426CA1	310.764.0426A1	310.764.0426CA1

DA Optoelectronic Switch

1/8				
1/4MINI				
1/4	310.766.2406A1	310.766.2406CA1	310.766.0406A1	310.766.0406CA1
3/8	310.766.2410A1	310.766.2410CA1	310.766.0410A1	310.766.0410CA1
1/2	310.766.2412A1	310.766.2412CA1	310.766.0412A1	310.766.0412CA1
3/4	310.766.2419A1	310.766.2419CA1	310.766.0419A1	310.766.0419CA1
1	310.766.2426A1	310.766.2426CA1	310.766.0426A1	310.766.0426CA1

Flare LINK is configured with PVDF NUT by default. For PFA material, see the code table on the last page.
Configurable 5... 160°C high temperature products .

Performance data

<i>Item</i>	<i>Unit</i>	<i>Data</i>
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...120 (Excluding HF)
Ambient temperature	°C	0...50
Switch	Rated voltage	VDC 24
	Model	PNP (NPN is optional)
	Cable connection	Plug
	Class of protection	IP 67

Product code

<i>Size (Inch)</i>	<i>Insert Bushing</i>		<i>Flare LINK</i>	
	<i>PFA-UHP</i>	<i>PFA</i>	<i>PFA-UHP</i>	<i>PFA</i>

NC Limit Switch

3/4	310.762.2419A2	310.762.2419CA2	310.762.0419A2	310.762.0419CA2
1	310.762.2426A2	310.762.2426CA2	310.762.0426A2	310.762.0426CA2
1-1/4	310.762.2431A2	310.762.2431CA2	310.762.0431A2	310.762.0431CA2
1-1/2	310.762.2438A2	310.762.2438CA2	310.762.0438A2	310.762.0438CA2

NO Limit Switch

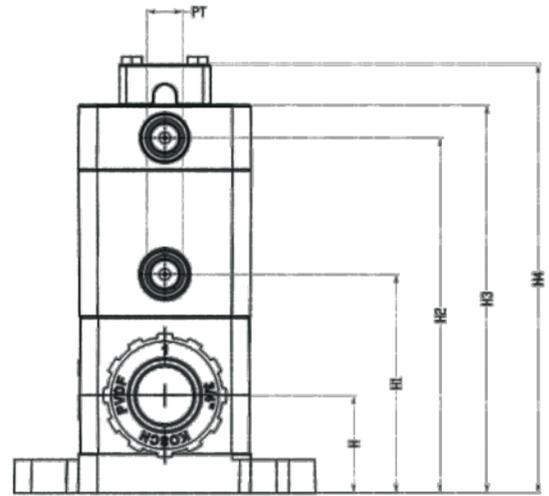
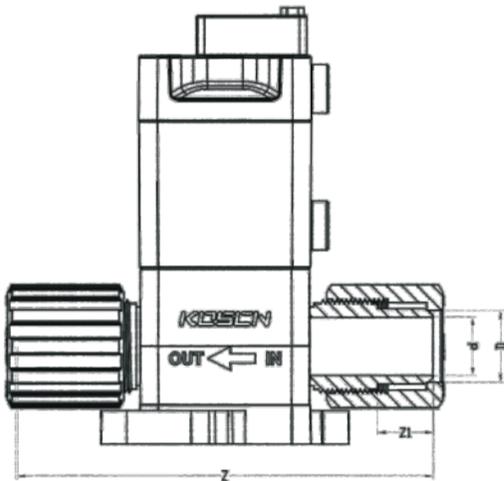
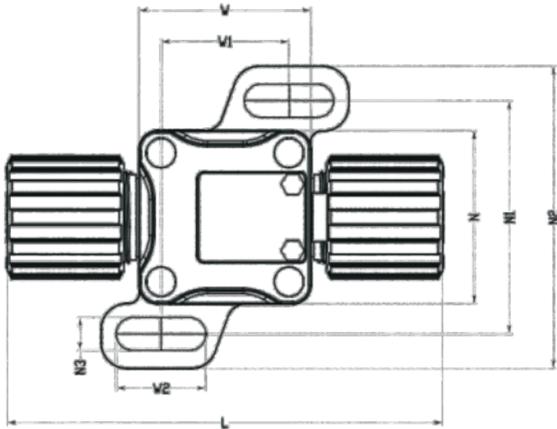
3/4	310.764.2419A2	310.764.2419CA2	310.764.0419A2	310.764.0419CA2
1	310.764.2426A2	310.764.2426CA2	310.764.0426A2	310.764.0426CA2
1-1/4	310.764.2431A2	310.764.2431CA2	310.764.0431A2	310.764.0431CA2
1-1/2	310.764.2438A2	310.764.2438CA2	310.764.0438A2	310.764.0438CA2

DA Limit Switch

3/4	310.766.2419A2	310.766.2419CA2	310.766.0419A2	310.766.0419CA2
1	310.766.2426A2	310.766.2426CA2	310.766.0426A2	310.766.0426CA2
1-1/4	310.766.2431A2	310.766.2431CA2	310.766.0431A2	310.766.0431CA2
1-1/2	310.766.2438A2	310.766.2438CA2	310.766.0438A2	310.766.0438CA2

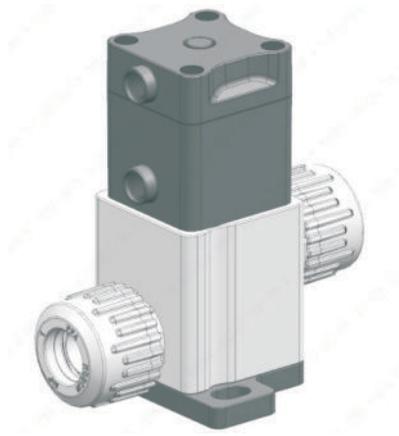
Flare LINK's default configuration is being upgraded to PFA NUT, and since switching is done gradually during the manufacturing process, you may receive PFA NUT products at this stage, or PVDF NUT products. Hope to understand.

DV310 , PNEUMATIC , Limit Switch , SIZE



Unit: mm

Inch	D	d	PT	H	H1	H2	H3	H4	N	N1	N2	N3	W	W1	W2	L	Z
1/8																	
1/4MINI																	
1/4	7,7	4,0	1/8	15,5	37	55	64	76	30	37,0	44	3,5	30	23,0	11,5	86,0	81,5
3/8	10,5	6,4	1/8	21,0	48	78	85	95	37	49,0	60	6,5	37	28,0	17,0	94,5	89,5
1/2	13,9	9,5	1/8	21,0	48	78	85	95	37	49,0	60	6,5	37	28,0	17,0	98,5	92,5
3/4	20,5	15,9	1/8	27,0	60	92	106	117	47	63,5	82	9,0	47	35,0	24,5	121,0	114,2
1	29,0	22,2	1/8	35,0	75	117	126	137	60	77,5	96	9,0	60	47,0	26,0	150,0	139,8
1-1/4																	
1-1/2																	



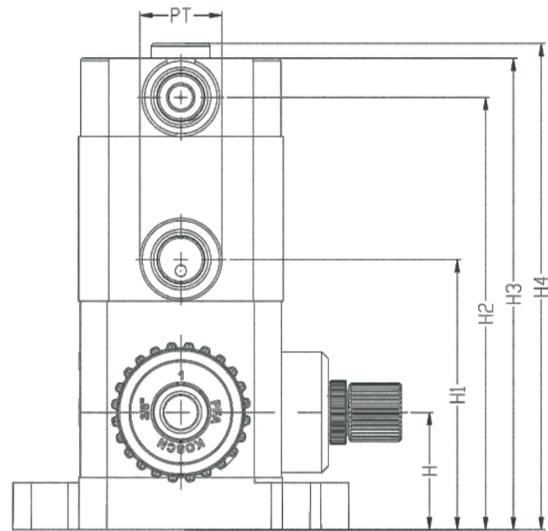
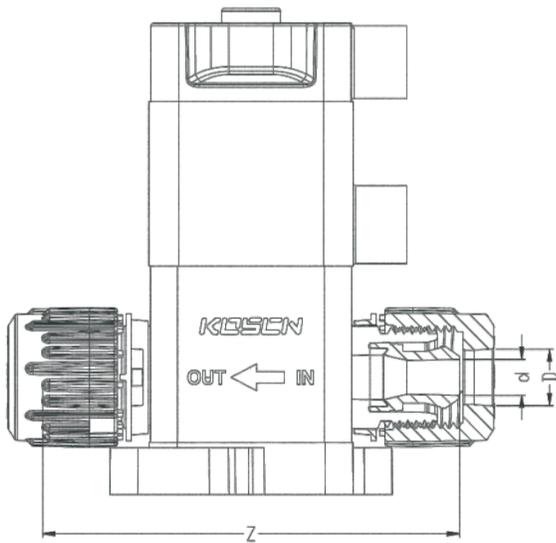
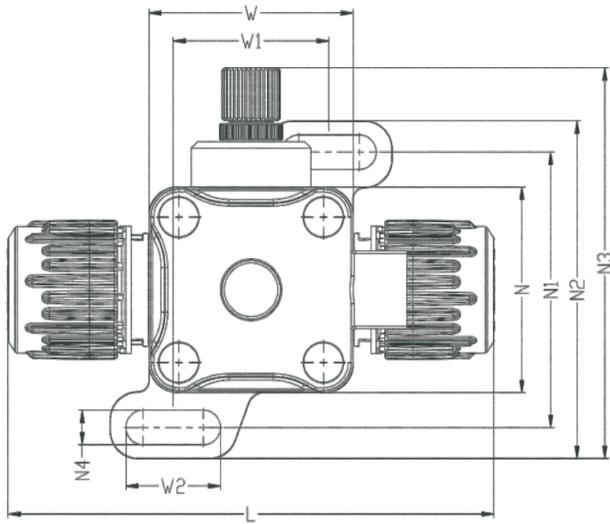
Performance data

<i>Item</i>	<i>Unit</i>	<i>Data</i>
Service pressure	bar	0...3,0
Backpressure	bar	0...1,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...160 (Excluding HF)
Ambient temperature	°C	0...60
Material	Valve body	PTFE
	Diaphragm	PTFE
	Actuating element	PPS
	Baseplate	PPS
	Bolt	SS Coating

Product code

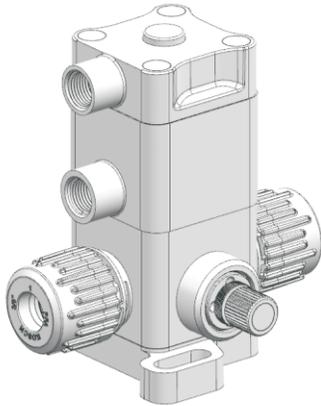
<i>Size (Inch)</i>	<i>PFA-UHP Insert Bushing</i>		
	<i>NC</i>	<i>NO</i>	<i>DA</i>
High temperature type			
1/4	310.862.2406 H	310.864.2406 H	310.866.2406 H
3/8	310.862.2410 H	310.864.2410 H	310.866.2410 H
1/2	310.862.2412 H	310.864.2412 H	310.866.2412 H
3/4	310.862.2419 H	310.864.2419 H	310.866.2419 H
1	310.862.2426 H	310.864.2426 H	310.866.2426 H

DV310 , PNEUMATIC BY PASS



Unit: mm

Inch	D	d	PT	H	H1	H2	H3	H4	N	N1	N2	N3	N4	W	W1	W2	L	Z
1/4	7,7	4,0	1/8	21,0	48	78	85	88	37	49,2	60,3	72	6,2	37	28,0	17,0	75	65,0
3/8	10,5	6,4	1/8	21,0	48	78	85	88	37	49,2	60,3	72	6,2	37	28,0	17,0	87	68,5
1/2	13,9	9,5	1/8	21,0	48	78	85	88	37	49,2	60,3	72	6,2	37	28,0	17,0	94	72,0
3/4	20,5	15,9	1/8	27,0	60	92	106	110	47	63,0	78,8	90	8,7	47	42,2	20,9	117	89,0
1	29,0	22,2	1/8	35,0	75	117	126	131	60	71,6	96,3	113	8,7	60	58,8	23,0	146	115,0



Performance data

<i>Item</i>	<i>Unit</i>	<i>Data</i>
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...120
Ambient temperature	°C	0...60
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PVDF
	Baseplate	PVDF
	Bolt	SS Coating

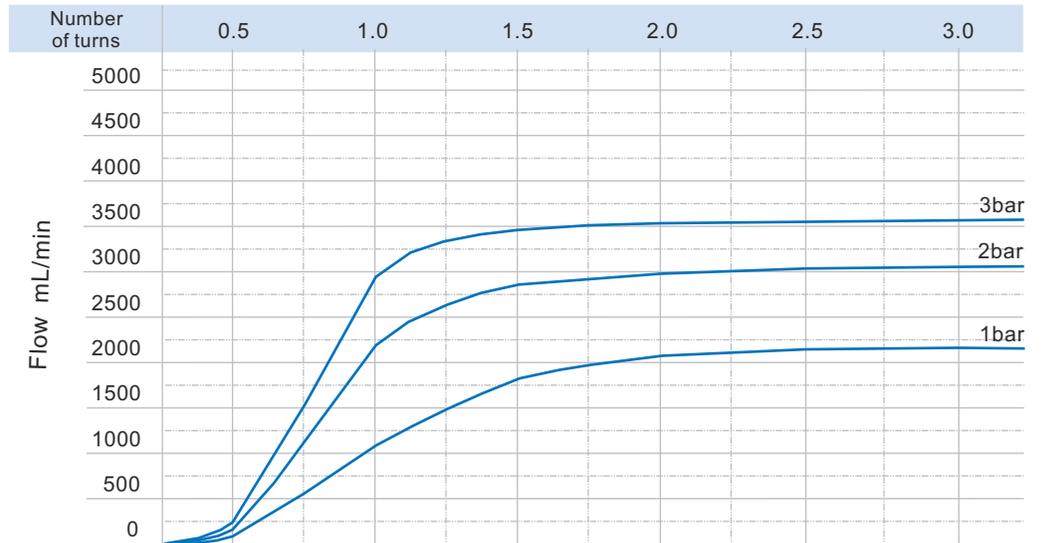
Product code

<i>Size (Inch)</i>	<i>PFA-UHP Insert Bushing</i>		
	<i>NC</i>	<i>NO</i>	<i>DA</i>
Pneumatic by pass			
1/4	310.762.2406 M	310.764.2406 M	310.766.2406 M
3/8	310.762.2410 M	310.764.2410 M	310.766.2410 M
1/2	310.762.2412 M	310.764.2412 M	310.766.2412 M
3/4	310.762.2419 M	310.764.2419 M	310.766.2419 M
1	310.762.2426 M	310.764.2426 M	310.766.2426 M
Pneumatic by pass Manual Limit-UP			
1/4	310.763.2406 M	310.765.2406 M	310.767.2406 M
3/8	310.763.2410 M	310.765.2410 M	310.767.2410 M
1/2	310.763.2412 M	310.765.2412 M	310.767.2412 M
3/4	310.763.2419 M	310.765.2419 M	310.767.2419 M
1	310.763.2426 M	310.765.2426 M	310.767.2426 M

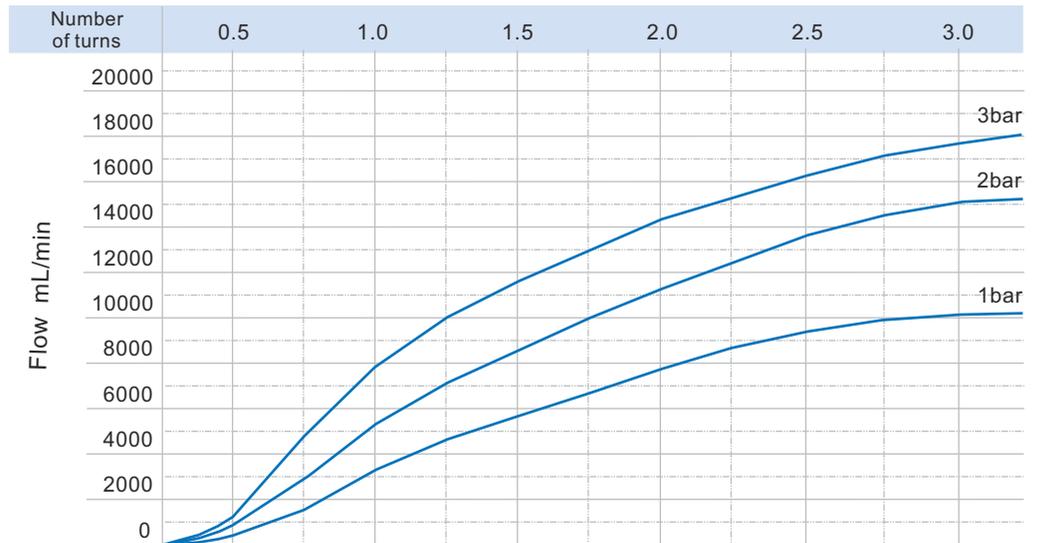
Bypass runner
Linear graph of relative flow

Refers to the change of the flow function of the valve opening stroke

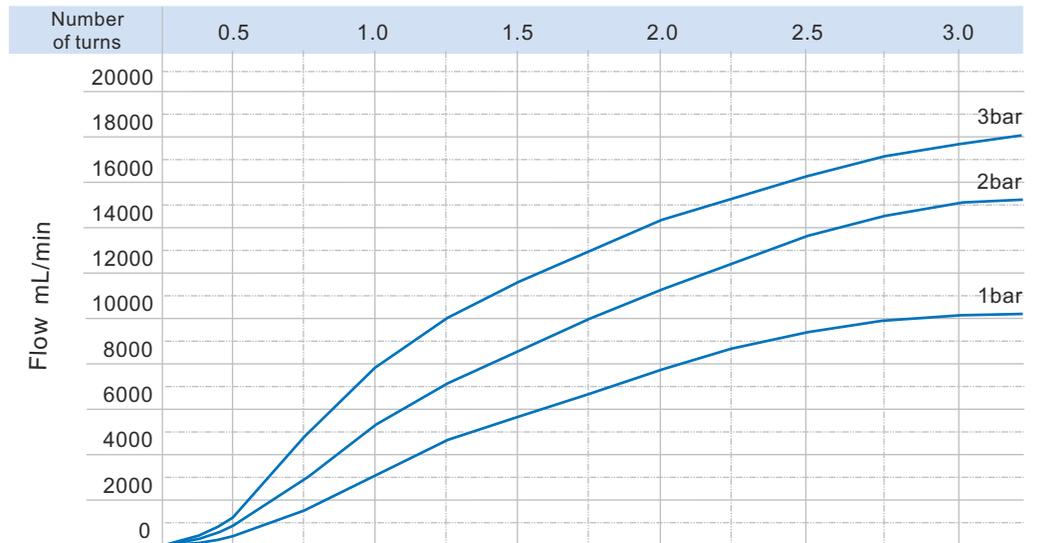
1/4 Data
06-46-3



3/8 Data
10-46-3



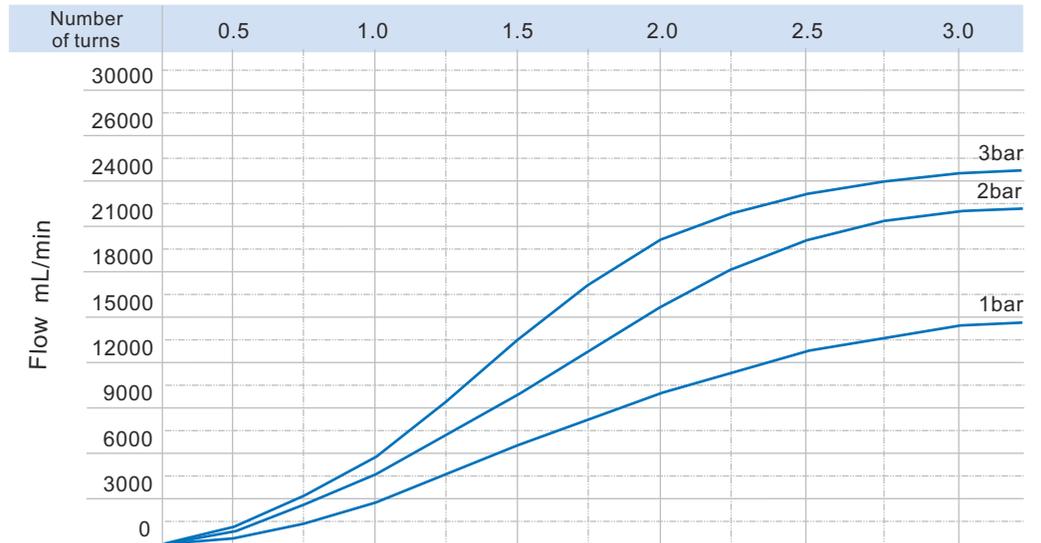
1/2 Data
12-46-3



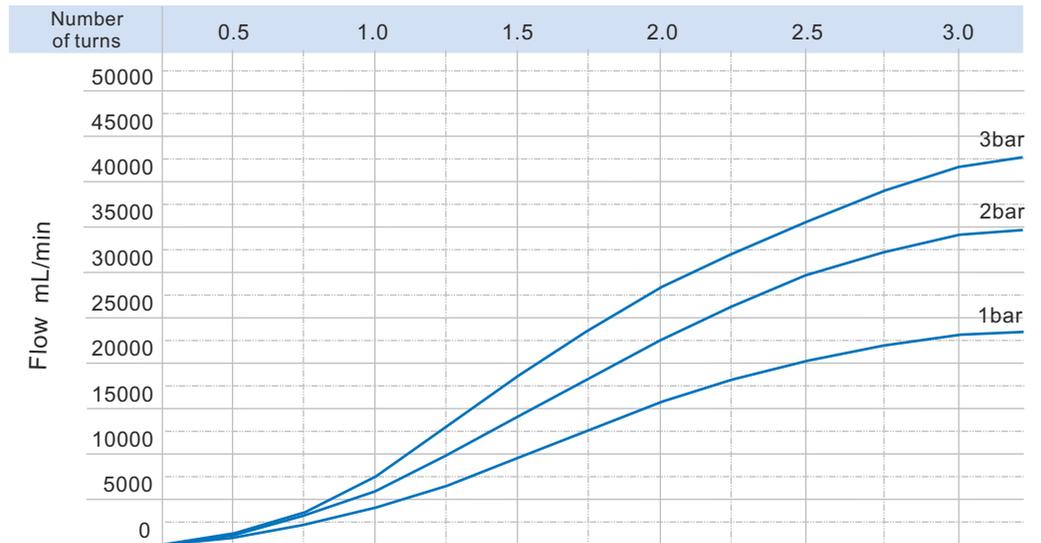
Bypass runner
 Linear graph of relative flow

Refers to the change of the flow function of the valve opening stroke

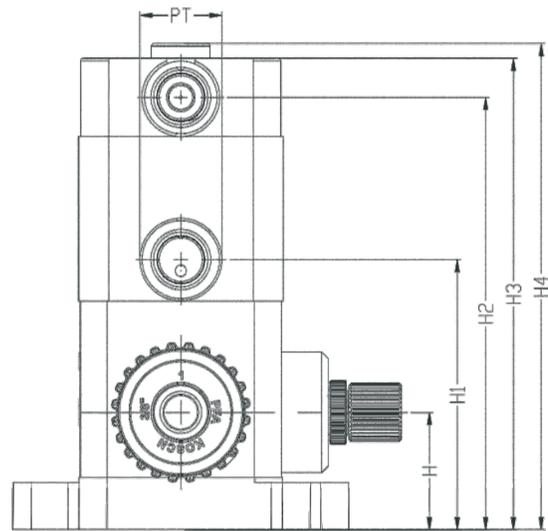
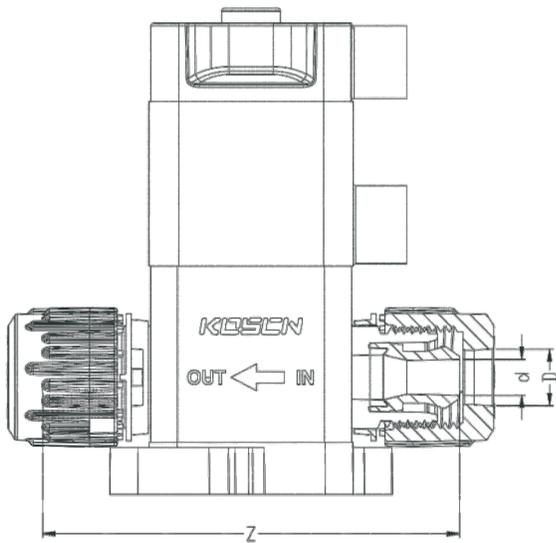
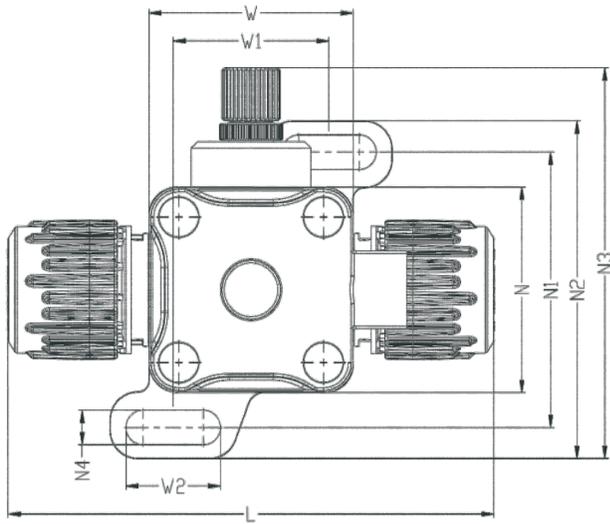
3/4 Data
 19-62-3



1 Data
 26-80-3

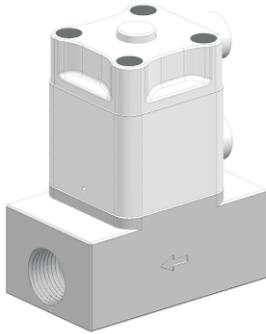


DV310 , PNEUMATIC BY PASS



Unit: mm

Inch	D	d	PT	H	H1	H2	H3	H4	N	N1	N2	N3	N4	W	W1	W2	L	Z
1/4	7,7	4,0	1/8	21,0	48	78	85	88	37	49,2	60,3	72	6,2	37	28,0	17,0	75	65,0
3/8	10,5	6,4	1/8	21,0	48	78	85	88	37	49,2	60,3	72	6,2	37	28,0	17,0	87	68,5
1/2	13,9	9,5	1/8	21,0	48	78	85	88	37	49,2	60,3	72	6,2	37	28,0	17,0	94	72,0
3/4	20,5	15,9	1/8	27,0	60	92	106	110	47	63,0	78,8	90	8,7	47	42,2	20,9	117	89,0
1	29,0	22,2	1/8	35,0	75	117	126	131	60	71,6	96,3	113	8,7	60	58,8	23,0	146	115,0

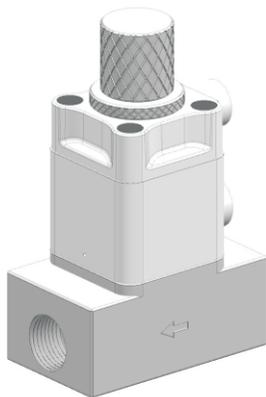


Performance data

Item	Unit	Data
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...120
Ambient temperature	°C	0...60
Material	Valve body	SUS316L
	Diaphragm	PTFE
	Actuating element	PVDF
	Bolt	SS Coating

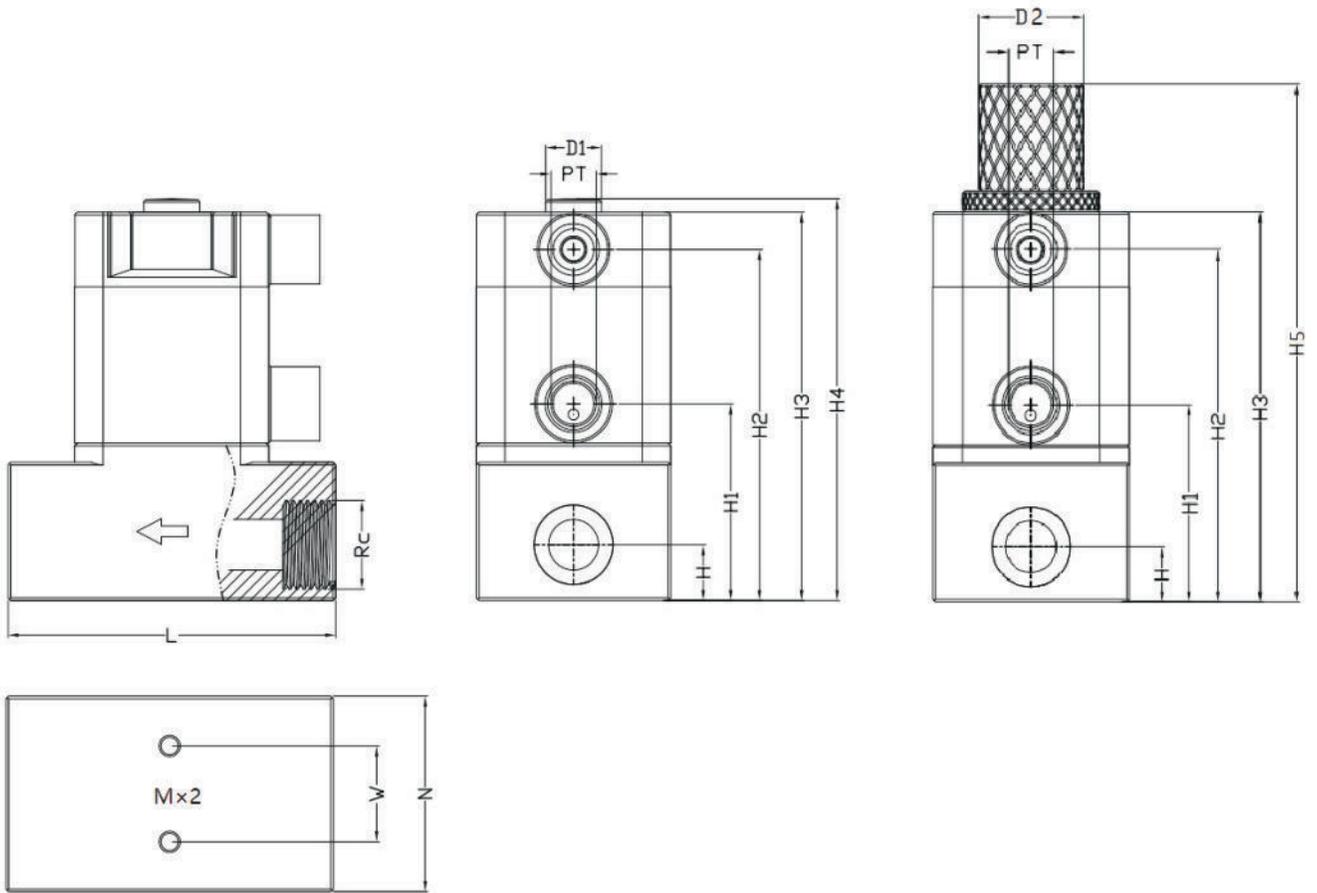
Product code

Size (Inch)	Adaptor Thread Rc	Card sleeve ANSI	Butt Welding ANSI
NC			
1/4	310.972.9906	310.972.6406	310.972.5406
3/8	310.972.9910	310.972.6410	310.972.5410
NO			
1/4	310.974.9906	310.974.6406	310.974.5406
3/8	310.974.9910	310.974.6410	310.974.5410
DA			
1/4	310.976.9906	310.976.6406	310.976.5406
3/8	310.976.9910	310.976.6410	310.976.5410



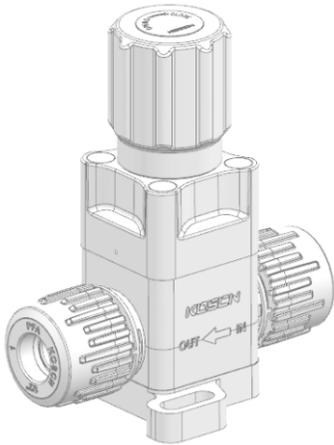
Product code

Size (Inch)	Adaptor Thread Rc	Card sleeve ANSI	Butt Welding ANSI
NC Manual Limit-DOWN			
1/4	310.973.9906X		
3/8	310.973.9910X		
NO Manual Limit-DOWN			
1/4	310.975.9906X		
3/8	310.975.9910X		
DA Manual Limit-DOWN			
1/4	310.977.9906X		
3/8	310.977.9910X		



Unit: mm

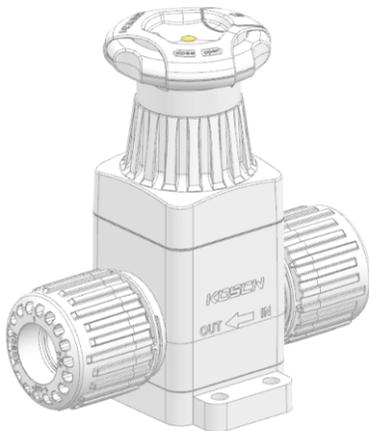
Inch	D1	D2	PT	H	H1	H2	H3	H4	H5	N	W	M	L
1/16													
1/8													
1/4	9	20	1/8	10	37	66	73	76	99	32	13	4	62
3/8	9	20	1/8	10	37	66	73	76	99	32	13	4	62



Performance data

Item	Unit	Data
Service pressure	bar	0...5,0
Backpressure	bar	0...5,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...80
Ambient temperature	°C	0...60
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PP-Natural
	Baseplate	PVDF
	Bolt	SS Coating

Product code



Size (Inch)	Insert Bushing		Flare LINK	
	PFA-UHP	PFA	PFA-UHP	PFA

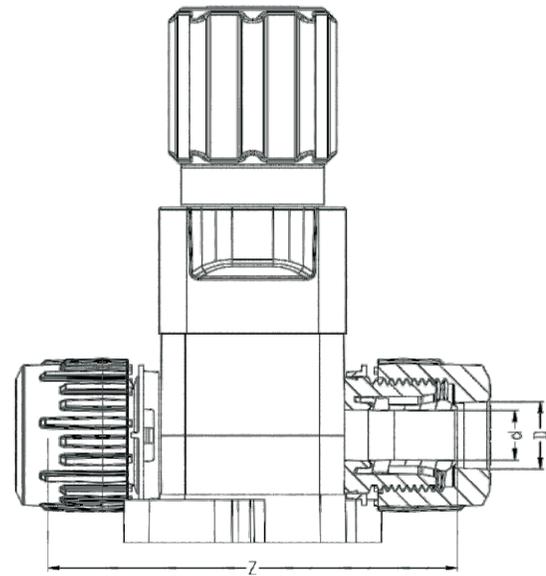
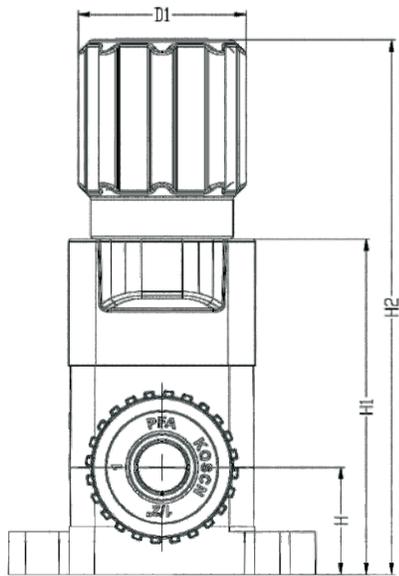
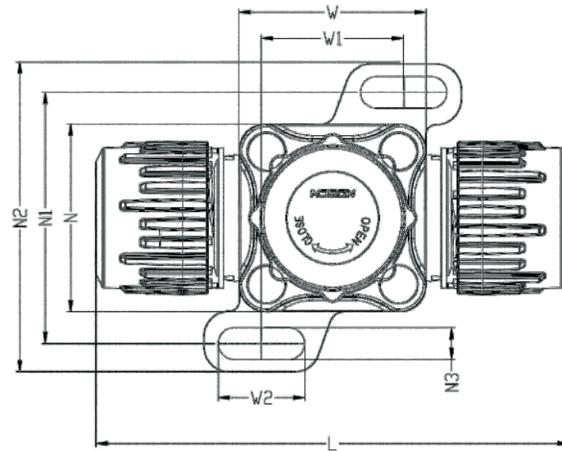
Standard

1/8				
1/4MINI				
1/4	311.760.2406	311.760.2406C	311.760.0406	311.760.0406C
3/8	311.760.2410	311.760.2410C	311.760.0410	311.760.0410C
1/2	311.760.2412	311.760.2412C	311.760.0412	311.760.0412C
3/4	311.760.2419	311.760.2419C	311.760.0419	311.760.0419C
1	311.760.2426	311.760.2426C	311.760.0426	311.760.0426C

Flare LINK is configured with PVDF NUT by default. For PFA material, see the code table on the last page.
Configurable 5... 160°C high temperature products .

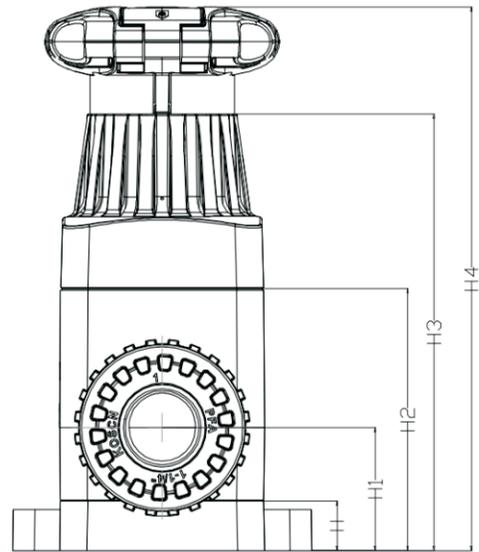
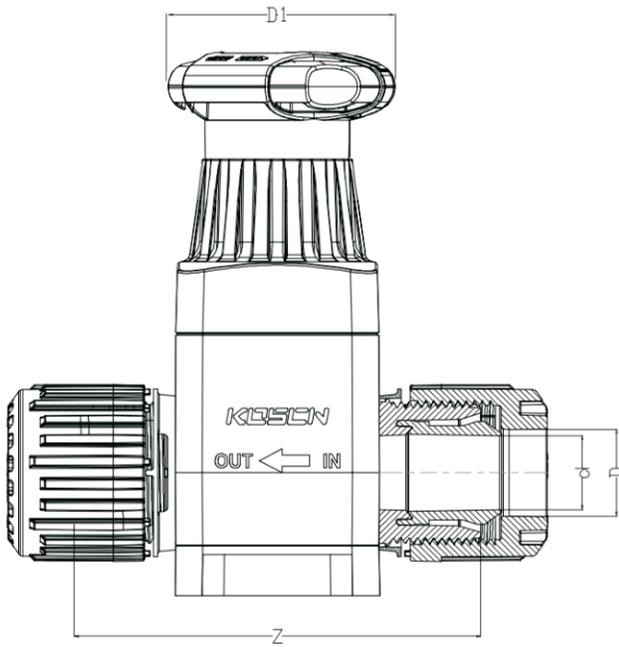
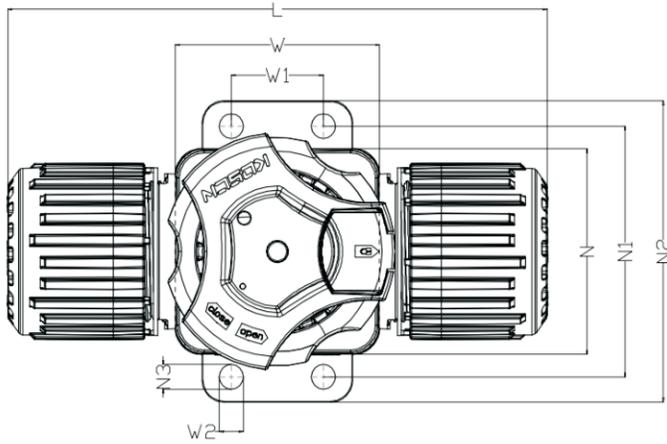
Large size

1-1/4	311.760.2431	311.760.2431C		
1-1/2	311.760.2438	311.760.2438C		
40A				
50A				



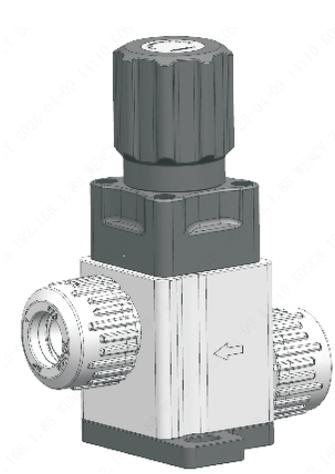
Unit: mm

Inch	D	d	D1	H	H1	H2	N	N1	N2	N3	W	W1	W2	L	Z
1/8															
1/4 MINI															
1/4	7,7	4,0	25	15,5	47	81	30	37,0	44	3,5	30	23,0	11,5	86,0	81,8
3/8	10,5	6,4	33	21,0	66	105	37	49,0	61	6,5	37	28,0	17,0	94,5	89,5
1/2	13,9	9,5	33	21,0	66	105	37	49,0	61	6,5	37	28,0	17,0	98,5	92,5
3/4	20,5	15,9	44	27,0	82	136	47	63,5	82	9,0	47	35,0	24,5	121,0	114,2
1	29,0	22,2	57	35,0	97	159	60	77,5	96	9,0	60	47,0	26,0	150,0	139,8



Unit: mm

Inch	D	d	D1	H	H1	H2	H3	H4	N	N1	N2	N3	W	W1	W2	L	Z
1-1/4	32,0	28,0	54	18,0	45	96	160	200	75	92	110	9,0	75	34,5	9,0	199	150
1-1/2	39,0	33,7	69	24,0	59	129	223	273	120	145	170	9,0	120	65,0	9,0	240	195
40A																	
50A																	

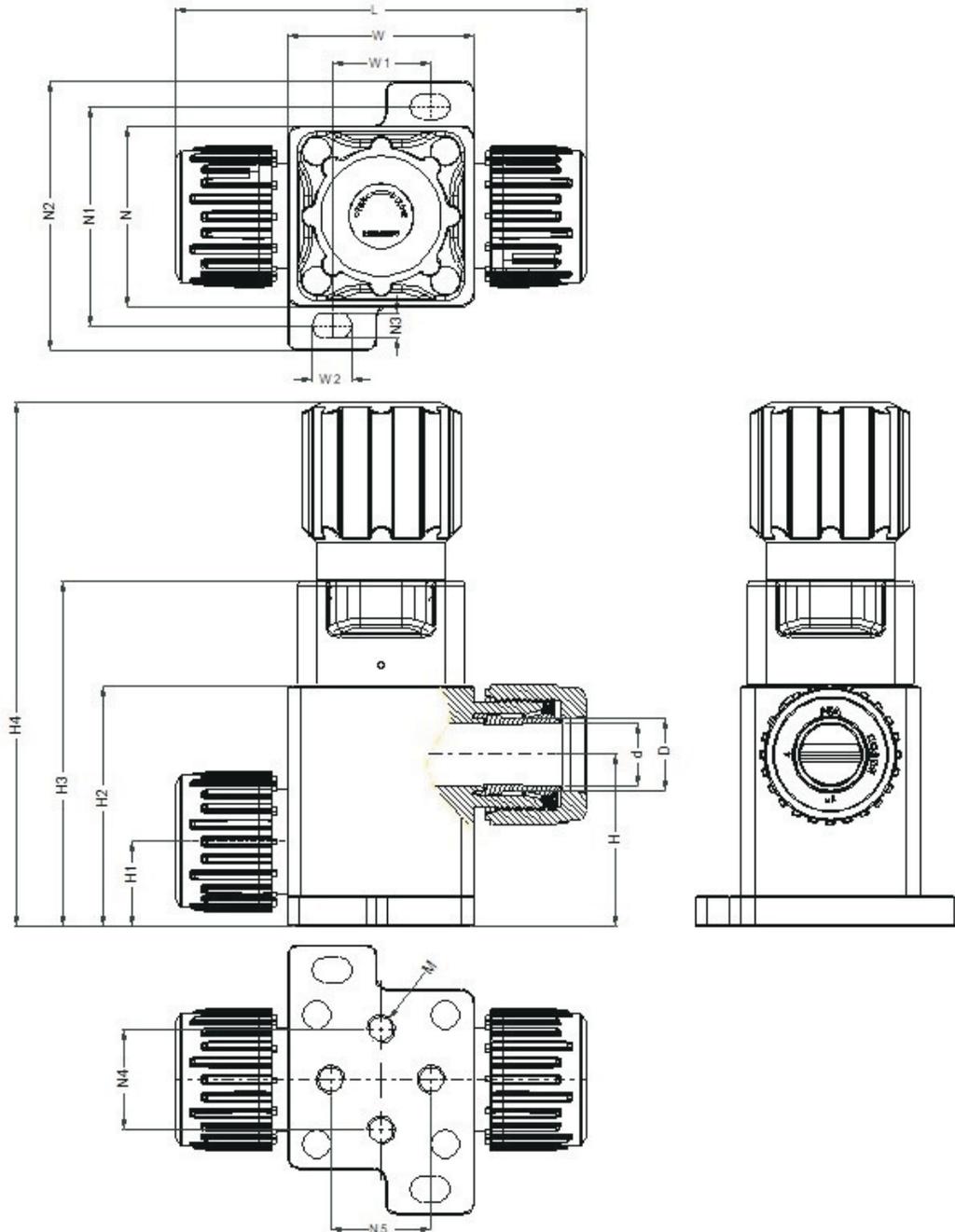


Performance data

<i>Item</i>	<i>Unit</i>	<i>Data</i>
Service pressure	bar	0...5,0
Backpressure	bar	0...3,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...190 (Excluding HF)
Ambient temperature	°C	0...60
Material	Valve body	PTFE
	Diaphragm	PTFE
	Actuating element	PPS
	Baseplate	PPS
	Bolt	SS Coating

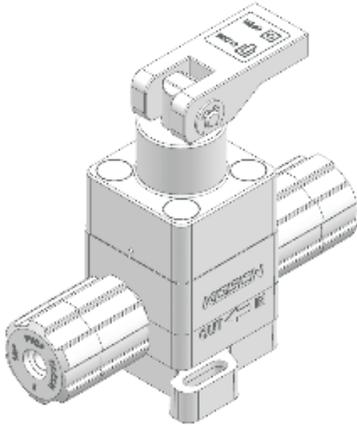
Product code

<i>Size (Inch)</i>	<i>Insert Bushing</i>
标准型	
1/4	311.860.2406H
3/8	311.860.2410H
1/2	311.860.2412H
3/4	311.860.2419H
1	311.860.2426H



Unit: mm

Inch	D	d	H	H1	H2	H3	H4	N	N1	N2	N3	N4	N5	M	W	W1	W2	L
1/4	7,7	4,0	27	18	36,0	56	85	30,0	/	/	/	20	20	M5	30,0	/	/	64
3/8	10,5	6,4	36	21	54,0	79	118	38,5	/	/	/	20	/	M5	38,5	/	/	88
1/2	13,9	9,5	36	21	54,0	79	118	38,5	/	/	/	20	/	M5	38,5	/	/	84
3/4	20,5	15,9	46	23	67,0	96	146	52,0	63,5	82	9	/	/	/	52,0	24,5	14	118
1	29,0	22,2	61	30	85,5	123	187	64,5	78,0	96	9	/	/	/	67,0	35,0	14	147



Performance data

Item	Unit	Data
Service pressure	bar	0...5,0
Backpressure	bar	0...3,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...60
Ambient temperature	°C	0...60
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PP-Natural
	Baseplate	PVDF
	Bolt	SS Coating

Product code

Size (Inch)	Insert Bushing		Flare LINK	
	PFA-UHP	PFA	PFA-UHP	PFA

Manual Toggle 90°

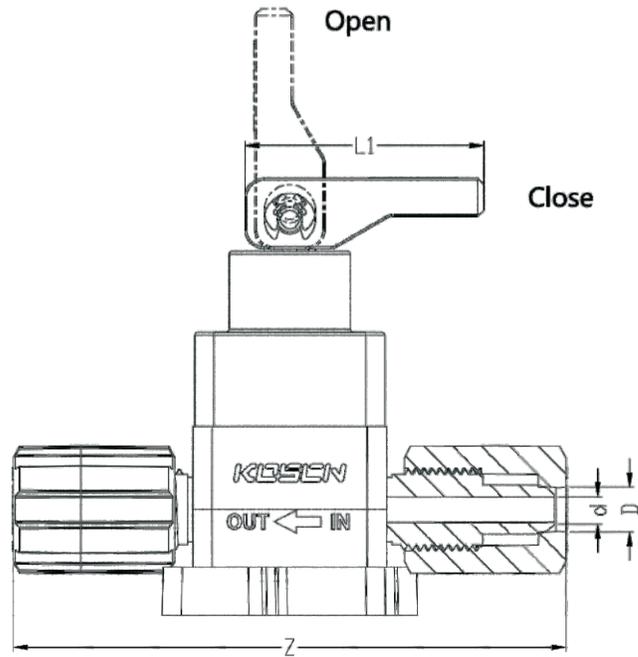
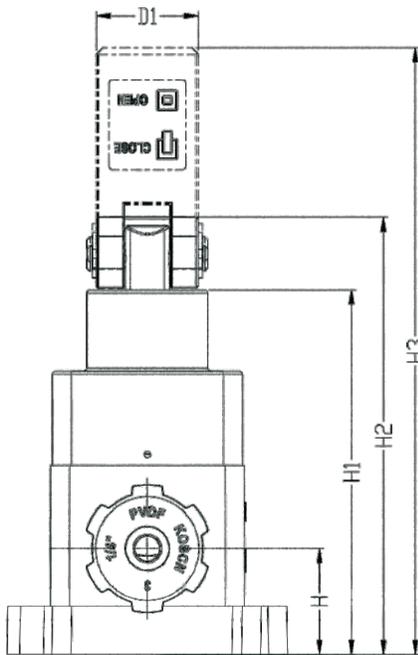
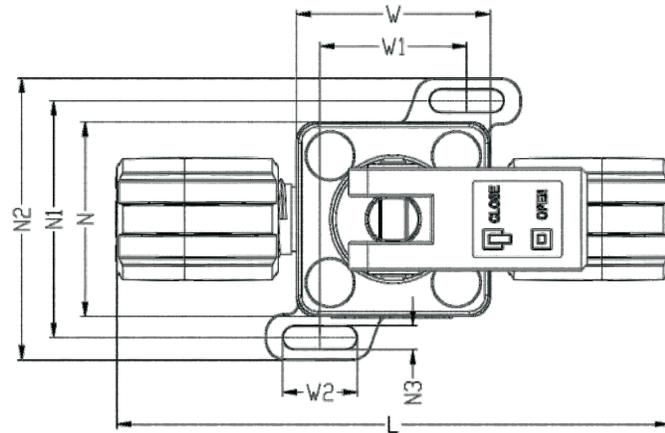
1/8				
1/4MINI				
1/4	311.767.2406	311.767.2406C	311.767.0406	311.767.0406C
3/8	311.767.2410	311.767.2410C	311.767.0410	311.767.0410C
1/2	311.767.2412	311.767.2412C	311.767.0412	311.767.0412C
3/4	311.767.2419	311.767.2419C	311.767.0419	311.767.0419C
1	311.767.2426	311.767.2426C	311.767.0426	311.767.0426C
1-1/4				
1-1/2				

Manual Toggle-Automatic closing

1/8				
1/4MINI				
1/4	311.766.2406	311.766.2406C	311.766.0406	311.766.0406C
3/8	311.766.2410	311.766.2410C	311.766.0410	311.766.0410C
1/2	311.766.2412	311.766.2412C	311.766.0412	311.766.0412C
3/4	311.766.2419	311.766.2419C	311.766.0419	311.766.0419C
1	311.766.2426	311.766.2426C	311.766.0426	311.766.0426C
1-1/4				
1-1/2				

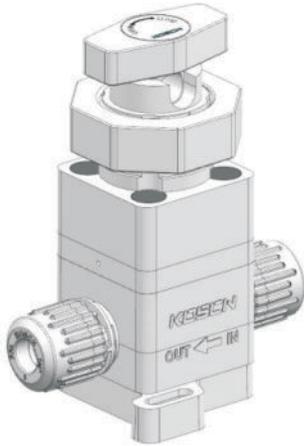
Flare LINK is configured with PVDF NUT by default. For PFA material, see the code table on the last page. Configurable 5... 160°C high temperature products .

DV311 , TOGGLE , SIZE



Unit: mm

Inch	D	d	D1	H	H2	H3	N	N1	N2	N3	W	W1	W2	L	L1
1/8															
1/4 MINI															
1/4	7,7	4,0	15,5	15,5	67	94	30	37,0	44	3,5	30	23,0	11,5	86,0	37,5
3/8	10,5	6,4	16,0	21,0	100	130	37	49,0	61	6,5	37	28,0	17,0	94,5	42,5
1/2	13,9	9,5	16,0	21,0	100	130	37	49,0	61	6,5	37	28,0	17,0	98,5	42,5
3/4	20,5	15,9	19,0	27,0	120	160	47	63,5	82	9,0	47	35,0	24,5	121,0	55,0
1	29,0	22,2	22,0	35,0	140	190	60	77,5	96	9,0	60	47,0	26,5	150,0	
1-1/4															
1-1/2															



Performance data

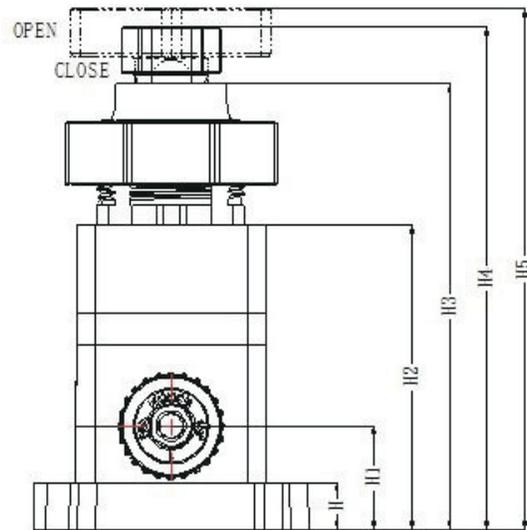
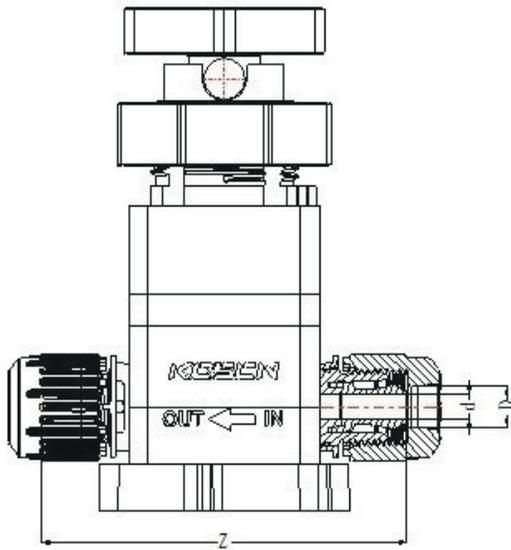
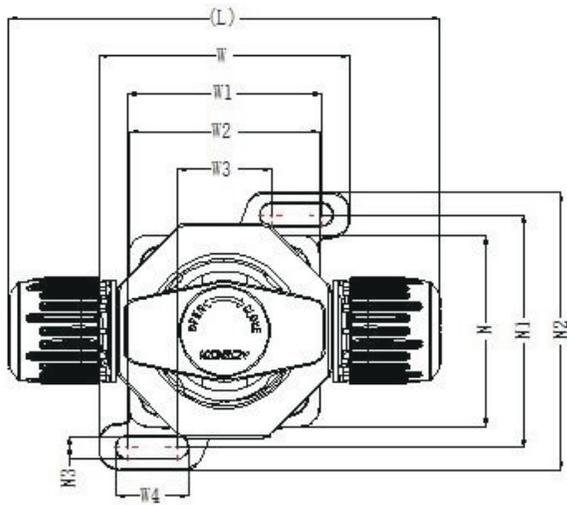
<i>Item</i>	<i>Unit</i>	<i>Data</i>
Service pressure	bar	0...5,0
Backpressure	bar	0...3,0
Leakage rate	cm ³ /min	0 (Based on water pressure)
Operating temperature	°C	5...60
Ambient temperature	°C	0...60
Material	Valve body	PFA
	Diaphragm	PTFE
	Actuating element	PP-Natural
	Baseplate	PVDF
	Bolt	SS Coating

Product code

<i>Size (Inch)</i>	<i>Insert Bushing</i>		<i>Flare LINK</i>	
	<i>PFA-UHP</i>	<i>PFA</i>	<i>PFA-UHP</i>	<i>PFA</i>
Hand lever				
1/4	311.765.2406	311.765.2406C	311.765.0406	311.765.0406C
3/8	311.765.2410	311.765.2410C	311.765.0410	311.765.0410C
1/2	311.765.2412	311.765.2412C	311.765.0412	311.765.0412C
3/4	311.765.2419	311.765.2419C	311.765.0419	311.765.0419C
1	311.765.2426	311.765.2426C	311.765.0426	311.765.0426C

Flare LINK's default configuration is being upgraded to PFA NUT, and since switching is done gradually during the manufacturing process, you may receive PFA NUT products at this stage, or PVDF NUT products. Hope to understand.

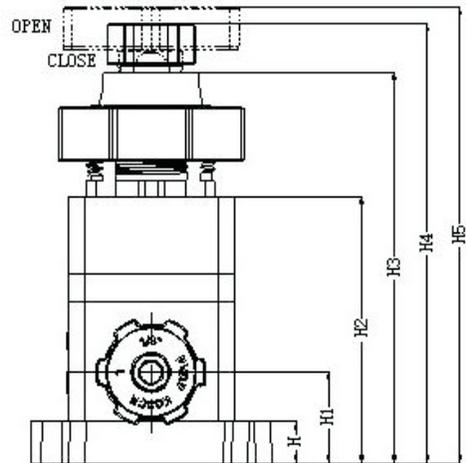
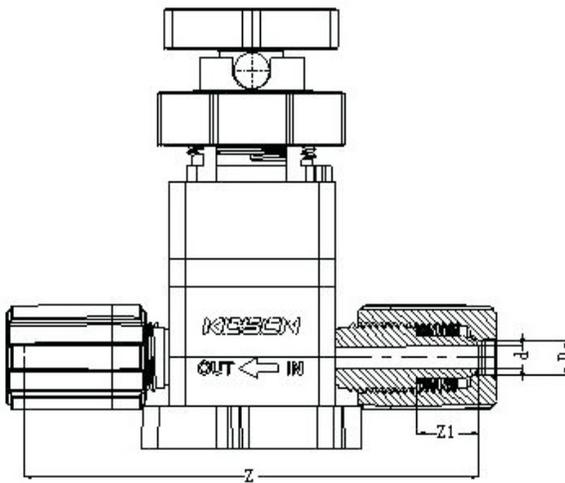
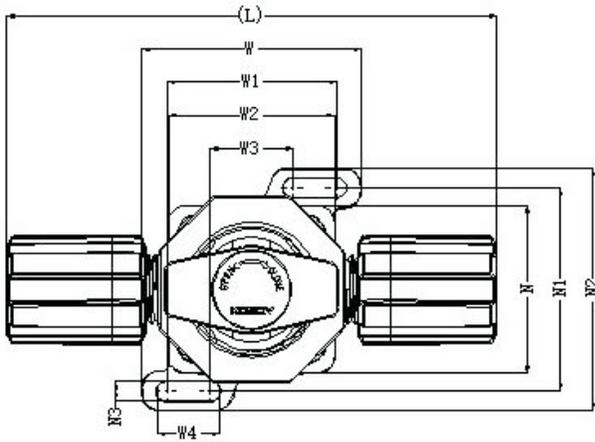
DV311 , MANUAL HAND LEVER , SIZE



Unit: mm

Inch	D	d	H	H1	H2	H3	H4	H5	N	N1	N2	N3	W	W1	W2	W3	W4	L	Z
1/4	6,5	4,0	7,5	16,5	48,5	71,0	80,0	82,8	30	37,0	44,0	3,5	40,0	31,0	30	15,0	11,5	69,0	58,0
3/8	9,5	6,6	8,4	21,0	65,7	92,4	104,0	107,0	37	49,2	62,2	6,2	50,6	38,8	37	17,2	17,0	87,2	76,8
1/2	12,7	9,8	8,4	21,0	65,7	92,4	104,0	107,0	37	49,2	62,2	6,2	50,6	38,8	37	17,2	17,0	93,1	80,5
3/4	19,2	16,0	9,0	27,0	77,1	107,3	116,8	120,8	47	63,4	82,0	9,0	67,6	50,5	47	19,5	24,5	117,0	101,0
1	25,5	22,0	10,0	35,4	97,6	137,6	149,6	154,6	60	78,0	96,4	9,0	84,3	64,0	60	30,0	26,0	146,1	129,0

DV311 , MANUAL HAND LEVER , SIZE



Unit: mm

Inch	D	d	H	H1	H2	H3	H4	H5	N	N1	N2	N3	W	W1	W2	W3	W4	L	Z	Z1
1/4	6,35	4,0	7,5	16,5	48,5	71,0	80,0	82,8	30	37,0	44,0	3,5	40,0	31,0	30	15,0	11,5	90,0	83,0	11
3/8	9,60	6,6	8,4	21,0	65,7	92,4	104,0	107,0	37	49,2	62,2	6,2	50,6	38,8	37	17,2	17,0	96,0	90,6	13
1/2	12,70	9,8	8,4	21,0	65,7	92,4	104,0	107,0	37	49,2	62,2	6,2	50,6	38,8	37	17,2	17,0	97,0	96,0	15
3/4	19,50	16,0	9,0	27,0	77,1	107,3	116,8	120,8	47	63,4	82,0	9,0	67,6	50,5	47	19,5	24,5	120,0	114,0	15
1	26,45	22,3	10,0	35,4	97,6	137,6	149,6	154,6	60	78,0	96,4	9,0	84,3	64,0	60	30,0	26,0	153,4	139,8	16,8

Order code

DV310 Pneumatic Chemical Liquid Valve	<input type="checkbox"/>									
Product series	3	1	0							
Valve body material										
PPN				5						
PVDF				6						
PFA				7						
PTFE				8						
SUS				9						
Installation form										
Flange installation					6					
Bottom installation D					8					
Bottom installation C					9					
Control mode										
NC						2				
NC (Manual flow regulation is available)						3				
NO						4				
NO (Manual flow regulation is available)						5				
DA						6				
DA (Manual flow regulation is available)						7				
Connection mode										
Flare LINK: PVDF NUT							0			
Insert Bushing							2			
Flare LINK: PFA NUT							4			
Spigot Bitt+IR							5			
Thread							9			
Connection standard										
ANSI NUT								4		
NPT								8		
R								9		
Interface size										
1/8"									03	
1/4"									06	
3/8"									10	
1/2"									12	
3/4"									19	
1"									26	
1-1/4"									31	
1-1/2"									38	
Limit Switch										
Optoelectronic switch-PNP										A0
Optoelectronic switch-NPN										A1
Controller-PNP										A2
Controller-NPN										A3

Order code

DV311 Manual
Chemical Liquid Valve

	<input type="checkbox"/>									
Product series										
	3	1	1							
Valve body material										
PPN				5						
PVDF				6						
PFA				7						
PTFE				8						
SUS				9						
Diaphragm material										
Flange installation				6						
Bottom installation D				8						
Bottom installation C				9						
Control mode										
Standard						0				
Handle switch						5				
Toggle-Automatic closing						6				
Toggle 90°						7				
Toggle 180°						8				
Toggle 180°-LOCK						9				
Connection mode										
Flare LINK: PVDF NUT							0			
Insert Bushing							2			
Flare LINK: PFA NUT							4			
Spigot Bitt+IR							5			
Thread							9			
Connection standard										
ANSI NUT								4		
NPT								8		
R								9		
Interface size										
1/8"										03
1/4"										06
3/8"										10
1/2"										12
3/4"										19
1"										26
1-1/4"										31
1-1/2"										38
40A										50
50A										63



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