

Build Codes - NEUMO BioFlow Aseptic Check Valves

Code 1	Model Number
HVC	Horizontal (Flanged O-Ring Body Joint)
TCVC	Vertical (Tri-Clamp Body Joint)
VC	Vertical (Flanged O-Ring Body Joint)

Code 2	Dimension BPE (Line C)	Dimension ISO (line B)	Dimension DIN (line A)
4A	-	-	6,0x1,0 mm
6A	-	-	8,0x1,0 mm
6B	-	10,2x1,6 mm	-
6C	0.25"	-	-
8A	-	-	10,0x1,0 mm
8B	-	13,5x1,6 mm	-
8C	0.375"	-	-
10A	-	-	13,0x1,5 mm
10B	-	17,2x1,6 mm	-
15A	-	-	19,0x1,5 mm
15B	-	21,3x1,6 mm	-
15C	0.5"	-	-
20A	-	-	23,0x1,5 mm
20B	-	26,9x1,6 mm	-
20C	0.75"	-	-
25A	-	-	29,0x1,5 mm
25B	-	33,7x2,0 mm	-
25C	1.0"	-	-
32A	-	-	35,0x1,5 mm
32B	-	42,4x2,0 mm	-
40A	-	-	41,0x1,5 mm
40B	-	48,3x2,0 mm	-
40C	1.5"	-	-
50A	-	-	53,0x1,5 mm
50B	-	60,3x2,0 mm	-
50C	2.0"	-	-
65A	-	-	70,0x2,0 mm
65B	-	76,1x2,0 mm	-
65C	2.5"	-	-
80A	-	-	85,0x2,0 mm
80B	-	88,9x2,3 mm	-
80C	3.0"	-	-
100A	-	-	104,0x2,0 mm
100B	-	114,3x2,3 mm	-
100C	4.0"*	-	-
125A ⁷	-	-	129x2,0 mm
125B ⁷	-	139,7x2,6 mm	-
150A ⁷	-	-	154,0x2,0 mm
150B ⁷	-	168,3x2,6 mm	-
150C ⁷	6.0"	-	-

Code 3	End Connections
WW	Both sides Orbital Weld Ends ^{2 5}
CC	Both sides Tri-Clamp (ASME-BPE/DIN32676) ¹
CW ⁷	One side Tri-Clamp / One side weld end ^{1 2}

Code 4	Body Material
SS	1.4435 / 316L (BPE)
904 ⁷	1.4539 / 904L ⁷
6Mo	6Mo / UNS N08367 (AL6XN)
A22	2.4602 / UNS N06022 (Alloy 22)
T2 ⁷	3.07035 / Titanium Grade II ⁷

Code 5	Body Connection (See table Below)
TC	Tri-Clamp (ASME-BPE/DIN32676)
BC ⁴	NEUMO BioConnect® (O-Ring) ⁴
CL ⁴	NEUMO CleanLip® (1.4435 - Elastomer-free) ⁴
CS ⁴	NEUMO ConnectS® (Elastomer-free) ⁴

Code 6	FlowStop (Disc) Material (See table below)
SE ⁵	1.4435/316L + EPDM ⁵
PT	PTFE solid
CS	1.4435/316L elastomer-free (flat face)
6E ⁷	6Mo / UNS N08367 (AL6XN) / EPDM ⁷
AE ⁷	2.4602 / UNS N06022 (Alloy 22) / EPDM ⁷

Code 7	Body Seal
E ⁵	EPDM ⁵
V	Viton
VF	Viton/FEP Encapsulated
PT	PTFE
CL ⁴	NEUMO CleanLip® (1.4435 - Elastomer-free) ⁴
CS ⁴	NEUMO ConnectS® (Elastomer-free) ⁴

Code 8	Body Clamp
SH ⁵	13MHMD Double-Hinged ⁵
S	13MHM Single-Hinged
3P	13MHS Three Piece (1.50"-4.00")
SSH	13MHP Double-Bolted HP Clamp
F ⁴	Flanged, no Clamp (BioConnect® body) ⁴

Code 9	ID Surface Finish
SF1	SF1 / ≤20µ-in/0.51 µm MP
SF4	SF4 / ≤15µ-in/0.38 µm EP
H3 ⁶	H3 / ≤0.80 µm MP ⁶
HE3 ⁶	HE3 / ≤0.80 µm EP ⁶
6M ⁶	≤0.60 µm MP ⁶
6E ⁶	≤0.60 µm EP ⁶
H4 ⁶	H4 / ≤0.40µm MP ⁶
HE4 ⁶	HE4 / ≤0.40µm EP ⁶

¹ Tri-Clamp dimensions according ASME-BPE / DIN32676 and be determined by dimensional standard chosen (Code 2)

² Weld Ends will have controlled sulphur 0.005 - 0.017% when dimensional standard ASME-BPE is selected (Code 2)

³ FlowStop SE (Stainless Steel + EPDM) up to 150°C operating temperature (Code 6)

FlowStop PT (PTFE) up to 200°C operating temperature (Code 6)

⁴ available on type VC and HVC (Code 1) only

⁵ Standard option

⁶ available on DIN and ISO dimensions only

⁷ non stock standard item

NEUMO BioFlow Body Seal Options (Code 5)

Code TC	Code BC ⁴	Code CL ⁴	Code CS ⁴
Tri-Clamp Body ASME-BPE / DIN32676 with TC Seal	NEUMO BioConnect® Body Flange with O-Ring Seal	NEUMO BioConnect® Body Flange with CleanLip® Stainless Steel O-Ring Elastomer-free	NEUMO ConnectS® Body Flange Elastomer-free metal to metal

Configuration Examples:

	NEUMO BioFlow TCVC - Horizontal Check Valve									
	<p>NEUMO BioFlow TCVC 1", Springless Aseptic Disc Check Valve for Vertical Installation. Model / Build Code: TCVC-25C-CC-SS-TC-SE-E-SH-SF1 Body and FlowStop Material 1.4435/316L. FlowStop Seal EPDM (FDA + USP Cl. VI). NEUMO BioConnect® flanged body joint, O-Ring EPDM (FDA + USP Cl. VI). Tri-Clamp End Connections. Internal Surface Finish ASME-BPE SF1 (20µ-in/0.51 µm).</p>									
Code No.	1	2	3	4	5	6	7	8	9	
Code ID	HVC	25C	CC	SS	TC	SE	E	SH	SF1	

	NEUMO BioFlow VC - Vertical Check Valve									
	<p>NEUMO BioFlow VC 3", Springless Aseptic Disc Check Valve for Vertical Installation. Model / Build Code: VC-80C-WW-SS-CS-CS-F-SF1 Body and FlowStop Material 1.4435/316L. FlowStop CS (Elastomer-free). NEUMO ConnectS® (Elastomer-free) flanged body joint. Orbital Weld End Connections. Internal Surface Finish ASME-BPE SF1 (20µ-in/0.51 µm).</p>									
Code No.	1	2	3	4	5	6	7	8	9	
Code ID	VC	80C	WW	SS	CS	CS	CS	F	SF1	

	NEUMO BioFlow HVC - Horizontal Check Valve									
	<p>NEUMO BioFlow HVC 2", Springless Aseptic Disc Check Valve for Horizontal Installation. Model / Build Code: HVC-50C-CC-6MO-BC-PT-VF-F-SF4 Body Material 6Mo. FlowStop PTFE (FDA). NEUMO BioConnect® flanged body joint, O-Ring Viton/FEP encapsulated (FDA). Tri-Clamp End Connections. Internal Surface Finish ASME-BPE SF4 (15µ-in/0.38 µm).</p>									
Code No.	1	2	3	4	5	6	7	8	9	
Code ID	HVC	50C	CC	6MO	BC	PT	VF	F	SF4	

FlowStop (Disc) Options (Code 6):



SE/CS/6E/AE (Code 6)



SE/6E/AE (Code 6)



CS (Code 6)



PT (Code 6)

Working Principle:



Installation & Maintenance Manuals (Hyperlinks):

- ⇒ [BioFlow TCVC and VC/HVC BioConnect](#)
- ⇒ [BioFlow VC/HVC ConnectS®](#)