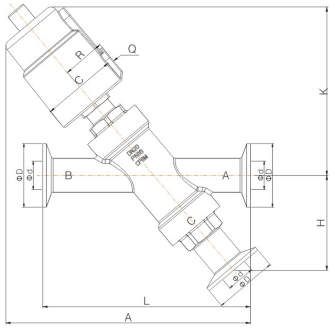
ESG®

Multi-channel Valve



Main Dimension (Tri-clamp connection)

Size	Actuator	Q	C	R	D	d	A	K	H	L	Weight (kg)
DN20	50	1/8"	50.5	27	50.5	22.5	200	140	76	165	1.98

Single Acting Control

Size	Actuator	Orifice	Flow value Kv(m³/h)			A→B&A→C		B→A&C→A		B→A&A→C	
			A-B	B-A	A-C	Differential pressure range(MPa)	Control pressure (Mpa)	Differential pressure range(MPa)	Control pressure (Mpa)	Differential pressure range(MPa)	Control pressure (Mpa)
DN20-A	50	24	9.5	11.9	9.8	0-1.0	0.5-0.7	0-0.6	0.5-0.65	0-1.0	0.5-0.7
DN20-B						0-1.6	0.35-0.7	0-0.3	0.35-0.45	0-1.6	0.35-0.7

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

Double Acting Normally Closed Control

Size	Actuator	Orifice	Flow value Kv(m³/h)			A→B&A→C		B→A&C→A		B→A&A→C	
			A-B	B-A	A-C	Differential pressure range(MPa)	Control pressure (Mpa)	Differential pressure range(MPa)	Control pressure (Mpa)	Differential pressure range(MPa)	Control pressure (Mpa)
DN20-B	50	24	9.5	11.9	9.8	0-1.6	0.35-0.7	0-1.6	0.35-0.7	0-1.6	0.35-0.7

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

Double Acting Without Spring Control

Size	Actuator	Orifice	Flow value Kv(m³/h)			A→B&A→C		B→A&C→A		B→A&A→C	
			A-B	B-A	A-C	Differential pressure range(MPa)	Control pressure (Mpa)	Differential pressure range(MPa)	Control pressure (Mpa)	Differential pressure range(MPa)	Control pressure (Mpa)
DN20	50	24	9.5	11.9	9.8	0-1.6	0.3-0.6	0-1.6	0.3-0.7	0-1.6	0.3-0.6

Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

109 Series Pneumatic Modular Valve

Technical Specification

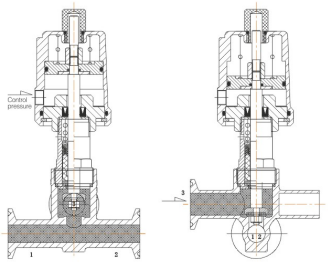
- Operating pressure: 0–16bar (0–232psi)
- Control pressure: 3–8bar (43.5–116psi)
- Control medium: Filtered compressed air or neutral gas
- Body material: CF8M/CF3M and other special materials
- Actuator material: CF8
- Seal material: PTFE
- Medium temperature: –10℃ — +180℃
- Ambient temperature: –10℃ — +80℃
- Control type: Single acting normally closed,
  Double acting normally closed,
  Double acting without spring
- Connection type: Tri–clamp
- Applicable medium: Water, Steam, Oil, Neutral gas or Liquid,
  Organic solvent, Acid and lye
- Leakage class: DIN EN 12266 Class A

Function Principle

When the valve is in idle state, due to the spring force the valve is Normally Closed (No.3 port), the bottom two ports are Normally Open (No.2 port); When the actuator piston is pressed by air, the valve opens, fluids from NO.3 port goes into No.1 and No.2 ports. When Double Acting, the valve opens/closes by compressed air.

Advantages

1. Easy to clean
   a. Seat is separate from the public ports. Well machined inner wall of the public ports ensures a smooth flow.
   b. The valve utilizes bottom seal and seal ring for connection to valve stem in order to avoid fluid residue and allow effortless cleaning.
2. The modular valve system is easy to install and assemble, allowing many different layouts. It is a good choice for mixing, distributing and collecting fluids.



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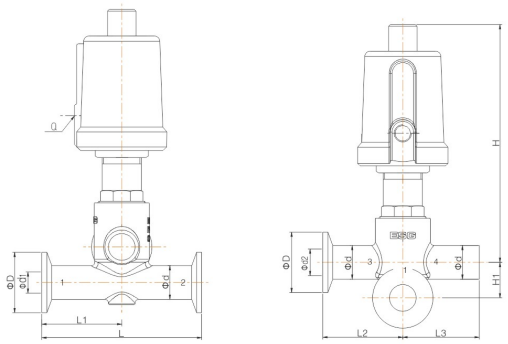
Multi-channel Valve



Main Dimension

Size	Actuator	Q	ΦD	Φd	Φd1	Φd2	H	H1	L1	L2	L3	L
DN10	40	1/8"	34	19	12	15	134	20	45	45	43	90
DN20	50	1/8"	50.5	29.5	24	24	140	30	60	60	43	120
DN25	63	1/8"	50.5	34	29.5	29.5	165	39	65	63.5	55	130

Order Instruction

109 X XXX XX X X (*)

- 109 — Series No.
- X — Control type: 1: Single acting normally closed; 2: Double acting normally closed; 3: Double acting without spring
- XXX — Size: D10、D20、D25
- XX — Connection type: K7: Tri-clamp ISO2852
- X — Body material: 2: CF8M; 6: CF3M
- X — Sealing material: 2: PTFE Normal temperature; 4: Graphite Normal temperature; 5: Graphite High temperature; *: Customized sealing
- (*) — Customization: E: Complying with EC1935; *: Special customization

110 Series Pneumatic Manifold Valve

Technical Specification

- Operating pressure: 0–16bar (0–232psi)
- Control pressure: 3–8bar (43.5–116psi)
- Control medium: Filtered compressed air or neutral gas
- Seal material: PTFE
- Body material: CF8/CF8M/CF3M and other special materials
- Applicable medium: Water, Oil, Ail and other liquid
- Medium temperature: −10℃ — +180℃, +25℃ — +220℃
- Ambient temperature: −10℃ — +80℃
- Connection type: Welded, Threaded, Diamond flange
- Control type: Single acting normally closed,
  Double acting normally closed,
  Double acting without spring
- Leakage class: DIN EN 12266 Class A

Advantages

Manifold valve adopts three–way connection design for optimal pipeline layout. It has aesthetic appearance, compact structure, and superb performance. A great choice for material blending.

Order Instruction

110 X XXX XX X X (*)

- 110 — Series No.
- X — Control type: 1: Single acting normally closed; 2: Double acting normally closed; 3: Double acting without spring
- XXX — Size: D15、D20、D25
- XX — Bottom connection: G1: Threaded BSP DIN ISO 228–1(DN15, DN 25); HA: Welded Manifold dimension A(DN20, DN25); F1: Diamond flange(DN20, DN 25)
- X — Body material: 1: CF8; 2: CF8M; 6: CF3M
- X — Sealing material: 2: PTFE Normal temperature; 3: PTFE High temperature; 4: Graphite Normal temperature; 5: Graphite High temperature; *: Customized sealing
- (*) — Customization: E: Complying with EC1935; *: Special customization