

CHECK VALVES

Beaver API 594 Cast Wafer/Lugged Dual Plate Check Valve

A group of non-return valves that are durable and compact in size and weight to control back flow.

C51, C52, C53, C54, C55, C56



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Beaver C51 Dual Plate Check Valve

Beaver C51–C56 API 594 Cast Wafer/Lugged Dual Plate Check Valve

The Beaver API 594 dual plate check valve uses two spring-loaded plates on a central hinge pin. The flow pressure moves the two half-discs off the seats to allow forward flow. When flow decreases, the discs close on to the seat and block reverse flow.

The spring-loaded disc design eliminates slamming or hammering caused by fluid backflow. This reduces wear on pipelines and pumps. It's also a more compact and lightweight design compared to a swing check valve.

Available in wafer or lugged design, this Beaver dual plate check valve complies with API 594 standards.

KEY FEATURES

- Dual plate design eliminates slamming and water hammer, reducing wear on pipelines and pumps.
- Lower rates of wear and tear of seals due to the lift and swing plate action.
- Compact and lightweight for easier handling and self-support.
- Spring action allows for horizontal or vertical fitting.
- Available from DN50–600, with pressure ratings of Class 150–600.

Need technical advice? Our friendly specialists are here to help.

C51–C56

API 594 Cast Wafer/Lugged Dual Plate Check Valve

Tables 1–2. C51–C56 Specifications

Technical Specifications	
Brand	Beaver
Model	C51 (Class 150 Wafer) C52 (Class 150 Lugged) C53 (Class 300 Wafer) C54 (Class 300 Lugged) C55 (Class 600 Wafer) C56 (Class 600 Lugged)
Size range	DN50–600 (2–24")
Pressure class	Class 150/300/600
End connections	Wafer and lugged
Temperature range	-29°C to 425°C
Design and manufacture	API594
Flange dimension	ASME B16.5
Testing and checking	API598

Tables 1–2. C51–C56 Specifications

Material Specifications	
Body, disc	WCB, CF8, CF8M, Cast iron
Seat	13Cr, SS304, SS316
Stem	13Cr, F304, F316
Spring, spacer, plug screw	SS304, SS316
Gasket	PTFE
Flying ring	WCB, SS304

C51, C53, C55

API 594 Cast Wafer Dual Plate Check Valve

Diagram 1. C51, C53, C55 Wafer Parts

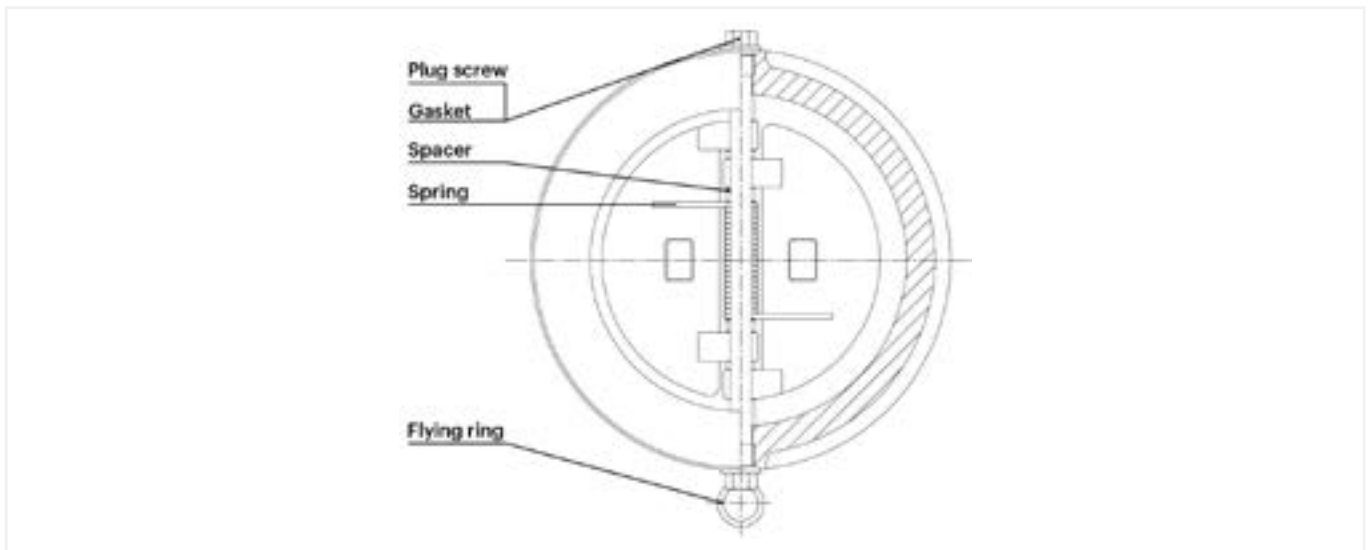


Diagram 2. C51, C53, C55 Wafer Parts

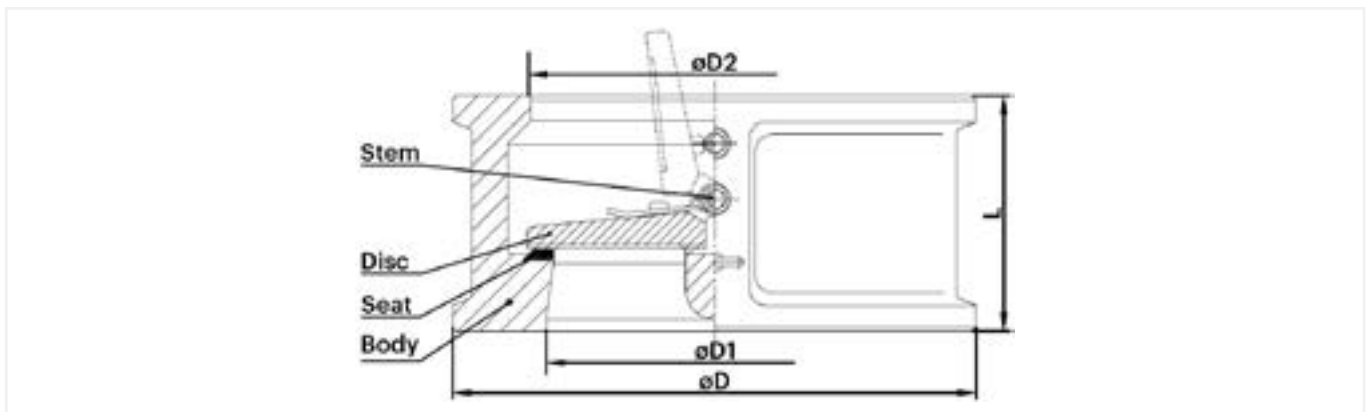


Table 1. C51 Class 150 Wafer Dimensions

Product Dimensions (mm)				
Size (DN)	L	D	D1	D2
DN50	60	103	51	56
DN65	67	122	65	73
DN80	73	135	80	88
DN100	73	173	102	110
DN125	86	195	127	132
DN150	98	220	152	160
DN200	127	277	203	210
DN250	146	337	254	266
DN300	181	407	305	310
DN350	184	448	350	355
DN400	191	512	400	405
DN450	203	547	450	455
DN500	219	604	500	505
DN600	222	715	600	605

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API 594 Cast Wafer Dual Plate Check Valve

Table 2. C53 Class 300 Wafer Dimensions

Product Dimensions (mm)				
Size (DN)	L	D	D1	D2
DN50	60	110	51	58
DN65	67	128	65	73
DN80	73	147	80	88
DN100	73	179	102	108
DN125	86	214	127	132
DN150	98	249	152	160
DN200	127	305	203	210
DN250	146	359	254	266
DN300	181	420	305	310
DN350	222	483	350	355
DN400	232	537	400	405
DN450	264	594	450	455
DN500	292	652	500	505
DN600	318	772	600	608

Table 3. C55 Class 600 Wafer Dimensions

Product Dimensions (mm)				
Size (DN)	L	D	D1	D2
DN50	60	110	51	58
DN65	67	128	65	73
DN80	73	147	80	88
DN100	79	191	102	108
DN125	105	239	127	136
DN150	136	264	152	162
DN200	165	318	200	212
DN250	213	398	250	266
DN300	229	455	305	312
DN350	273	490	337	355
DN400	305	562	387	400
DN450	362	610	438	450
DN500	368	680	489	500
DN600	438	786	591	600

C52, C54, C56

API 594 Cast Lugged Dual Plate Check Valve

Diagram 1. C52, C54, C56 Lugged Parts

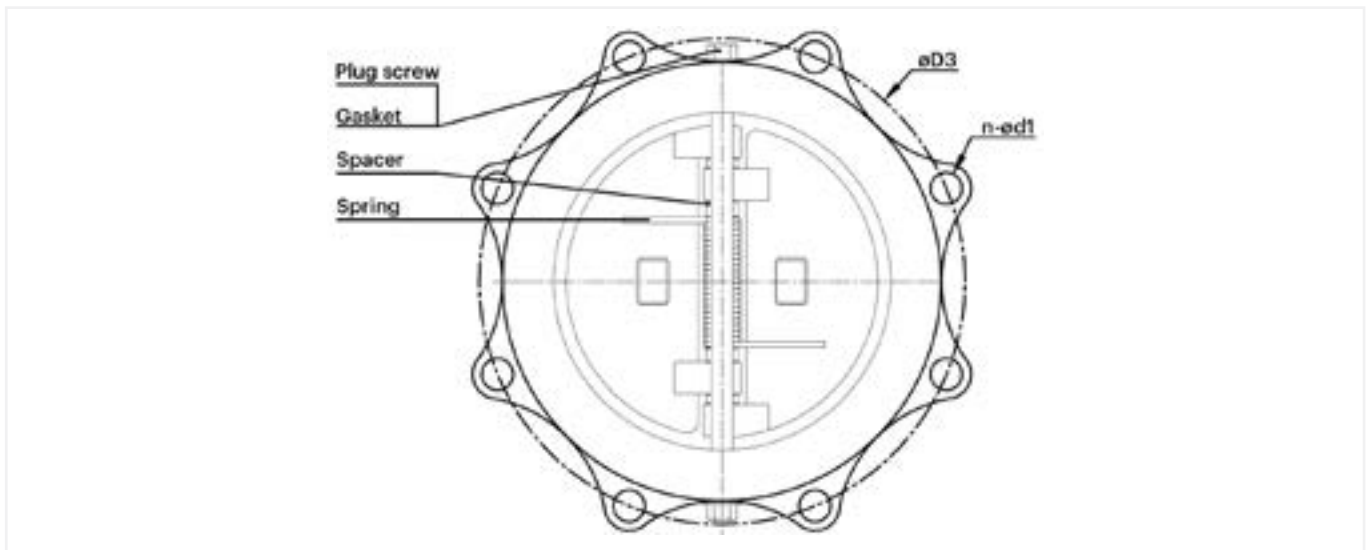


Diagram 2. C52, C54, C56 Lugged Parts

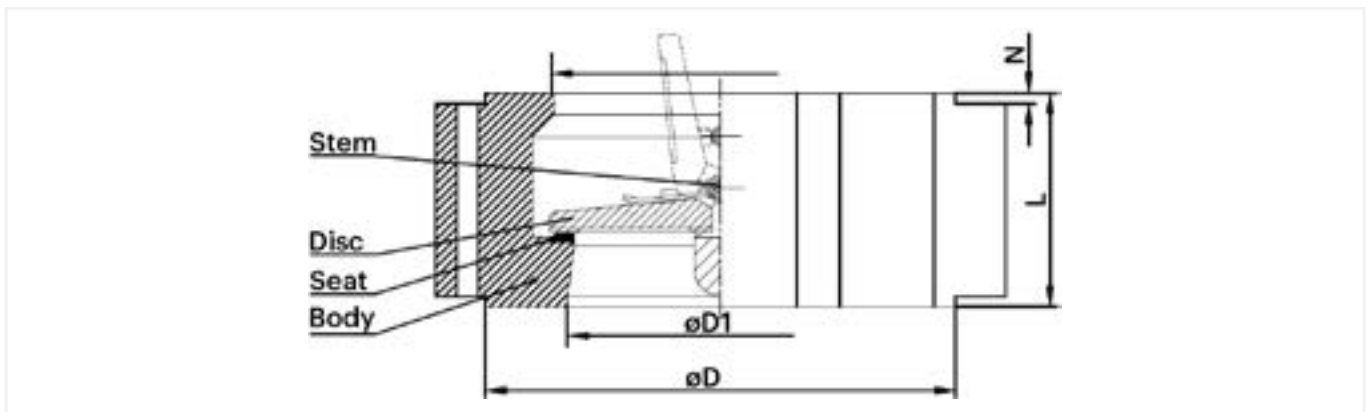


Table 1. C52 Class 150 Lugged Dimensions

Product Dimensions (mm)								
Size (DN)	L	D		D1	D2	D3	n-d	N
		RF	RJ					
DN50	60	92	102	51	58	120.5	4-19	2
DN65	67	105	121	65	73	139.5	4-19	2
DN80	73	127	133	80	88	152.5	4-19	2
DN100	73	157	171	102	108	190.5	8-19	2
DN125	86	186	194	127	132	216	8-22.5	2
DN150	98	216	219	152	160	241.5	8-22.5	2
DN200	127	270	273	203	210	298.5	8-22.5	2
DN250	146	324	330	254	266	362	12-25.5	2
DN300	181	381	406	305	310	432	12-25.5	2
DN350	184	413	425	350	355	476	12-28.5	2
DN400	191	470	483	400	405	540	16-28.5	2
DN450	203	533	546	450	455	578	16-32	2
DN500	219	584	597	500	505	635	16-32	2
DN600	222	692	711	600	605	749.5	20-35	2

C52, C54, C56

API 594 Cast Lugged Dual Plate Check Valve

Table 2. C54 Class 300 Lugged Dimensions

Product Dimensions (mm)								
Size (DN)	L	D		D1	D2	D3	n-d	N
		RF	RJ					
DN50	60	92	108	51	58	127	8-19	2
DN65	67	105	127	65	73	149	8-22.5	2
DN80	73	127	146	80	88	168.5	8-22.5	2
DN100	73	157	175	102	108	200	8-22.5	2
DN125	86	186	210	127	132	235	8-22.5	2
DN150	98	216	241	152	160	270	12-22.5	2
DN200	127	270	302	203	210	330	12-25.5	2
DN250	146	324	356	254	266	387.5	16-28.5	2
DN300	181	381	413	305	310	451	16-32	2
DN350	222	413	457	350	355	514.5	20-32	2
DN400	232	470	508	400	405	571.5	20-35	2
DN450	264	533	575	450	455	628.5	24-35	2
DN500	292	584	635	500	505	686	24-35	2
DN600	318	692	749	600	608	813	24-41	2

Table 2. C56 Class 600 Lugged Dimensions

Product Dimensions (mm)								
Size (DN)	L	D		D1	D2	D3	n-d	N
		RF	RJ					
DN50	60	92	108	51	58	127	8-19	7
DN65	67	105	127	65	73	149	8-22.5	7
DN80	73	127	146	80	88	168	8-22.5	7
DN100	79	157	175	102	108	216	8-22.5	7
DN125	105	186	210	127	136	266.5	8-28.5	7
DN150	136	216	241	152	162	292	12-28.5	7
DN200	165	270	302	203	212	349	12-32	7
DN250	213	324	356	250	266	432	16-35	7
DN300	229	381	413	305	312	489	20-35	7
DN350	273	413	457	337	355	527	20-38	7
DN400	305	470	508	387	400	603	20-41	7
DN450	362	533	575	438	450	654	20-44.5	7
DN500	368	584	635	489	500	724	24-44.5	7
DN600	438	692	749	591	600	838	24-51	7



We're here to help

We know it's important for you to talk to someone who knows their stuff. So if you have technical questions or need help choosing the right products, talk to our team. We'll walk you through our proven problem solving process.

1. Tell us what you need.

Tell us about your project. What do you want to achieve? What problems do you need to overcome? Let's work back from there.

2. Choose the right solution.

Weigh up the options. We'll do the analysis, discuss the options with you, and make a recommendation—the choice we'd make in your shoes.

3. Get the job done.

Complete your project, with the right products, on time and to spec. We've got your back all the way, with support during installation and commissioning.

Tap into our expertise and talk to our friendly, expert team.

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To request a quote or explore our product range, visit beaverprocess.com.au

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