



Filling Valve

1AA Series
27mm Actuator
Pipe-less Filling Valve

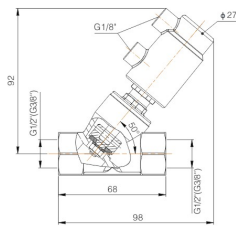


1AB Series
Pipe-less Filling Valve

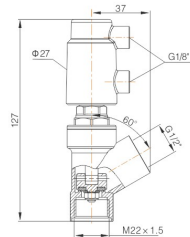


Technical Specification

- Control type: Double acting normally closed, Double acting without spring
- Operating pressure: 0–7bar (0–102psi)
- Control medium: Filtered compressed air or neutral gas
- Control pressure: 3–4.5bar (44–65psi)
- Body material: CF8/CF8M/CF3M and other special materials
- Seal material: PTFE
- Medium temperature: –10°C — +120°C
- Ambient temperature: –10°C — +80°C
- Connection type: Threaded connection (BSP, BSPT, NPT)



1AA Series 27mm Actuator
Pipe-less Filling Valve



1AB Series
Pipe-less Filling Valve

Advantages

- The filling valves is widely used in filling machinery, suitable for viscous, pasty and even foamy fluids with accurate and stable filling.
- 1AA series with 27mm actuator and 1AS series, the valve core made a flexible seat, it can be the self-adjustable with good sealing performance.

1AC/1AF Series
Filling Valve with
Internal Sealing



1AP Series
Filling Valve with Internal
Sealing and Suction

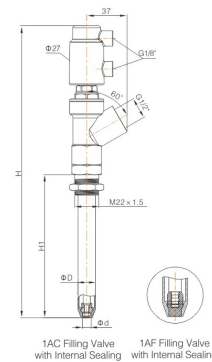


Technical Specification

- Control type: Double acting normally closed, Double acting without spring
- Operating pressure: 0–7bar (0–102psi)
- Control pressure: 3–4.5bar (44–65psi)
- Body material: CF8M/CF3M and other special materials
- Seal material: PTFE
- Medium temperature: –10°C — +120°C
- Ambient temperature: –10°C — +80°C

Advantages

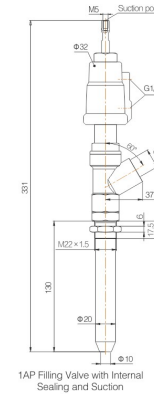
- It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
- Fast, accurate and stable filling.
- Delicate and compact, easy to arrange pipeline layout.
- Special nozzle structure and sealing design ensure no dripping leakage.
- Bottom chamfer structure of the nozzle self-locates and enables submerged filling.
- Internal suction pipe effectively recovers dripping liquid.



1AC Filling Valve
with Internal Sealing



1AF Filling Valve
with Internal Sealing



1AP Filling Valve with Internal
Sealing and Suction

1AC/1AF Main Dimension

Size	φ D	φ d	H	H1
1AC	20	10	267	130
1AC	18	9	267	130
1AF	16	8	267	130

ESG®

Filling Valve



1AL/1AM Series Filling Valve with Internal Sealing

1AL/1AM Series Filling Valve with Internal Sealing and Suction

1AD Series Filling Valve with External Sealing

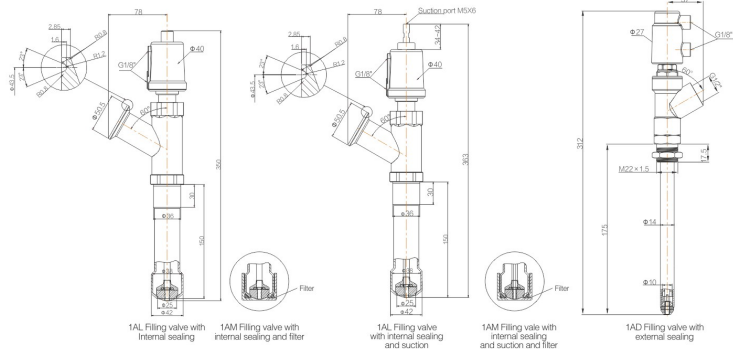
* Accessory can be installed on top of actuator

Technical Specification

- Control type: Double acting normally closed, Double acting without spring
- Operating pressure: 0–7bar (0–102psi)
- Control pressure: 3–4.5bar (44–65psi)
- Body material: CF8M
- Seal material: PTFE
- Medium temperature: –10°C — +120°C
- Ambient temperature: –10°C — +80°C

Advantages

- It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
- Fast, accurate and stable filling.
- Delicate and compact, easy to arrange pipeline layout.
- Special nozzle structure and sealing design ensure no dripping leakage.
- Bottom chamfer structure of the filling nozzle self-locates and enables submerged filling.
- The head gourd shape design of the filling tube reduces weight and cost without sacrificing flow rate.
- With super strong suction function, it can timely recover the liquid sliding down the pipe wall without dripping.



1AL Filling valve with Internal sealing

1AM Filling valve with internal sealing and filter

1AL Filling valve with internal sealing and suction

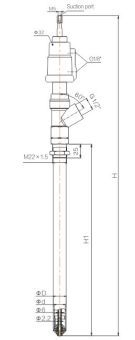
1AM Filling valve with internal sealing and suction and filter

1AD Filling valve with external sealing



1AJ/1AE/1AK Series Filling Valve with External Sealing and Suction

1AG/1AI/1AH Series Filling Valve with External Sealing and Suction



1AJ/1AG/1AE/1AI/1AK/1AH Series

Technical Specification

- Control type: Double acting normally closed, Double acting without spring
- Operating pressure: 0–7bar (0–102psi)
- Control pressure: 3–4.5bar (44–65psi)
- Body material: CF8M/CF3M and other special materials
- Seal material: PTFE
- Medium temperature: –10°C — +120°C
- Ambient temperature: –10°C — +80°C

Advantages

- Superior performance in easy foaming fluids filling.
- Delicate and compact structure easy for pipeline layout.
- Fast and stable filling.
- Special suction design ensure no dripping leakage.
- Special tip seal structure enables convenient maintenance and replacements.

Main Dimension

Size	Φ D	Φ d	H1	Size	H
1AJ	20	17	300		502
1AG	20	17	130		332
1AE	16	13	300		502
1AI	16	13	130		332
1AK	12	9	300		502
1AH	12	9	130		332

ESG®

Filling Valve

1A1 Series
Sauce Filling Valve
with Internal Sealing

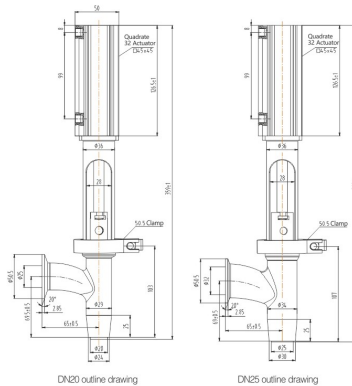


Technical Specification

- Control type: Double acting without spring
- Operating pressure: 0–7bar (0–102psi)
- Control pressure: 4–7bar (58–102psi)
- Control medium: CF8M/CF3M and other special materials
- Seal material: UPE
- Medium temperature: –10°C — +110°C
- Ambient temperature: –10°C — +60°C

Advantages

- Widely used in filling machinery. Suitable for viscous, granular sauce filling. Such as beef sauce, chili sauce, bean paste, etc.
- Fast, accurate and stable filling.
- The internal structure adopts plunger design, resulting in easy cleaning and minimal residue.
- The filling body and the connection are connected by tri-clamp, so that they can be installed, uninstalled, and adjusted easily.
- Long valve stroke enables large-capacity filling.
- Accessories, such as proximity switch and position indicator, can be installed on top of actuator to enable feedback of valve open/close state.



1A2 Series
Filling Valve with
Internal Sealing



* Customization available

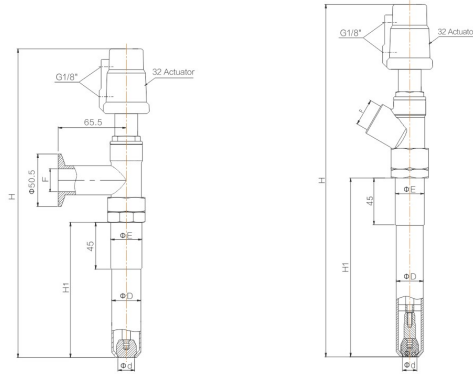
Technical Specification

- Control type: Double acting normally closed, Double acting without spring
- Operating pressure: 0–7bar (0–102psi)
- Control pressure: 3–4.5bar (44–65psi)
- Body material: CF8M/CF3M and other special materials
- Seal material: PTFE
- Medium temperature: –10°C — +120°C
- Ambient temperature: –10°C — +80°C

Advantages

- It is widely used in filling machinery, especially for applications with viscous, pasty and even foamy fluids.
- Fast, accurate and stable filling.
- Delicate and compact, easy to arrange pipeline layout.
- Special nozzle structure and sealing design ensure no dripping leakage.
- Bottom chamfer structure of the filling nozzle self-locates and enables submerged filling.
- The valve utilizes bottom seal and seal ring for connection to valve stem in order to avoid fluid residue and allow effortless cleaning.
- Internal suction structure recovers dripping liquid along the pipe wall.

Filling Valve



Main Dimension (1A2 Series)

Size	Connection method	Actuator	ΦD	Φd	F	H	H1	ΦE (Optional)
DN15	Threaded connection Tri-clamp connection	32	12	5	G1/2 NPT1/2 BSPT1/2 Φ 16	220-540	60-380	Φ 20/M22X1.5
			14	6.5				
			16	8				
			18	9				
			20	10				
			24	13				
DN20	Threaded connection	32	18	9	G3/4" NPT3/4" BSPT3/4" M26X1.5	227-547	60-380	Φ 26/M28X1.5
			20	10				
			22	11.5				
			24	13				
			26	14				
			28	16				
DN25	Tri-clamp connection	32	18	9	Φ 22	227-547	60-380	Φ 26/M28X1.5
			20	10				
			22	11.5				
			24	13				
			26	14				
			28	16				

Order Instruction

Series	Actuator	Control type	Inlet size	Pipe outer diameter (mm)	Pipe length (mm)	Sealing structure	Suction	Connection type	Valve securement	Body Material	Special customization EC 1935	
		2: Double acting normally closed 3: Double acting without spring				I: Internal sealing E: External sealing	0: Without suction 1: With suction	G1: Threaded BSP DIN ISO 228-1 T1: Threaded BSPT DIN 2999-1MS07-1 N1: Threaded NPT ASME B1.20.1 M1: M26*1.5 H7: Welded DIN 11850-2/DIN 11966 A H8: Welded DIN 11850-3 H9: Welded Chamfer K7: Tri-clamp ISO 2862-50.5	0: No securement M: Thread securement D: Pipe securement	1: CF8 2: CF8M 6: CF3M		
1AA	A27	2/3	D10	00	000	I	0	G1/T1/N1	0		1/2/6	
	A27	2/3	D15	00	000	I	0	G1/T1/N1/H7/H8/H9/K7	0		1/2/6	
1AB	A27	2/3	D15	00	000	I	0	G1/T1/N1	0		1/2/6	
1AC	A27	2/3	D15	20	130	I	0	G1/T1/N1	MD	2/6		
	A27	2/3	D15	18	130	I	0	G1/T1/N1	MD	2/6		
1AF	A27	2/3	D15	16	130	I	0	G1/T1/N1	MD	2/6		
1AP	A32	2/3	D15	20	130	I	1	G1/T1/N1/K7	MD	2/6		
1AD	A27	2/3	D15	14	175	E	0	G1/T1/N1	MD	2/6		
1AJ	A32	2/3	D15	20	300	E	1	G1/T1/N1/K7	MD	2/6		
1AG	A32	2/3	D15	20	130	E	1	G1/T1/N1/K7	MD	2/6		
1AE	A32	2/3	D15	16	300	E	1	G1/T1/N1/K7	MD	2/6		
1AI	A32	2/3	D15	16	130	E	1	G1/T1/N1/K7	MD	2/6		
1AK	A32	2/3	D15	12	300	E	1	G1/T1/N1/K7	MD	2/6		
1AH	A32	2/3	D15	12	130	E	1	G1/T1/N1/K7	D	2/6		
1AL	A40	2/3	D25	42	150	I	0/1	K7	D	2/6		
1AM	A40	2/3	D25	50	150	I	0/1	K7	D	2/6		
1A1	A32	3	D25	29	40	/	0	K7	/	1/2/6		
	A32	3	D32	34	40	/	0	K7	/	1/2/6		
1A2	A32	2/3		D15	60-380	I	0	G1/T1/N1/K7	MD	2/6		
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