



A9 - ASEPTIC ELBOWS / BENDS

A10 - STERI-Bo[®] - 90° DIN 11865-BL-90

elbows for orbital welding

A11 - STERI-Bo[®] - 60°

elbows for orbital welding

A12 - STERI-Bo[®] - 45° DIN 11865-BL-45

elbows for orbital welding

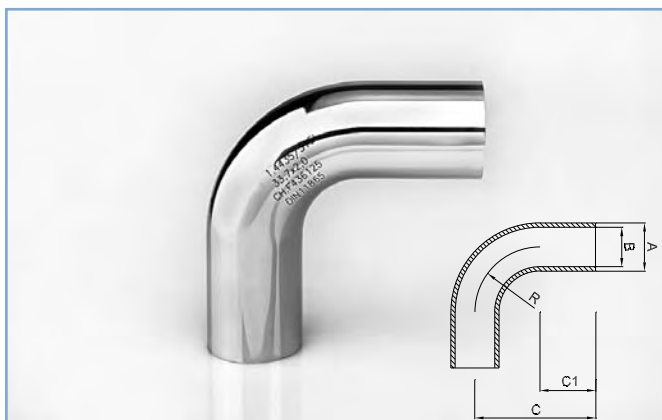
A13 - STERI-Bo[®] - 30°

elbows for orbital welding

A14 - MEDI-Bo[®] - 90° / 45° DIN 11852-BL

elbows for orbital welding

ASEPTIC PROGRAM



Aseptic elbows 90° for orbital welding

DIN 11865-BL-90

STERI-Bo® / HQ-Bo®

Dimensions:

DIN 11866-A (DIN 11850)

DIN 11866-B (EN ISO 1127)

DIN 11866-C (ASME BPE)

Marking:

dimension, material, heat number

Tolerance:

DIN 11865 / EN ISO 1127

Material:

AISI 316L

Certificate (on demand):

EN 10204 3.1

EN 10204 3.1 AD-W2 (for selected items)

Inner surface variants:

electrochemical polished

Ra ≤ 0,6 μm (STERI-line®)

Ra ≤ 0,5 μm (STERI-line®)

Ra ≤ 0,4 μm (HQ-line®)

Ra ≤ 0,25 μm (HQ-line®)

DIN	pipe	A	B	C	C1	R
DN 4*	6,0 x 1,0	6,0	4,0	45,0	25,0	22,0
DN 6	8,0 x 1,0	8,0	6,0	45,0	25,0	22,0*
DN 8	10,0 x 1,0	10,0	8,0	50,0	25,0	25,0
DN 10*	12,0 x 1,0	12,0	10,0	51,0	25,0	26,0
DN 10	13,0 x 1,5	13,0	10,0	51,0	25,0	26,0
DN 15	19,0 x 1,5	19,0	16,0	60,0	25,0	35,0
DN 20	23,0 x 1,5	23,0	20,0	65,0	25,0	40,0
DN 25	29,0 x 1,5	29,0	26,0	90,0	40,0	50,0
DN 32	35,0 x 1,5	35,0	32,0	95,0	40,0	55,0
DN 40	41,0 x 1,5	41,0	38,0	100,0	40,0	60,0
DN 50	53,0 x 1,5	53,0	50,0	110,0	40,0	70,0
DN 65	70,0 x 2,0	70,0	66,0	120,0	40,0	80,0
DN 80	85,0 x 2,0	85,0	81,0	145,0	55,0	90,0
DN 100	104,0 x 2,0	104,0	100,0	155,0	55,0	100,0
DN 125	129,0 x 2,0	129,0	125,0	270,0	82,5	187,5
DN 150	154,0 x 2,0	154,0	150,0	325,0	100,0	225,0
DN 200	204,0 x 2,0	204,0	200,0	400,0	100,0	300,0

ASME BPE	pipe	A	B	C	C1	R
DN 1/4"	6,35 x 0,89	6,35	4,57	66,7	41,3	25,4
DN 3/8"	9,53 x 0,89	9,53	7,75	66,7	41,3	25,4
DN 1/2"	12,7 x 1,65	12,7	9,4	76,2	50,8	25,4
DN 3/4"	19,05 x 1,65	19,05	15,75	76,2	50,8	25,4
DN 1"	25,4 x 1,65	25,4	22,1	76,2	38,1	38,1
DN 1 1/2"	38,1 x 1,65	38,1	34,8	95,3	38,1	57,2
DN 2"	50,8 x 1,65	50,8	47,5	120,7	44,5	76,2
DN 2 1/2"	63,5 x 1,65	63,5	60,2	139,7	44,5	95,3
DN 3"	76,2 x 1,65	76,2	72,9	158,8	44,5	114,3
DN 4"	101,6 x 2,11	101,6	97,38	203,2	50,8	152,4
DN 6"	152,4 x 2,77	152,4	146,86	292,1	63,5	228,6

Values Ra in [μm]	STERI-line®			HQ-line®	
	MB/H2	K400/H3o	e-pol/HE3o	K400/H4o	epol/HE5o
Ra > 0,8					
Ra ≤ 0,8					
Ra ≤ 0,5-0,8					
Ra ≤ 0,4					
Ra ≤ 0,25					

ISO	pipe	A	B	C	C1	R
DN 8	13,5 x 1,6	13,5	10,3	45,0	25,0	20,0
DN 10	17,2 x 1,6	17,2	14,0	53,0	25,0	28,0
DN 15	21,3 x 1,6	21,3	18,1	55,0	25,0	30,0
DN 20	26,9 x 1,6	26,9	23,7	68,5	40,0	28,5
DN 25	33,7 x 2,0	33,7	29,7	78,0	40,0	38,0
DN 32	42,4 x 2,0	42,4	38,4	87,5	40,0	47,5
DN 40	48,3 x 2,0	48,3	44,3	97,0	40,0	57,0
DN 50	60,3 x 2,0	60,3	56,3	116,0	40,0	76,0
DN 65	76,1 x 2,0	76,1	72,1	150,0	55,0	95,0
DN 80	88,9 x 2,3	88,9	84,3	169,5	55,0	114,5
DN 100	114,3 x 2,3	114,3	109,7	207,5	55,0	152,5
DN 125	139,7 x 2,6	139,7	134,5	245,5	55,0	190,5
DN 150	168,3 x 2,6	168,3	163,1	283,5	55,0	228,5
DN 200	219,1 x 2,6	219,1	213,9	385,0	80,0	305,0

*) non-standard

further dimensions on request

ASEPTIC PROGRAM



Aseptic elbows 60° for orbital welding similar to DIN 11865-BL STERI-Bo® / HQ-Bo®

Dimensions:

DIN 11866-A (DIN 11850)
DIN 11866-B (EN ISO 1127)
DIN 11866-C (ASME BPE)

Marking:

dimension, material, heat number

Tolerance:

EN ISO 1127

Material:

AISI 316L

Certificate (on demand):

EN 10204 3.1
EN 10204 3.1 AD-W2 (for selected items)

Inner surface variants:

electrochemical polished
Ra ≤ 0,6 μm (STERI-line®)
Ra ≤ 0,5 μm (STERI-line®)
Ra ≤ 0,4 μm (HQ-line®)
Ra ≤ 0,25 μm (HQ-line®)

Values Ra in [μm]	STERI-line®		HQ-line®	
	K400/H3o	e-pol/HE3o	K400/H4o	e-pol/HE5o
	Ra≤0,8	Ra≤0,5-0,8	Ra≤0,4	Ra≤0,25
Inside mech. polished				
Inside e-polished				
Outside mech. polished				

DIN	pipe	A	B	C	C1	R
DN 4*	6,0 x 1,0	6,0	4,0	33,3	25,0	22,0
DN 6	8,0 x 1,0	8,0	6,0	33,3	25,0	22,0
DN 8	10,0 x 1,0	10,0	8,0	35,4	25,0	25,0
DN 10*	12,0 x 1,0	12,0	10,0	35,8	25,0	26,0
DN 10	13,0 x 1,5	13,0	10,0	35,8	25,0	26,0
DN 15	19,0 x 1,5	19,0	16,0	39,5	25,0	35,0
DN 20	23,0 x 1,5	23,0	20,0	41,6	25,0	40,0
DN 25	29,0 x 1,5	29,0	26,0	60,7	40,0	50,0
DN 32	35,0 x 1,5	35,0	32,0	62,8	40,0	55,0
DN 40	41,0 x 1,5	41,0	38,0	64,9	40,0	60,0
DN 50	53,0 x 1,5	53,0	50,0	69,0	40,0	70,0
DN 65	70,0 x 2,0	70,0	66,0	73,1	40,0	80,0
DN 80	85,0 x 2,0	85,0	81,0	92,3	55,0	90,0
DN 100	104,0 x 2,0	104,0	100,0	96,4	55,0	100,0
DN 125	129,0 x 2,0	129,0	125,0	160,2	82,5	187,5
DN 150	154,0 x 2,0	154,0	150,0	193,2	100,0	225,0
DN 200	204,0 x 2,0	204,0	200,0	224,3	100,0	300,0

ASME BPE	pipe	A	B	C	C1	R
DN 1/4"	6,35 x 0,89	6,35	4,57	50,8	40,3	25,4
DN 3/8"	9,53 x 0,89	9,53	7,75	50,8	40,3	25,4
DN 1/2"	12,7 x 1,65	12,7	9,4	57,2	46,7	25,4
DN 3/4"	19,05 x 1,65	19,05	15,75	57,2	46,7	25,4
DN 1"	25,4 x 1,65	25,4	22,1	57,2	41,4	38,1
DN 1 1/2"	38,1 x 1,65	38,1	34,8	63,5	39,8	57,2
DN 2"	50,8 x 1,65	50,8	47,5	76,2	44,6	76,2
DN 2 1/2"	63,5 x 1,65	63,5	60,2	85,7	47,0	95,3
DN 3"	76,2 x 1,65	76,2	72,9	92,1	44,8	114,3
DN 4"	101,6 x 2,11	101,6	97,38	114,3	51,2	152,4
DN 6"	152,4 x 2,77	152,4	146,86	158,8	64,1	228,6

ISO	pipe	A	B	C	C1	R
DN 8	13,5 x 1,6	13,5	10,3	33,3	25,0	20,0
DN 10	17,2 x 1,6	17,2	14,0	36,6	25,0	28,0
DN 15	21,3 x 1,6	21,3	18,1	37,4	25,0	30,0
DN 20	26,9 x 1,6	26,9	23,7	51,8	40,0	28,5
DN 25	33,7 x 2,0	33,7	29,7	55,7	40,0	38,0
DN 32	42,4 x 2,0	42,4	38,4	59,7	40,0	47,5
DN 40	48,3 x 2,0	48,3	44,3	63,6	40,0	57,0
DN 50	60,3 x 2,0	60,3	56,3	71,5	40,0	76,0
DN 65	76,1 x 2,0	76,1	72,1	94,4	55,0	95,0
DN 80	88,9 x 2,3	88,9	84,3	102,4	55,0	114,5
DN 100	114,3 x 2,3	114,3	109,7	118,2	55,0	152,5
DN 125	139,7 x 2,6	139,7	134,5	133,9	55,0	190,5
DN 150	168,3 x 2,6	168,3	163,1	149,7	55,0	228,5
DN 200	219,1 x 2,6	219,1	213,9	206,3	80,0	305,0

*) non-standard

further dimensions on request

ASEPTIC PROGRAM



Aseptic elbows 45° for orbital welding

DIN 11865-BL-45

STERI-Bo® / HQ-Bo®

Dimensions:

DIN 11866-A (DIN 11850)

DIN 11866-B (EN ISO 1127)

DIN 11866-C (ASME BPE)

Marking:

dimension, material, heat number

Tolerance:

DIN 11865 / EN ISO 1127

Material:

AISI 316L

Certificate (on demand):

EN 10204 3.1

EN 10204 3.1 AD-W2 (for selected items)

Inner surface variants:

electrochemical polished

Ra ≤ 0,6 μm (STERI-line®)

Ra ≤ 0,5 μm (STERI-line®)

Ra ≤ 0,4 μm (HQ-line®)

Ra ≤ 0,25 μm (HQ-line®)

DIN	pipe	A	B	C	C1	R
DN 4*	6,0 x 1,0	6,0	4,0	33,3	25,0	22,0
DN 6	8,0 x 1,0	8,0	6,0	33,3	25,0	20,0*
DN 8	10,0 x 1,0	10,0	8,0	35,4	25,0	25,0
DN 10*	12,0 x 1,0	12,0	10,0	35,8	25,0	26,0
DN 10	13,0 x 1,5	13,0	10,0	35,8	25,0	26,0
DN 15	19,0 x 1,5	19,0	16,0	39,5	25,0	35,0
DN 20	23,0 x 1,5	23,0	20,0	41,6	25,0	40,0
DN 25	29,0 x 1,5	29,0	26,0	60,7	40,0	50,0
DN 32	35,0 x 1,5	35,0	32,0	62,8	40,0	55,0
DN 40	41,0 x 1,5	41,0	38,0	64,9	40,0	60,0
DN 50	53,0 x 1,5	53,0	50,0	69,0	40,0	70,0
DN 65	70,0 x 2,0	70,0	66,0	73,1	40,0	80,0
DN 80	85,0 x 2,0	85,0	81,0	92,3	55,0	90,0
DN 100	104,0 x 2,0	104,0	100,0	96,4	55,0	100,0
DN 125	129,0 x 2,0	129,0	125,0	160,2	82,5	187,5
DN 150	154,0 x 2,0	154,0	150,0	193,2	100,0	225,0
DN 200	204,0 x 2,0	204,0	200,0	224,3	100,0	300,0

ASME BPE	pipe	A	B	C	C1	R
DN 1/4"	6,35 x 0,89	6,35	4,57	50,8	40,3	25,4
DN 3/8"	9,53 x 0,89	9,53	7,75	50,8	40,3	25,4
DN 1/2"	12,7 x 1,65	12,7	9,4	57,2	46,7	25,4
DN 3/4"	19,05 x 1,65	19,05	15,75	57,2	46,7	25,4
DN 1"	25,4 x 1,65	25,4	22,1	57,2	41,4	38,1
DN 1 1/2"	38,1 x 1,65	38,1	34,8	63,5	39,8	57,2
DN 2"	50,8 x 1,65	50,8	47,5	76,2	44,6	76,2
DN 2 1/2"	63,5 x 1,65	63,5	60,2	85,7	47,0	95,3
DN 3"	76,2 x 1,65	76,2	72,9	92,1	44,8	114,3
DN 4"	101,6 x 2,11	101,6	97,38	114,3	51,2	152,4
DN 6"	152,4 x 2,77	152,4	146,86	158,8	64,1	228,6

Values Ra in [μm]	STERI-line®			HQ-line®	
	MB/H2 Ra>0,8	K400/H3o Ra≤0,8	e-pol/HE3o Ra≤0,5-0,8	K400/H4o Ra≤0,4	epol/HE5o Ra≤0,25
Inside bright finish	STERI-line				
Inside mech. polished		STERI-line	STERI-line	HQ-line	HQ-line
Inside e-polished			STERI-line		HQ-line
Outside bright finish	STERI-line				
Outside mech. polished		STERI-line	STERI-line	HQ-line	HQ-line

ISO	pipe	A	B	C	C1	R
DN 8	13,5 x 1,6	13,5	10,3	33,3	25,0	20,0
DN 10	17,2 x 1,6	17,2	14,0	36,6	25,0	28,0
DN 15	21,3 x 1,6	21,3	18,1	37,4	25,0	30,0
DN 20	26,9 x 1,6	26,9	23,7	51,8	40,0	28,5
DN 25	33,7 x 2,0	33,7	29,7	55,7	40,0	38,0
DN 32	42,4 x 2,0	42,4	38,4	59,7	40,0	47,5
DN 40	48,3 x 2,0	48,3	44,3	63,6	40,0	57,0
DN 50	60,3 x 2,0	60,3	56,3	71,5	40,0	76,0
DN 65	76,1 x 2,0	76,1	72,1	94,4	55,0	95,0
DN 80	88,9 x 2,3	88,9	84,3	102,4	55,0	114,5
DN 100	114,3 x 2,3	114,3	109,7	118,2	55,0	152,5
DN 125	139,7 x 2,6	139,7	134,5	133,9	55,0	190,5
DN 150	168,3 x 2,6	168,3	163,1	149,7	55,0	228,5
DN 200	219,1 x 2,6	219,1	213,9	206,3	80,0	305,0

*) non-standard

further dimensions on request

ASEPTIC PROGRAM



Aseptic elbows 30° for orbital welding similar to DIN 11865-BL STERI-Bo® / HQ-Bo®

Dimensions:

DIN 11866-A (DIN 11850)
DIN 11866-B (EN ISO 1127)
DIN 11866-C (ASME BPE)

Marking:

dimension, material, heat number

Tolerance:

EN ISO 1127

Material:

AISI 316L

Certificate (on demand):

EN 10204 3.1
EN 10204 3.1 AD-W2 (for selected items)

Inner surface variants:

electrochemical polished
Ra ≤ 0,6 μm (STERI-line®)
Ra ≤ 0,5 μm (STERI-line®)
Ra ≤ 0,4 μm (HQ-line®)
Ra ≤ 0,25 μm (HQ-line®)

Values Ra in [μm]	STERI-line®		HQ-line®	
	K400/H3o	e-pol/HE3o	K400/H4o	e-pol/HE5o
	Ra≤0,8	Ra≤0,5-0,8	Ra≤0,4	Ra≤0,25
Inside mech. polished				
Inside e-polished				
Outside mech. polished				

DIN	pipe	A	B	C	C1	R
DN 4*	6,0 x 1,0	6,0	4,0	33,3	25,0	22,0
DN 6	8,0 x 1,0	8,0	6,0	33,3	25,0	22,0
DN 8	10,0 x 1,0	10,0	8,0	35,4	25,0	25,0
DN 10*	12,0 x 1,0	12,0	10,0	35,8	25,0	26,0
DN 10	13,0 x 1,5	13,0	10,0	35,8	25,0	26,0
DN 15	19,0 x 1,5	19,0	16,0	39,5	25,0	35,0
DN 20	23,0 x 1,5	23,0	20,0	41,6	25,0	40,0
DN 25	29,0 x 1,5	29,0	26,0	60,7	40,0	50,0
DN 32	35,0 x 1,5	35,0	32,0	62,8	40,0	55,0
DN 40	41,0 x 1,5	41,0	38,0	64,9	40,0	60,0
DN 50	53,0 x 1,5	53,0	50,0	69,0	40,0	70,0
DN 65	70,0 x 2,0	70,0	66,0	73,1	40,0	80,0
DN 80	85,0 x 2,0	85,0	81,0	92,3	55,0	90,0
DN 100	104,0 x 2,0	104,0	100,0	96,4	55,0	100,0
DN 125	129,0 x 2,0	129,0	125,0	160,2	82,5	187,5
DN 150	154,0 x 2,0	154,0	150,0	193,2	100,0	225,0
DN 200	204,0 x 2,0	204,0	200,0	224,3	100,0	300,0

ASME BPE	pipe	A	B	C	C1	R
DN 1/4"	6,35 x 0,89	6,35	4,57	50,8	40,3	25,4
DN 3/8"	9,53 x 0,89	9,53	7,75	50,8	40,3	25,4
DN 1/2"	12,7 x 1,65	12,7	9,4	57,2	46,7	25,4
DN 3/4"	19,05 x 1,65	19,05	15,75	57,2	46,7	25,4
DN 1"	25,4 x 1,65	25,4	22,1	57,2	41,4	38,1
DN 1 1/2"	38,1 x 1,65	38,1	34,8	63,5	39,8	57,2
DN 2"	50,8 x 1,65	50,8	47,5	76,2	44,6	76,2
DN 2 1/2"	63,5 x 1,65	63,5	60,2	85,7	47,0	95,3
DN 3"	76,2 x 1,65	76,2	72,9	92,1	44,8	114,3
DN 4"	101,6 x 2,11	101,6	97,38	114,3	51,2	152,4
DN 6"	152,4 x 2,77	152,4	146,86	158,8	64,1	228,6

ISO	pipe	A	B	C	C1	R
DN 8	13,5 x 1,6	13,5	10,3	33,3	25,0	20,0
DN 10	17,2 x 1,6	17,2	14,0	36,6	25,0	28,0
DN 15	21,3 x 1,6	21,3	18,1	37,4	25,0	30,0
DN 20	26,9 x 1,6	26,9	23,7	51,8	40,0	28,5
DN 25	33,7 x 2,0	33,7	29,7	55,7	40,0	38,0
DN 32	42,4 x 2,0	42,4	38,4	59,7	40,0	47,5
DN 40	48,3 x 2,0	48,3	44,3	63,6	40,0	57,0
DN 50	60,3 x 2,0	60,3	56,3	71,5	40,0	76,0
DN 65	76,1 x 2,0	76,1	72,1	94,4	55,0	95,0
DN 80	88,9 x 2,3	88,9	84,3	102,4	55,0	114,5
DN 100	114,3 x 2,3	114,3	109,7	118,2	55,0	152,5
DN 125	139,7 x 2,6	139,7	134,5	133,9	55,0	190,5
DN 150	168,3 x 2,6	168,3	163,1	149,7	55,0	228,5
DN 200	219,1 x 2,6	219,1	213,9	206,3	80,0	305,0

*) non-standard

further dimensions on request

ASEPTIC PROGRAM



Elbows 45° and 90° for orbital welding DIN 11852-BL-45/-90 MEDI-Bo®

Dimensions:

DIN 11866-A (DIN 11850)

Marking:

dimension, material, heat number

Tolerance:

DIN 11852 / ISO 2768-1

Material:

AISI 316L

Certificate (on demand):

EN 10204 3.1

EN 10204 3.1 AD-W2 (for selected items)

Inner surface variants::

MB/MB

- raw internal and external surface finish
- the internal surface roughness in the bending area could increase up to 2.5 times of the raw material ($R_a \leq 0.8/1.6 \mu\text{m}$)

MB/K400

- raw internal surface
- outside mech. polished K400

K400/K400

- internal and external surface mech. polished K400

e-pol./K400

- internal surface electropolished
- outside mech. polished K400

Inner surface variants:

electrochemical polished

$R_a \leq 0,8 \mu\text{m}$ (STERI-line®)

$R_a \leq 0,6 \mu\text{m}$ (STERI-line®)

$R_a \leq 0,5 \mu\text{m}$ (STERI-line®)

$R_a \leq 0,4 \mu\text{m}$ (HQ-line®)

$R_a \leq 0,25 \mu\text{m}$ (HQ-line®)

DIN 90°	pipe	A	B	C	C1	R
DN 10	13,0 x 1,5	13,0	10,0	51,0	25,0	26,0
DN 15	19,0 x 1,5	19,0	16,0	60,0	25,0	35,0
DN 20	23,0 x 1,5	23,0	20,0	65,0	25,0	40,0
DN 25	29,0 x 1,5	29,0	26,0	90,0	40,0	50,0
DN 32	35,0 x 1,5	35,0	32,0	95,0	40,0	55,0
DN 40	41,0 x 1,5	41,0	38,0	100,0	40,0	60,0
DN 50	53,0 x 1,5	53,0	50,0	110,0	40,0	70,0
DN 65	70,0 x 2,0	70,0	66,0	120,0	40,0	80,0
DN 80	85,0 x 2,0	85,0	81,0	145,0	55,0	90,0
DN 100	104,0 x 2,0	104,0	100,0	155,0	55,0	100,0
DN 125	129,0 x 2,0	129,0	125,0	245,0	57,5	187,5

DIN 45°	pipe	A	B	C	C1	R
DN 10	13,0 x 1,5	13,0	10,0	35,8	25,0	26,0
DN 15	19,0 x 1,5	19,0	16,0	39,5	25,0	35,0
DN 20	23,0 x 1,5	23,0	20,0	41,6	25,0	40,0
DN 25	29,0 x 1,5	29,0	26,0	60,7	40,0	50,0
DN 32	35,0 x 1,5	35,0	32,0	62,8	40,0	55,0
DN 40	41,0 x 1,5	41,0	38,0	64,9	40,0	60,0
DN 50	53,0 x 1,5	53,0	50,0	69,0	40,0	70,0
DN 65	70,0 x 2,0	70,0	66,0	73,1	40,0	80,0
DN 80	85,0 x 2,0	85,0	81,0	92,3	55,0	90,0
DN 100	104,0 x 2,0	104,0	100,0	96,4	55,0	100,0
DN 125	129,0 x 2,0	129,0	125,0	135,2	57,5	187,5

further dimensions on request (ASME / ISO)