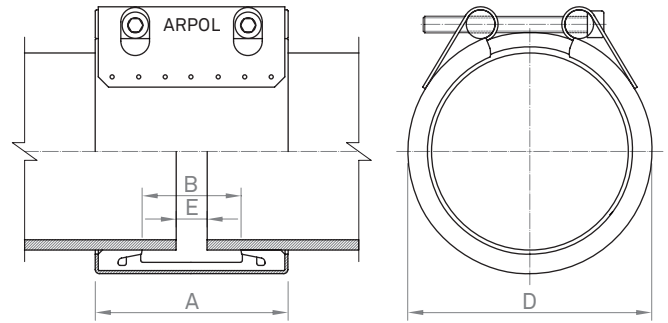


# Nominal width 95

## Series IBX

To ensure correct operation, Fitting instructions must be respected.  
 Test pressure = 1.5 x PS



	Quality W1		Quality W2		Quality W4		Quality W5	
	AISI	DIN	AISI	DIN	AISI	DIN	AISI	DIN
Casing			304 L	1.4307	304 L	1.4307	316 L	1.4404
Bolts			1035	1.0501	304	1.4301	316 L	1.4401
Bars			1045	1.0503	304 L	1.4307	316 L	1.4404
Inner Steel Plate (Lock)			304 L	1.4307	304 L	1.4307	316 L	1.4404

Sealing gasket: EPDM / NBR / Silicone

OD		Pressure								Bolts	
		PN bar	PS bar		A mm	B mm	D mm	E <sup>1</sup> mm	E <sup>2</sup> mm	Diam.	Tor. Nm
48,3	47 - 49	16	45		78	31	67,3	5	15	M 8	7
54,0	53 - 55	16	45		78	31	73,0	5	15	M 8	7
57,0	56 - 58	16	40		78	31	76,0	5	15	M 8	7
60,3	59 - 61	16	40		78	31	79,3	5	15	M 8	7
63,0	62 - 65	16	40		78	31	82,0	5	15	M 8	7
76,1	74 - 77	16	30		94	45	98,1	5	15	M 8	7
84,0	82 - 85	16	30		94	45	106,0	5	15	M 8	7
88,9	87 - 91	16	30		95	45	110,9	5	15	M 8	7
104,0	102 - 106	16	30		95	45	126,0	5	15	M 8	10
108,0	107 - 111	14	30		95	45	130,0	5	15	M 8	10
114,3	112 - 117	13	30		95	45	136,3	5	15	M 8	10
125,0	124 - 127	12	20		95	45	147,0	5	15	M 8	10
129,0	127 - 131	12	20		95	45	151,0	5	15	M 8	10
133,0	131 - 136	11	20		95	45	155,0	5	15	M 8	10
139,7	137 - 142	11	20		95	45	161,7	5	15	M 8	10
154,0	152 - 156	10	20		95	45	176,0	5	15	M 8	10
159,0	156 - 161	10	20		95	45	181,0	5	15	M 8	10
168,3	166 - 171	10	20		95	45	190,3	5	15	M 8	10

E<sup>1</sup> Permitted gaps without internal band E<sup>2</sup> Permitted gaps with internal band  
 PN Shipbuilding industry safety factor ≥4 PS Working pressure OD Outside Diameter Tor. Torque Value

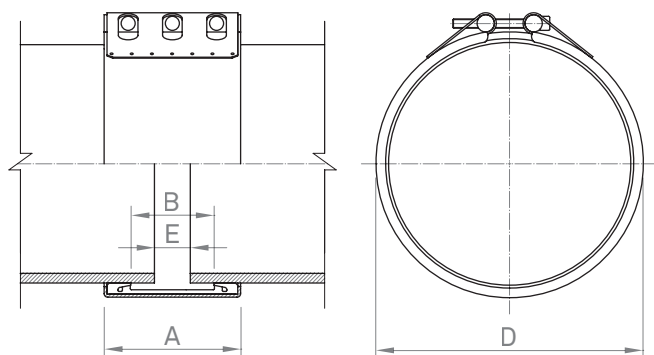
OD	Maximum diameter difference	Maximum angular deflection	Maximum misalignment
mm	mm	degrees	mm
48,3	0,5	4,0	1,0
54 - 63	1,0	4,0	1,0
76,1 - 104	1,5	4,0	1,0
108 - 154	2,5	4,0	1,0
159 - 168,3	2,5	4,0	2,0

See page 7 (Permitted tolerances)

# Nominal width 140

## Series IBY to IFY

To ensure correct operation, Fitting instructions must be respected.  
Test pressure = 1.5 x PS



	IBY	ICY	IDY	IEY	IFY
	mm	mm	mm	mm	mm
<b>A</b>	139	140	141	142	144
<b>B</b>	86	86	86	86	86
<b>D</b>	DE + 23	DE + 24	DE + 25	DE + 26	DE + 28
<b>E<sup>1</sup></b>	10	10	10	10	10
<b>E<sup>2</sup></b>	35	35	35	35	35

	Quality W1		Quality W2		Quality W4		Quality W5	
	AISI	DIN	AISI	DIN	AISI	DIN	AISI	DIN
Casing			304 L	1.4307	304 L	1.4307	316 L	1.4404
Bolts			1035	1.0501	304	1.4301	316	1.4401
Bars			1045	1.0503	304 L	1.4307	316 L	1.4404
Inner Steel Plate (Lock)			304 L	1.4307	304 L	1.4307	316 L	1.4404

Sealing gasket: EPDM / NBR / Silicone

DN	IBY			ICY			IDY			IEY			IFY			
	mm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm
150	23	M 10	20	30	M 10	20										
200	18	M 10	20	24	M 10	20	30	M 10	20							
250	15	M 10	20	19	M 10	20	24	M 10	20							
300	12	M 10	25	16	M 10	20	20	M 10	20							
350	11	M 10	30	14	M 10	20	18	M 10	20	21	M 10	20	28	M 12	25	
400	9	M 10	30	13	M 10	20	16	M 10	20	19	M 10	20	25	M 12	25	
450	8	M 10	25	11	M 10	25	14	M 10	25	17	M 12	30	22	M 12	30	
500	8	M 10	30	10	M 10	25	13	M 10	25	15	M 12	30	20	M 12	35	
550	7	M 10	30	9	M 10	30				14	M 12	35	19	M 12	35	
600	6	M 10	30	9	M 10	30				13	M 12	35	17	M 12	35	
650	6	M 10	35	8	M 10	35				12	M 12	45	16	M 12	45	
700	6	M 10	35	7	M 10	35				11	M 12	45	15	M 12	45	
750	5	M 10	40	7	M 10	40				10	M 12	45	14	M 16	60	
800	5	M 10	40	6	M 12	50				10	M 12	50	13	M 16	70	
850				6	M 12	60				9	M 12	60	12	M 16	70	
900				6	M 12	60				9	M 12	60	12	M 16	80	
950				5	M 12	60				8	M 12	60	11	M 16	80	
1000				5	M 12	70				8	M 12	70	10	M 16	90	
1100				5	M 12	70				7	M 16	90	9	M 16	90	
1200				4	M 12	80				7	M 16	100	9	M 16	100	

Nominal diameter serve as guidance of the pressure scale. Measures in between DN range can be manufactured.

E<sup>1</sup> Permitted gaps without internal band E<sup>2</sup> Permitted gaps with internal band PS Working pressure DN Nominal Diameter OD Outside Diameter Tor. Torque Value

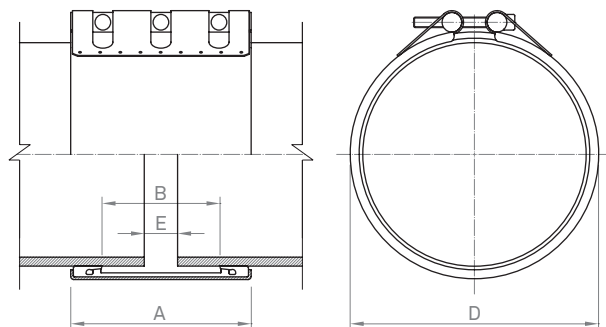
OD	Maximum diameter difference	Maximum angular deflection	Maximum misalignment
mm	mm	degrees	mm
150 - 250	2,5	2,0	2,0
250 - 500	2,5	2,0	3,0
500 - 1200	3,0	2,0	3,0

See page 7 (Permitted tolerances)

# Coated nominal width 200

## Serie AGZ

To ensure correct operation, Fitting instructions must be respected.  
Test pressure = 1.5 x PS



AGZ	
mm	
A	206
B	142
D	DE + 30
E <sup>1</sup>	15
E <sup>2</sup>	60

	Quality W1		Quality W2		Quality W4		Quality W5	
	AISI	DIN	AISI	DIN	AISI	DIN	AISI	DIN
Casing	1024	1.0570						
Bolts	1035 / 304	1.0501 / 1.4301						
Bars	1045 / 304 L	1.0503 / 1.4307						
Inner Steel Plate (Lock)	304 L	1.4307						

Sealing gasket: EPDM / NBR

OD	PS bar	AGZ Diam.	Tor. Nm
600	29	M 20	60
650	27	M 20	70
700	25	M 20	80
750	23	M 20	80
800	22	M 20	90
850	21	M 20	90
900	19	M 20	100
950	18	M 20	100
1000	18	M 20	120
1100	16	M 20	120
1200	15	M 20	140
1300	14	M 20	140
1400	13	M 20	160

Nominal diameter serve as guidance of the pressure scale. Measures in between DN range can be manufactured.

E<sup>1</sup> Permitted gaps without internal band E<sup>2</sup> Permitted gaps with internal band PS Working pressure DN Nominal Diameter OD Outside Diameter Tor. Torque Value

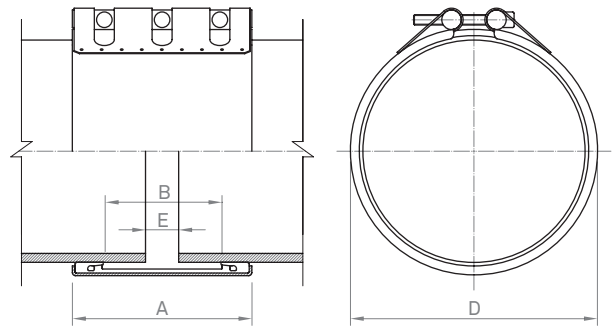
OD	Maximum diameter difference	Maximum angular deflection	Maximum misalignment
mm	mm	degrees	mm
500 - 1500	3,0	2,0	3,0

See page 7 (Permitted tolerances)

# Nominal width 200

## Series IBZ to IHFZ

To ensure correct operation, Fitting instructions must be respected.  
 Test pressure = 1.5 x PS



	IBZ	ICZ	IDZ	IEZ	IFZ	IGZ	IHFZ
	mm	mm	mm	mm	mm	mm	mm
A	199	200	201	202	204	206	204
B	142	142	142	142	142	142	142
D	DE + 23	DE + 24	DE + 25	DE + 26	DE + 28	DE + 30	DE + 52
E <sup>1</sup>	15	15	15	15	15	15	15
E <sup>2</sup>	60	60	60	60	60	60	60

	Quality W1		Quality W2		Quality W4		Quality W5	
	AISI	DIN	AISI	DIN	AISI	DIN	AISI	DIN
Casing			304 L	1.4307	304 L	1.4307	316 L	1.4404
Bolts			1035	1.0501	304	1.4301	316	1.4401
Bars			1045	1.0503	304 L	1.4307	316 L	1.4404
Inner Steel Plate (Lock)			304 L	1.4307	304 L	1.4307	316 L	1.4404

Sealing gasket: EPDM / NBR / Silicone

DN mm	IBZ			ICZ			IDZ			IEZ			IFZ			IGZ			IHFZ			
	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	
150	23	M 12	20	30	M 12	20																
200	18	M 12	25	24	M 12	25	30	M 12	20													
250	15	M 12	25	19	M 12	25	24	M 12	20													
300	12	M 12	30	16	M 12	30	20	M 12	20													
350	11	M 12	35	14	M 12	30	18	M 12	25	21	M 12	25	28	M 16	30							
400	9	M 12	35	13	M 12	25	16	M 12	30	19	M 12	25	25	M 16	60							
450	8	M 12	45	11	M 12	30	14	M 12	30	17	M 12	30	22	M 16	40							
500	8	M 12	45	10	M 12	35	13	M 12	35	15	M 12	30	20	M 16	40							
550	7	M 12	35	9	M 12	35				14	M 16	45	19	M 16	45							
600	6	M 12	35	9	M 12	35				13	M 16	50	17	M 16	50	21	M 20	60	27	M 20	70	
650	6	M 12	40	8	M 12	45				12	M 16	60	16	M 16	60	20	M 20	70	25	M 20	80	
700	6	M 12	45	7	M 12	45				11	M 16	60	15	M 16	60	18	M 20	70	24	M 20	80	
750	5	M 12	45	7	M 12	45				10	M 16	60	14	M 16	60	17	M 20	80	22	M 20	80	
800	5	M 12	50	6	M 12	50				10	M 16	70	13	M 16	70	16	M 20	90	20	M 20	90	
850				6	M 12	60				9	M 16	70	12	M 16	70	15	M 20	90	19	M 20	90	
900				6	M 12	60				9	M 16	80	12	M 16	80	14	M 20	100	19	M 20	100	
950				5	M 12	60				8	M 16	80	11	M 16	80	14	M 20	100	17	M 20	100	
1000				5	M 12	70				8	M 16	90	10	M 16	90	13	M 20	120	16	M 20	110	
1100				5	M 16	90				7	M 16	90	9	M 16	90	12	M 20	120	15	M 20	120	
1200				4	M 16	100				7	M 16	100	9	M 16	10	11	M 20	140	14	M 20	140	
1300										6	M 16	120	9	M 16	120	10	M 20	140	13	M 20	140	
1400										6	M 16	120	7	M 16	120	9	M 20	160	12	M 20	160	
1500										5	M 16	140	7	M 16	140	9	M 20	160	11	M 20	160	

Nominal diameter serve as guidance of the pressure scale. Measures in between DN range can be manufactured.

E<sup>1</sup> Permitted gaps without internal band E<sup>2</sup> Permitted gaps with internal band PS Working pressure DN Nominal Diameter OD Outside Diameter Tor. Torque Value

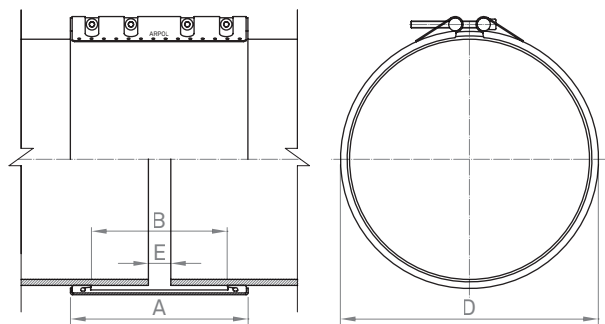
OD mm	Maximum diameter difference		Maximum angular deflection		Maximum misalignment	
	IBZ - IGZ	IHFZ	IBZ - IGZ	IHFZ	IBZ - IGZ	IHFZ
	mm		degrees		mm	
150 - 250	2,5		2,0		2,0	
250 - 500	2,5		2,0		3,0	
500 - 1500	3,0	2,0	2,0	1,0	3,0	2,0

See page 7 (Permitted tolerances)

# Coated nominal width 300

## Serie AGW

To ensure correct operation, Fitting instructions must be respected.  
Test pressure = 1.5 x PS



AGW	
mm	
A	301
B	230
D	DE + 30
E <sup>1</sup>	15
E <sup>2</sup>	80

	Quality W1		Quality W2		Quality W4		Quality W5	
	AISI	DIN	AISI	DIN	AISI	DIN	AISI	DIN
Casing	1024	1.0570						
Bolts	1035 / 304	1.0501 / 1.4301						
Bars	1045 / 304 L	1.0503 / 1.4307						
Inner Steel Plate (Lock)	304 L	1.4307						

Sealing gasket: EPDM

DN	PS bar	AGW	Tor. Nm
mm		Diam.	
600	29	M 20	50
650	27	M 20	60
700	25	M 20	60
750	23	M 20	60
800	22	M 20	70
850	21	M 20	70
900	19	M 20	70
950	18	M 20	80
1000	18	M 20	80
1100	16	M 20	90
1200	15	M 20	100
1300	14	M 20	100
1400	13	M 20	120
1500	12	M 20	120

Nominal Diameter serve as guidance of the pressure scale. Measures in between DN range can be manufactured.

E<sup>1</sup> Permitted gaps without internal band E<sup>2</sup> Permitted gaps with internal band PS Working pressure DN Nominal Diameter OD Outside Diameter Tor. Torque Value

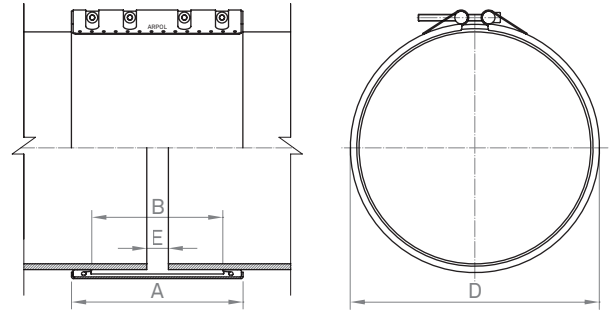
OD	Maximum diameter difference	Maximum angular deflection	Maximum misalignment
mm	mm	degrees	mm
500 - 1500	3,0	2,0	3,0

See page 7 (Permitted tolerances)

# Nominal width 300

## Series IBW a IHGW

To ensure correct operation, Fitting instructions must be respected.  
 Test pressure = 1.5 x PS



	IBW	ICW	IDW	IEW	IFW	IGW	IHFV	IHW
	mm	mm	mm	mm	mm	mm	mm	mm
<b>A</b>	294	295	296	297	299	301	299	301
<b>B</b>	230	230	230	230	230	230	230	230
<b>D</b>	DE + 23	DE + 24	DE + 25	DE + 26	DE + 28	DE + 30	DE + 52	DE + 56
<b>E<sup>1</sup></b>	15	15	15	15	15	15	15	15
<b>E<sup>2</sup></b>	80	80	80	80	80	80	80	80

	Quality W1		Quality W2		Quality W4		Quality W5	
	AISI	DIN	AISI	DIN	AISI	DIN	AISI	DIN
Casing			304 L	1.4307	304 L	1.4307	316 L	1.4404
Bolts			1035	1.0501	304	1.4301	316	1.4401
Bars			1045	1.0503	304 L	1.4307	316 L	1.4404
Inner Steel Plate (Lock)			304 L	1.4307	304 L	1.4307	316 L	1.4404

Sealing gasket: EPDM

DN	IBW			ICW			IDW			IEW			IFW			IGW			IHFV			IHW		
	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm	PS bar	Diam.	Tor. Nm
300	12	M 12	15	16	M 12	15	20	M 12	15															
350	11	M 12	20	14	M 12	20	18	M 12	20	21	M 16	25	28	M 16	25									
400	9	M 12	20	13	M 12	20	16	M 12	20	19	M 16	30	25	M 16	30									
450	8	M 12	25	11	M 12	25	14	M 12	25	17	M 16	30	22	M 16	30									
500	8	M 12	25	10	M 12	25	13	M 12	25	15	M 16	35	20	M 16	35									
550	7	M 12	30	9	M 12	30				14	M 16	35	19	M 16	35									
600	6	M 12	30	9	M 12	30				13	M 16	40	17	M 16	40	21	M 20	40	27	M 20	60	34	M 24	60
650	6	M 12	30							12	M 16	45	16	M 16	45	20	M 20	60	25	M 20	60	32	M 24	60
700	6	M 12	35							11	M 16	45	15	M 16	45	18	M 20	60	23	M 20	70	29	M 24	80
750	5	M 12	35							10	M 16	50	14	M 16	50	17	M 20	60	22	M 20	70	27	M 24	80
800	5	M 12	40							10	M 16	50	13	M 16	50	16	M 20	70	20	M 20	70	26	M 24	90
850										9	M 16	60	12	M 16	60	15	M 20	70	19	M 20	80	24	M 24	90
900										9	M 16	60	12	M 16	60	14	M 20	70	18	M 20	80	23	M 24	100
950										8	M 16	60	11	M 16	60	14	M 20	80	17	M 20	90	22	M 24	100
1000										8	M 16	70	10	M 16	70	13	M 20	80	16	M 20	90	21	M 24	120
1100										7	M 16	70	9	M 16	70	12	M 20	90	15	M 20	100	19	M 24	120
1200										7	M 16	80	9	M 20	100	11	M 20	100	14	M 20	120	17	M 24	140
1300										6	M 16	80	8	M 20	100	10	M 20	100	13	M 20	120	16	M 24	140
1400										6	M 16	90	7	M 20	120	9	M 20	120	12	M 20	120	15	M 24	160
1500										5	M 16	100	7	M 20	120	9	M 20	120	11	M 20	140	14	M 24	160

Nominal diameter serve as guidance of the pressure scale. Measures in between DN range can be manufactured.

E<sup>1</sup> Permitted gaps without internal band E<sup>2</sup> Permitted gaps with internal band PS Working pressure DN Nominal Diameter OD Outside Diameter Tor. Torque Value

OD	Maximum diameter difference		Maximum angular deflection		Maximum misalignment	
	IBW - IGW	IHFV - IHGW	IBW - IGW	IHFV - IHGW	IBW - IGW	IHFV - IHGW
mm	mm		degrees		mm	
300 - 500	2,5		2,0		3,0	
500 - 1500	3,0	2,0	2,0	1,0	3,0	2,0

See page 7 (Permitted tolerances)