

NEUMO ConnectS®

A new era of releasable tube couplings,
completely elastomer-free

Advantages of NEUMO ConnectS®

Constructive Benefits

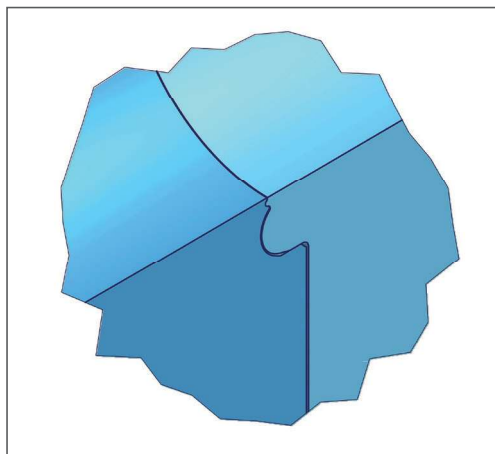
- revolutionary technology
- virtually no dead space
- high pressure design PN100 available
- rounded product range including elastomer-free check valves (BioFlow), sight glasses and interfaces for instrumentation (BioControl CS).
- optimum cleanability (CIP / SIP)
- no more microbial contamination
- maximum process reliability

Technical Benefits

- completely elastomer-free construction
- inwrought metal sealing outline
- seals by elastic deformation
- no temperature limitations
- ideally suited for aggressive media
- ideally suited for abrasive media
- very easy assembly (male / female)

Economic Benefits

- reduces maintenance costs and downtimes
- eliminates procurement and stockkeeping of replacement elastomers
- enormous potential for reducing total cost of ownership
- minimising the risk of process disturbances



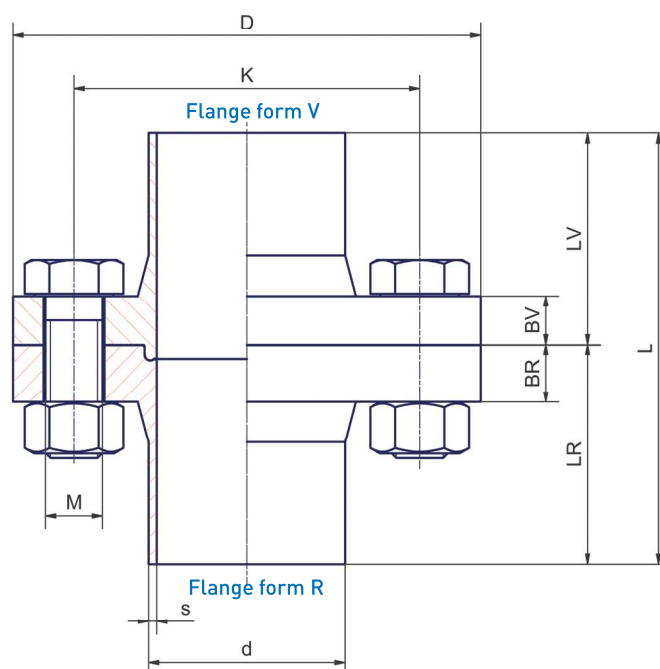
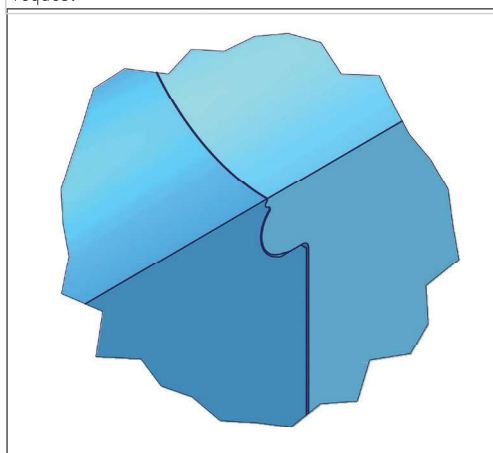


Blind Flange form V

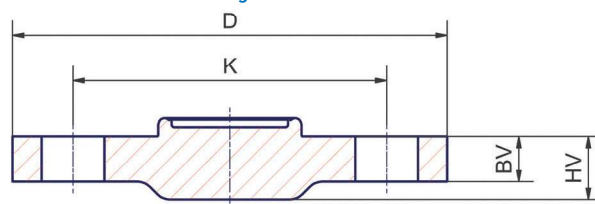


Blind Flange form R

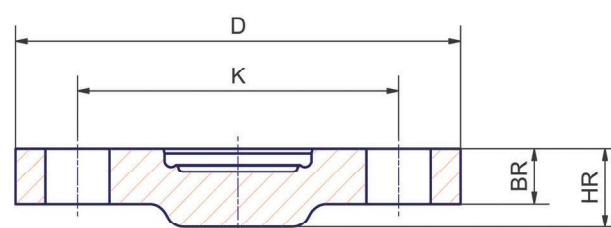
Technical Data	
Material*	1.4435 / 316L
Surface finish (product contacted area)*	Ra < 0,8 µm precision turned area)
Sealing	Elastomer-free (metallic)
Max. permissible pressure	PN16 (up to DN50 / 2") PN10 (DN65 / 2 1/2" - DN100 / 4") (high pressure type PN100 up to DN40 available as special design)
Max. operating temperature	-10°C / +200°C
Delta ferrite content (raw material)*	< 1%
Connections*	Orbital welding ends in accordance with DIN11866 line A (DIN), line B (ISO), line C (ASME-BPE)
Tests	EHEDG 01 cleanability test
Approvals	TÜV-component testing TA-Air
*Alternative material grades (such as 1.4539, 6Mo / UNS N08367, etc.), larger dimensions, different connections, surface qualities and delta ferrite values are available on request	



Blind Flange form V



Blind Flange form R





ConnectS® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN11866 line A

DN	d	s	D	K	L	LR	BR	LV	BV	HR	HV	M
6	8	1	60	40	88	45	10	43	8	13	8	4x M 8x30
8	10	1	60	40	88	45	10	43	8	13	8	4x M 8x30
10	13	1,5	65	45	88	45	10	43	8	13	8	4x M 10x30
15	19	1,5	75	55	88	45	10	43	8	13	8	4x M 10x30
20	23	1,5	85	60	92	47	12	45	10	15	10	4x M 10x35
25	29	1,5	97	70	102	52	12	50	10	17	10	4x M 12x35
32	35	1,5	105	78	102	52	12	50	10	17	14	4x M 12x35
40	41	1,5	115	85	106	54	14	52	12	19	16	4x M 14x40
50	53	1,5	125	95	106	54	14	52	12	19	16	4x M 14x40
65	70	2	145	115	130	66	16	64	14	21	18	8x M 12x45
80	85	2	155	125	130	66	16	64	14	21	18	8x M 12x45
100	104	2	180	150	134	68	18	66	16	23	20	8x M 12x50

ConnectS® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN11866 line B

DN	d	s	D	K	L	LR	BR	LV	BV	HR	HV	M
6	10,2	1,6	60	40	88	45	10	43	8	13	8	4x M 8x30
8	13,5	1,6	60	40	88	45	10	43	8	13	8	4x M 8x30
10	17,2	1,6	65	45	88	45	10	43	8	13	8	4x M 10x30
15	21,3	1,6	75	55	88	45	10	43	8	13	8	4x M 10x30
20	26,9	1,6	85	60	92	47	12	45	10	17	10	4x M 10x35
25	33,7	2	97	70	102	52	12	50	10	17	10	4x M 12x35
32	42,4	2	105	78	102	52	12	50	10	17	14	4x M 12x35
40	48,3	2	115	85	106	54	14	52	12	19	16	4x M 14x40
50	60,3	2	125	95	106	54	14	52	12	19	16	4x M 14x40
65	76,1	2	145	115	130	66	16	64	14	21	18	8x M 12x45
80	88,9	2,3	155	125	130	66	16	64	14	21	18	8x M 12x45
100	114,3	2,3	180	150	134	68	18	66	16	23	20	8x M 12x50

ConnectS® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN11866 line C

DN	d	s	D	K	L	LR	BR	LV	BV	HR	HV	M
3/8"	9,53	0,89	60	40	88	45	10	43	8	13	8	4x M 8x30
1/2"	12,7	1,65	65	45	88	45	10	43	8	13	8	4x M 10x30
3/4"	19,05	1,65	75	55	88	45	10	43	8	13	8	4x M 10x30
1"	25,4	1,65	85	60	92	47	12	45	10	17	10	4x M 10x35
1 1/2"	38,1	1,65	105	78	102	52	12	50	10	17	16	4x M 12x35
2"	50,8	1,65	125	95	106	54	14	52	12	19	16	4x M 14x40
2 1/2"	63,5	1,65	135	105	106	54	14	52	12	19	18	6x M 14x40
3"	76,2	1,65	145	115	130	66	16	64	14	22	18	8x M 12x45
4"	101,6	2,11	180	150	134	68	18	66	16	23	20	8x M 12x50



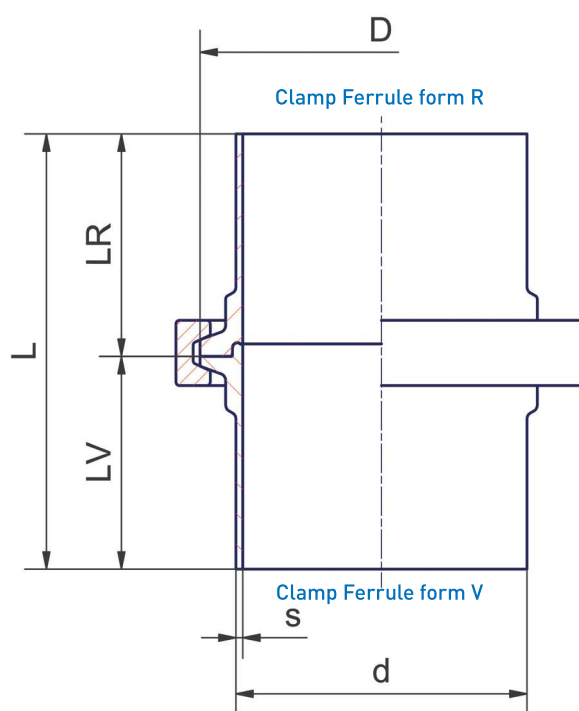
Blind Ferrule form V



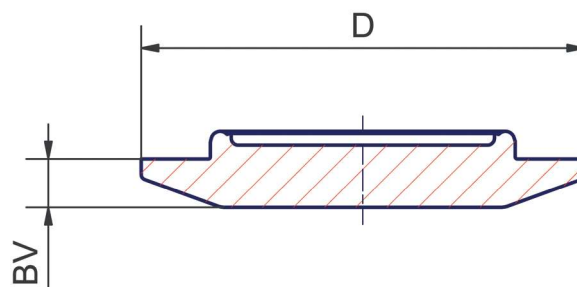
Blind Ferrule form R

Technical Data	
Material*	1.4435 / 316L
Surface finish (product contacted area)*	Ra < 0,8 µm precision turned
Sealing	Elastomer-free (metallic)
Max. permissible pressure	PN10
Max. operating temperature	-10°C / +200°C
Delta ferrite content (raw material)*	< 1%
Connections*	Orbital welding ends in accordance with DIN11866 line A (DIN), line B (ISO), line C (ASME-BPE)

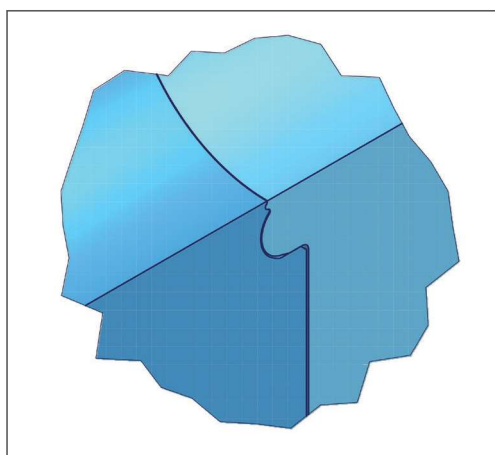
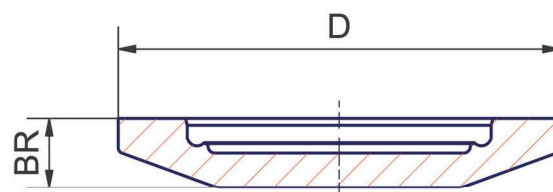
* Alternative material grades (such as 1.4539, 6Mo / UNS N08367, etc.), different connections, finish qualities and delta ferrite values are available on request.



Blind Ferrule form V



Blind Ferrule form R





ConnectS® Clamp Connection and Blind Ferrules, tube dimensions in accordance with DIN11866 line A

DN	d	s	D	L	LR	BR	LV	BV
6	8	1	25	69,5	35	10	34,5	6
8	10	1	25	69,5	35	10	34,5	6
10	13	1,5	25	69,5	35	10	34,5	6
15	19	1,5	34	68	35	10	33	6
20	23	1,5	50,5	68	35	10	33	7
25	29	1,5	50,5	76	39	10	37	8
32	35	1,5	50,5	76	39	10	37	8
40	41	1,5	64	76	39	10	37	7
50	53	1,5	77,5	76	39	10	37	8

ConnectS® Clamp Connection and Blind Ferrules, tube dimensions in accordance with DIN11866 line B

DN	d	s	D	L	LR	BR	LV	BV
6	10,2	1,6	25,0	69,5	35	10	34,5	6
8	13,5	1,6	25,0	69,5	35	10	34,5	6
10	17,2	1,6	25,0	69,5	35	10	34,5	6
15	21,3	1,6	50,5	68	35	10	33	7
20	26,9	1,6	50,5	68	35	10	33	7
25	33,7	2	50,5	76	39	10	37	7
32	42,4	2	50,5	76	39	10	37	7
40	48,3	2	64,0	76	39	10	37	7

ConnectS® Clamp Connection and Blind Ferrules, tube dimensions in accordance with DIN11866 line C

DN	d	s	D	L	LR	BR	LV	BV
3/8"	9,53	0,89	25,0	68	35	10	34,5	6
1/2"	12,7	1,65	25,0	68	35	10	34,5	6
3/4"	19,05	1,65	25,0	68	35	10	33	6
1"	25,4	1,65	50,5	68	35	10	33	7
1 1/2"	38,1	1,65	50,5	76	39	10	37	7
2"	50,8	1,65	64,0	76	39	10	37	7



NEUMO BioConnect®

The flexible tube connection with an option:
elastomer or metallic sealing

Advantages of NEUMO BioConnect®

Constructive Benefits

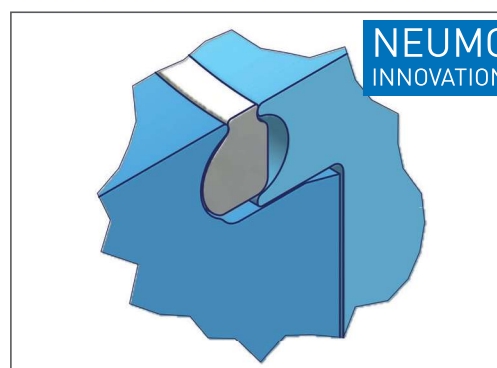
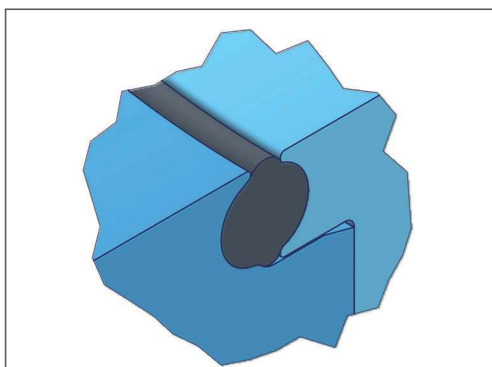
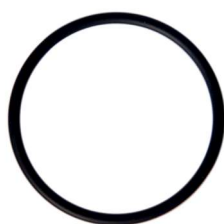
- one technology, 3 connection types
- high flexibility: smooth switch to the metallic sealing CleanLip is possible at a later time without changing the flange connection
- cGMP compliant design
- virtually no dead space
- high pressure design PN100 - available up to DN40

Technical Benefits

- stay flexible - use optionally with chambered elastomer or the innovative stainless steel sealing element CleanLip.
- minimum exposure of the medium to the elastomere
- optimal cleanability (CIP / SIP)
- controlled elastomer pressing by metallic stop and full chambering
- defined expansion volume for the elastomer with expansion chamber on the side averting the media
- no elastomer return

Economic Benefits

- reduces maintenance costs and downtimes
- high potential for reducing total cost of ownership
- minimising the risks of process disturbances
- high flexibility of production due to low SIP / CIP times



NEUMO
INNOVATION

CleanLip for BioConnect®-flange connections only
test report: EHEDG 01 cleanability test



Blind Flange form V

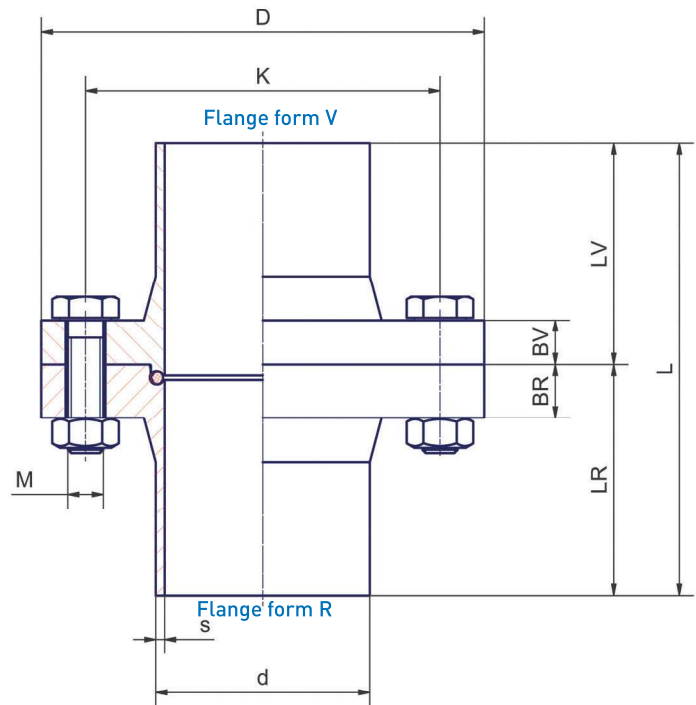
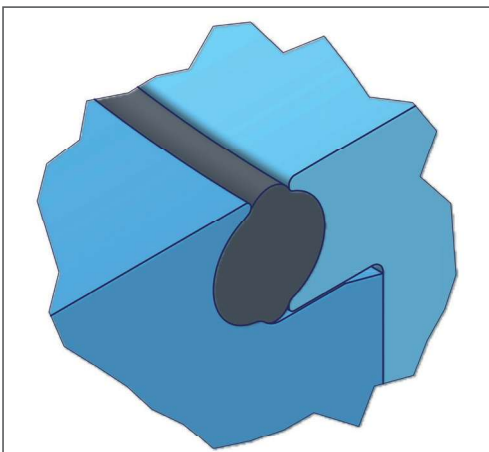


Blind Flange form R

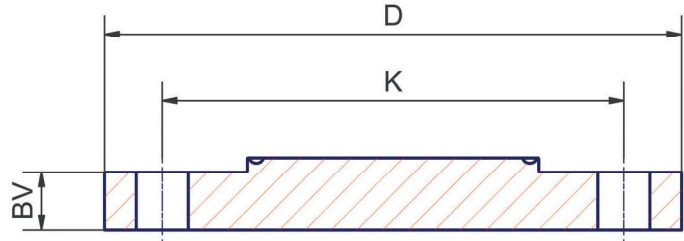
Technical Data

Material*	1.4435 / 316L
Surface finish (product contacted area)*	Ra < 0,8 µm precision turned area)
Sealing*	EPDM (FDA + USP Class VI)
Max. permissible pressure *	PN16 (up to DN100 / 4") PN10 (from DN125 / 6") (high pressure type PN100 available as special design)
Max. operating temperature	-10°C / +150°C (up to 200°C with O-ring PTFE or CleanLip)
Delta ferrite content (raw material)*	< 1%
Connections*	Orbital welding ends in accordance with DIN11866 line A (DIN), line B (ISO), line C (ASME-BPE)
Approvals	TÜV-component testing TA-air EHEDG

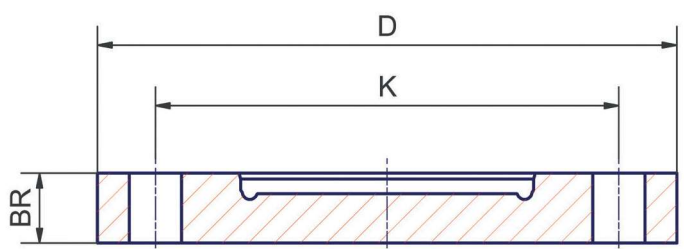
* Alternative material grades (such as 2.4602, 2.4605, 1.4539, 6Mo / UNS N08367, titanium, etc.), alternative seal materials (such as Viton, Viton / FEP-encapsulated, PTFE, CleanLip, etc.), higher pressure resistances (such as PN50), as well as different connections, surface qualities and delta ferrite values are available on request.



Blind Flange form V



Blind Flange form R





BioConnect® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN11866 line A

DN	d	s	D	K	L	LR	BR	LV	BV	M
6	8	1	60	40	88	45	10	43	8	4x M 8x30
8	10	1	60	40	88	45	10	43	8	4x M 8x30
10	13	1,5	65	45	88	45	10	43	8	4x M 8x30
15	19	1,5	75	55	88	45	10	43	8	4x M 8x30
20	23	1,5	80	60	92	47	12	45	10	4x M 8x30
25	29	1,5	85	65	102	52	12	50	10	4x M 8x30
32	35	1,5	95	75	102	52	12	50	10	4x M 8x30
40	41	1,5	100	80	102	52	12	50	10	4x M 8x30
50	53	1,5	110	90	106	54	14	52	12	4x M 8x35
65	70	2	140	115	130	66	16	64	14	4x M 10x40
80	85	2	150	125	130	66	16	64	14	8x M 10x40
100	104	2	175	150	134	68	18	66	16	8x M 10x45
125	129	2	190	165	118	60	18	58	16	8x M 10x45
150	154	2	215	190	118	60	18	58	16	8x M 12x50
200	204	2	270	245	118	60	20	58	18	12x M 12x55

BioConnect® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN11866 line B

DN	d	s	D	K	L	LR	BR	LV	BV	M
6	10,2	1,6	60	40	88	45	10	43	8	4x M 8x30
8	13,5	1,6	60	40	88	45	10	43	8	4x M 8x30
10	17,2	1,6	65	45	88	45	10	43	8	4x M 8x30
15	21,3	1,6	75	55	88	45	10	43	8	4x M 8x30
20	26,9	1,6	80	60	92	47	12	45	10	4x M 8x30
25	33,7	2	85	65	102	52	12	50	10	4x M 8x30
32	42,4	2	95	75	102	52	12	50	10	4x M 8x30
40	48,3	2	100	80	102	52	12	50	10	4x M 8x30
50	60,3	2	110	90	106	54	14	52	12	4x M 8x35
65	76,1	2	140	115	130	66	16	64	14	4x M 10x40
80	88,9	2,3	150	125	130	66	16	64	14	8x M 10x40
100	114,3	2,3	175	150	134	68	18	66	16	8x M 10x45
125	139,7	2,6	200	175	118	60	18	58	16	8x M 10x45
150	168,3	2,6	230	205	118	60	18	58	16	8x M 12x50
200	219,1	2,6	285	260	118	60	20	58	18	12x M 12x55

BioConnect® Flange Connection and Blind Flanges, tube dimensions in accordance with DIN11866 line C

DN	d	s	D	K	L	LR	BR	LV	BV	M
3/8"	9,53	0,89	60	40	88	45	10	43	8	4x M 8x30
1/2"	12,7	1,65	65	45	88	45	10	43	8	4x M 8x30
3/4"	19,05	1,65	75	55	88	45	10	43	8	4x M 8x30
1"	25,4	1,65	80	60	92	47	12	45	10	4x M 8x30
1 1/2"	38,1	1,65	100	80	102	52	12	50	10	4x M 8x30
2"	50,8	1,65	100	80	102	52	12	50	10	4x M 8x30
2 1/2"	63,5	1,65	110	90	106	54	14	52	12	4x M 8x35
3"	76,2	1,65	140	115	130	66	16	64	14	8x M 10x40
4"	101,6	2,11	175	150	134	68	18	66	16	8x M 10x45
6"	152,4	2,77	215	190	118	60	18	58	16	8x M 12x50

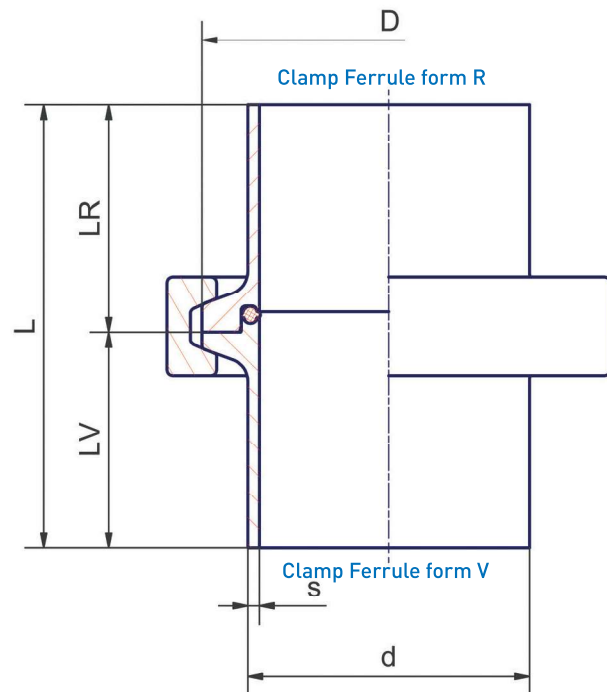
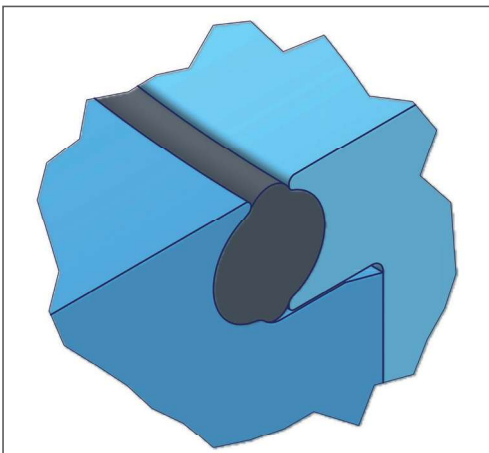


Blind Ferrule form V

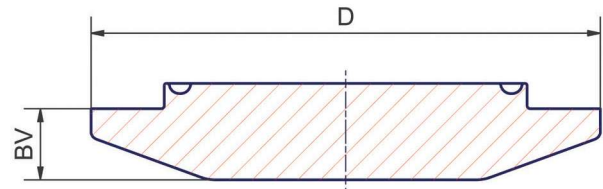


Blind Ferrule form R

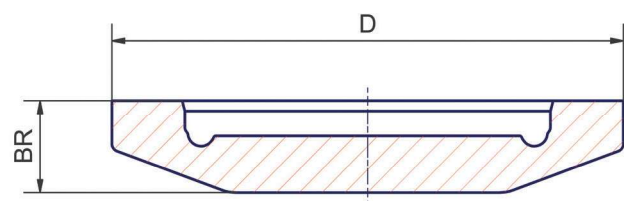
Technical Data	
Material*	1.4435 / 316L
Surface finish (product contacted area)*	Ra < 0,8 µm precision turned
Sealing*	EPDM (FDA + USP Class VI)
Max. permissible pressure	PN16 (up to DN50 / 2") PN10 (from DN65 / 2 1/2")
Max. operating temperature	-10°C / +150°C (200°C with O-ring PTFE)
Delta ferrite content (raw material)*	< 1%
Connections*	Orbital welding ends in accordance with DIN11866 line A (DIN), line B (ISO), line C (ASME-BPE)
Approvals	TÜV-component testing EHEDG
* alternative materials (such as 2.4602, 2.4605, 1.4539, 6Mo / UNS N08367, titanium, etc.), alternative seal materials (such as Viton, Viton / FEP-encapsulated, PTFE, CleanLip, etc.), higher pressure resistances as well as different connections, surface qualities and delta ferrite values are available on request.	



Blind Ferrule form V



Blind Ferrule form R





BioConnect® Clamp Connection and Blind Ferrules, tube dimensions in accordance with DIN11866 line A

DN	d	s	D	L	LR	BR	LV	BV
6	8	1	25	68	35	7,5	33	5,5
8	10	1	25	68	35	7,5	33	5,5
10	13	1,5	25	68	35	7,5	33	5,5
15	19	1,5	25	68	35	7,5	33	5,5
20	23	1,5	50,5	68	35	9	33	7
25	29	1,5	50,5	76	39	9	37	7
32	35	1,5	50,5	76	39	9	37	7
40	41	1,5	64	76	39	9	37	7
50	53	1,5	77,5	76	39	9	37	7
65	70	2	91	96	49	9	47	7
80	85	2	106	96	49	11	47	9
100	104	2	119	96	49	11	47	9

BioConnect® Clamp Connection and Blind Ferrules, tube dimensions in accordance with DIN11866 line B

DN	d	s	D	L	LR	BR	LV	BV
6	10,2	1,6	25	68	35	7,5	33	5,5
8	13,5	1,6	25	68	35	7,5	33	5,5
10	17,2	1,6	25	68	35	7,5	33	5,5
15	21,3	1,6	50,5	68	35	9	33	7
20	26,9	1,6	50,5	68	35	9	33	7
25	33,7	2	50,5	76	39	9	37	7
32	42,4	2	50,5	76	39	9	37	7
40	48,3	2	64	76	39	9	37	7
50	60,3	2	77,5	76	39	9	37	7
65	76,1	2	91	96	49	9	47	7
80	88,9	2,3	106	96	49	11	47	9
100	114,3	2,3	130	96	49	11	47	9

BioConnect® Clamp Connection and Blind Ferrules, tube dimensions in accordance with DIN11866 line C

DN	d	s	D	L	LR	BR	LV	BV
3/8"	9,53	0,89	25	68	35	7,5	33	5,5
1/2"	12,7	1,65	25	68	35	7,5	33	5,5
3/4"	19,05	1,65	25	68	35	7,5	33	5,5
1"	25,4	1,65	50,5	68	35	9	33	7
1 1/2"	38,1	1,65	50,5	76	39	9	37	7
2"	50,8	1,65	64	76	39	9	37	7
2 1/2"	63,5	1,65	77,5	76	39	9	37	7
3"	76,2	1,65	91	96	49	9	47	7
4"	101,6	2,11	119	96	49	11	47	9

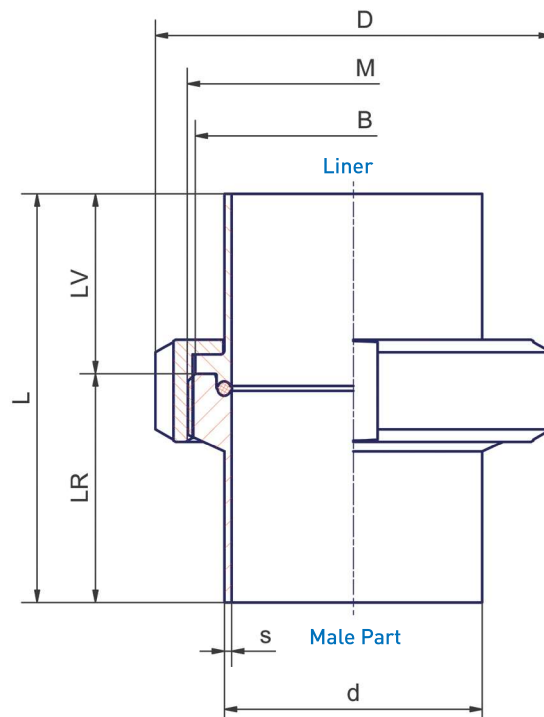


Blind Part form R

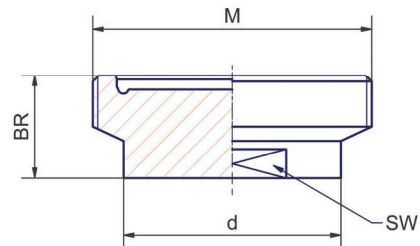


Blind Part form V

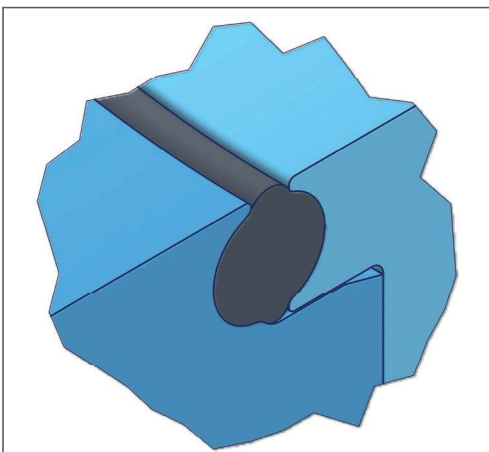
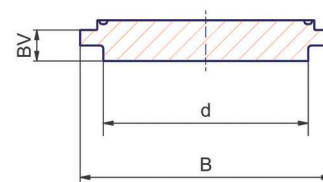
Technical Data	
Material*	1.4435 / 316L
Surface finish (product contacted area)*	Ra < 0,8 µm precision turned area)
Sealing*	EPDM (FDA + USP Class VI)
Max. permissible pressure	PN16
Max. operating temperature	-10°C / +150°C (200°C with O-ring PTFE)
Delta ferrite content (raw material)*	< 1%
Connections*	Orbital welding ends in accordance with DIN11866 line A (DIN), line B (ISO), line C (ASME-BPE)
Approvals	TÜV-component testing EHEDG
* Alternative materials (such as 2.4602, 2.4605, 1.4539, 6Mo / UNS N08367, titanium, etc.), alternative seal materials (such as Viton, Viton / FEP-encapsulated, PTFE, CleanLip, etc.), higher pressure resistances as well as different connections, surface qualities and delta ferrite values are available on request.	



Blind Part form R



Blind Part form V





BioConnect® Screwed Connection, Blind Part form R and Blind Part form V, tube dimensions in accordance with DIN11866 line A

DN	d	s	SW	D	B	M	L	LR	BR	LV	BV
6	8	1	7	6kt-SW19	13	M16 x 1,5	67	36	17	31	7
8	10	1	9	6kt-SW22	15	M18 x 1,5	67	36	17	31	7
10	13	1,5	10	6kt-SW27	19	M22 x 1,5	68	37	18	31	7
15	19	1,5	17	42	27	M30 x 1,5	68	37	19	31	7
20	23	1,5	19	48	33	M36 x 2	70	39	21	31	7
25	29	1,5	24	55	39	M42 x 2	81	44	21	37	8
32	35	1,5	30	65	49	M52 x 2	82	45	23	37	8
40	41	1,5	36	70	53	M56 x 2	83	46	24	37	8
50	53	1,5	46	82	65	M68 x 2	84	47	25	37	8
65	70	2	60	105	85	M90 x 3	112	64	32	48	9
80	85	2	70	115	95	M100 x 3	112	64	30	48	9
100	104	2	90	145	124	M130 x 4	114	66	34	48	9

BioConnect® Screwed Connection, Blind Part form R and Blind Part form V, tube dimensions in accordance with DIN11866 line B

DN	d	s	SW	D	B	M	L	LR	BR	LV	BV
6	10,2	1,6	-	6kt-SW 22	15	M18 x 1,5	67	36	17	31	7
8	13,5	1,6	10	6kt-SW 27	19	M22 x 1,5	68	37	17	31	7
10	17,2	1,6	15	6kt-SW 30	23	M26 x 1,5	68	37	18	31	7
15	21,3	1,6	17	42	27	M30 x 1,5	68	37	19	31	7
20	26,9	1,6	24	48	33	M36 x 2	70	39	21	31	7
25	33,7	2	27	55	39	M42 x 2	81	44	21	37	8
32	42,4	2	36	65	49	M52 x 2	82	45	23	37	8
40	48,3	2	41	70	53	M56 x 2	83	46	24	37	8
50	60,3	2	50	82	65	M68 x 2	84	47	25	37	8
65	76,1	2	65	105	85	M90 x 3	112	64	32	48	9
80	88,9	2,3	75	115	95	M100 x 3	112	64	30	48	9
100	114,3	2,3	95	145	124	M130 x 4	114	66	34	48	9

BioConnect® Screwed Connection, Blind Part form R and Blind Part form V, tube dimensions in accordance with DIN11866 line C

DN	d	s	SW	D	B	M	L	LR	BR	LV	BV
3/8"	9,53	0,89	-	6kt-SW 22	15	M18 x 1,5	67	36	17	31	7
1/2"	12,7	1,65	10	6kt-SW 27	19	M22 x 1,5	68	37	17	31	7
3/4"	19,05	1,65	17	42	27	M30 x 1,5	68	37	19	31	7
1"	25,4	1,65	24	48	33	M36 x 2	70	39	21	31	7
1 1/2"	38,1	1,65	32	65	49	M52 x 2	82	45	23	37	8
2"	50,8	1,65	46	82	65	M68 x 2	84	47	25	37	8
2 1/2"	63,5	1,65	55	105	85	M90 x 3	112	64	32	48	9
3"	76,2	1,65	65	105	85	M90 x 3	112	64	32	48	9
4"	101,6	2,11	85	145	124	M130 x 4	114	66	34	48	9