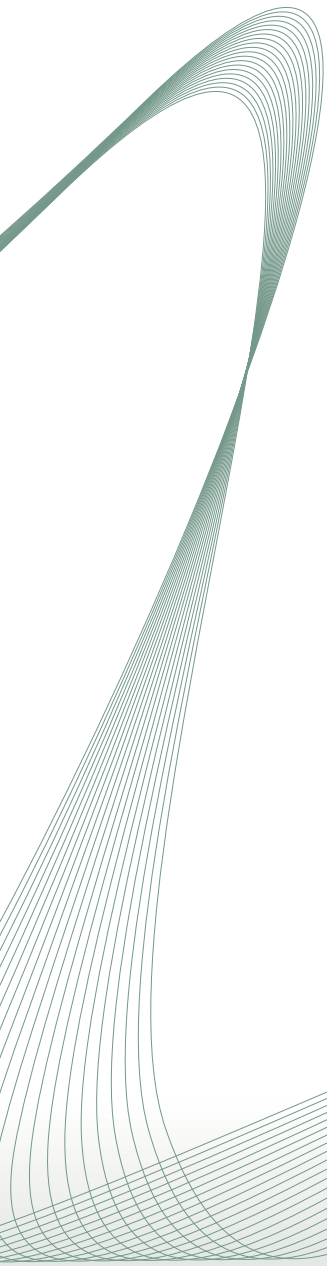
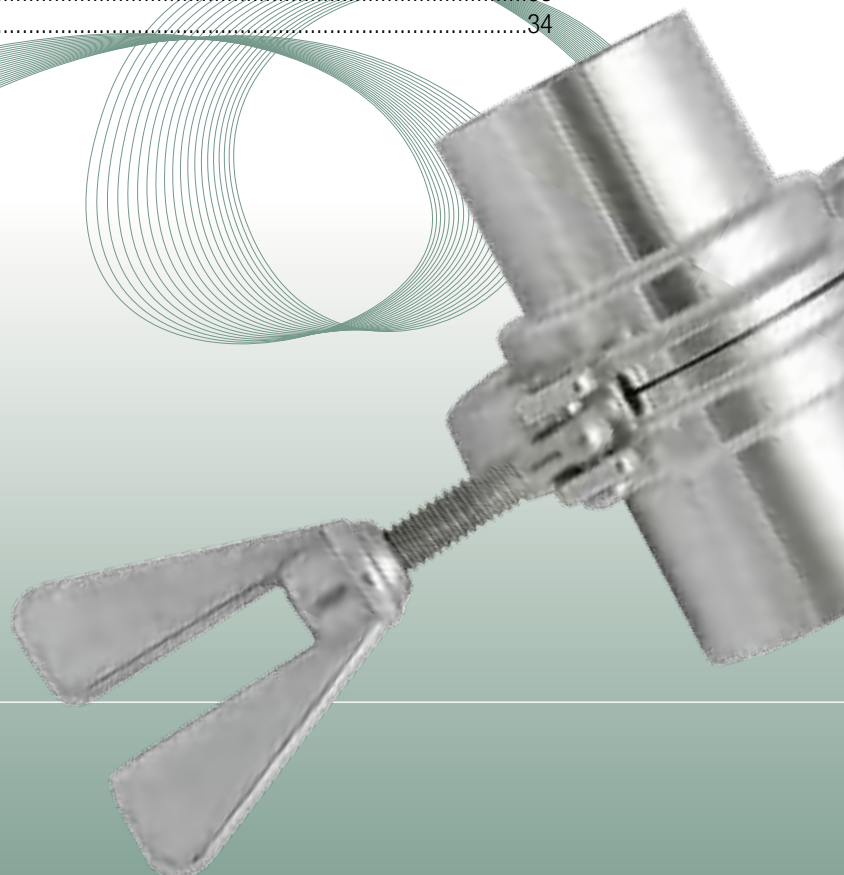




## TRI-CLAMP CONNECTIONS

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# SH Type Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SH Type Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Profile, for equal pressure over the whole circumference. Surface, internal and external bright finish Hexagon nuts are also available as an alternative to the wingnuts
<b>Options:</b>	Item-No. for clamps 1/2" to 5" = 200.000.001 Item-No. for clamps from 5 1/2" = 200.000.002.
<b>Remarks:</b>	Technical contents are subject to change Data on the maximum operating pressure is dependent on the seals used (elastomers). Model with Wingnut SH Type: Torque rating 5 Nm Model with Hexagon-Nut SHX Type: Torque rating 20 Nm

Technical data on SH Type Closure Clamp										
Drawing for table below: see next page										
ISO 2852	DIN 32676	BS 4825	A-Mass	B	C	W	max. Working	max.	Weight	Item No.
DIN 32676	Series A	DIN 32676	TC-Size	Rad.	Length	Thickness	pressure	Test pressure	in grams	
Series B		Series C					at 150° C			
DN 6 / 8 / 10	DIN 4 / 6 / 8 / *10	1/2" - *3/4"	25.0	63.0	75.0	17.0	50 bar	100 bar	150 g	200.005.028
	DIN 10 / 15 / 20		34.0	67.0	85.0	17.0	50 bar	100 bar	170 g	200.010.037
DN *8 / *10	DIN 25 / 32	1" - 1 1/2"	50.5	77.0	102.0	17.0	50 bar	100 bar	250 g	200.025.053
15 / 20 / 25	40									
DN 32 / 40	DIN 50	2"	64.0	93.0	123.0	17.0	50 bar	100 bar	330 g	200.050.067
DN 50		2 1/2"	77.5	100.0	140.0	17.0	50 bar	100 bar	380 g	200.065.080
DN 65	DIN 65	3"	91.0	105.0	150.0	17.0	40 bar	80 bar	440 g	200.080.094
DN 80	DIN 80	3 1/2"	106.0	110.0	165.0	17.0	40 bar	80 bar	440 g	200.090.108
	DIN 100	4"	119.0	119.0	185.0	17.0	35 bar	70 bar	570 g	200.100.122
DN 100		4 1/2"	130.0	119.0	191.0	17.0	30 bar	60 bar	600 g	200.114.133
		*5"	144.5	131.0	215.0	19.0	30 bar	60 bar	750 g	200.125.147
	*DIN 125	5 1/2"	155.0	155.0	252.0	24.0	30 bar	60 bar	1390 g	200.125.157
		*6"	167.0	156.0	262.0	24.0	30 bar	60 bar	1380 g	200.150.170
DN 150	DIN 150	6 5/8"	183.0	164.0	280.0	24.0	25 bar	50 bar	1610 g	200.150.170.58
		8"	217.5	184.0	325.0	24.0	20 bar	40 bar	2110 g	200.200.220.1
DN 200	DIN 200	8 5/8"	233.5	185.0	333.0	24.0	20 bar	40 bar	2250 g	200.200.220.58
	*DIN 250	*10"	268.0	213.0	382.0	24.0	16 bar	32 bar	2780 g	200.250.250
	*DIN 300	*12"	319.0	242.0	458.0	24.0	10 bar	20 bar	3690 g	200.319.304.1
DN 300		12 5/8"	338.5	243.0	463.0	24.0	10 bar	20 bar	3465 g	200.300.338.1

All lengths in millimeters (if not specified differently).

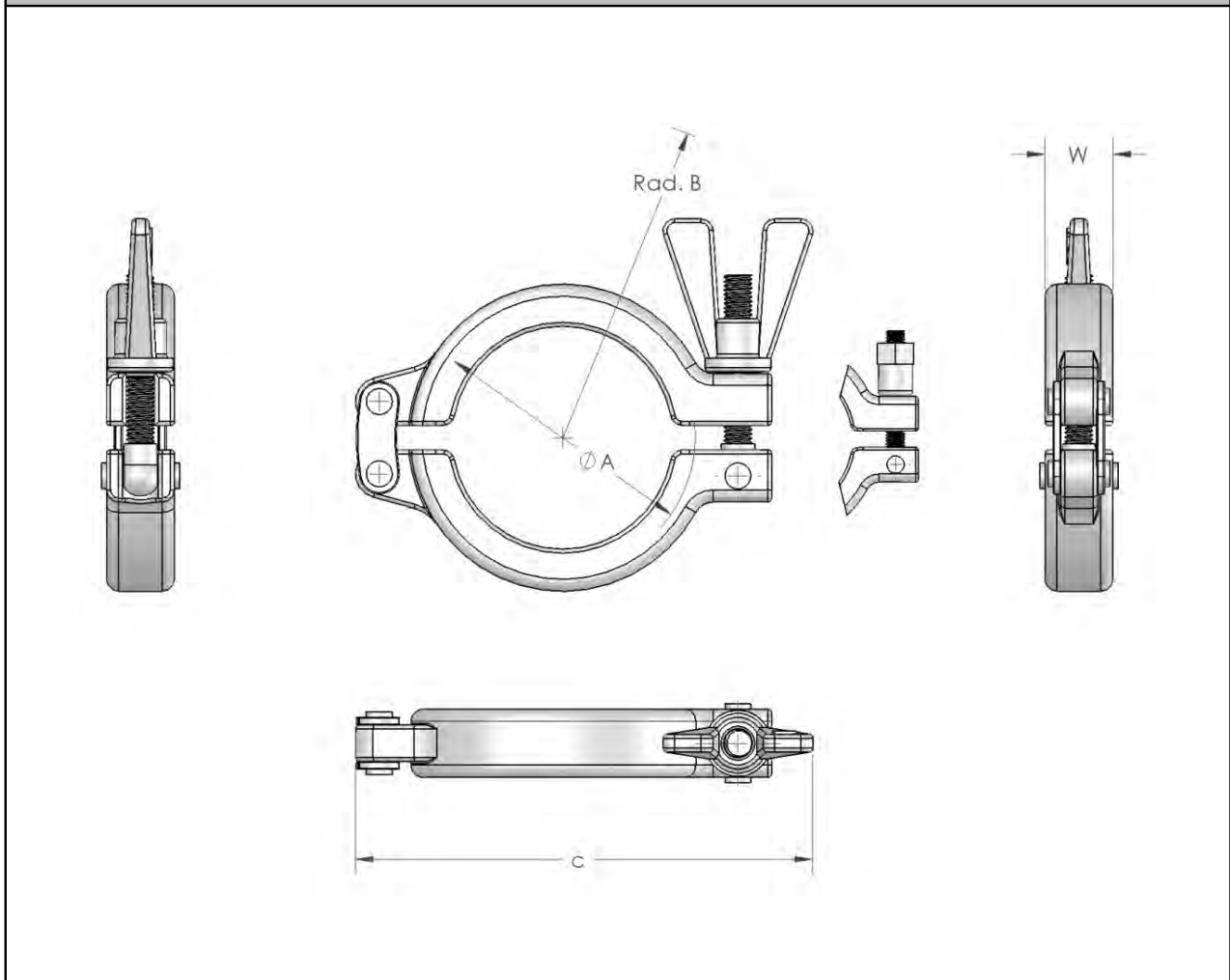
# SH Type Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SH Type Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME-BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Eye nuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Prole, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change

Recommended areas of application: Pharma, Biotechnology and Industry.

SH Type Closure Clamp

Technical data on drawing below: see previous page



# SH Type (Double Bolted) Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SH Type (Double Bolted) Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME-BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Prole, for equal pressure over the whole circumference. Surface, internal and external bright finish Hexagon nuts are also available as an alternative to the wingnuts
<b>Options:</b>	Item-No. for clamps 1/2" to 5" = 200.000.001 Item-No. for clamps from 5 1/2" = 200.000.002
<b>Remarks:</b>	Technical contents are subject to change Data on the maximum operating pressure is dependent on the seals used (elastomers). Model with Wingnut SH Type: Torque rating 5 Nm Model with Hexagon-Nut SHX Type: Torque rating 20 Nm

Technical data on SH Type (Double Bolted) Closure Clamp										
Drawing for table below: see next page										
ISO 2852	DIN 32676	BS 4825	A	B	C	W	max.	max.	Weight	Item No.
DIN 32676	Series A	DIN 32676	TC-Size	Rad.	Length	Thick- ness	Working pressure	Test pressure	in gram	
Series B		Series C					by 150° C			
	*DIN 125	5 1/2"	155.0	155.0	265.0	24.0	30 bar	60 bar	1470 g	200.125.157.-2
		*6"	167.0	156.0	277.0	24.0	30 bar	60 bar	1670 g	200.150.170.-2
DN 150	DIN 150	6 5/8"	183.0	164.0	297.0	24.0	25 bar	50 bar	1690 g	200.150.170.59
		8"	217.5	184.0	332.0	24.0	20 bar	40 bar	2190 g	200.200.220
DN 200	DIN 200	8 5/8"	233.5	185.0	353.0	24.0	20 bar	40 bar	2340 g	200.200.220.59
	*DIN 250	*10"	268.0	205.0	382.0	24.0	16 bar	32 bar	2780 g	200.250.250.-2
DN 250		10 5/8"	286.1	213.0	405.0	24.0	16 bar	32 bar	2970 g	200.250.250.58
	*DIN 300	*12"	319.0	242.0	458.0	24.0	10 bar	20 bar	3690 g	200.319.304.2
DN 300		12 5/8"	338.5	243.0	463.0	24.0	10 bar	20 bar	3370 g	200.300.338.2

*All lengths in millimeters (if not specified differently).*

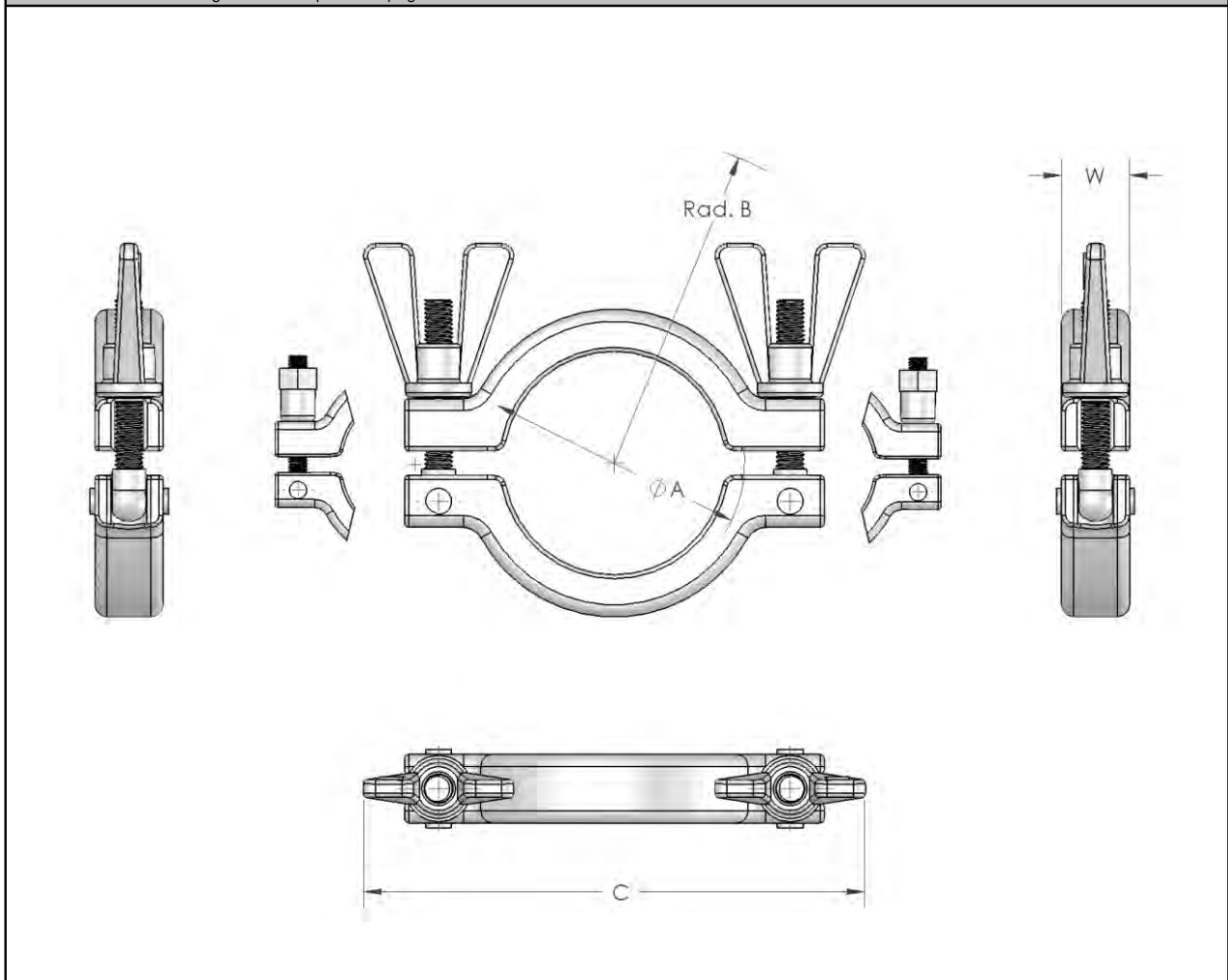
# SH Type (Double Bolted) Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SH Type (Double Bolted) Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME-BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Prole, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change

Recommended areas of application: Pharma, Biotechnology and Industry.

SH Type (Double Bolted) Closure Clamp

Technical Datas to drawing below: see previous page



# S Type Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	S-Type Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME-BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from SS 304 (1.4301)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Prole, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change Data on the maximum operating pressure is dependent on the seals used (elastomers). Model with Wingnut S type: torque 5 Nm Model with 6-Hexagon Nuts SX type: torque 20 Nm

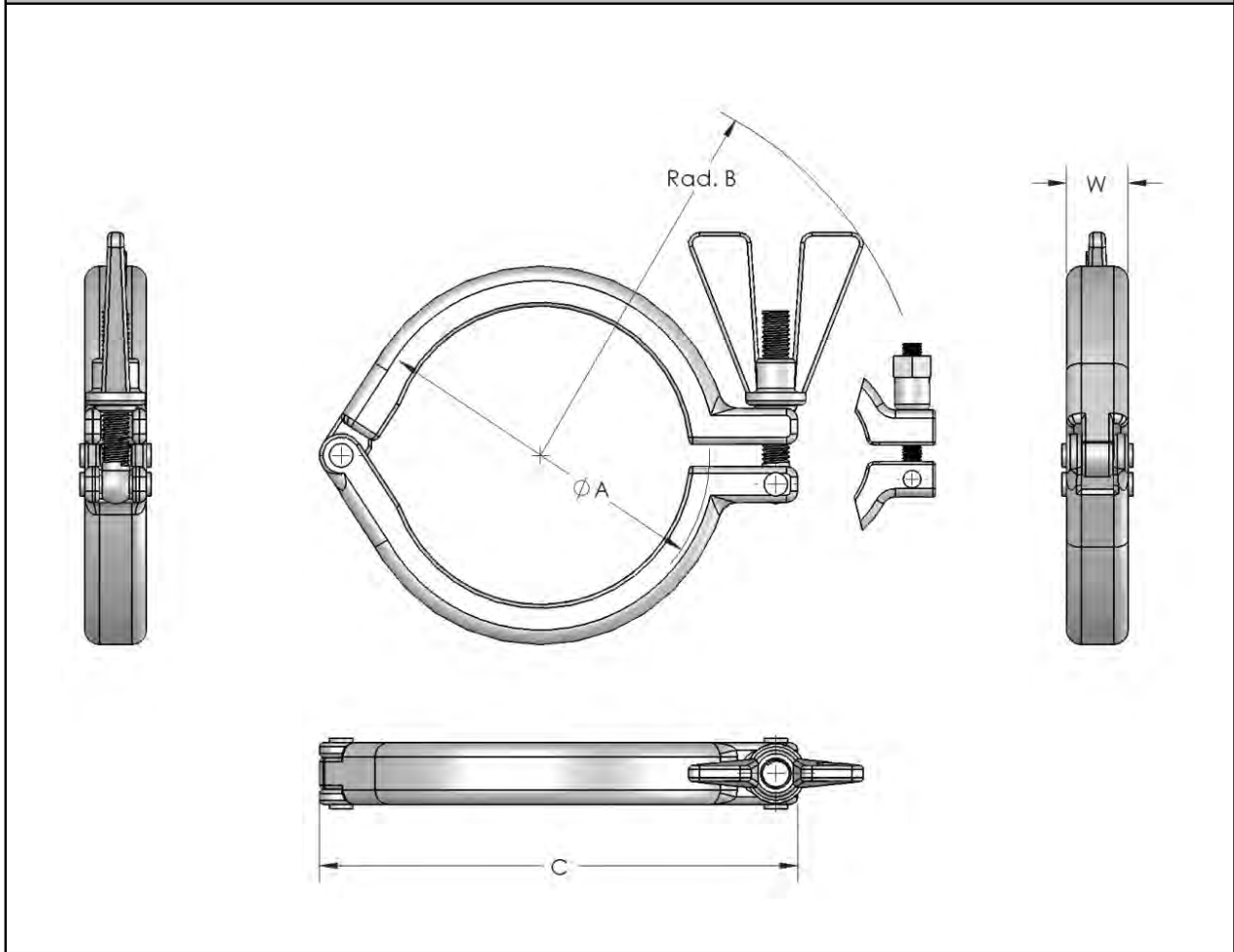
Technical data on S Type Closure Clamp										
Drawing for table below: see next page										
ISO 2852 DIN 32676 Series B	DIN 32676 Series A	BS 4825 DIN 32676 Series C	A TC-Size	B Rad	C Length	W Thickness	max. Working pressure by 150° C	max. Test pressure	Weight in grams	Item No.
DN 6 / 8 / 10	DIN 4 / 6 / 8 / *10	1/2" - *3/4"	25.0	63.0	60.0	17.0	25 bar	50 bar	130 g	204.005.028
	DIN 10 / 15 / 20		34.0	73.0	69.0	17.0	25 bar	50 bar	170 g	204.010.037
DN 8* / 10* 15 / 20 / 25	DIN 25 / 32 40	1" - 1 1/2"	50.5	78.0	85.0	17.0	25 bar	50 bar	210 g	204.025.053
DN 32 / 40	DIN 50	2"	64.0	82.0	99.0	17.0	25 bar	50 bar	250 g	204.080.094
DN 50		2 1/2"	77.5	89.0	112.0	17.0	25 bar	50 bar	350 g	204.065.080
DN 65	DIN 65	3"	91.0	96.0	126.0	17.0	20 bar	40 bar	420 g	204.080.095
DN 80	DIN 80	3 1/2"	106.0	103.0	140.0	17.0	20 bar	40 bar	440 g	204.090.108
	DIN 100	4"	119.0	110.0	154.0	17.0	17 bar	34 bar	510 g	204.100.122
DN 100		4 1/2"	130.0	115.0	165.0	17.0	15 bar	30 bar	600 g	204.144.133
		*6"	167.0	134.0	216.0	25.0	15 bar	30 bar	880 g	204.150.170

# S Type Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	S-Type Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from SS 304 (1.4301)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Prole, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change

Recommended areas of application: Pharma, Biotechnology and Industry.

S-Type Closure Clamp  
 Technical data on drawing below: see previous page



# SSH Type (Heavy Duty) Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SSH Type (Heavy Duty) Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Hexagon nut made of AISI 316 (1.4401) Rest made of SS 304 (1.4301)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Profile, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change Data on the maximum operating pressure is dependent on the seals used (elastomers). Model with Hexagon Nuts SSH type: torque 27 Nm

Technical data on SSH Type (Heavy Duty) Closure Clamp										
Drawing for table below: see next page										
ISO 2852 DIN 32676 Series B	DIN 32676 Series A	BS 4825 DIN 32676 Series C	A TC-Size	B Rad.	C Length	W Thick- ness	max. Working pressure by 150° C	max. Test pressure	Weight in grams	Item No.
DN 6 / 8 / 10	DIN 4 / 6 / 8 / *10	1/2" - *3/4"	25.0	34.0	65.0	16.0	75 bar	150 bar	160 g	203.005.028
DN *8 / *10 15 / 20 / 25	DIN 25 / 32 40	1" - 1 1/2"	50.5	60.0	103.0	26.0	75 bar	150 bar	660 g	203.025.053
DN 32 / 40	DIN 50	2"	64.0	67.0	113.0	26.0	75 bar	150 bar	820 g	203.050.067
DN 50		2 1/2"	77.5	75.0	128.0	26.0	75 bar	150 bar	940 g	203.065.080
DN 65	DIN 65	3"	91.0	80.0	137.0	26.0	60 bar	120 bar	1020 g	203.080.094
DN 80	DIN 80	3 1/2"	106.0	88.0	150.0	26.0	60 bar	120 bar	1070 g	203.090.108
	DIN 100	4"	119.0	93.0	165.0	26.0	53 bar	105 bar	1270 g	203.100.122
DN 100		4 1/2"	130.0	97.0	174.0	26.0	45 bar	90 bar	1330 g	203.144.133
		6"	167.0	132.0	240.0	26.0	45 bar	90 bar	1930 g	203.150.170
DN 150	DIN 150	6 5/8"	183.0	142.0	260.0	26.0	38 bar	75 bar	2110 g	203.150.170.58
DN 200	DIN 200	8 5/8"	233.0	168.0	318.0	26.0	30 bar	60 bar	2520 g	203.200.220.58

*All lengths in millimeters (if not specified differently).*



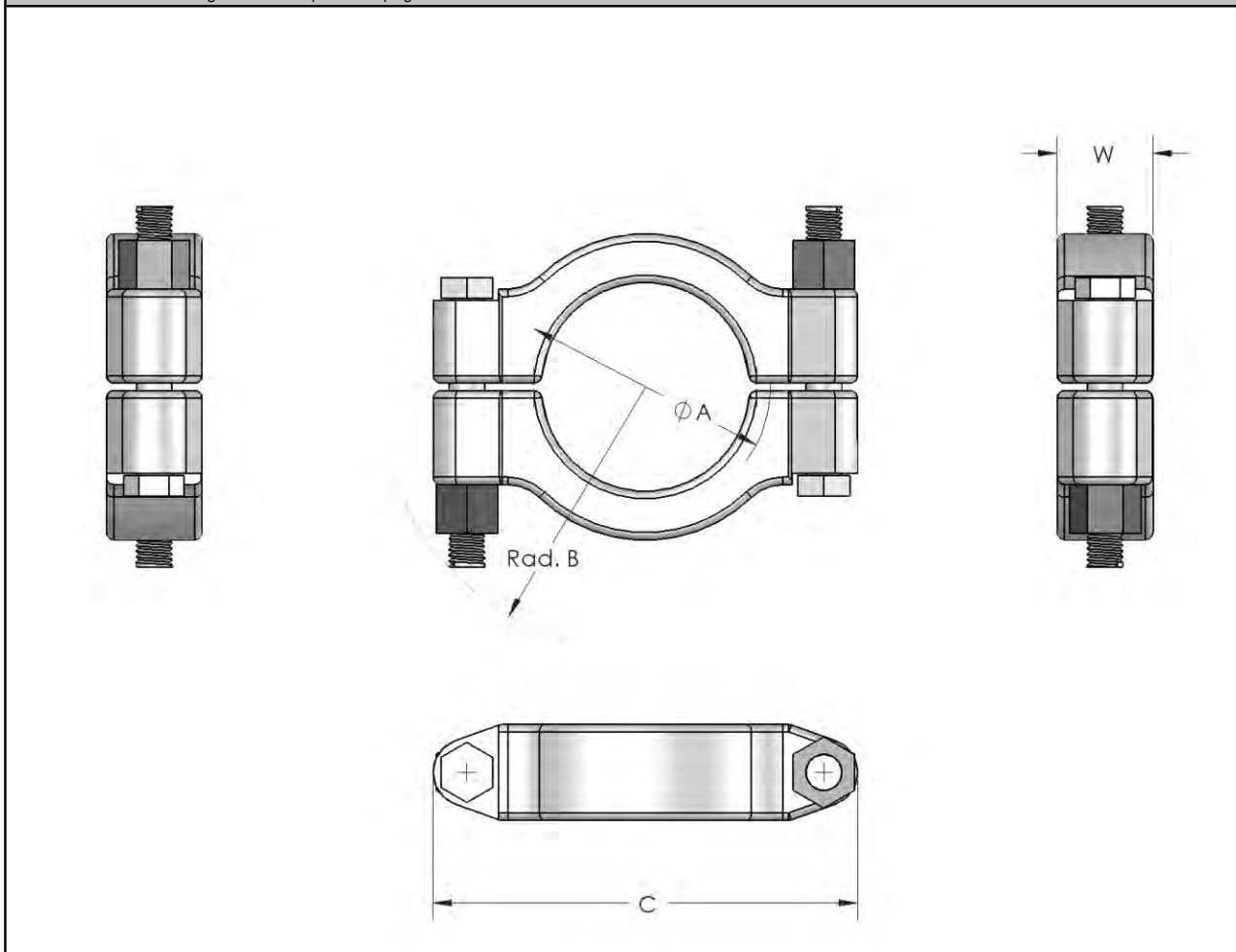
# SSH Type (Heavy Duty) Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SSH Type (Heavy Duty) Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Hexagon nut made of AISI 316 (1.4401) Rest made of SS 304 (1.4301)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Profile, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change

Recommended areas of application: Pharma, Biotechnology and Industry.

S-Type Closure Clamp

Technical data on drawing below: see previous page



# 3 Segment Type Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	3 Segment Type Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	3 Segment-Clamp with V-prole, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change No data on the pressure ratings. Clamp is not in accordance with CE-guidelines.

Technical data on 3 Segment Type Closure Clamp										
Drawing for table below: see next page										
ISO 2852 DIN 32676 Series B	DIN 32676 Series A	BS 4825 DIN 32676 Series C	A TC-Size	B Rad.	C Length	W Thick- ness	max. Working pressure by 150° C	max. Test pressure	Weight in grams	Item No.
DN 8* / 10* 15 / 20 / 25	DIN 25 / 32 40	1" - 1 1/2"	50.5	76.5	81.7	19.0	----	----	370 g	201.025.053
DN 32 / 40	DIN 50	2"	64.0	82.0	93.5	19.0	----	----	420 g	201.050.067
DN 50		2 1/2"	77.5	87.0	109.0	19.5	----	----	490 g	201.065.080
DN 65	DIN 65	3"	91.0	96.0	126.5	19.5	----	----	630 g	201.080.094

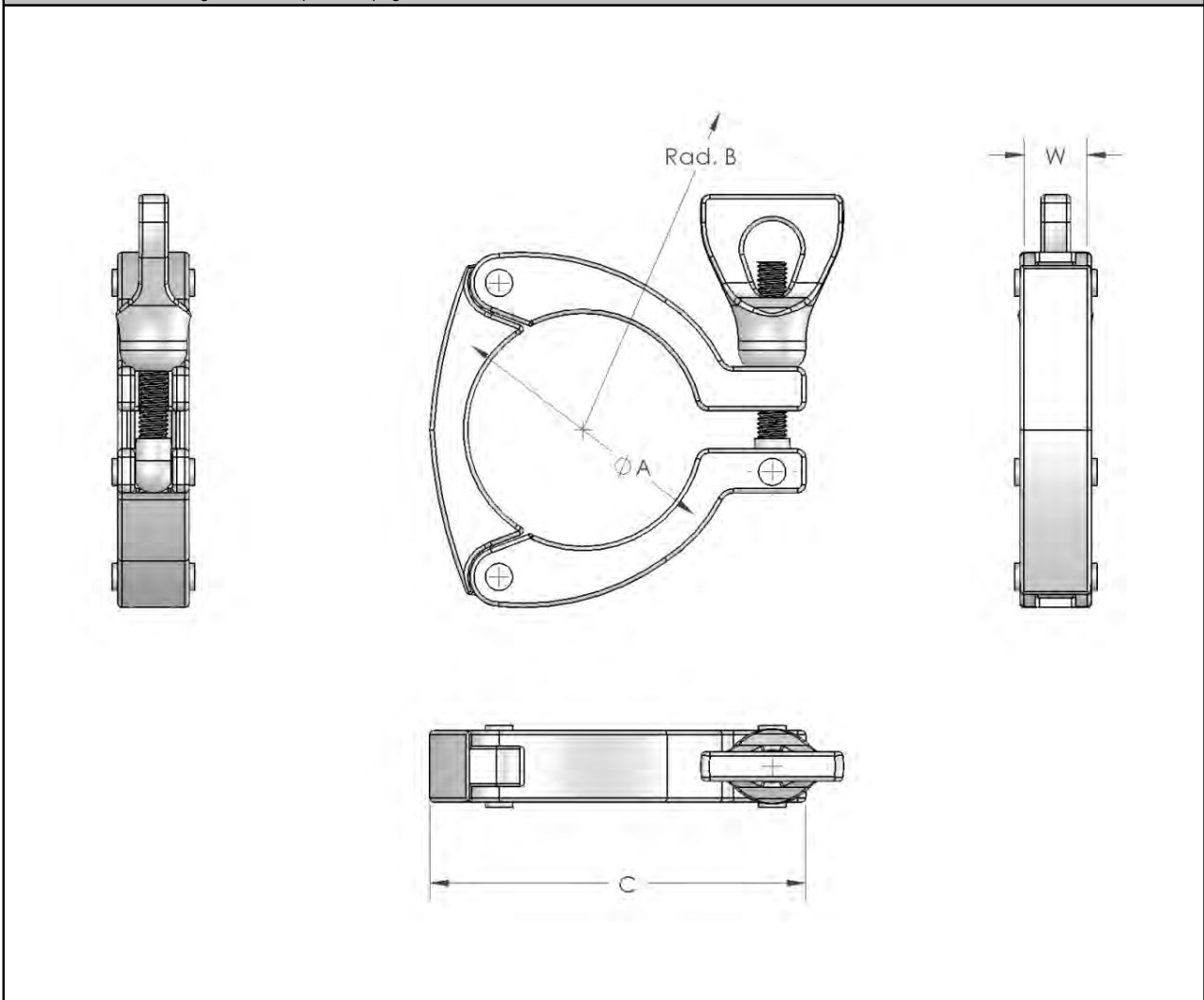
# 3 Segment Type Closure Clamp

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	3 Segment Type Closure Clamp
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Eye nuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality: 3</b>	Segment-Clamp with V-prole, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change

Recommended areas of application: Pharma, Biotechnology and Industry.

3 Segment Type Closure Clamp

Technical data on drawing below: see previous page



# TRI-CLAMP CONNECTIONS

## SH Safety Clamp®

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SH Safety Clamp®
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Profile, for equal pressure over the whole circumference. Surface, internal and external bright finish Hexagon nuts are also available as an alternative to the wingnuts
<b>Options:</b>	Item-No. for clamps 1/2" to 5" = 200.000.001 Item-No. for clamps from 5 1/2" = 200.000.002 Technical contents are subject to change
<b>Remarks:</b>	Data on the maximum operating pressure is dependent on the seals used (elastomers). Model with Wingnut SH Type: Torque rating 5 Nm Model with Hexagon-Nut SHX Type: Torque rating 20 Nm

Technical data on SH Safety Clamp®										
Drawing for table below: see previous page										
ISO 2852 DIN 32676 Series B	DIN 32676 Series A	BS 4825 DIN 32676 Series C	A TC-Size	B Rad.	C Length	W Thick- ness	max. Working pressure by 150° C	max. Test pressure	Weight in grams	Item No.
DN 6 / 8 / 10	DIN 4 / 6 / 8 / *10	1/2" - *3/4"	25.0	63.0	75.0	17.0	50 bar	100 bar	160 g	200.105.028
	DIN 10 / 15 / 20		34.0	67.0	85.0	17.0	50 bar	100 bar	180 g	200.110.037
DN 8* / 10* 15 / 20 / 25	DIN 25 / 32 40	1" - 1 1/2"	50.5	77.0	102.0	17.0	50 bar	100 bar	260 g	200.125.053
DN 32 / 40	DIN 50	2"	64.0	93.0	123.0	17.0	50 bar	100 bar	340 g	200.150.067
DN 50		2 1/2"	77.5	100.0	140.0	17.0	50 bar	100 bar	390 g	200.165.080
DN 65	DIN 65	3"	91.0	105.0	150.0	17.0	40 bar	80 bar	450 g	200.180.094
DN 80	DIN 80	3 1/2"	106.0	110.0	165.0	17.0	40 bar	80 bar	450 g	200.190.108
	DIN 100	4"	119.0	119.0	185.0	17.0	35 bar	70 bar	580 g	200.200.122

*All lengths in millimeters (if not specified differently).*

## TRI-CLAMP CONNECTIONS

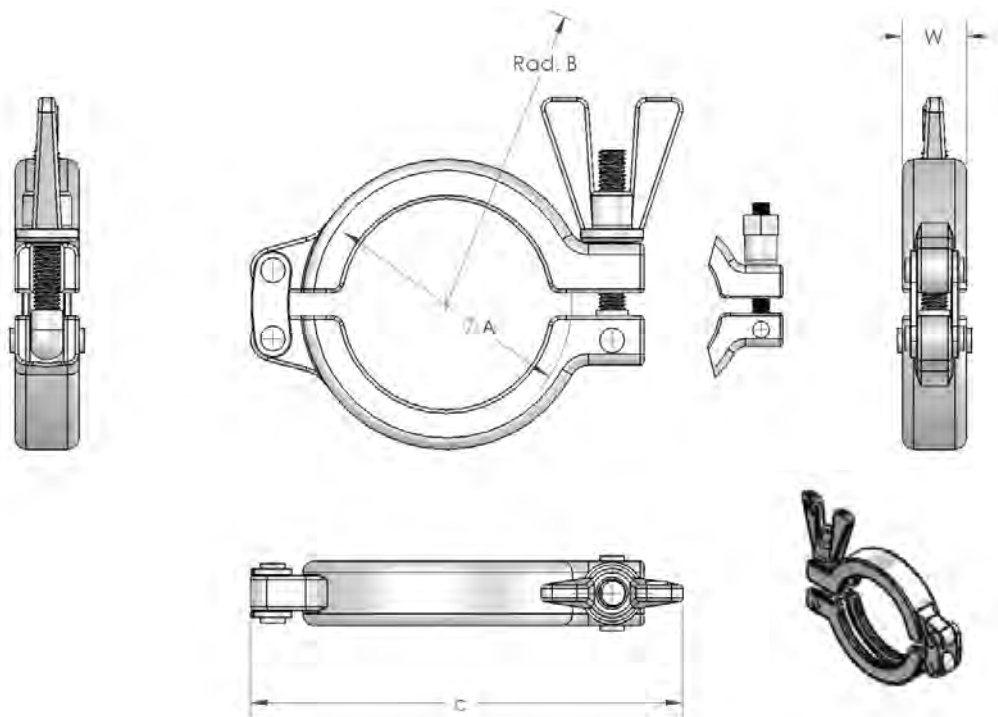
# SH Safety Clamp<sup>®</sup>

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	SH Safety Clamp <sup>®</sup>
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Tri-Clamp Coupling, Wingnuts and Eye-Bolt Screw from AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Closure Clamp with V-Profile, for equal pressure over the whole circumference. Surface, internal and external bright finish
<b>Remarks:</b>	Technical contents are subject to change

Recommended areas of application: Pharma, Biotechnology and Industry.

SH Type Closure Clamp

Technical data on drawing below: see next page

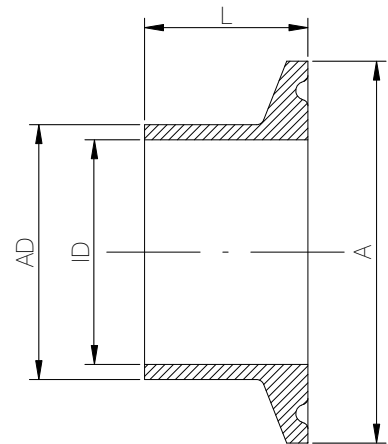


## TRI-CLAMP CONNECTIONS

# Tri-Clamp Ferrule

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Ferrule, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 Series B (ISO 1127)
<b>Material:</b>	Stnr.-W. 1.4435 BN2 (Fe < 0.5%) acc. EN 10088
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Surface, internal and external bright finish. Weld-on ends for orbital-welding. Ra, internal < 0.4 µm, Ra, external < 0.8 µm (ID ≤ 9.0 mm = Ra, internal < 0.6 µm)
<b>Pipe-Hygiene Classes:</b>	H 3 / H 4 acc. DIN 11866
<b>Marking:</b>	Size, Material, Melt number, Manufacturer code
<b>Certificates:</b>	Certificate acc. EN 10204-3.1
<b>Option:</b>	Electropolishing
<b>Remarks:</b>	Technical contents are subject to change

Dimensions for Tri-Clamp Ferrules						
Sizes	A	AD	ID	L	Item No.	
acc. DIN 32676 Series B, ISO 1127						
ISO DN 6	6	25.0	10.2	7.0	28.5	210.010.007
ISO DN 8	8	25.0	13.5	10.3	28.5	210.013.010
ISO DN 8	8	50.5	13.5	10.3	21.6	210.013.010.S
ISO DN 10	10	25.0	17.2	14.0	28.5	210.017.014
ISO DN 10	10	50.5	17.2	14.0	21.6	210.017.013
ISO DN 10	10	50.5	17.2	14.0	28.5	210.017.013.28
ISO DN 15	15	50.5	21.3	18.1	21.6	210.021.018
ISO DN 15	15	50.5	21.3	18.1	28.5	210.021.018.28
ISO DN 20	20	50.5	26.9	22.9	21.6	210.026.022
ISO DN 20	20	50.5	26.9	22.9	28.5	210.026.022.28
ISO DN 20/1	20/1	50.5	26.9	23.7	21.6	210.026.023
ISO DN 20/1	20/1	50.5	26.9	23.7	28.5	210.026.023.28
ISO DN 25	25	50.5	33.7	28.7	21.6	210.033.028
ISO DN 25	25	50.5	33.7	28.7	28.5	210.033.028.28
ISO DN 25/1	25/1	50.5	33.7	29.7	21.6	210.033.029
ISO DN 25/1	25/1	50.5	33.7	29.7	28.5	210.033.029.28
ISO DN 32	32	64.0	42.4	38.4	21.6	210.042.038
ISO DN 32	32	64.0	42.4	38.4	28.5	210.042.038.28
ISO DN 40	40	64.0	48.3	44.3	21.6	210.048.044
ISO DN 40	40	64.0	48.3	44.3	28.5	210.048.044.28
ISO DN 50	50	77.5	60.3	56.3	21.6	210.060.056
ISO DN 50	50	77.5	60.3	56.3	28.5	210.060.056.28



*All lengths in millimeters (if not specified differently).*

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Catalogue Sterile Components Version CS004, Printed 07/2014, Version 2. More information: [www.connectors.ch](http://www.connectors.ch) or email: [info@connectors.ch](mailto:info@connectors.ch)

# Tri-Clamp Ferrule

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Ferrule, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 Series B (ISO 1127) / *non standard
<b>Material:</b>	Stnr.-W. 1.4435 BN2 (Fe < 0.5%) acc. EN 10088
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Surface, internal and external bright finish. Weld-on ends for orbital-welding. Ra, internal < 0.4 µm, Ra, external < 0.8 µm
<b>Pipe-Hygiene Classes:</b>	H 3 / H 4 acc. DIN 11866
<b>Marking:</b>	Size, Material, Melt number, Manufacturer code
<b>Certificates:</b>	Certificate acc. EN 10204-3.1
<b>Option:</b>	Electropolishing
<b>Remarks:</b>	Technical contents are subject to change

Dimensions for Tri-Clamp Ferrules						
Sizes	A	AD	ID	L	Item No.	
acc. DIN 32676 Series B, ISO 1127						
ISO DN 65	91.0	76.1	72.1	21.6	220.076.072.SP	
ISO DN 65	91.0	76.1	72.1	28.5	220.076.072.28	
ISO DN 80	106.0	88.9	84.3	21.6	220.088.084	
ISO DN 80	106.0	88.9	84.3	28.5	220.088.084.28	
ISO DN 100	130.0	114.3	109.7	21.6	220.114.109.7	
ISO DN 150	183.0	168.3	163.1	28.5	220.000.150	
ISO DN 200	233.5	219.1	213.9	28.5	220.000.200	
ISO DN *250	286.1	273.1	266.3	28.5	220.000.250	
ISO DN *300	338.5	323.9	315.9	28.5	220.000.300	

# Tri-Clamp Ferrule

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Ferrule, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 Series A (DIN 11850) / *non standard
<b>Material:</b>	Stnr.-W. 1.4435 BN2 (Fe < 0.5%) acc. EN 10088
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Surface, internal and external bright finish. Weld-on ends for orbital-welding. Ra, internal < 0.4 µm, Ra, external < 0.8 µm (ID ≤ 9.0 mm = Ra, internal < 0.6 µm, ID ≤ 6.0 mm = Ra, internal < 0.8 µm)
<b>Pipe-Hygiene Classes:</b>	H 3 / H 4 acc. DIN 11866
<b>Marking:</b>	Size, Material, Melt number, Manufacturer code
<b>Certificates:</b>	Certificate acc. EN 10204-3.1
<b>Option:</b>	Electropolishing
<b>Remarks:</b>	Technical contents are subject to change

Dimensions for Tri-Clamp Ferrules						
Sizes	A	AD	ID	L	Item No.	
acc. DIN 32676 Series A, DIN 11850						
DIN *4	25.0	6.0	4.0	28.5	210.006.004	
DIN *6	25.0	8.0	6.0	28.5	210.008.006	
DIN *8	25.0	10.0	8.0	28.5	210.010.008	
DIN *10	25.0	12.0	10.0	28.5	210.010.010	
DIN 10	34.0	13.0	10.0	28.5	215.013.010.DIN	
DIN 15	34.0	19.0	16.0	28.5	215.019.016.DIN	
DIN 20	34.0	23.0	20.0	28.5	215.023.020.DIN	
DIN 25	50.5	29.0	26.0	28.5	210.029.026.DIN	
DIN 32	50.5	35.0	32.0	28.5	210.035.032.DIN	
DIN 40	50.5	41.0	38.0	28.5	210.041.038.DIN	
DIN 50	64.0	53.0	50.0	28.5	210.053.050.DIN	
DIN 65	91.0	70.0	66.0	28.5	210.070.066.DIN	
DIN 80	106.0	85.0	81.0	28.5	210.085.081.DIN	
DIN 100	119.0	104.0	100.0	28.5	214.104.100.DIN	
DIN 125	155.0	129.0	125.0	28.5	210.129.125.DIN	
DIN 150	183.0	154.0	150.0	28.5	210.154.150.DIN	
DIN 200	233.5	204.0	200.0	28.5	210.204.200.DIN	

All lengths in millimeters (if not specified differently).



## TRI-CLAMP CONNECTIONS

# Tri-Clamp Ferrule

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Ferrule, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 (ASME BPE 2009) / *non standard
<b>Material:</b>	Stnr.-W. 1.4435 BN2 (Fe < 0.5%) acc. EN 10088
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Surface, internal and external bright finish. Weld-on ends for orbital-welding. Ra, internal < 0.4 µm, Ra, external < 0.8 µm
<b>Pipe-Hygiene Classes:</b>	H 3 / H 4 acc. DIN 11866
<b>Marking:</b>	Size, Material, Melt number, Manufacturer code
<b>Certificates:</b>	Certificate acc. EN 10204-3.1
<b>Option:</b>	Electropolishing. Standard length: 21.6 mm - Upon request 28.5 mm
<b>Remarks:</b>	Technical contents are subject to change

Dimensions for Tri-Clamp Connectors						
Sizes	A	AD	ID	L	Item No.	
acc. DIN 32676 Series C (ASME BPE 2009)						
OD 1/2"	25.0	12.70	9.40	28.5	220.012.009	
OD 3/4"	25.0	19.05	15.75	28.5	220.019.016	
OD 1"	50.5	25.40	22.10	21.6	220.025.022	
OD 1 1/2"	50.5	38.10	34.80	21.6	220.038.034	
OD 2"	64.0	50.80	47.50	21.6	220.050.047	
OD 2 1/2"	77.5	63.50	60.20	21.6	220.064.060	
OD 3"	91.0	76.20	72.90	21.6	220.076.072	
OD *3 1/2"	106.0	88.90	84.30	21.6	220.088.084	
OD 4"	119.0	101.60	97.40	21.6	220.102.097	
OD *4 1/2"	130.0	114.30	109.10	21.6	220.114.109	
OD *5"	144.5	127.00	120.00	21.6	220.127.120	
OD 6"	167.0	152.40	146.86	21.6	220.154.147	
OD *8"	217.5	205.00	198.00	21.6	220.205.198	
OD *10"	268.0	254.00	250.00	28.5	220.254.250	
OD *12"	319.0	304.80	300.80	28.5	220.304.300	

# TRI-CLAMP CONNECTIONS

## Tri-Clamp Gasket

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Gasket, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 Series B (ISO 1127) / *non standard
<b>Material:</b>	Viton®, polymerisate made of vinylidene fluoride and hexafluoride propylenes. Platinum catalyzed silicone, EPDM Aethylene-propylene-diene rubber
<b>Permissible sterilization temperature:</b>	EPDM: 132°C (150°C for a short time), Silicone and Viton®: 150°C
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers. and USP class IV
<b>Remarks:</b>	Technical contents are subject to change Blind gaskets also available upon request Viton® and Teflon® are registered trademarks of DuPont Performance Elastomers

Dimensions for Tri-Clamp Gaskets											
Sizes	A	Item No. Viton®	Item No. Silicone	Item No. EPDM							
acc. DIN 32676 Series B, ISO 1127											
ISO DN 8	22.0	240.022.010	- W/L	241.022.010	- W/L	242.022.010	- W/L				
ISO DN *8	34.0	240.034.011	X -	241.034.011	X -	242.034.011	X -				
ISO DN 8	50.5	240.050.010	X -	241.050.010	X -	242.050.010	X -				
ISO DN 10	22.0	240.022.014	- W/L	241.022.014	- W/L	242.022.014	- W/L				
ISO DN *10	34.0	240.034.014	X -	241.034.014	X -	242.034.014	X W/L				
ISO DN 10	50.5	240.050.014	X -	241.050.014	X -	242.050.014	X -				
ISO DN *15	34.0	240.034.019	X -	241.034.019	X -	242.034.019	X -				
ISO DN 15	50.5	240.050.019	X -	241.050.019	X -	242.050.019	X -				
ISO DN 20	50.5	240.050.024	X -	241.050.024	X -	242.050.024	X -				
ISO DN 20/1	50.5	240.050.024	X -	241.050.024	X -	242.050.024	X -				
ISO DN 25	50.5	240.050.030	X -	241.050.030	X -	242.050.030	X -				
ISO DN 25/1	50.5	240.050.030	X -	241.050.030	X -	242.050.030	X -				
ISO DN 32	64.0	240.064.039	X -	241.064.039	X -	242.064.039	X -				
ISO DN 40	64.0	240.064.044	X -	241.064.044	X -	242.064.044	X -				
ISO DN 50	77.5	240.077.056	X -	241.077.056	X -	242.077.056	X -				
ISO DN 65	91.0	240.091.072	X -	241.091.072	X W/L	242.091.072	X W/L				
ISO DN 80	106.0	240.106.084	X -	241.106.084	X -	242.106.084	X -				
ISO DN 100	130.0	240.130.110	- W/L	241.130.110	X -	242.130.110	X -				
ISO DN 150	182.7	240.000.150	X -	241.000.150	X -	242.000.150	X -				
ISO DN 200	233.5	240.000.200	X -	241.000.200	X -	242.000.200	X -				
ISO DN 250	287.5	240.000.250	X -	241.000.250	X -	242.000.250	X -				
ISO DN 300	338.3	240.000.300	X -	241.000.300	X -	242.000.300	X -				

X = with lip      W/L = without lip

All lengths in millimeters (if not specified differently).

# TRI-CLAMP CONNECTIONS

## Tri-Clamp Gasket

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Gasket, Type Biotechnology
<b>Valid standards:</b>	acc. DIN 32676 Series B (ISO 1127) / *non standard
<b>Material:</b>	PTFE made purely of polytetrafluorethylene, PTFE enveloped with filler made of Viton®
<b>Permissible sterilization temperature:</b>	PTFE and PTFE coated: 150°C
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers. and USP class IV
<b>Remarks:</b>	Technical contents are subject to change Blind gaskets also available upon request Viton® and Teflon® are registered trademarks of DuPont Performance Elastomers

Dimensions for Tri-Clamp Gaskets										
Sizes	A	Item No.					Item No.			
		Teflon®/PTFE enveloped					Teflon®/PTFE			
acc. DIN 32676 Series B, ISO 1127										
ISO DN	8	22.0	243.022.010	-	W/L	244.022.010	-	W/L		
ISO DN	*8	34.0	243.034.011	X	-	244.034.011	-	W/L		
ISO DN	8	50.5	243.050.010	X	-	244.050.010	-	W/L		
ISO DN	10	22.0	243.022.014	-	W/L	244.022.014	-	W/L		
ISO DN	*10	34.0	243.034.014	X	-	244.034.014	-	W/L		
ISO DN	10	50.5	243.050.014	X	-	244.050.014	-	W/L		
ISO DN	*15	34.0	243.034.019	X	W/L	244.034.019	-	W/L		
ISO DN	15	50.5	243.050.019	X	W/L	244.050.019	-	W/L		
ISO DN	20	50.5	243.050.024	X	W/L	244.050.024	-	W/L		
ISO DN	20/1	50.5	243.050.024	X	W/L	244.050.024	-	W/L		
ISO DN	25	50.5	243.050.030	-	W/L	244.050.030	-	W/L		
ISO DN	25/1	50.5	243.050.030	-	W/L	244.050.030	-	W/L		
ISO DN	32	64.0	243.064.039	X	W/L	244.064.039	-	W/L		
ISO DN	40	64.0	243.064.044	-	W/L	244.064.044	-	W/L		
ISO DN	50	77.5	243.077.056	-	W/L	244.077.056	-	W/L		
ISO DN	65	91.0	243.091.072	-	W/L	244.091.072	-	W/L		
ISO DN	80	106.0	243.106.084	X	-	244.106.084	-	W/L		
ISO DN	100	130.0	243.130.110	X	-	244.130.110	-	W/L		
ISO DN	150	182.7	243.000.150	-	W/L	244.000.150	-	W/L		
ISO DN	200	233.5	243.000.200	-	W/L	244.000.200	-	W/L		
ISO DN	250	287.5	243.000.250	X	-	244.000.250	-	W/L		
ISO DN	300	338.3	243.000.300	X	W/L	244.000.300	-	W/L		

X = with lip  
(enveloped)

X = with lip

W/L = without lip  
(enveloped)

W/L = without lip

# TRI-CLAMP CONNECTIONS

## Tri-Clamp Gasket

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Gasket, Type Biotechnology
<b>Valid standards:</b>	acc. DIN 32676 Series A (DIN 11850) / *non standard
<b>Material:</b>	Viton <sup>®</sup> , polymerisate made of vinylidene fluoride and hexafluoride propylenes. Platinum catalyzed silicone, EPDM Aethylene-propylene-diene rubber, Viton <sup>®</sup>
<b>Permissible sterilization temperature:</b>	EPDM: 132°C (150°C for a short time), Silicone and Viton: 150°C
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers. and USP class IV
<b>Remarks:</b>	Technical contents are subject to change Blind rivets also available upon request Viton <sup>®</sup> and Teflon <sup>®</sup> are registered trademarks of DuPont Performance Elastomers

Dimensions for Tri-Clamp Gaskets													
Sizes	A	Item No. Viton <sup>®</sup>				Item No. Silicone				Item No. EPDM			
acc. DIN 32676 Series A (DIN 11850)													
DIN *4	22.0	240.022.004	-	W/L	241.022.004	-	W/L	242.022.004	-	W/L			
DIN *6	22.0	240.022.006	-	W/L	241.022.006	-	W/L	242.022.006	-	W/L			
DIN *8	22.0	240.022.008	-	W/L	241.022.008	-	W/L	242.022.008	-	W/L			
DIN *10	22.0	240.022.010	-	W/L	241.022.010	-	W/L	242.022.010	-	W/L			
DIN 10	34.0	240.034.010	X	-	241.034.010	X	-	242.034.010	X	-			
DIN 15	34.0	240.034.016	X	-	241.034.016	X	-	242.034.016	X	-			
DIN 20	34.0	240.034.020	X	-	241.034.020	X	-	242.034.020	X	-			
DIN 25	50.5	240.050.026	X	-	241.050.026	X	-	242.050.026	X	-			
DIN 32	50.5	240.050.032	X	-	241.050.032	X	-	242.050.032	X	-			
DIN 40	50.5	240.050.038	X	-	241.050.038	X	-	242.050.038	X	-			
DIN 50	64.0	240.064.050	X	-	241.064.050	X	-	242.064.050	X	-			
DIN 65	91.0	240.091.066	X	-	241.091.066	X	-	242.091.066	X	-			
DIN 80	106.0	240.106.081	X	-	241.106.081	X	-	242.106.081	X	-			
DIN 100	119.0	240.119.100	X	-	241.119.100	X	-	242.119.100	X	-			
DIN 125	155.0	240.155.125	X	-	241.155.125	X	-	242.155.125	X	-			
DIN 150	183.0	240.183.150	X	-	241.183.150	X	-	242.183.150	X	-			
DIN 200	233.5	240.233.200	X	-	241.233.200	X	-	242.233.200	X	-			

All lengths in millimeters (if not specified differently).

# TRI-CLAMP CONNECTIONS

## Tri-Clamp Gasket

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Gasket, Type Biotechnology
<b>Valid standards:</b>	DIN 32676, DIN 11850 / *non standard
<b>Material:</b>	PTFE made purely of polytetrafluoride ethylene, PTFE enveloped with filler made of Viton®
<b>Permissible sterilization temperature:</b>	PTFE and PTFE coated: 150°C
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.1550 for PTFE and USP Class VI
<b>Remarks:</b>	Technical contents are subject to change Blind gaskets also available upon request Viton® and Teflon® are registered trademarks of DuPont Performance Elastomers

Dimensions for Tri-Clamp Gaskets									
Sizes	A	Item No.			Item No.				
		Teflon®/PTFE enveloped			Teflon®/PTFE				
acc. DIN 32676 Series A (DIN 11850)									
DIN *4	22.0	-	-	-	244.022.004	-	W/L		
DIN *6	22.0	-	-	-	244.022.006	-	W/L		
DIN *8	22.0	-	-	-	244.022.008	-	W/L		
DIN *10	22.0	243.022.010	-	W/L	244.022.010	-	W/L		
DIN 10	34.0	243.034.010	-	W/L	244.034.010	-	W/L		
DIN 15	34.0	243.034.016	-	W/L	244.034.016	-	W/L		
DIN 20	34.0	243.034.020	X	W/L	244.034.020	-	W/L		
DIN 25	50.5	243.050.026	X	-	244.050.026	-	W/L		
DIN 32	50.5	243.050.032	-	W/L	244.050.032	-	W/L		
DIN 40	50.5	243.050.038	-	W/L	244.050.038	-	W/L		
DIN 50	64.0	243.064.050	X	-	244.064.050	-	W/L		
DIN 65	91.0	243.091.066	X	-	244.091.066	-	W/L		
DIN 80	106.0	243.106.081	X	-	244.106.081	-	W/L		
DIN 100	119.0	243.119.100	-	W/L	244.119.100	-	W/L		
DIN 125	155.0	243.155.125	-	W/L	244.155.125	-	W/L		
DIN 150	183.0	243.183.150	X	-	244.182.150	-	W/L		
DIN 200	233.5	243.233.200	X	-	244.233.200	-	W/L		

# TRI-CLAMP CONNECTIONS

## Tri-Clamp Gasket

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Gasket, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 Series C (ASME BPE 2009) / *non standard
<b>Material:</b>	Viton®, polymerisate made of vinylidene fluoride and hexafluoride propylenes. Platinum catalyzed silicone, EPDM aethylene-propylene-diene-rubber
<b>Permissible sterilization temperature:</b>	EPDM: 132°C (150°C for a short time), Silicone and Viton®: 150°C
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.2600 for elastomers and USP Class VI
<b>Remarks:</b>	Technical contents are subject to change Blind gaskets also available upon request Viton® and Teflon® are registered trademarks of DuPont Performance Elastomers

Dimensions for Tri-Clamp Gaskets												
Sizes	A	Item No.	Viton®			Silicone			EPDM			
acc. DIN 32676 Series C (ASME BPE 2009)												
OD 1/2"	22.0	240.022.010	-	W/L	241.022.010	-	W/L	242.022.010	-	W/L		
OD 3/4"	22.0	240.022.017	-	W/L	241.022.017	-	W/L	242.022.017	-	W/L		
OD 1"	50.5	240.050.022	X	-	241.050.022	X	W/L	242.050.022	X	W/L		
OD 1 1/2"	50.5	240.050.034	X	-	241.050.034	X	W/L	242.050.034	X	W/L		
OD 2"	64.0	240.064.047	X	-	241.064.047	X	W/L	242.064.047	X	W/L		
OD 2 1/2"	77.5	240.077.059	X	-	241.077.059	X	W/L	242.077.059	X	-		
OD 3"	91.0	240.091.072	X	-	241.091.072	X	W/L	242.091.072	X	W/L		
OD *3 1/2"	106.0	240.106.084	X	-	241.106.084	X	-	242.106.084	X	-		
OD 4"	119.0	240.119.097	X	-	241.119.097	X	W/L	242.119.097	X	-		
OD *4 1/2"	130.0	240.130.109	-	W/L	241.130.109	X	-	242.130.109	X	-		
OD *5"	144.0	240.144.121	-	W/L	241.144.121	X	-	242.144.121	X	-		
OD *6"	167.0	240.167.146	X	-	241.167.146	X	-	242.167.146	X	-		
OD *8"	217.5	240.217.197	X	-	241.217.197	X	-	242.217.197	X	-		
OD *10"	268.0	240.268.250	X	-	241.268.250	X	-	242.268.250	X	-		
OD *12"	319.0	240.304.300	X	-	241.304.300	X	-	242.304.300	X	-		

All lengths in millimeters (if not specified differently).

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Catalogue Sterile Components Version CS004, Printed 07/2014, Version 2. More information: [www.connectors.ch](http://www.connectors.ch) or email: [info@connectors.ch](mailto:info@connectors.ch)

# TRI-CLAMP CONNECTIONS

## Tri-Clamp Gasket

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Tri-Clamp Gasket, Type Biotechnology
<b>Valid standards:</b>	DIN 32676 Series C (ASME BPE 2009) / *non standard
<b>Material:</b>	PTFE made purely of polytetrafluoride ethylene, PTFE with core made of fluoride-rubber FPM
<b>Permissible sterilization temperature:</b>	PTFE and PTFE coated: 150°C
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.1550 for PTFE and USP Class VI
<b>Remarks:</b>	Technical contents are subject to change Blind gaskets also available upon request Viton® and Teflon® are registered trademarks of DuPont Performance Elastomers

Dimensions for Tri-Clamp Gaskets									
Sizes	A	Item No.				Item No.			
		Teflon®/PTFE coated				Teflon®/PTFE			
acc. DIN 32676 Row C (ASME BPE 2009)									
OD 1/2"	22.0	243.022.010	-	W/L	244.022.010	-	W/L		
OD 3/4"	22.0	243.022.017	-	W/L	244.022.017	-	W/L		
OD 1"	50.5	243.050.022	-	W/L	244.050.022	-	W/L		
OD 1 1/2"	50.5	243.050.034	-	W/L	244.050.034	-	W/L		
OD 2"	64.0	243.064.047	-	W/L	244.064.047	-	W/L		
OD 2 1/2"	77.5	243.077.059	-	W/L	244.077.059	-	W/L		
OD 3"	91.0	243.091.072	-	W/L	244.091.072	-	W/L		
OD *3 1/2"	106.0	243.106.084	X	-	244.106.084	-	W/L		
OD 4"	119.0	243.119.097	-	W/L	244.119.097	-	W/L		
OD *4 1/2"	130.0	243.130.109	X	-	244.130.109	-	W/L		
OD *5"	144.0	243.144.121	X	-	244.144.121	-	W/L		
OD *6"	167.0	243.167.146	-	W/L	244.167.146	-	W/L		
OD *8"	217.5	243.217.197	X	W/L	244.217.197	-	W/L		
OD *10"	268.0	243.268.250	X	W/L	244.268.250	-	W/L		
OD *12"	319.0	243.304.300	X	-	244.304.300	X	W/L		

# Tri-Clamp Gasket - Supplement Sheet

**Product group:** Tri-Clamp Connections

**Description:** Tri-Clamp Gasket, Type Biotechnology

**Valid standards:** ISO 2852, DIN 32676, BS 4825 (ASME BPE) / \*non standard

**Material:** PTFE made purely of polytetrafluoride ethylenes, PTFE with core made of fluoride rubber FPM, Viton®, polymerisate made of vinylidene fluoride and hexafluoride propylenes.  
Platinum catalyzed silicone, EPDM aethylene-propylene-diene-rubber

**Permissible sterilization temperature:** EPDM: 132°C (150°C for a short time), Silicone, Viton® and PTFE: 150°C

**Version / Surface quality:** Surface smooth and nonporous, free of laminar recesses and ridges.  
Edges without tears and notches.

**Marking** Marking on packing units

**Certificates:** Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers.  
Incl. Certificate of conformance FDA-21 CFR 177.1550 for PTFE and USP Class VI

**Remarks:** Technical contents are subject to change  
Viton® and Teflon® are registered trademarks of DuPont Performance Elastomers

Chemical Description	Fluoro-rubber, Viton®	Silicone rubber	Aethylene-propylene-diene-rubber	Teflon®	**Silkoflon
Short Description acc. ISO 1629	FPM	MVQ	EPDM	PTFE	FEP/MVQ
<b>Specifications</b>					
Abrasion-Resistance	good	good to excellent	good to excellent	excellent	excellent
Steam-Resistance	poor	poor	good to excellent	excellent	excellent
Dielectricity Quality	good	excellent	excellent	excellent	excellent
Fire-Resistance	good	poor	poor	excellent	excellent
Ozone-Resistance	excellent	excellent	excellent	excellent	excellent
Acid-Resistance	good	good	good to excellent	excellent	excellent
Temperature-Resistance Material	-29°C to 204°C	-62°C to 232°C	-46°C to 132°C	-78°C to 232°C	-60°C to 200°C
Permissible sterilization temperature	150°C	150°C	132°C 150°C for a short time	150°C	150°C
Weather-Resistance	good	excellent	excellent	excellent	excellent
Tear resistance	neutral	excellent	good	excellent	excellent
Tensile strength	good to excellent	good	good to excellent	excellent	excellent

\*\*Gasketmaterial Silkoflon: For Aseptic O-Ring Unions: see page 67



# Screen Gaskets – Tri-Clamp Gasket with mesh

**Product group:** Tri-Clamp Connections

**Description:** Screen Gaskets

**Valid standards:** DIN 32676 Series C (ASME BPE 2009)

**Material:** EPDM aethylene-propylene-diene-rubber  
Platinum catalyzed silicone  
AISI 316

**Permissible sterilization temperature:** Silicone: 150°C, EPDM: 132°C (150°C for a short time),

**Version / Surface quality:** Surface smooth and nonporous, free of laminar recesses and ridges.  
Edges without tears and notches.

**Marking** Marking on packing units

**Certificates:** Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers.  
and USP Class VI

**Remarks:** Other dimensions and materials available upon request  
Technical contents are subject to change

Dimensions for Tri-Clamp Screen Gaskets					
Sizes	A	Mesh#	Item No. Silicone	Item No. EPDM	
acc. DIN 32676 Series C (ASME BPE)					
OD 1-1/2"	50.5	10	241.050.034.010	242.050.034.010	
OD 1-1/2"	50.5	20	241.050.034.020	242.050.034.020	
OD 1-1/2"	50.5	30	241.050.034.030	242.050.034.030	
OD 1-1/2"	50.5	35	241.050.034.035	242.050.034.035	
OD 1-1/2"	50.5	40	241.050.034.040	242.050.034.040	
OD 1-1/2"	50.5	60	241.050.034.060	242.050.034.060	
OD 1-1/2"	50.5	100	241.050.034.100	242.050.034.100	
OD 2"	64.0	20	241.064.047.020	242.064.047.020	
OD 2"	64.0	30	241.064.047.030	242.064.047.030	
OD 2"	64.0	40	241.064.047.040	242.064.047.040	
OD 2-1/2"	77.5	20	241.077.059.020	242.077.059.020	
OD 4"	119.0	20	241.119.097.020	242.119.097.020	
OD 4"	119.0	40	241.119.097.040	242.119.097.040	

## TRI-CLAMP CONNECTIONS

# Smart Gaskets® – Tri-Clamp Gasket with mesh

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Smart Gaskets®
<b>Valid standards:</b>	DIN 32676
<b>Material:</b>	EPDM aethylene-propylene-diene-rubber Platinum catalyzed silicone
<b>Permissible sterilization temperature:</b>	Silicone: 150°C, EPDM: 132°C (150°C for a short time)
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking:</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers. and USP Class VI
<b>Remarks:</b>	Other materials and dimensions available upon request The function of the gasket is only guaranteed if used with the appertaining clamp Technical contents are subject to change

Dimensions for Tri-Clamp Smart Gaskets®						
Sizes	A	Ports	Item No. Silicone	Item No. EPDM	Item No. Tri-Clamp Connections	
acc. DIN 32676 Series C (ASME BPE)						
OD 1/2"	25.0	1	241.105.000	242.105.000	209.005.028.	
OD 1/2"	25.0	2	241.205.000	242.205.000	209.005.028.	
OD 1/2"	25.0	3	241.305.000	242.305.000	209.005.028.	
OD 1/2"	25.0	4	241.405.000	242.405.000	209.005.028.	
OD 3/4"	25.0	1	241.107.000	242.107.000	209.005.028.	
OD 3/4"	25.0	2	241.207.000	242.207.000	209.005.028.	
OD 3/4"	25.0	3	241.307.000	242.307.000	209.005.028.	
OD 3/4"	25.0	4	241.407.000	242.407.000	209.005.028.	
OD 1"	50.5	1	241.110.000	242.110.000	209.025.053.	
OD 1"	50.5	2	241.210.000	242.210.000	209.025.053.	
OD 1"	50.5	3	241.310.000	242.310.000	209.025.053.	
OD 1"	50.5	4	241.410.000	242.410.000	209.025.053.	
OD 1-1/2"	50.5	1	241.115.000	242.115.000	209.025.053.	
OD 1-1/2"	50.5	2	241.215.000	242.215.000	209.025.053.	
OD 1-1/2"	50.5	3	241.315.000	242.315.000	209.025.053.	
OD 1-1/2"	50.5	4	241.415.000	242.415.000	209.025.053.	
OD 2"	64.0	1	241.120.000	242.120.000	209.050.067.1	
OD 2"	64.0	2	241.220.000	242.220.000	209.050.067.2	
OD 2"	64.0	3	241.320.000	242.320.000	209.050.067.3	
OD 2"	64.0	4	241.420.000	242.420.000	209.050.067.4	
OD 3"	91.0	1	241.130.000	242.130.000	209.080.094.1	
OD 3"	91.0	2	241.230.000	242.230.000	209.080.094.2	
OD 3"	91.0	3	241.330.000	242.330.000	209.080.094.3	
OD 3"	91.0	4	241.430.000	242.430.000	209.080.094.4	
OD 4"	119.0	1	241.140.000	242.140.000	209.100.122.1	
OD 4"	119.0	2	241.240.000	242.240.000	209.100.122.2	
OD 4"	119.0	3	241.340.000	242.340.000	209.100.122.3	
OD 4"	119.0	4	241.440.000	242.440.000	209.100.122.4	

All lengths in millimeters (if not specified differently).

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Catalogue Sterile Components Version CS004, Printed 07/2014, Version 2. More information: [www.connectors.ch](http://www.connectors.ch) or email: [info@connectors.ch](mailto:info@connectors.ch)

# TRI-CLAMP CONNECTIONS

## Covers

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Covers
<b>Valid standards:</b>	acc. DIN 32676 Series C, (ASME BPE 2009)
<b>Material:</b>	EPDM aethylene-propylene-diene-rubber Platinum catalyzed silicone Viton®, polymerisate made of vinylidene fluoride and hexafluoride propylenes. Cover made of AISI 316 (1.4401)
<b>Permissible sterilization temperature:</b>	Viton®, Silicone: 150°C, EPDM: 132°C (150°C for a short time),
<b>Version / Surface quality:</b>	Surface smooth and nonporous, free of laminar recesses and ridges. Edges without tears and notches.
<b>Marking</b>	Marking on packing units
<b>Certificates:</b>	Incl. Certificate of conformance FDA-21 CFR 177.2600 for Elastomers and USP Class VI
<b>Remarks:</b>	Other dimensions and materials made on request Also available with bore hole Technical contents are subject to change

Dimensions for Covers					
Sizes	A	Item No. Viton®	Item No. Silicone	Item No. EPDM	
acc. DIN 32676 Series C (ASME BPE 2009)					
OD 3/4"	25.0	240.316.016.000	241.316.016.000	242.316.016.000	
OD 1"	50.5	240.316.022.000	241.316.022.000	242.316.022.000	
OD 1 1/2"	50.5	240.316.034.000	241.316.034.000	242.316.034.000	
OD 2"	64.0	240.316.047.000	241.316.047.000	242.316.047.000	
OD 2 1/2"	77.5	240.316.059.000	241.316.059.000	242.316.059.000	
OD 3"	91.0	240.316.072.000	241.316.072.000	242.316.072.000	

# Blind cover

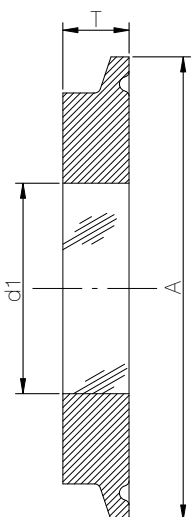
<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Blind cover, Type Biotechnology
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / *non standard
<b>Material:</b>	Stnr.-W. 1.4435 BN2 (Fe < 0.5%) acc. EN 10088
<b>Permissible sterilization temperature:</b>	150°C
<b>Version / Surface quality:</b>	Surfaces internal and external metallic, shiny. Ra, internal < 0.4 µm, Ra, external < 0.8 µm
<b>Pipe-Hygiene Classes:</b>	H 3 / H 4 acc. DIN 11866
<b>Marking:</b>	Material number, melt number, manufacturer code
<b>Certificates:</b>	Incl. Certificate of conformance EN 10204-3.1
<b>Option:</b>	Electropolishing
<b>Remarks:</b>	Technical contents are subject to change

Dimensions for Blind Cover						
ISO 2852 DIN 32676 Series B	DIN 32676 Series A	BS 4825 (ASME BPE) DIN 32676 Series C	A	T	Item No.	
DN 6 / 8 / 10	DIN 4 / 6 / 8 / *10	1/2" / *3/4"	25.0	5.5	230.005.025	
	DIN 10 / 15 / 20		34.0	5.5	230.010.034	
*DN 8 / *10 / 15 20 / 25	DIN 25 / 32 / 40	1" / 1 1/2"	50.5	6.4	230.025.050	
DN 32 / 40	DIN 50	2"	64.0	6.4	230.050.064	
DN 50		2 1/2"	77.5	6.4	230.065.077	
DN 65	DIN 65	3"	91.0	6.4	230.080.091	
DN 80	DIN 80	3 1/2"	106.0	6.4	230.090.106	
	DIN 100	4"	119.0	6.4	230.100.119	
DN 100		4 1/2"	130.0	10.0	230.114.130	
	*DIN 125	*5"	144.5	10.0	230.125.144	
	DIN 125	5 1/2"	155.0	10.0	230.155.135	
		*6"	167.0	11.0	230.150.167	
DN 150	DIN 150	6 5/8"	183.0	11.0	230.000.150	
		8"	217.5	14.0	230.200.217	
DN 200	DIN 200	8 5/8"	233.5	14.0	230.000.200	
	*DIN 250	*10"	268.0	14.0	230.250.268	
DN 250		*10 5/8"	286.1	14.0	230.000.250	
		*12"	319.0	20.0	230.319.304	
DN 300		12 5/8"	338.5	20.0	230.000.300	

All lengths in millimeters (if not specified differently).

# Clamp sight glass

<b>Product group:</b>	Tri-Clamp Connections
<b>Description:</b>	Metal-melted clamp view window, sterile model
<b>Valid standards:</b>	ISO 2852, DIN 32676, BS 4825 (ASME BPE) / * non standard
<b>Material:</b>	Stnr.-W. 1.4462 Duplex acc. EN 10088 Glass: Borosilicate acc. DIN 7080 Other ring materials (e.g 2.4602 or 2.4610) on request
<b>Permissible operating temperatures:</b>	-30° to +280°C
<b>Permissible operating pressure:</b>	-1 to +16 bar (see table below)
<b>Version / Surface quality:</b>	Surfaces internal and external sanded and polished. Ra, internal < 0.25 µm, Ra, external < 0.8 µm
<b>Certification:</b>	3A-standard for food / ASME BPE 2009
<b>Marking:</b>	Material number, melt number, certification code
<b>Certificates:</b>	Incl. Certificate of conformance EN 10204-3.1
<b>Remarks:</b>	Technical contents are subject to change

Dimensions for Clamp view windows								
ISO 2852 DIN 32676 Series B	DIN 32676 Series A	BS 4825 (ASME BPE) DIN 32676 Series C	A	T	d1	max. Pressure	Item No.	
*DN 8 / *10 / 15 20 / 25	DIN 25 / 32 / 40	1" / 1 1/2"	50.5	10.0	25.0	16 bar	231.000.025	
DN 32 / 40	DIN 50	2"	64.0	10.0	30.0	16 bar	231.000.050	
DN 50		2 1/2"	77.5	10.0	35.0	16 bar	231.000.077	
DN 65	DIN 65	3"	91.0	10.0	40.0	10 bar	231.000.065	
DN 80	DIN 80	3 1/2"	106.0	10.0	50.0	10 bar	231.000.080	
	DIN 100	4"	119.0	12.0	55.0	10 bar	231.000.100	
		5"	144.5	16.0	65.0	10 bar	231.000.145	
	DIN 125	*5 1/2"	155.0	16.0	70.0	6 bar	231.000.155	
		*6"	167.0	16.0	75.0	6 bar	231.000.167	
DN 150	DIN 150	6 5/8"	183.0	16.0	75.0	6 bar	231.000.150	
		8"	217.5	18.0	100.0	6 bar	231.000.217	
DN 200	DIN 200	8 5/8"	233.5	18.0	100.0	6 bar	231.000.200	
DN 250		*10"	268.0	20.0	120.0	6 bar	231.000.258	
	DIN 250	*10 5/8"	287.5	20.0	120.0	6 bar	231.000.250	
	DIN 300	*12"	319.0	22.0	140.0	6 bar	231.000.319	
DN 300		12 5/8"	338.5	22.0	140.0	6 bar	231.000.300	