



NEUMO GmbH + Co.KG

Armaturenfabrik · Apparatebau · Steriltechnik

Valves and fittings for food and pharmaceutical industries



BioConnect®

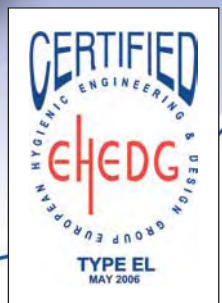
BioConnect®



BioControl®



Connect S®



Who is NEUMO

NEUMO was founded by Senator h.c. Henry Ehrenberg in 1947 in order to produce valves and fittings from stainless steel for food technology.

Within 50 years this early start led to the well-known NEUMO-Ehrenberg-Group, which is currently represented with its production facilities and trading companies in four continents with 1400 employees.

Looking for the nearest contact? Please visit our group's members under "LINKS".

Nowadays NEUMO is producing and supplying tubes, fittings and valves, vessels and heat exchangers made from stainless steel as well as highly corrosion resistant alloys (like e.g. Hastelloy materials) for the pharmaceutical, biotechnological, chemical and food processing industries.

NEUMO Germany has specialized in construction, development and production of components for aseptic technology and high purity systems.

The product range contains special tubes, couplings, all types of fittings and accessories, vessels etc. as well as special constructions.

NEUMO is offering sophisticated and well-engineered solutions for Your individual question and demand together in combination with quality products of highest reputation. Our highly experienced, skilled and motivated team is committed to Your success.

Thinking "STAINLESS" at NEUMO means experience, expertise and the right program.

That's why you should go for NEUMO products.
We are here for You.

Get in contact with us!

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BioConnect® Screwed Version



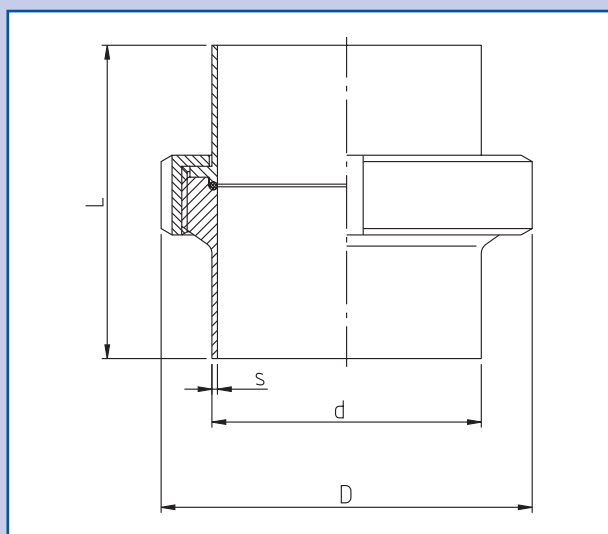
pressure class:	PN 16 higher if requested
material:	(1.4404 / 1.4435) 316L nut: 1.4301 O-Ring: EPDM-FDA
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
6	8	1	67	SW19
8	10	1	67	SW22
10	13	1,5	68	SW27
15	19	1,5	68	42
20	23	1,5	70	48
25	29	1,5	81	55
32	35	1,5	82	65
40	41	1,5	83	70
50	53	1,5	84	82
65	70	2	112	105
80	85	2	112	115
100	104	2	114	145

Dimensions für DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
13,5	13,5	1,6	67	SW27
17,2	17,2	1,6	68	SW30
21,3	21,3	1,6	68	42
26,9	26,9	1,6	70	48
33,7	33,7	2	81	55
42,4	42,4	2	82	65
48,3	48,3	2	83	70
60,3	60,3	2	84	82
76,1	76,1	2	112	105
88,9	88,9	2,3	112	115
114,3	114,3	2,3	114	145



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	68	SW27
3/4"	19,05	1,65	68	42
1"	25,4	1,65	70	48
1 1/2"	38,1	1,65	82	65
2"	50,8	1,65	84	82
2 1/2"	63,5	1,65	112	105
3"	76,2	1,65	112	105
4"	101,6	2,11	114	145

Only for use with BioConnect® - O-Rings!



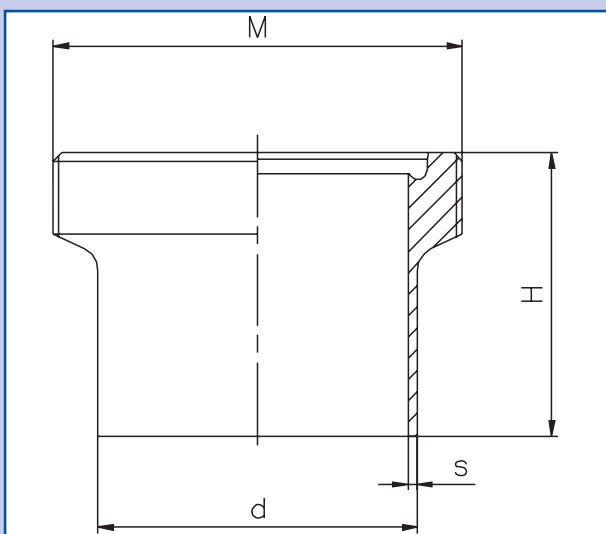
pressure class:	PN 16
material:	higher if requested (1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	H	M
6	8	1	36	M 16 x 1,5
8	10	1	36	M 18 x 1,5
10	13	1,5	37	M 22 x 1,5
15	19	1,5	37	M 30 x 1,5
20	23	1,5	39	M 36 x 2
25	29	1,5	44	M 42 x 2
32	35	1,5	45	M 52 x 2
40	41	1,5	46	M 56 x 2
50	53	1,5	47	M 68 x 2
65	70	2	64	M 90 x 3
80	85	2	64	M 100 x 3
100	104	2	66	M 130 x 4

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	H	M
13,5	13,5	1,6	37	M 22 x 1,5
17,2	17,2	1,6	37	M 26 x 1,5
21,3	21,3	1,6	37	M 30 x 1,5
26,9	26,9	1,6	39	M 36 x 1,5
33,7	33,7	2	44	M 42 x 2
42,4	42,4	2	45	M 52 x 2
48,3	48,3	2	46	M 56 x 2
60,3	60,3	2	47	M 68 x 2
76,1	76,1	2	64	M 90 x 3
88,9	88,9	2,3	64	M 100 x 3
114,3	114,3	2,3	66	M 130 x 4



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	H	M
1/2"	12,7	1,65	37	M 22 x 1,5
3/4"	19,05	1,65	37	M 30 x 1,5
1"	25,4	1,65	39	M 36 x 2
1 1/2"	38,1	1,65	45	M 52 x 2
2"	50,8	1,65	47	M 68 x 2
2 1/2"	63,5	1,65	64	M 90 x 3
3"	76,2	1,65	64	M 90 x 3
4"	101,6	2,11	66	M 130 x 4



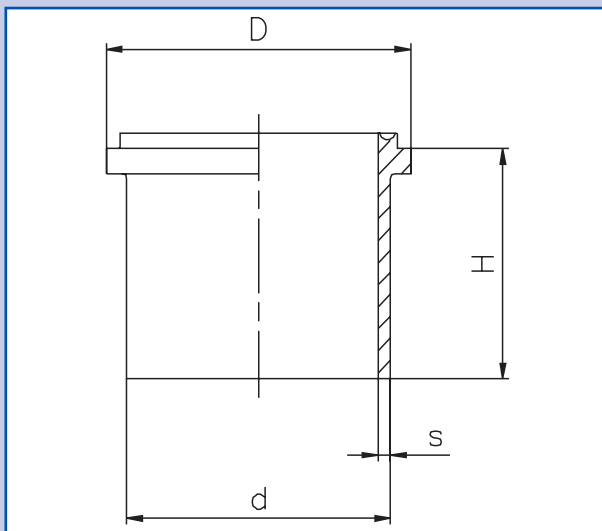
pressure class:	PN 16 higher if requested
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	H	D
6	8	1	31	13
8	10	1	31	15
10	13	1,5	31	19
15	19	1,5	31	27
20	23	1,5	31	33
25	29	1,5	37	39
32	35	1,5	37	49
40	41	1,5	37	53
50	53	1,5	37	65
65	70	2	48	85
80	85	2	48	95
100	104	2	48	124

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	H	D
13,5	13,5	1,6	31	19
17,2	17,2	1,6	31	23
21,3	21,3	1,6	31	27
26,9	26,9	1,6	31	33
33,7	33,7	2	37	39
42,4	42,4	2	37	49
48,3	48,3	2	37	53
60,3	60,3	2	37	65
76,1	76,1	2	48	85
88,9	88,9	2,3	48	95
114,3	114,3	2,3	48	124



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	H	D
1/2"	12,7	1,65	31	19
3/4"	19,05	1,65	31	27
1"	25,4	1,65	31	33
1 1/2"	38,1	1,65	37	49
2"	50,8	1,65	37	65
2 1/2"	63,5	1,65	48	85
3"	76,2	1,65	48	85
4"	101,6	2,11	48	124

BioConnect® Flanged Version



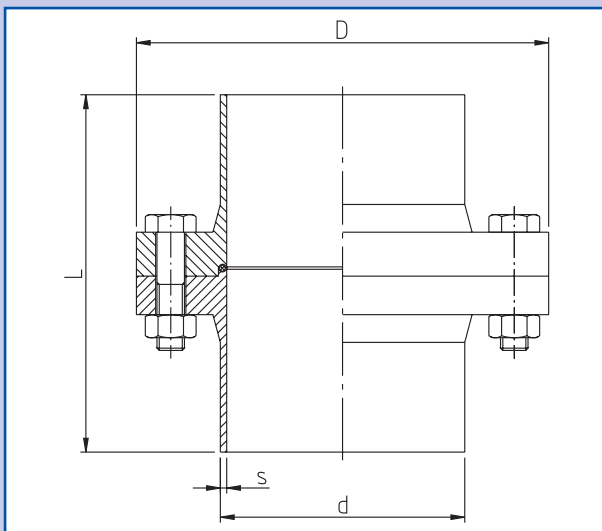
pressure class:	PN 16 (to DN 100) PN 10 (from DN 125) PN 100 (if requested)
material:	(1.4404 / 1.4435) 316L O-Ring: EPDM-FDA
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
6	8	1	88	60
8	10	1	88	60
10	13	1,5	88	65
15	19	1,5	88	75
20	23	1,5	92	80
25	29	1,5	102	85
32	35	1,5	102	95
40	41	1,5	102	100
50	53	1,5	106	110
65	70	2	130	140
80	85	2	130	150
100	104	2	134	175
125	129	2	118,3	190
150	154	2	118,3	215
200	204	2	118,3	270

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
13,5	13,5	1,6	88	60
17,2	17,2	1,6	88	65
21,3	21,3	1,6	88	75
26,9	26,9	1,6	92	80
33,7	33,7	2	102	85
42,4	42,4	2	102	95
48,3	48,3	2	102	100
60,3	60,3	2	106	110
76,1	76,1	2	130	140
88,9	88,9	2,3	130	150
114,3	114,3	2,3	134	175
139,7	139,7	2,6	118,3	200
168,3	168,3	2,6	118,3	230
219,1	219,1	2,6	118,3	285



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	88	65
3/4"	19,05	1,65	88	75
1"	25,4	1,65	92	80
1 1/2"	38,1	1,65	102	100
2"	50,8	1,65	102	100
2 1/2"	63,5	1,65	106	110
3"	76,2	1,65	130	140
4"	101,6	2,11	134	175

Only for use with BioConnect® - O-Rings!



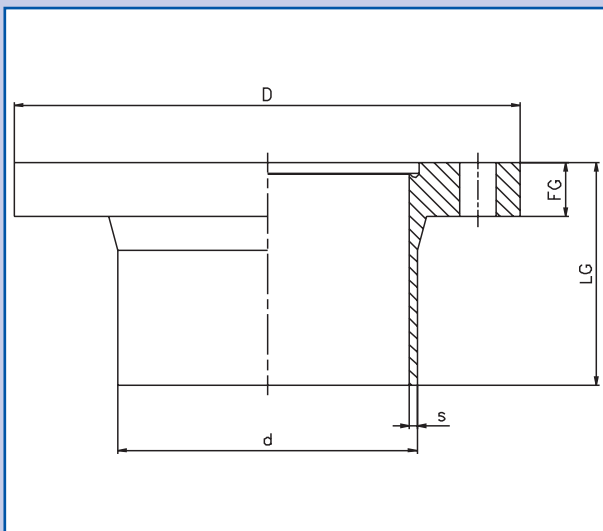
pressure class:	PN 16 (to DN 100) PN 10 (from DN 125) PN 100 (if requested)
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	LG	FG	D
6	8	1	45	10	60
8	10	1	45	10	60
10	13	1,5	45	10	65
15	19	1,5	45	10	75
20	23	1,5	47	12	80
25	29	1,5	52	12	85
32	35	1,5	52	12	95
40	41	1,5	52	12	100
50	53	1,5	54	14	110
65	70	2	66	16	140
80	85	2	66	16	150
100	104	2	68	18	175
125	129	2	60	18	190
150	154	2	60	18	215
200	204	2	60	20	270

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	LG	FG	D
13,5	13,5	1,6	45	10	60
17,2	17,2	1,6	45	10	65
21,3	21,3	1,6	45	10	75
26,9	26,9	1,6	47	12	80
33,7	33,7	2	52	12	85
42,4	42,4	2	52	12	95
48,3	48,3	2	52	12	100
60,3	60,3	2	54	14	110
76,1	76,1	2	66	16	140
88,9	88,9	2,3	66	16	150
114,3	114,3	2,3	68	18	175
139,7	139,7	2,6	60	18	200
168,3	168,3	2,6	60	18	230
219,1	219,1	2,6	60	20	285



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	LG	FG	D
1/2"	12,7	1,65	45	10	65
3/4"	19,05	1,65	45	10	75
1"	25,4	1,65	47	12	80
1 1/2"	38,1	1,65	52	12	100
2"	50,8	1,65	52	12	100
2 1/2"	63,5	1,65	54	14	110
3"	76,2	1,65	66	16	140
4"	101,6	2,11	68	18	175



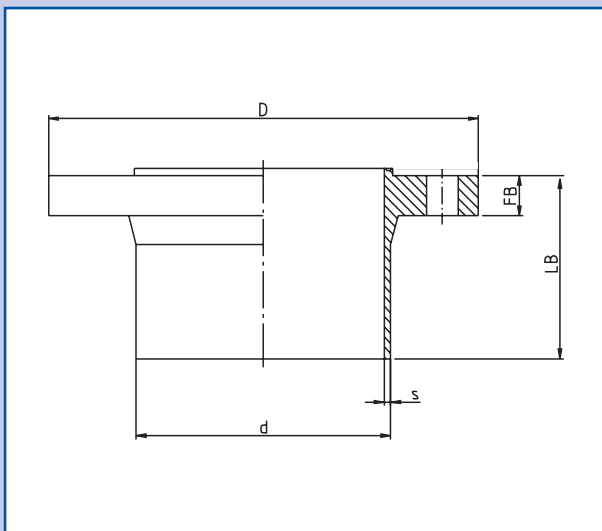
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material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	LB	FB	D
6	8	1	43	8	60
8	10	1	43	8	60
10	13	1,5	43	8	65
15	19	1,5	43	8	75
20	23	1,5	45	10	80
25	29	1,5	50	10	85
32	35	1,5	50	10	95
40	41	1,5	50	10	100
50	53	1,5	52	12	110
65	70	2	64	14	140
80	85	2	64	14	150
100	104	2	66	16	175
125	129	2	58,3	16	190
150	154	2	58,3	16	215
200	204	2	58,3	18	270

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	LB	FB	D
13,5	13,5	1,6	43	8	60
17,2	17,2	1,6	43	8	65
21,3	21,3	1,6	43	8	75
26,9	26,9	1,6	45	10	80
33,7	33,7	2	50	10	85
42,4	42,4	2	50	10	95
48,3	48,3	2	50	10	100
60,3	60,3	2	52	12	110
76,1	76,1	2	64	14	140
88,9	88,9	2,3	64	14	150
114,3	114,3	2,3	66	16	175
139,7	139,7	2,6	58,3	16	200
168,3	168,3	2,6	58,3	16	230
219,1	219,1	2,6	58,3	18	285



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	LB	FB	D
1/2"	12,7	1,65	43	8	65
3/4"	19,05	1,65	43	8	75
1"	25,4	1,65	45	10	80
1 1/2"	38,1	1,65	50	10	100
2"	50,8	1,65	50	10	100
2 1/2"	63,5	1,65	52	12	110
3"	76,2	1,65	64	14	140
4"	101,6	2,11	66	16	175

BioConnect® Clamp Version



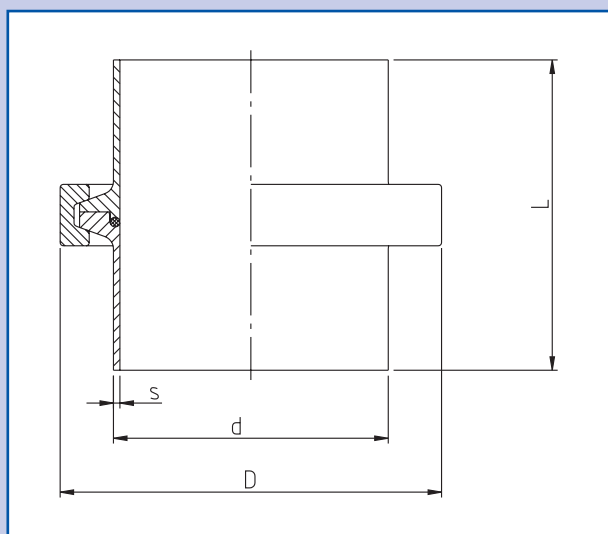
pressure class:	PN 16 (to DN 50) PN 10 (DN 65 to DN 100)
material:	(1.4404 / 1.4435) 316L clamp 1.4301 O-Ring: EPDM-FDA
temperature:	-10/+135°C short-time +150°C
Werkzeugnis:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
6	8	1	68	39
8	10	1	68	39
10	13	1,5	68	39
15	19	1,5	68	39
20	23	1,5	68	63
25	29	1,5	76	63
32	35	1,5	76	63
40	41	1,5	76	76
50	53	1,5	76	90
65	70	2	96	104
80	85	2	96	118
100	104	2	96	130

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
13,5	13,5	1,6	68	39
17,2	17,2	1,6	68	39
21,3	21,3	1,6	68	63
26,9	26,9	1,6	68	63
33,7	33,7	2	76	63
42,4	42,4	2	76	63
48,3	48,3	2	76	76
60,3	60,3	2	76	90
76,1	76,1	2	96	104
88,9	88,9	2,3	96	118
114,3	114,3	2,3	96	145



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	68	39
3/4"	19,05	1,65	68	39
1"	25,4	1,65	68	63
1 1/2"	38,1	1,65	76	63
2"	50,8	1,65	76	76
2 1/2"	63,5	1,65	76	90
3"	76,2	1,65	96	104
4"	101,6	2,11	96	130

Only for use with BioConnect® - O-Rings!



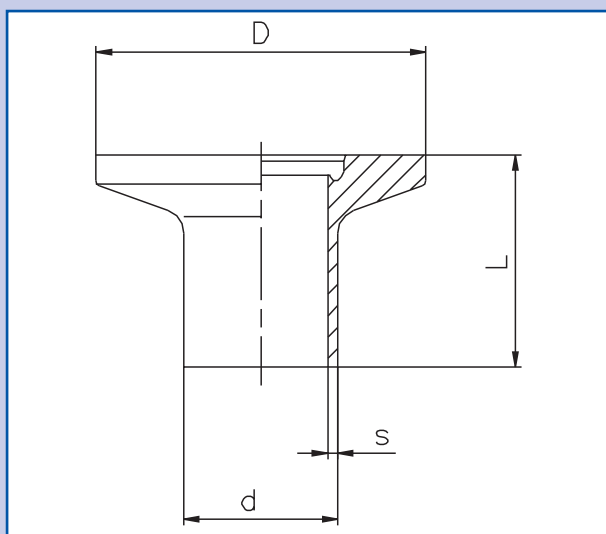
pressure class:	PN 16 (to DN 50) PN 10 (DN 65 to DN 100)
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
6	8	1	35	25
8	10	1	35	25
10	13	1,5	35	25
15	19	1,5	35	25
20	23	1,5	35	50,4
25	29	1,5	39	50,4
32	35	1,5	39	50,4
40	41	1,5	39	64
50	53	1,5	39	77,4
65	70	2	49	90,9
80	85	2	49	106
100	104	2	49	118,9

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
13,5	13,5	1,6	35	25
17,2	17,2	1,6	35	25
21,3	21,3	1,6	35	50,4
26,9	26,9	1,6	35	50,4
33,7	33,7	2	39	50,4
42,4	42,4	2	39	50,4
48,3	48,3	2	39	64
60,3	60,3	2	39	77,4
76,1	76,1	2	49	90,9
88,9	88,9	2,3	49	106
114,3	114,3	2,3	49	130



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	35	25
3/4"	19,05	1,65	35	25
1"	25,4	1,65	35	50,4
1 1/2"	38,1	1,65	39	50,4
2"	50,8	1,65	39	64
2 1/2"	63,5	1,65	39	77,4
3"	76,2	1,65	49	90,9
4"	101,6	2,11	49	118,9



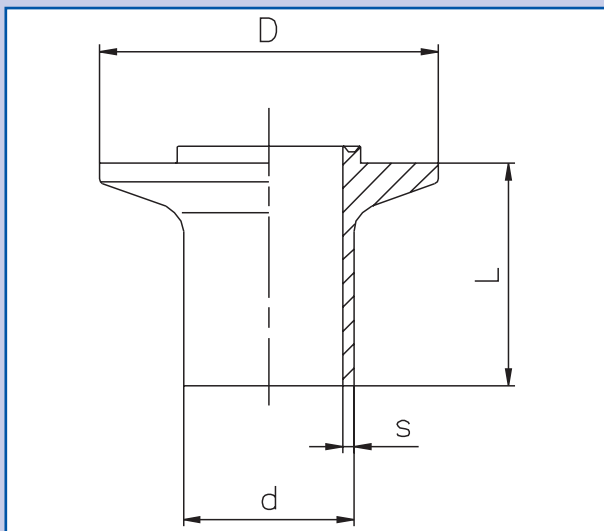
pressure class:	PN 16 (to DN 50) PN 10 (DN 65 to DN 100)
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
6	8	1	33	25
8	10	1	33	25
10	13	1,5	33	25
15	19	1,5	33	25
20	23	1,5	33	50,4
25	29	1,5	37	50,4
32	35	1,5	37	50,4
40	41	1,5	37	64
50	53	1,5	37	77,4
65	70	2	47	90,9
80	85	2	47	106
100	104	2	47	118,9

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
13,5	13,5	1,6	33	25
17,2	17,2	1,6	33	25
21,3	21,3	1,6	33	50,4
26,9	26,9	1,6	33	50,4
33,7	33,7	2	33	50,4
42,4	42,4	2	37	50,4
48,3	48,3	2	37	64
60,3	60,3	2	37	77,4
76,1	76,1	2	47	90,9
88,9	88,9	2,3	47	106
114,3	114,3	2,3	47	130

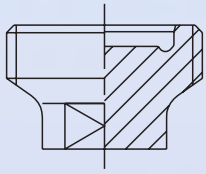


technical changes reserved

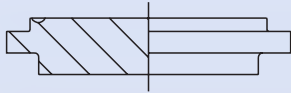
Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	33	25
3/4"	19,05	1,65	33	25
1"	25,4	1,65	33	50,4
1 1/2"	38,1	1,65	37	50,4
2"	50,8	1,65	37	64
2 1/2"	63,5	1,65	37	77,4
3"	76,2	1,65	47	90,9
4"	101,6	2,11	47	118,9

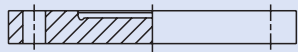
BioConnect® Blind Parts



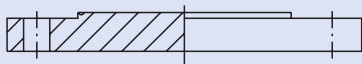
Blind part form R for
BioConnect® screwed version



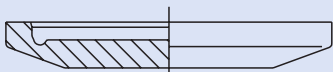
Blind part form V for
BioConnect® screwed version



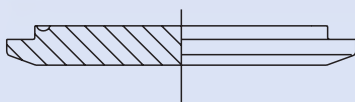
Blind part form R for
BioConnect® flanged version



Blind part form V for
BioConnect® flanged version



Blind part form R for
BioConnect® clamp version



Blind part form V for
BioConnect® clamp version

BioConnect® blind part form V

for BioConnect®
screwed version



pressure class: PN 16

material: (1.4404 / 1.4435) 316L

temperature: -10/+135°C
short-time +150°C

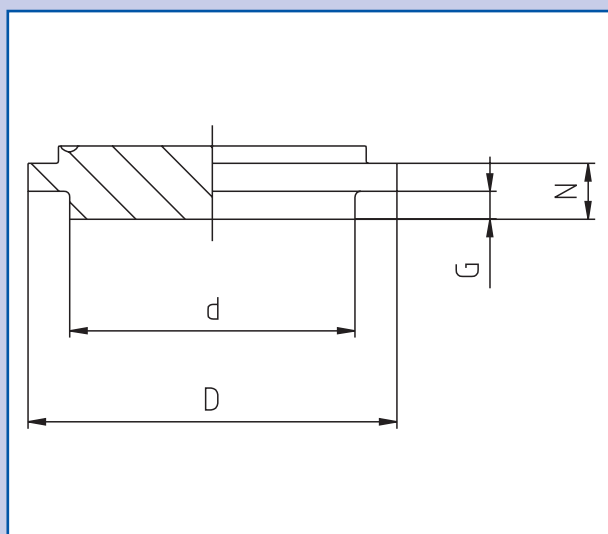
test report: EN 10204 - 3.1B
(if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	D	d	N	G
6	13	8	7	4
8	15	10	7	4
10	19	12	7	4
15	27	19	7	4
20	33	23	7	4
25	39	29	8	4
32	49	35	8	4
40	53	41	8	4
50	65	53	8	4
65	85	70	9	5
80	95	85	9	5
100	124	104	9	5

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	D	d	N	G
13,5	19	13,5	7	4
17,2	23	17,2	7	4
21,3	27	21,3	7	4
26,9	33	26,9	7	4
33,7	39	33,7	8	4
42,4	49	42,4	8	4
48,3	53	48,3	8	4
60,3	65	60,3	8	4
76,1	85	76,1	9	5
88,9	95	88,9	9	5
114,3	124	114,3	9	5



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	D	d	N	G
1/2"	19	13,5	7	4
3/4"	27	19	7	4
1"	33	26,9	7	4
1 1/2"	49	42,4	8	4
2"	65	60,3	8	4
2 1/2"	85	70	9	5
3"	85	76,1	9	5
4"	124	114,3	9	5

BioConnect[®] blind part form V

for BioConnect[®] flanged version



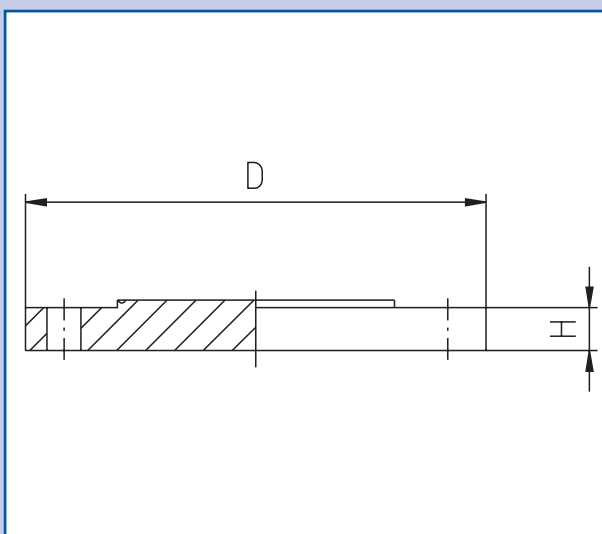
pressure class:	PN 16
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	D	H
6	60	8
8	60	8
10	65	8
15	75	8
20	80	10
25	85	10
32	95	10
40	100	10
50	110	12
65	140	14
80	150	14
100	175	16
125	190	16
150	215	16
200	270	18

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	D	H
13,5	60	8
17,2	65	8
21,3	75	8
26,9	80	10
33,7	85	10
42,4	95	10
48,3	100	10
60,3	110	12
76,1	140	14
88,9	150	14
114,3	175	16
139,7	200	16
168,3	230	16
219,1	285	20



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	D	H
1/2"	65	8
3/4"	75	8
1"	80	10
1 1/2"	100	10
2"	100	10
2 1/2"	110	12
3"	140	14
4"	175	16

BioConnect® blind part form V

for BioConnect® clamp version



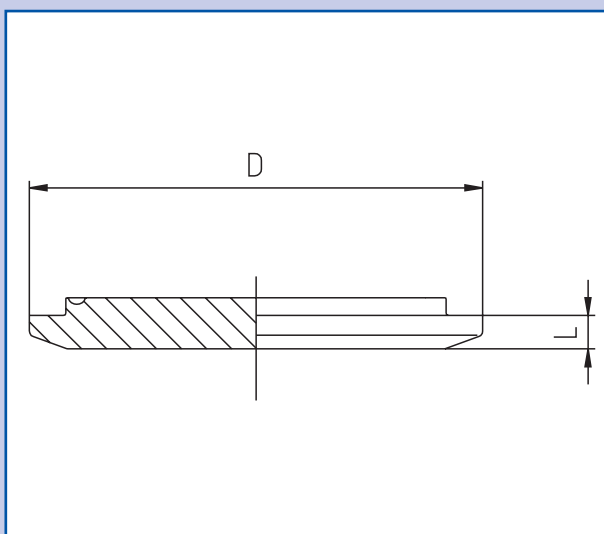
pressure class:	PN 16 (to DN 50) PN 10 (DN65 - DN100)
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+135°C short-time +150°C
test report:	EN 10204 - 3.1B (if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	D	L
6	25	5,5
8	25	5,5
10	25	5,5
15	25	5,5
20	50,4	7
25	50,4	7
32	50,4	7
40	64	7
50	77,4	7
65	90,9	7
80	106	9
100	118,9	9

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	D	L
13,5	25	5,5
17,2	25	5,5
21,3	50,4	7
26,9	50,4	7
33,7	50,4	7
42,4	50,4	7
48,3	64	7
60,3	77,4	7
76,1	90,9	7
88,9	106	9
114,3	130	9



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	D	L
1/2"	25	5,5
3/4"	25	5,5
1"	50,4	7
1 1/2"	50,4	7
2"	64	7
2 1/2"	77,4	7
3"	90,9	7
4"	118,9	9

BioConnect® Non return Valve



body material:	1.4435/1.4404/316L
surface finish interior:	product touched Ra ≤ 0,8 µm, i/o electropolished
poppet:	316L
seat:	EPDM
pressure class:	PN 16
end connections:	extended weld ends according to DIN 11866 (DIN, ISO and ASME BPE)
operating pressure:	4,5 bar (65 psi)
line position:	vertical
applications:	clean fluids (f.e. WFI) clean gases

Technical details

DN	valve	flow @ max differential pressure	cracking pressure
15	VC 1-2	3,6 m³/hr @ 0,2 bar	0,01 bar
25	VC 1-1	4,0 m³/hr @ 0,2 bar	0,02 bar
40	VC 1-3	11 m³/hr @ 0,2 bar	0,02 bar
50	VC 1-4	16 m³/hr @ 0,2 bar	0,02 bar

The sanitary check is a simple check valve which only allows flow into one direction and prevents flow into the opposite direction.

The valve does not incorporate a spring and it is designed to be placed vertically into the line with the flow arrows pointing up.

Dimensions according to DIN 11 866 line A

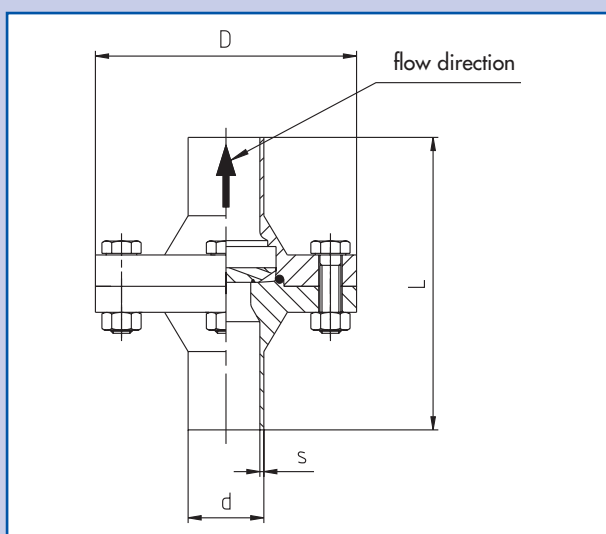
DN	d	s	L	D
15	19	1,5	102	100
25	29	1,5	112	100
40	41	1,5	112	110
50	53	1,5	114	140

Dimensions according to DIN 11 866 line B

DN	d	s	L	D
10	17,2	1,6	102	100
15	21,3	1,6	102	100
20	26,9	1,6	112	100
25	33,7	2,0	115	110
40	48,3	2,0	115	140
50	60,3	2,0	160	175

Dimensions according to DIN 11 866 line C

DN	d	s	L	D
1/2"	12,7	1,65	100	100
3/4"	19,05	1,65	100	100
1"	25,4	1,65	112	100
1 1/2"	38,1	1,65	115	110
2"	50,8	1,65	115	110



technical changes reserved



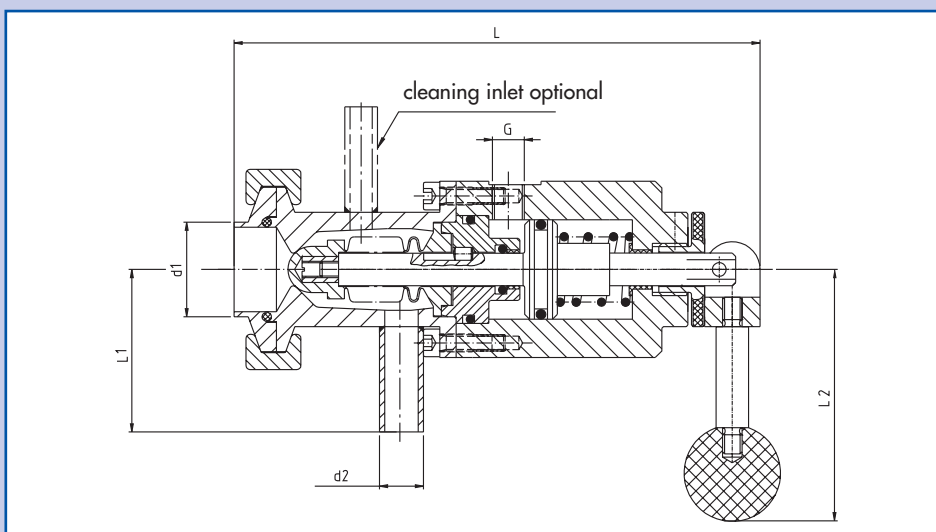
BioConnect® Sampling Valve



material:	product touched material: 316L (1.4435/1.4404) others: 304 (1.4301) o-ring: EPDM-FDA bellow: PTFE-TFM 1705
product connections:	BioConnect® aseptic clamp DN 25 or as requested
product touched surface finish:	Ra ≤ 0,8 µm
max.operating pressure:	6,0 bar (PN 6)
operating temperature:	max.135 °C
control air pressure:	min. 6 bar max.7 bar
test report:	EN 10204 - 3.1B (if requested AD-W2)
build in:	horizontal
cleaning inlet:	as requested

Technical details

d1	d2	L	L1	L2	G
29 x 1,5	12 x 1	161	50	77	1/8"



technical changes reserved



block flange for tank welding:
B25, B50, B65 und B80

tank wall thickness max. 4mm!

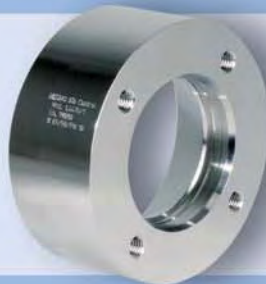
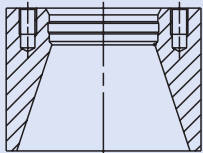


block flange with welding neck :
B25-Bund, B50-Bund, B65-Bund
and B80-Bund

tank wall thickness max. 12mm!

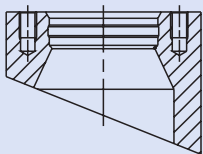


block flange high version:
B25 x 25, B50 x 40
and B65 x 50



special flanges for tank welding:
B25-Sonder, B50-Sonder, B65-Sonder,
B80-Sonder

high / diameter as to be agreed



special flanges for tank welding:
B25-Sonder, B50-Sonder, B65-Sonder,
B80-Sonder

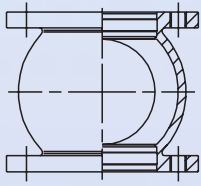
high / diameter as to be agreed



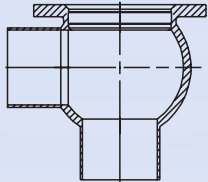
special flanges for tank welding:
B25-Sonder, B50-Sonder, B65-Sonder,
B80-Sonder

high / diameter as to be agreed

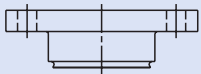
Note: Please observe our welding recommendations for all products depicted above



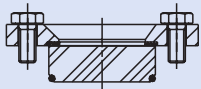
inline-housing:
type G25, G50 und G65



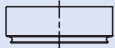
angle-housing:
type U25, U50 und U65



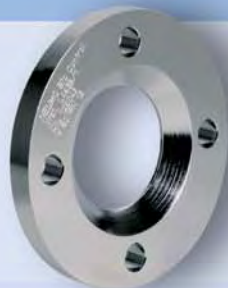
blind flange for
block flange / housings G or
type D25, D50, D65 und D80



sight-glass-set for:
type S25, S50, S65 und S80



spare part / accessories for sight glass
type F25, F50, F65 und F80



spare part / accessories for sight glass
type V25, V50, V65 und V80

Note: We reserve the right to deliver the BioControl housings with a modified design!

BioControl® Blind Flange



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L
O-Ring: EPDM-FDA

temperature: -10/+135°C,
short-time 150°C

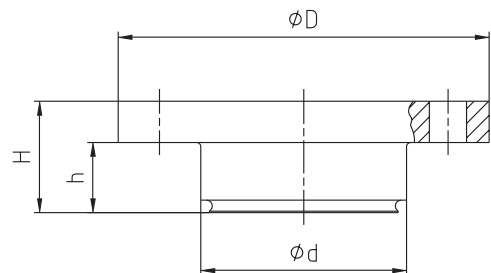
test report: EN 10204 - 3.1B
(if requested AD-W2)

Blind Flange

Typ	d	D	H	h	Art.-Nr:
D25	30,5	64	20	11	04010.025.000.4100
D50	50,0	90	27	17	04010.050.000.4100
D65	68,0	120	27	17	04010.065.000.4100
D80	87,5	140	37	25	04010.080.000.4100

Please order seal ring seperatly!

Only for use with BioControl® - O-Rings!



technical changes reserved



BioControl® Block Flange



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L

temperature: -10/+150°C

test report: EN 10204 - 3.1B
(if requested AD-W2)

Block Flange high version

Typ	d	D	H	Art.-Nr:
B25 high	30,5	64	25	04032.025.000.4100
B50 high	50,0	90	40	04032.050.000.4100
B65 high	68,0	120	50	04032.065.000.4100

Block Flange for tank welding

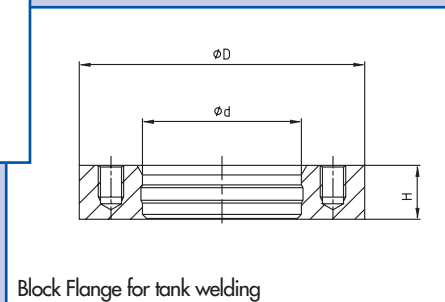
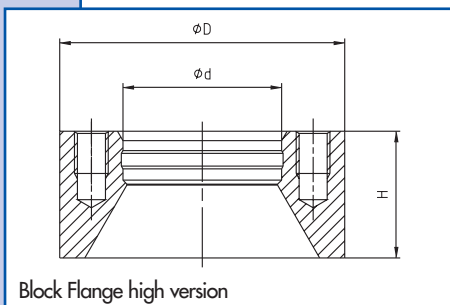
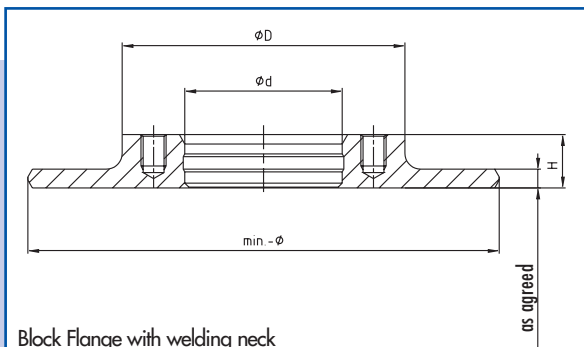
Typ	d	D	H	Art.-Nr:
B25	30,5	64	11	04030.025.000.4100
B50	50,0	90	17	04030.050.000.4100
B65	68,0	120	17	04030.065.000.4100
B80	87,5	140	25	04030.080.000.4100

tank wall thickness max. 4 mm

Block Flange with welding neck

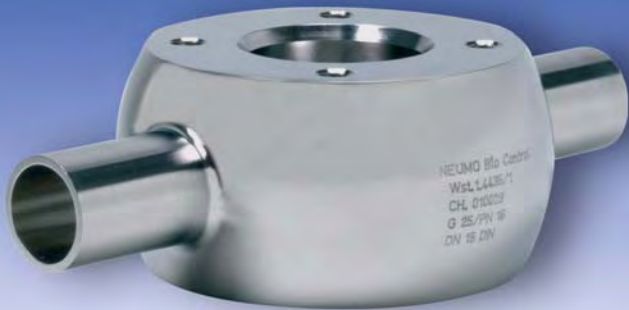
Typ	d	D	H	min.-ø	Art.-Nr:
B25	30,5	64	11	144	if requested
B50	50,0	90	17	170	if requested
B65	68,0	120	17	200	if requested
B80	87,5	140	25	220	if requested

tank wall thickness max. 12 mm



technical changes reserved

BioControl® Inline Housing



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L

temperature: -10/+150°C

test report: EN 10204 - 3.1B
(if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

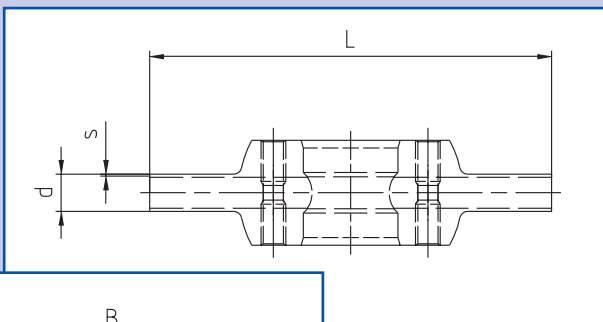
Typ	DN	d	s	h	L	B	U	Art.-Nr:
G25	6 DIN	8	1,0	28	130	70,0	30,5	04001.025.006.4100
G25	8 DIN	10	1,0	30	130	71,0	30,5	04001.025.008.4100
G25	10 DIN	13	1,5	32	130	71,5	30,5	04001.025.010.4100
G25	15 DIN	19	1,5	38	130	74,5	30,5	04001.025.015.4100
G25	20 DIN	23	1,5	42	130	76,5	30,5	04001.025.020.4100

Dimensions for DIN 11866 line B, DIN EN ISO 1127

Typ	DN	d	s	h	L	B	U	Art.-Nr:
G25	13,5	13,5	1,6	32,3	130	72,0	30,5	04101.025.008.4100
G25	17,2	17,2	1,6	36,0	130	73,5	30,5	04101.025.010.4100
G25	21,3	21,3	1,6	40,1	130	75,5	30,5	04101.025.015.4100
G25	26,9	26,9	1,6	45,7	130	78,5	30,5	04101.025.020.4100

Dimensions for DIN 11866 line C, ASME-BPE

Typ	DN	d	s	h	L	B	U	Art.-Nr:
G25	1/2"	12,7	1,65	31,4	130	71,5	30,5	04201.025.012.4100
G25	3/4"	19,05	1,65	37,75	130	74,5	30,5	04201.025.034.4100
G25	1"	25,4	1,65	44,1	130	78,0	30,5	04201.025.100.4100



technical changes reserved



BioControl® Inline Housing



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L

temperature: -10/+150°C

test report: EN 10204 - 3.1B
(if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

Typ	DN	d	s	h	L	D	U	Art.-Nr:
G50	25 DIN	29	1,5	60	150	90	50,1	04001.050.025.4100
G50	32 DIN	35	1,5	66	150	90	50,1	04001.050.032.4100
G50	40 DIN	41	1,5	72	150	90	50,1	04001.050.040.4100
G50	50 DIN	53	1,5	84	150	90	50,1	04001.050.050.4100
G50	65 DIN	70	2,0	100	170	90	50,1	04001.050.065.4100
G50	80 DIN	85	2,0	115	170	90	50,1	04001.050.080.4100
G50	100 DIN	104	2,0	134	170	90	50,1	04001.050.100.4100
G65	40 DIN	41	1,5	72	180	120	68,1	04001.065.040.4100
G65	50 DIN	53	1,5	84	180	120	68,1	04001.065.050.4100
G65	65 DIN	70	2,0	100	200	120	68,1	04001.065.065.4100
G65	80 DIN	85	2,0	115	200	120	68,1	04001.065.080.4100
G65	100 DIN	104	2,0	134	200	120	68,1	04001.065.100.4100

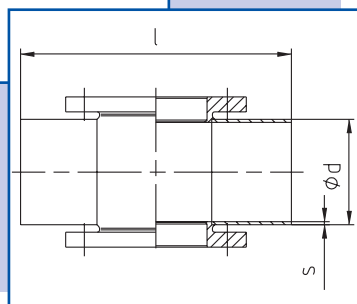
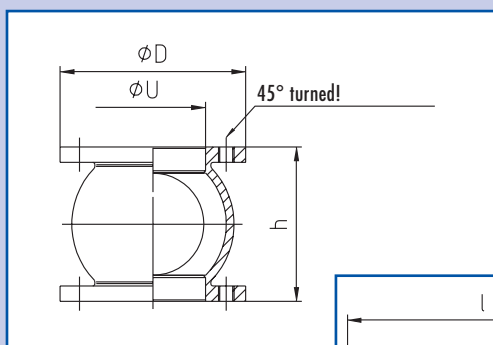
Dimensions for DIN 11866 line B, DIN EN ISO 1127

Typ	DN	d	s	h	L	D	U	Art.-Nr:
G50	33,7	33,7	2	63,7	150	90	50,1	04101.050.025.4100
G50	42,4	42,4	2	76,4	150	90	50,1	04101.050.032.4100
G50	48,3	48,3	2	78,3	150	90	50,1	04101.050.040.4100
G50	60,3	60,3	2	90,3	150	90	50,1	04101.050.050.4100
G50	76,1	76,1	2	106,7	170	90	50,1	04101.050.065.4100
G50	88,9	88,9	2,3	118,3	170	90	50,1	04101.050.080.4100
G50	114,3	114,3	2,3	144,3	170	90	50,1	04101.050.100.4100
G65	48,3	48,3	2	78,3	180	120	68,1	04101.065.040.4100
G65	60,3	60,3	2	90,3	180	120	68,1	04101.065.050.4100
G65	76,1	76,1	2	106,7	200	120	68,1	04101.065.065.4100
G65	88,9	88,9	2,3	118,3	200	120	68,1	04101.065.080.4100
G65	114,3	114,3	2,3	144,3	200	120	68,1	04101.065.100.4100

Dimensions for DIN 11866 line C, ASME-BPE

Typ	DN	d	s	h	L	D	U	Art.-Nr:
G50	1 1/2"	38,1	1,65	68,8	150	90	50,1	04201.050.112.4100
G50	2"	50,8	1,65	81,5	150	90	50,1	04201.050.200.4100
G50	2 1/2"	63,5	1,65	94,2	170	90	50,1	04201.050.212.4100
G50	3"	76,2	1,65	106,9	170	90	50,1	04201.050.300.4100
G50	4"	101,6	2,11	131,8	170	90	50,1	04201.050.400.4100
G65	1 1/2"	38,1	1,65	68,8	180	120	68,1	04201.065.112.4100
G65	2"	50,8	1,65	81,5	180	120	68,1	04201.065.200.4100
G65	2 1/2"	63,5	1,65	94,2	200	120	68,1	04201.065.212.4100
G65	3"	76,2	1,65	106,9	200	120	68,1	04201.065.300.4100
G65	4"	101,6	2,11	131,8	200	120	68,1	04201.065.400.4100

Note: We reserve the right to deliver the BioControl housings with a modified design!



technical changes reserved



BioControl® Angle Housing



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L

temperature: -10/+150°C

test report: EN 10204 - 3.1B
(if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

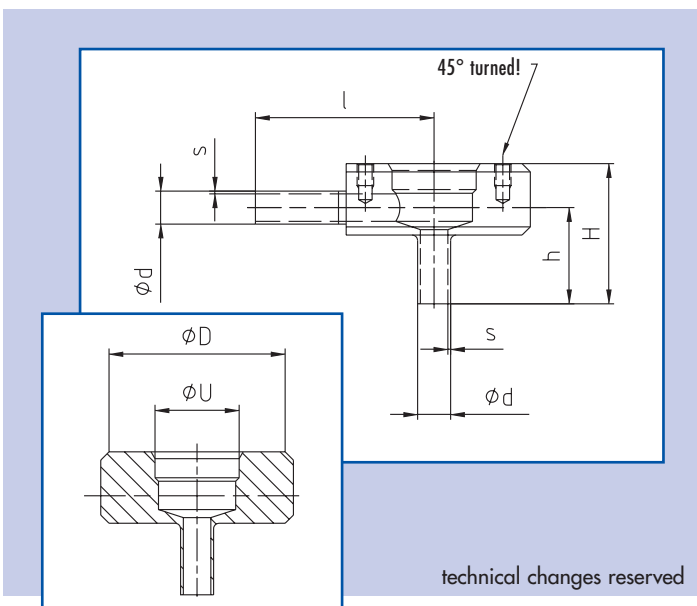
Typ	DN	d	s	h	H	l	D	U	Art.-Nr:
U25	6 DIN	8	1	34	48	65	64	30,5	04002.025.006.4100
U25	8 DIN	10	1	35	50	65	64	30,5	04002.025.008.4100
U25	10 DIN	13	1,5	35	51	65	64	30,5	04002.025.010.4100
U25	15 DIN	19	1,5	41	60	65	64	30,5	04002.025.015.4100
U25	20 DIN	23	1,5	41	65	65	64	30,5	04002.025.020.4100

Dimensions for DIN 11866 line B, DIN EN ISO 1127

Typ	DN	d	s	h	H	l	D	U	Art.-Nr:
U25	13,5	13,5	1,6	37	53	65	64	30,5	04102.025.008.4100
U25	17,2	17,2	1,6	39	57	65	64	30,5	04102.025.010.4100
U25	21,3	21,3	1,6	41	61	65	64	30,5	04102.025.015.4100
U25	26,9	26,9	1,6	43	66	65	64	30,5	04102.025.020.4100

Dimensions for DIN 11866 line C, ASME-BPE

Typ	DN	d	s	h	H	l	D	U	Art.-Nr:
U25	1/2"	12,7	1,65	36	52	65	64	30,5	04202.025.012.4100
U25	3/4"	19,05	1,65	40	59	65	64	30,5	04202.025.034.4100
U25	1"	25,4	1,65	43	65	65	64	30,5	04202.025.100.4100



BioControl® Angle Housing



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L

temperature: -10/+150°C

test report: EN 10204 - 3.1B
(if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

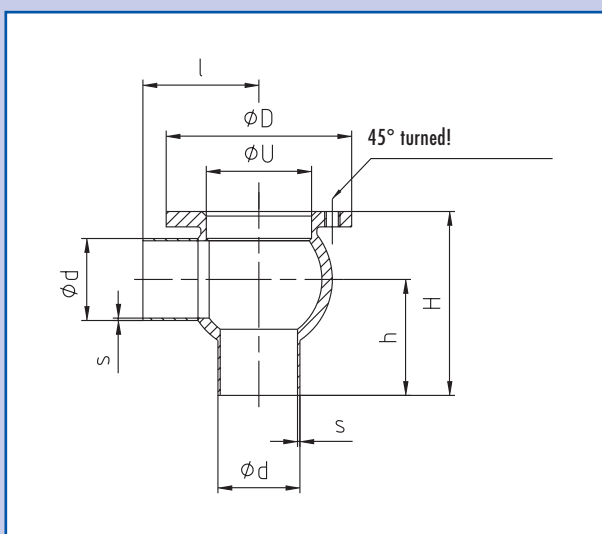
Typ	DN	d	s	H	h	l	D	U	Art.-Nr:
U50	25 DIN	29	1,5	90	60	75	90	50,1	04002.050.025.4100
U50	32 DIN	35	1,5	90	60	75	90	50,1	04002.050.032.4100
U50	40 DIN	41	1,5	95	59	75	90	50,1	04002.050.040.4100
U50	50 DIN	53	1,5	105	63	75	90	50,1	04002.050.050.4100
U50	65 DIN	70	2,0	130	80	85	90	50,1	04002.050.065.4100
U50	80 DIN	85	2,0	145	87,5	90	90	50,1	04002.050.080.4100
U50	100 DIN	104	2,0	165	98	100	90	50,1	04002.050.100.4100
U65	40 DIN	41	1,5	105	69	90	120	68,1	04002.065.040.4100
U65	50 DIN	53	1,5	112	70	90	120	68,1	04002.065.050.4100
U65	65 DIN	70	2,0	130	80	100	120	68,1	04002.065.065.4100
U65	80 DIN	85	2,0	145	87,5	100	120	68,1	04002.065.080.4100
U65	100 DIN	104	2,0	165	98	100	120	68,1	04002.065.100.4100

Dimensions for DIN 11866 line B, DIN EN ISO 1127

Typ	DN	d	s	H	h	l	D	U	Art.-Nr:
U50	33,7	33,7	2	95	63,2	75	90	50,1	04102.050.025.4100
U50	42,4	42,4	2	95	63,2	75	90	50,1	04102.050.032.4100
U50	48,3	48,3	2	100	61	75	90	50,1	04102.050.040.4100
U50	60,3	60,3	2	110	65	75	90	50,1	04102.050.050.4100
U50	76,1	76,1	2	135	82	85	90	50,1	04102.050.065.4100
U50	88,9	88,9	2,3	150	91	90	90	50,1	04102.050.080.4100
U50	114,3	114,3	2,3	175	103,2	100	90	50,1	04102.050.100.4100
U65	48,3	48,3	2	107	68	90	120	68,1	04102.065.040.4100
U65	60,3	60,3	2	115	70	90	120	68,1	04102.065.050.4100
U65	76,1	76,1	2	135	82	100	120	68,1	04102.065.065.4100
U65	88,9	88,9	2,3	155	96	100	120	68,1	04102.065.080.4100
U65	114,3	114,3	2,3	175	103,2	100	120	68,1	04102.065.100.4100

Dimensions for DIN 11866 line C, ASME-BPE

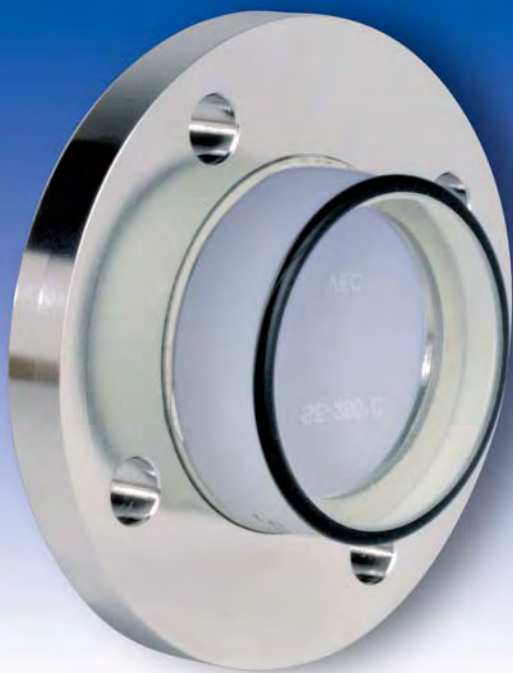
Typ	DN	d	s	H	h	l	D	U	Art.-Nr:
U50	1 1/2"	38,1	1,65	95	60,5	75	90	50,1	04202.050.112.4100
U50	2"	50,8	1,65	105	64,0	75	90	50,1	04202.050.200.4100
U50	2 1/2"	63,5	1,65	130	83,0	85	90	50,1	04202.050.212.4100
U50	3"	76,2	1,65	145	91,5	90	90	50,1	04202.050.300.4100
U50	4"	101,6	2,11	165	99,5	100	90	50,1	04202.050.400.4100
U65	1 1/2"	38,1	1,65	105	70,5	90	120	68,1	04202.065.112.4100
U65	2"	50,8	1,65	115	74,0	90	120	68,1	04202.065.200.4100
U65	2 1/2"	63,5	1,65	130	83,0	100	120	68,1	04202.065.212.4100
U65	3"	76,2	1,65	145	91,5	100	120	68,1	04202.065.300.4100
U65	4"	101,6	2,11	165	99,5	100	120	68,1	04202.065.400.4100



technical changes reserved

Note: We reserve the right to deliver the BioControl housings with a modified design!

BioControl® Sight Glass Set



pressure class: PN 16 (TÜV tested)

material: (1.4404 / 1.4435) 316L
O-Ring: EPDM-FDA

temperature: -10/+135°C,
short-time 150°C

test report: EN 10204 - 3.1B
(if requested AD-W2)

Sight Glass Set

Typ	d1	d2	D	H	h	Art.-Nr:
S25	30,5	25,0	64	20	11	04020.025.000.4100
S50	50,0	40,5	90	27	17	04020.050.000.4100
S65	68,0	58,5	120	27	17	04020.065.000.4100
S80	87,5	78,0	140	37	25	04020.080.000.4100

- 1 Sight Glass
- 2 Seal Ring
- 3 Seal
- 4 Flange Ring
- 5 Hexagon Screw

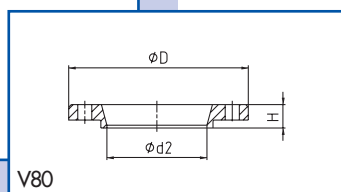
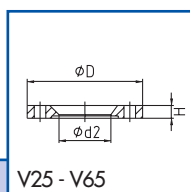
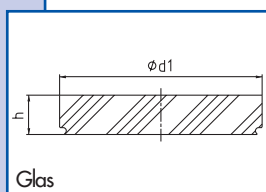
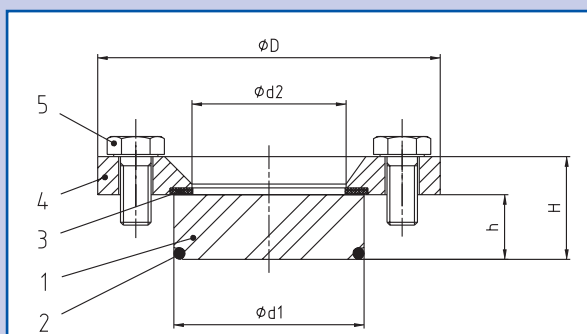
Flange Ring

Typ	d2	D	H	Art.-Nr:
V25	25,0	64	9,0	04024.025.000.4100
V50	40,5	90	10,0	04024.050.000.4100
V65	58,5	120	10,0	04024.065.000.4100
V80	78,0	140	18,2	04024.080.000.4100

Sight Glass

Typ	d1	h	Art.-Nr:
F25	30,5	13	04021.025.000.64
F50	50,0	17	04021.050.000.64
F65	68,0	17	04021.065.000.64
F80	87,5	17	04021.080.000.64

technical changes reserved



tool for disassembly
Art.-Nr.: 04029.050.080.99

Only for use with BioConnect® - O-Rings!



BioControl® Partner Products (Example)

Partners are:

- Endress und Hauser
- Herberts
- LABOM
- Lanthalux
- Malux
- Mettler-Toledo
- Negele
- Papenmeier
- Siemens
- VEGA
- WIKA



transmitter with G25



transmitter with blind flange



manometer with blind flange

Connect S[®] Flanged Version



pressure class*:	PN 16 (to DN 50) (*TÜV tested)
	PN 10 (DN 65 to 100) PN100 (on request)
material:	(1.4404 / 1.4435) 316L
temperature:	-10/+150°C, > on request
test report:	EN 10204 - 3.1B (if requested AD-W2)

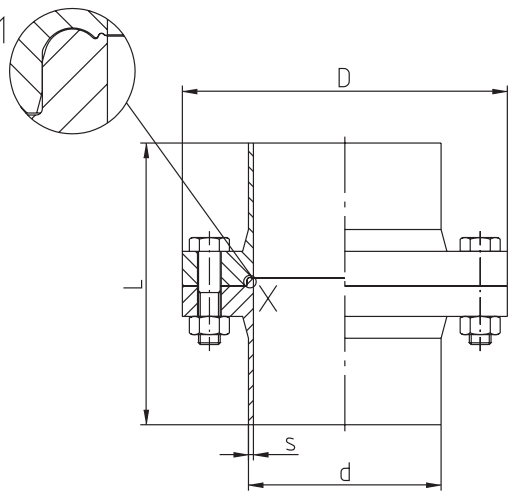
Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
10	13	1,5	88	65
15	19	1,5	88	75
20	23	1,5	92	85
25	29	1,5	102	97
32	35	1,5	102	105
40	41	1,5	106	115
50	53	1,5	106	125
65	70	2	130	145
80	85	2	130	155
100	104	2	134	180

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
10	17,2	1,6	88	65
15	21,3	1,6	88	75
20	26,9	1,6	92	85
25	33,7	2	102	97
32	42,4	2	102	105
40	48,3	2	106	115
50	60,3	2	106	125
65	76,1	2	130	145
80	88,9	2,3	130	155
100	114,3	2,3	134	180

X10:1



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	88	65
3/4"	19,05	1,65	88	75
1"	25,4	1,65	92	85
1 1/2"	38,1	1,65	102	105
2"	50,8	1,65	106	125
2 1/2"	63,5	1,65	106	135
3"	76,2	1,65	130	145
4"	101,6	2,11	134	180



pressure class: PN 10

material: (1.4404 / 1.4435) 316L
clamp 1.4301

temperature: -10/+150°C

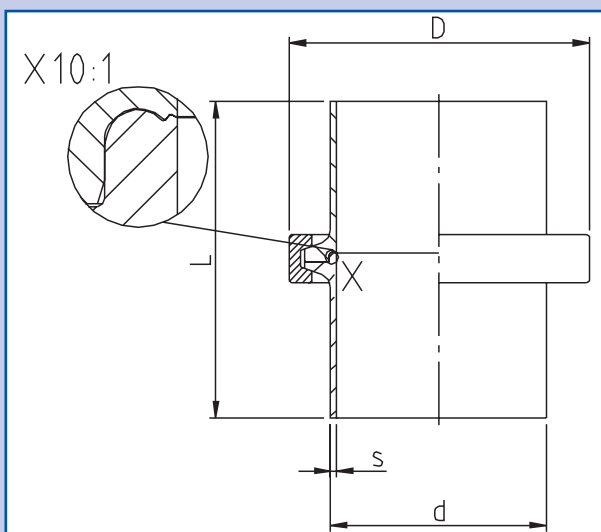
test report: EN 10204 - 3.1B
(if requested AD-W2)

Dimensions for DIN 11866 line A, DIN 11850

DN	d	s	L	D
10	13	1,5	69,5	39
15	19	1,5	69,5	39
20	23	1,5	69,5	63
25	29	1,5	68	63
32	35	1,5	76	63
40	41	1,5	76	76
50	53	1,5	76	90

Dimensions for DIN 11866 line B, DIN EN ISO 1127

DN	d	s	L	D
17,2	17,2	1,6	69,5	39
21,3	21,3	1,6	69,5	63
26,9	26,9	1,6	68	63
33,7	33,7	2	68	63
42,4	42,4	2	76	63
48,3	48,3	2	76	76
60,3	60,3	2	76	90



technical changes reserved

Dimensions for DIN 11866 line C, ASME-BPE

DN	d	s	L	D
1/2"	12,7	1,65	69,5	39
3/4"	19,05	1,65	68	39
1"	25,4	1,65	68	63
1 1/2"	38,1	1,65	76	63
2"	50,8	1,65	76	76

NEUMO keeps one of Europe's biggest stock for High Purity Stainless Steel Tube and Fittings.

Whatever dimensional standard is required in pharmaceutical industries - NEUMO has got it!

NEUMO Pharmatube High Purity Stainless Steel Tube is produced according technical specifications as follows:

welded acc. DIN 11866/ISO 1127/DIN 17457, PK2

Tolerances: D4/T4

mat.grade: 1.4435/BN2 (316L)

or

seamless acc. DIN 11866/ISO 1127/DIN 17458, PK2

Tolerances: D4/T4

mat.grade: 1.4435/BN2 (316L)

internal surface roughness:

Ra < 0,8µm

optional Ra < 0,6µm

optional Ra < 0,4µm and better

In addition NEUMO offers to the US-orientated pharmaceutical industries original High Purity tubing fulfilling all specification details of ASME-BPE including fittings and clamp ferrules.

AVAILABLE DIMENSIONS

DN	ISO 1127	DIN 11866/11850	ASME-BPE
4		6,0 x 1,0	6,35 x 0,89
6		8,0 x 1,0	
8	13,5 x 1,6	10,0 x 1,0	9,53 x 0,89
10	17,2 x 1,6	13,0 x 1,5	
15	21,3 x 1,6	19,0 x 1,5	12,7 x 1,65
20	26,9 x 1,6	23,0 x 1,5	19,05 x 1,65
25	33,7 x 2,0	29,0 x 1,5	25,4 x 1,65
32	42,4 x 2,0	35,0 x 1,5	
40	48,3 x 2,0	41,0 x 1,5	38,1 x 1,65
50	60,3 x 2,0	53,0 x 1,5	50,8 x 1,65
65	76,1 x 2,0/2,3	70,0 x 2,0	63,5 x 1,65
80	88,9 x 2,3	85,0 x 2,0	76,2 x 1,65
100	114,3 x 2,3/2,6	104,0 x 2,0	101,6 x 2,11



Fittings made of stainless steel for aseptic, chemical and pharmaceutical techniques:

The DIN standard 11865, which was issued beginning of 2003 defines the design of fittings (T-pieces, bends, reducing parts for welding) made of stainless steel for the aseptic, chemical and pharmaceutical areas:

The DIN standard committee for mountings 4.1 has developed the DIN 11865 with its explicit specifications, based on previous experiences from applications, practical usage and works standards. These are in particular:

- basic dimensions with tolerance indications
- hygienic classes
- surface consistency of the inner and outer surfaces acc. to the applied hygienic class
- tolerances of the wall thickness and sphericity
- permissible wall thickness reduction within the area of forming
- materials and their qualities / purity (e.g. ferrite content)
- labeling
- product description and order designations
- inspections and documentation
- packaging and transport

With this new DIN standard a further building block is made available for both, the planner and user of the plant, to achieve an optimal design of a piping for the aseptic area.

For the objective of applying a continuous aseptic concept for the construction of the plant, further issues and standards besides the DIN 11865 have to be taken into consideration:

- DIN 11866 "Pipes made of stainless steel for the aseptic, chemical and pharmaceutical area"
- optimal connection technology, e.g. NEUMO BioConnect, ConnectS or DIN 11864
- best possible selection of the valve technology: e.g. diaphragm valve, aseptic globe valves
- e.g. connection system NEUMO BioControl for applications such as pressure or temperature measurement techniques
- As far as technically feasible: Application of orbital welding technology

...and of course: Sufficient experience of the planner, the future operator and the supplier!

**We will gladly provide advise on the complex task: STERILE TECHNOLOGY.
Approach our specialized staff. Call for us!**



T-pieces, form T (long)



Elbow 90°, form BL.-90



T-pieces , form TK (short)



Elbow 45°, form BL.-45



T-pieces , form TR (long, reduced)



Reducer concentric , form RK



T-pieces , form TKR (short, reduced)



Reducer eccentric , form RE



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