

NUTORK®

Actuators & Valves

CE SIL3  EAC

Air Pilot Operated Valve

Poppet construction and design: 3/2 way & 4/2 way

The ports size range: 3/8", 1/2", 1", 1.5" & 2"

Material in aluminum alloy and 316SS



NUTORK CORPORATION

Directional Control Function:

Directional control valves function is to control the direction of flow in the pneumatic circuit. Directional control valves are able to control the way the air passes. These valves can regulate the airflow being capable to stop fluid flow. and change the direction of fluid flow.

Technical Data:

Function		3/2 and 4/2 way air pilot operated valve					
Construction Design		Poppet construction for high dirt tolerance					
Construction Material	Valve body	Aluminum alloy or 316SS					
	Poppet	Acetal and 316SS					
	Seals	Buna-N(std.), Viton(High Temp.), HNBR(Low Temp.) & Silicone(EAC Low Temp.)					
Medium(Note)		Filtered air. No lubrication needed, if applied it shall be continuous					
Mounting		Inline type, Orientation:in any position,preferably vertical					
Max. working pressure (bar)		10					
Minimum piloting pressure (bar)		2.0					
Ambient Temperature °C		-25°C ~ +75°C(Std. Temperature)					
		-25°C ~ +150°C(High Temperature)					
		-40°C ~ +75°C(Low Temperature)					
		-60°C ~ +75°C(Very Low Temperature)					
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	3/2 Way	3800	4850	10500	14000	49000	57000
	4/2 Way	2750	3200	9350	13900		
Orifice size (mm)		10	15	20	25	40	50
Working ports size(G or NPT)		3/8"	1/2"	3/4"	1"	1.5"	2"
Pilot port size		1/4"NPT					

Note:Air supply must be dry enough to avoid ice formation at temperature below +2°C(+35°F)

Ordering Information:

Basic Function Material Port Size Amb. Temp.

AOV

Material:

1. Code L: Aluminum Alloy
2. Code S: 316SS

Function:

1. Code 3: 3/2 way
2. Code 4: 4/2 way

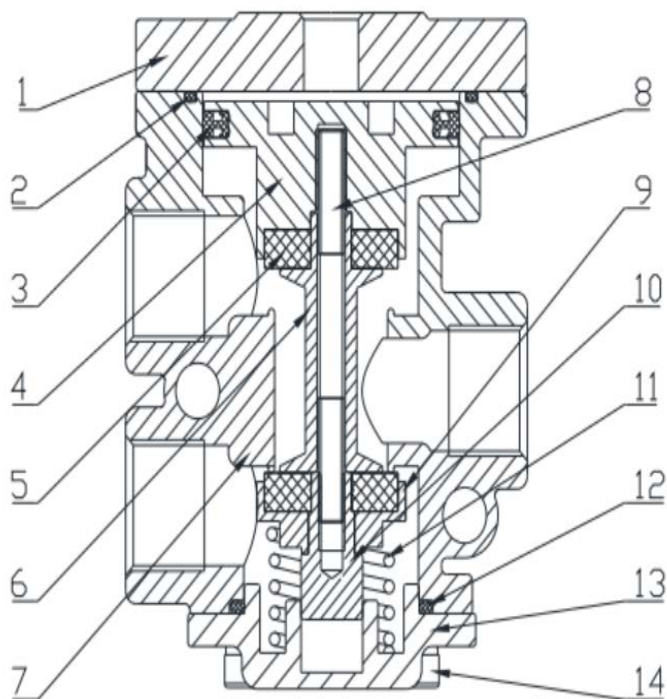
Port Size:

1. Code 03: 3/8"
2. Code 04: 1/2"
3. Code 06: 3/4"
4. Code 08: 1"
5. Code 12: 1.5"
6. Code 16: 2"

Amb. Temp.:

1. Code Blank: -25°C ~ +75°C(Std. Temperature)
2. Code HT: -25°C ~ +150°C(High Temperature)
3. Code LT: -40°C ~ +75°C(Low Temperature)
4. Code LLT: -60°C ~ +75°C(Very Low Temperature)

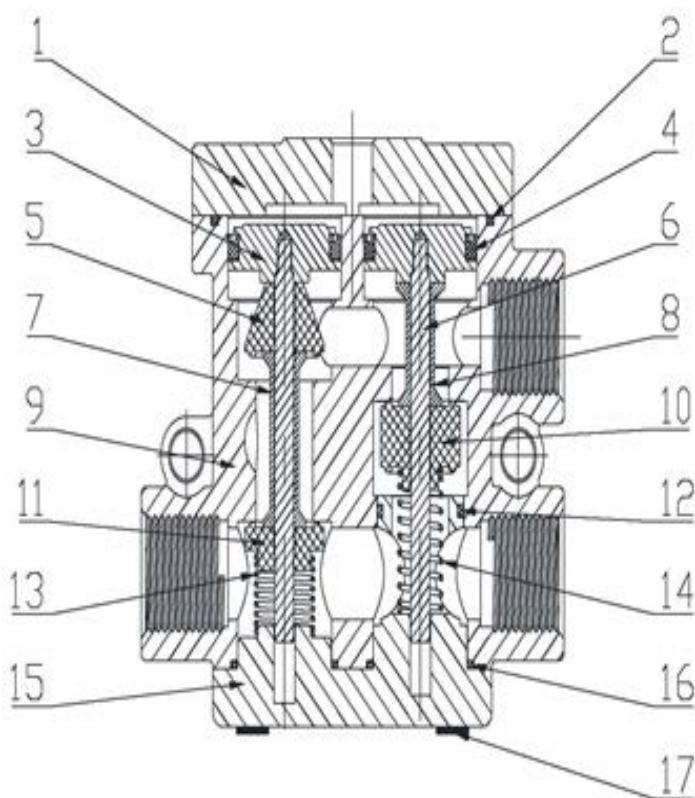
3/2 way:



Part list:

Label	Name	Material	Label	Name	Material
1	Top Cover	Aluminum Alloy/ Stainless Steel	8	Screw	Stainless Steel
2*	O-ring	NBR/ Silicone Rubber	9	Valve Seat	Aluminum Alloy/ Stainless Steel
3*	Piston Sealing Ring	NBR/ Silicone Rubber	10	Hexagonal Nut	Stainless Steel
4	Piston	Aluminum Alloy/ Stainless Steel	11*	Compression Spring	Spring Steel/ Stainless Steel
5*	Flat Cushion	NBR/ Silicone Rubber	12*	O-ring	NBR/ Silicone Rubber
6	Spool	Stainless Steel	13	Bottom Cover	Aluminum Alloy/ Stainless Steel
7	Valve body	Aluminum Alloy/ Stainless Steel	14	Hexagonal Screw	Stainless Steel
*Recommended Spare Parts		Please select appropriate spare parts according to the port size and model, included labels 2, 3, 5, 11, and 12.			

4/2 way:

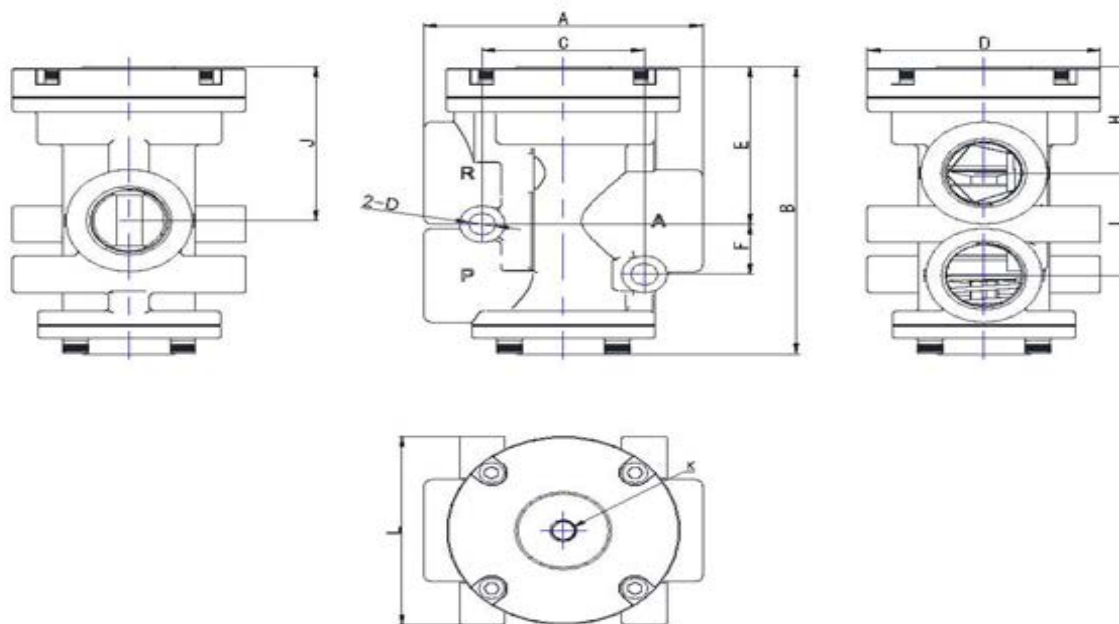


Part list:

Label	Name	Material	Label	Name	Material
1	Top Cover	Aluminum Alloy/ Stainless Steel	10*	Sealing Element B	Assembly
2*	O-Ring	NBR/ Silicone Rubber	11*	Sealing Element A2	Assembly
3	Piston	Aluminum Alloy/ Stainless Steel	12*	O-ring	NBR/ Silicone Rubber
4*	Piston Sealing Ring	NBR/ Silicone Rubber	13*	Compression spring	Spring Steel/ Stainless Steel
5*	Sealing Element A1	Assembly	14*	Compression spring	Spring Steel/ Stainless Steel
6	Spool	Stainless steel	15	Bottom cover	Aluminum Alloy/ Stainless Steel
7	Shaft Sleeve A	Aluminum Alloy/ Stainless Steel	16*	O-ring	NBR/ Silicone Rubber
8	Shaft Sleeve B	Aluminum Alloy/ Stainless Steel	17	Hexagonal Screw	Stainless steel
9	Valve Body	Aluminum Alloy/ Stainless Steel	N/A		
*Recommended Spare Parts		Please select appropriate spare parts according to the port size and model, included labels 2, 4, 5, 10,11,12,13,14, and 16.			

Outline Dimension:

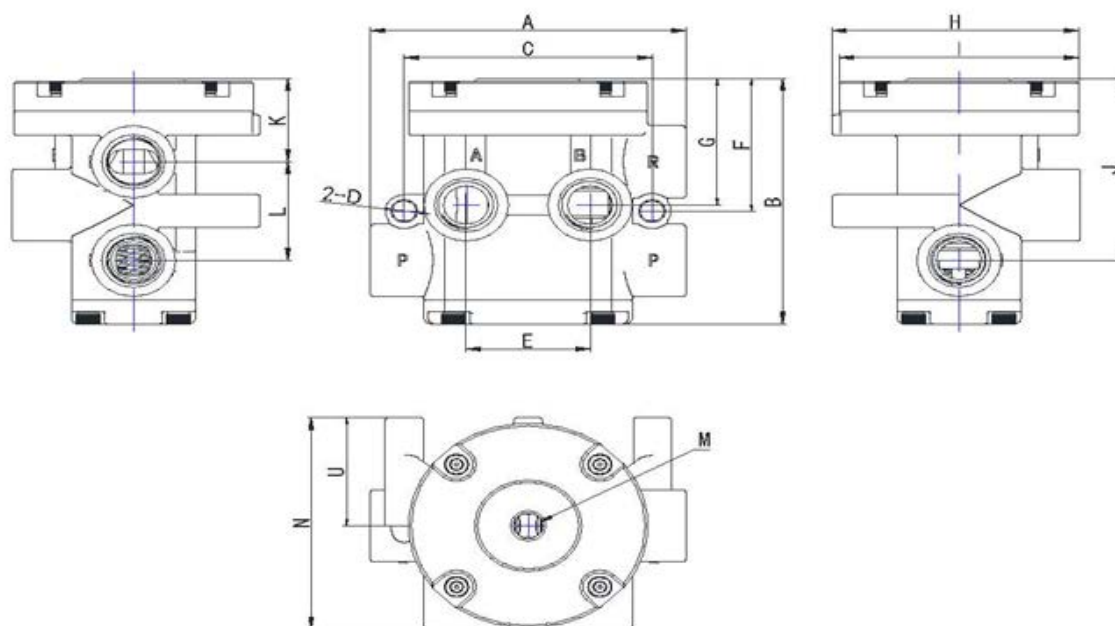
3/2 way:



Unit: mm

Port Size	A	B	C	D	E	F	G	H	I	J	K	L
3/8" & 1/2"	78.2	103.5	52	8.5	57.5	19	76	40.5	35	58	NPT1/4	76
3/4" & 1"	110	140.5	64	10.5	77	24.5	92	52	50	75	NPT1/4	92
1-1/2" & 2"	200	234	116	16.5	128	40	165	85	83.5	125	NPT1/4	165

4/2 way:



Unit: mm

Port Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	U
3/8" & 1/2"	112	102	88	8.5	44	55	52.5	87.5	85	75.5	34.5	41	NPT1/4	88	45
3/4" & 1"	156	135.5	119	10.5	57	69	66	107.5	105	99	40	59	NPT1/4	112	55