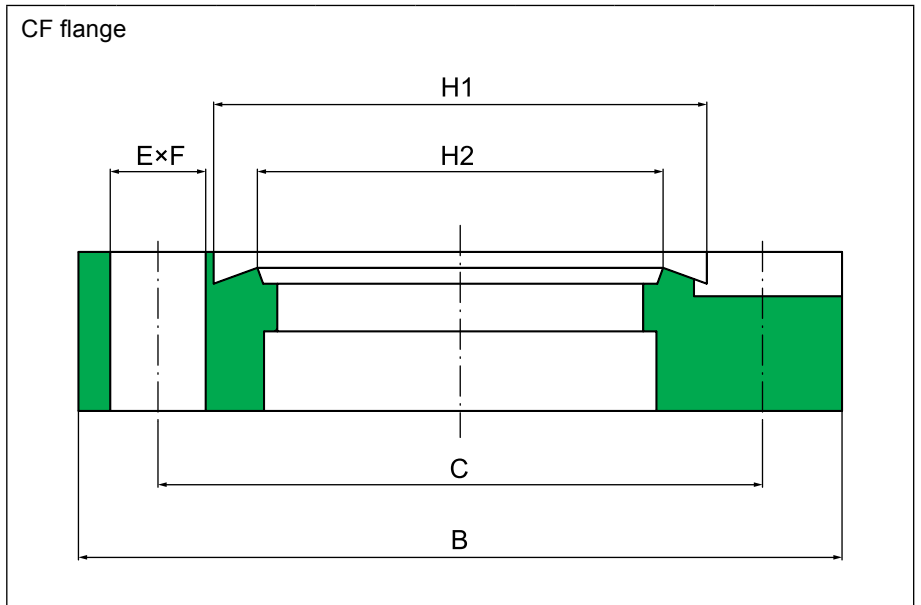


- Screws, bolts
- Copper seals
- Flanges
- Reducing pieces
- Intermediate pieces
- Elbows
- T-Pieces
- Cross pieces
- Bellows
- Adapters



Seal	Cu (copper)
Suitable flange material	stainless steel
Temperature ¹⁾	≤400 °C
Leak rate for Helium (mbar ls ⁻¹)	< 1 · 10 ⁻¹⁰
Sealing force (N per cm sealing line)	3000–5000
Multiple use of seal	no

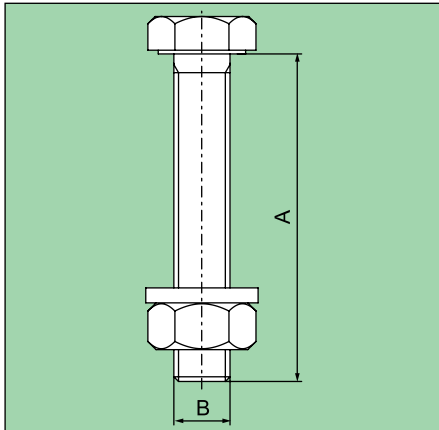
¹⁾ Maximum values: depending on operating conditions and sealing materials



DN	mm inch	16 5/8	25 1	40 1 1/2	63 2 1/2	100 4	160 6	200 8	250 10
O. D.	inch	1 1/8	2 1/8	2 3/4	4 1/2	6	8	10	12
B	mm inch	34 1.34	54 2.13	69.50 2.74	113.50 4.47	152 5.98	202.50 7.97	253 9.96	305 12.01
C	mm inch	27 1.06	41.30 1.63	58.70 2.31	92.20 3.63	130.30 5.13	181 7.13	231.80 9.13	284 11.18
E x F	mm inch	6 x 4.30 6 x 0.17	4 x 6.60 4 x 0.26	6 x 6.60 6 x 0.26	8 x 8.40 8 x 0.33	16 x 8.40 16 x 0.33	20 x 8.40 20 x 0.33	24 x 8.40 24 x 0.33	32 x 8.40 32 x 0.33
H1	mm inch	21.40 0.84	32.90 1.3	48.30 1.9	82.50 3.25	120.60 4.75	171.40 6.75	222.20 8.75	273.10 10.75
H2	mm inch	18.50 0.73	27.60 1.09	42 1.65	77 3.03	115 4.53	166 6.54	217 8.54	267 10.51

DN 16, 25, 40 without venting groove

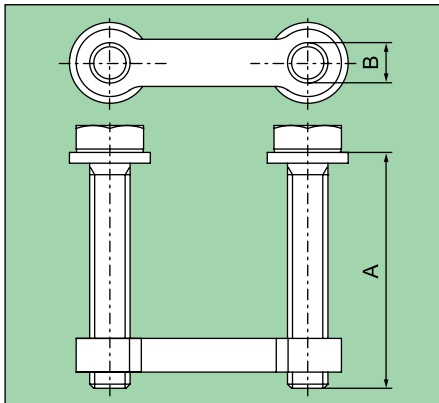
Technical data and ordering information



Screw with washer and nut

DN		A		B	thread	Ordering numbers
mm	inch	mm	inch			
16	5/8	20	0.79		M4	33024-CESS-0001
25	1	35	1.38		M6	33028-CESS-0001
40	1 1/2	35	1.38		M6	33032-CESS-0001
63	2 1/2	50	1.97		M8	33036-CESS-0001
100	4	55	2.17		M8	33040-CESS-0001
160	6	55	2.17		M8	33044-CESS-0001
200	8	60	2.36		M8	33046-CESS-0001
250	10	60	2.36		M8	33048-CESS-0001

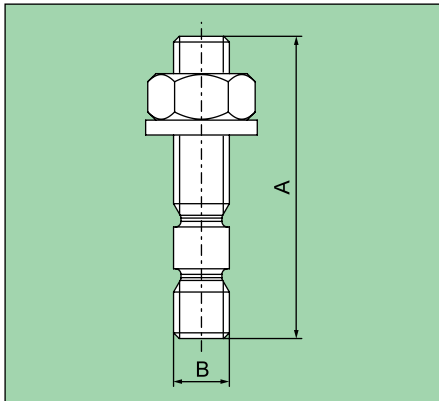
Stainless steel



Screw with double nut

DN		A		B	thread	Ordering numbers
mm	inch	mm	inch			
16	5/8	20	0.79		M4	33024-CESX-0001
40	1 1/2	35	1.38		M6	33032-CESX-0001
63	2 1/2	45	1.77		M8	33036-CESX-0001
100	4	50	1.97		M8	33040-CESX-0001
160	6	55	2.17		M8	33044-CESX-0001

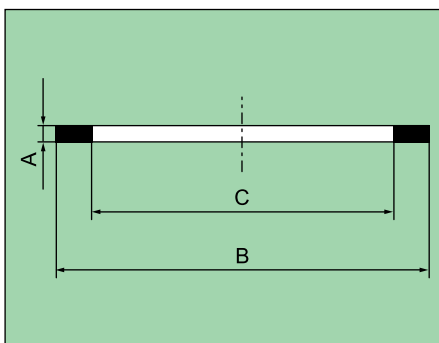
Stainless steel



Stud bolt with washer and nut

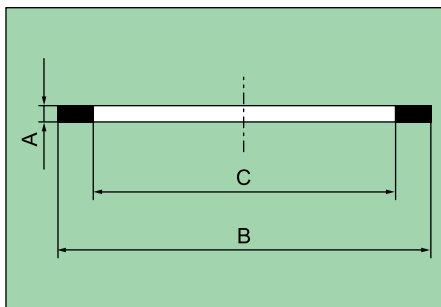
DN		A		B	thread	Ordering numbers
mm	inch	mm	inch			
16	5/8	20	0.79		M4	33024-CEST-0001
25	1	32.5	1.28		M6	33028-CEST-0001
40	1 1/2	32.5	1.28		M6	33032-CEST-0001
63	2 1/2	40	1.57		M8	33036-CEST-0001
100	4	45	1.77		M8	33040-CEST-0001
160	6	50	1.97		M8	33044-CEST-0001
200	8	50	1.97		M8	33046-CEST-0001
250	10	50	1.97		M8	33048-CEST-0001

Stainless steel



Copper seal

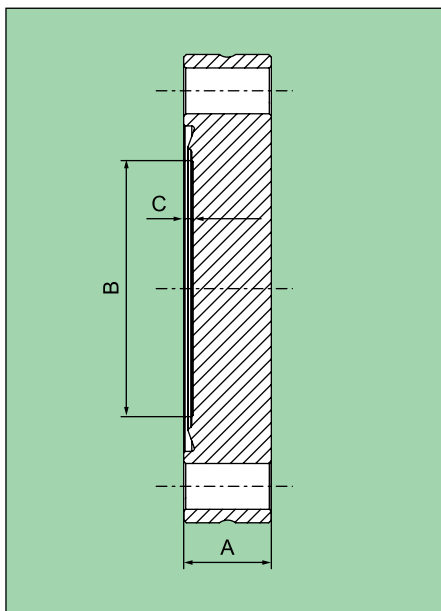
DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	2	0.08	21.3	0.84	16.2	0.64	33024-CKDF-0001
40	1 1/2	2	0.08	48.1	1.89	39	1.54	33032-CKDF-0001
63	2 1/2	2	0.08	82.4	3.24	63.6	2.50	33036-CKDF-0001
100	4	2	0.08	120.5	4.74	101.8	4.01	33040-CKDF-0001
160	6	2	0.08	171.3	6.74	152.6	6.01	33044-CKDF-0001
200	8	2	0.08	222.1	8.74	203.4	8.01	33046-CKDF-0001
250	10	2	0.08	272.9	10.74	254.2	10.01	33048-CKDF-0001



Copper seal

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	2	0.08	21.3	0.84	16.2	0.64	33024-CSDF-0001
40	1 1/2	2	0.08	48.1	1.89	39	1.54	33032-CSDF-0001
63	2 1/2	2	0.08	82.4	3.24	63.6	2.50	33036-CSDF-0001
100	4	2	0.08	120.5	4.74	101.8	4.01	33040-CSDF-0001
160	6	2	0.08	171.3	6.74	152.6	6.01	33044-CSDF-0001
200	8	2	0.08	222.1	8.74	203.4	8.01	33046-CSDF-0001
250	10	2	0.08	272.9	10.74	254.2	10.01	33048-CSDF-0001

Silver-plated

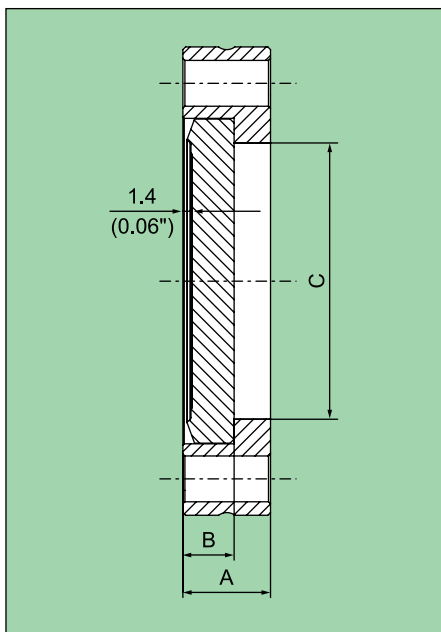


Blank-off flange

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	7.5	0.30	14	0.55	1.4	0.06	33024-CEFB-0001 ¹⁾
40	1 1/2	13	0.51	38	1.50	1.4	0.06	33032-CEFB-0001 ¹⁾
63	2 1/2	17.5	0.69	66	2.60	1.4	0.06	33036-CEFB-0001 ¹⁾
100	4	20	0.79	104	4.09	1.4	0.06	33040-CEFB-0001 ¹⁾
160	6	22	0.87	155	6.10	1.4	0.06	33044-CEFB-0001 ¹⁾
200	8	24.5	0.96	205	8.07	1.4	0.06	33046-CEFB-0001 ¹⁾
250	10	24.5	0.96	256	10.08	1.4	0.06	33048-CEFB-0001 ¹⁾
16	5/8	7.5	0.30	14	0.55	1.4	0.06	33024-CEFB-AAH1 ²⁾
40	1 1/2	13	0.51	38	1.50	1.4	0.06	33032-CEFB-AAH1 ²⁾
63	2 1/2	17.5	0.69	66	2.60	1.4	0.06	33036-CEFB-AAH1 ²⁾
100	4	20	0.79	104	4.09	1.4	0.06	33040-CEFB-AAH1 ²⁾
160	6	22	0.87	155	6.10	1.4	0.06	33044-CEFB-AAH1 ²⁾
200	8	24.5	0.96	205	8.07	1.4	0.06	33046-CEFB-AAH1 ²⁾
250	10	24.5	0.96	256	10.08	1.4	0.06	33048-CEFB-AAH1 ²⁾

¹⁾ Stainless steel AISI 304 (1.4301)

²⁾ Stainless steel AISI 316LN (1.4429)

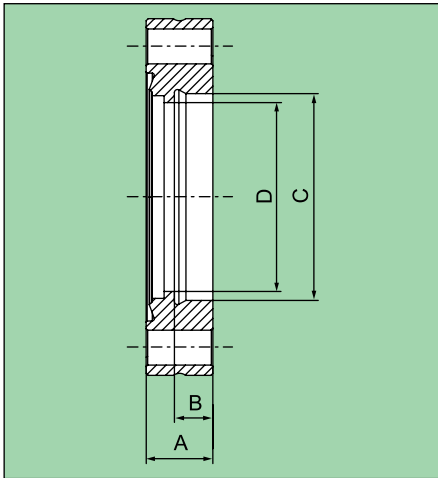


Blank-off flange, rotatable

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	7.5	0.30	5.8	0.23	18.6	0.73	33024-GEBD-0001 ¹⁾
40	1 1/2	13	0.51	7.6	0.30	41	1.61	33032-GEBD-0001 ¹⁾
63	2 1/2	17.5	0.69	12.6	0.50	71	2.80	33036-GEBD-0001 ¹⁾
100	4	20	0.79	14.3	0.56	109	4.29	33040-GEBD-0001 ¹⁾
160	6	22	0.87	15.8	0.62	160	6.30	33044-GEBD-0001 ¹⁾
200	8	24.5	0.96	17.1	0.67	206	8.11	33046-GEBD-0001 ¹⁾
250	10	24.5	0.96	18	0.71	257	10.12	33048-GEBD-0001 ¹⁾
16	5/8	7.5	0.30	5.8	0.23	18.6	0.73	33024-GEBD-AAH1 ²⁾
40	1 1/2	13	0.51	7.6	0.30	41	1.61	33032-GEBD-AAH1 ²⁾
63	2 1/2	17.5	0.69	12.6	0.50	71	2.80	33036-GEBD-AAH1 ²⁾
100	4	20	0.79	14.3	0.56	109	4.29	33040-GEBD-AAH1 ²⁾
160	6	22	0.87	15.8	0.62	160	6.30	33044-GEBD-AAH1 ²⁾
200	8	24.5	0.96	17.1	0.67	206	8.11	33046-GEBD-AAH1 ²⁾
250	10	24.5	0.96	18	0.71	257	10.12	33048-GEBD-AAH1 ²⁾

¹⁾ Stainless steel AISI 304 (1.4301)

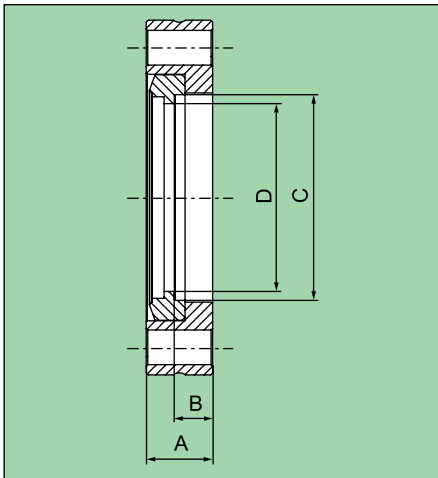
²⁾ Stainless steel AISI 316LN (1.4429)



Weld flange

DN		A		B		C		D		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	7.5	0.30	3.3	0.13	18.3	0.72	16	0.63	33024-CEFF-0001 ¹⁾
40	1 1/2	13	0.51	7.5	0.30	40.3	1.59	36.8	1.45	33032-CEFF-0001 ¹⁾
63	2 1/2	17.5	0.69	8	0.31	70.3	2.77	66	2.60	33036-CEFF-0001 ¹⁾
100	4	20	0.79	9	0.35	108.5	4.27	104	4.09	33040-CEFF-0001 ¹⁾
160	6	22	0.87	10	0.39	159.5	6.28	155	6.10	33044-CEFF-0001 ¹⁾
200	8	24.5	0.96	12	0.47	205.5	8.09	200	7.87	33046-CEFF-0001 ¹⁾
250	10	24.5	0.96	12	0.47	256.5	10.19	250	9.84	33048-CEFF-0001 ¹⁾
16	5/8	7.5	0.30	3.3	0.13	18.3	0.72	16	0.63	33024-CEFF-AAH1 ²⁾
40	1 1/2	13	0.51	7.5	0.30	40.3	1.59	36.8	1.45	33032-CEFF-AAH1 ²⁾
63	2 1/2	17.5	0.69	8	0.31	70.3	2.77	66	2.60	33036-CEFF-AAH1 ²⁾
100	4	20	0.79	9	0.35	108.5	4.27	104	4.09	33040-CEFF-AAH1 ²⁾
160	6	22	0.87	10	0.39	159.5	6.28	155	6.10	33044-CEFF-AAH1 ²⁾
200	8	24.5	0.96	12	0.47	205.5	8.09	200	7.87	33046-CEFF-AAH1 ²⁾
250	10	24.5	0.96	12	0.47	256.5	10.19	250	9.84	33048-CEFF-AAH1 ²⁾

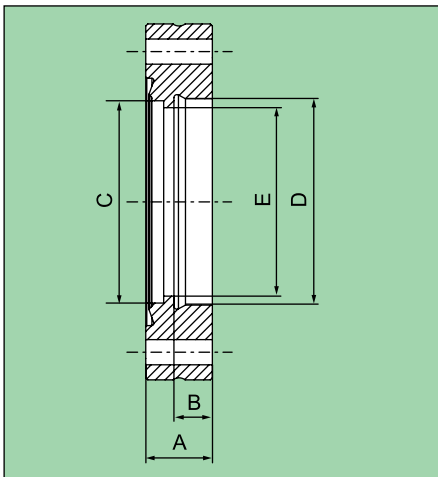
¹⁾ Stainless steel AISI 304 (1.4301) ²⁾ Stainless steel AISI 316LN (1.4429)



Weld flange, rotatable

DN		A		B		C		D		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	7.5	0.30	3.3	0.13	18.3	0.72	16	0.63	33024-GEFD-0001 ¹⁾
40	1 1/2	13	0.51	7.5	0.30	40.3	1.59	36.8	1.45	33032-GEFD-0001 ¹⁾
63	2 1/2	17.5	0.69	8	0.31	70.3	2.77	66	2.60	33036-GEFD-0001 ¹⁾
100	4	20	0.79	9	0.35	108.5	4.27	104	4.09	33040-GEFD-0001 ¹⁾
160	6	22	0.87	10	0.39	159.5	6.28	155	6.10	33044-GEFD-0001 ¹⁾
200	8	24.5	0.96	12	0.47	205.5	8.09	200	7.87	33046-GEFD-0001 ¹⁾
250	10	24.5	0.96	12	0.47	256.5	10.19	250	9.84	33048-GEFD-0001 ¹⁾
16	5/8	7.5	0.30	3.3	0.13	18.3	0.72	16	0.63	33024-GEFD-AAH1 ²⁾
40	1 1/2	13	0.51	7.5	0.30	40.3	1.59	36.8	1.45	33032-GEFD-AAH1 ²⁾
63	2 1/2	17.5	0.69	8	0.31	70.3	2.77	66	2.60	33036-GEFD-AAH1 ²⁾
100	4	20	0.79	9	0.35	108.5	4.27	104	4.09	33040-GEFD-AAH1 ²⁾
160	6	22	0.87	10	0.39	159.5	6.28	155	6.10	33044-GEFD-AAH1 ²⁾
200	8	24.5	0.96	12	0.47	205.5	8.09	200	7.87	33046-GEFD-AAH1 ²⁾
250	10	24.5	0.96	12	0.47	256.5	10.19	250	9.84	33048-GEFD-AAH1 ²⁾

¹⁾ Stainless steel AISI 304 (1.4301) ²⁾ Stainless steel AISI 316LN (1.4429)



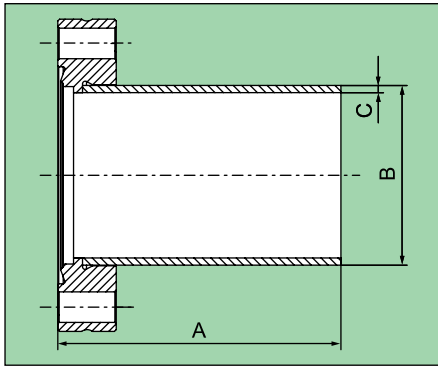
Weld flange with thread

DN		A		B		C		D		E		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	7.5	0.30	3.3	0.13	17.2	0.68	18.3	0.72	16	0.63	33024-CEFF-ABN1
40	1 1/2	13	0.51	7.5	0.30	39.5	1.56	40.3	1.59	36.8	1.45	33032-CEFF-ABN1
63	2 1/2	17.5	0.69	8	0.31	66	2.60	70.3	2.77	66	2.60	33036-CEFF-ABN1
100	4	20	0.79	9	0.35	104	4.09	108.5	4.27	104	4.09	33040-CEFF-ABN1

DN 16 = 6 × M4 DN 63 = 8 × M8
 DN 40 = 6 × M6 DN 100 = 16 × M8

Stainless steel AISI 304 (1.4301)

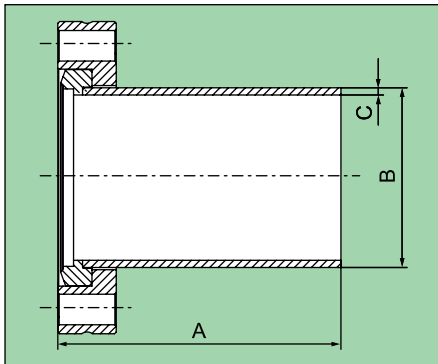




Weld neck flange

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	38	1.50	18	0.71	1	0.04	33024-CESK-0001
40	1 1/2	63	2.48	40	1.57	1.6	0.06	33032-CESK-0001
63	2 1/2	105	4.13	70	2.76	2	0.08	33036-CESK-0001
100	4	135	5.31	108	4.25	2	0.08	33040-CESK-0001
160	6	167	6.61	159	6.26	2	0.08	33044-CESK-0001

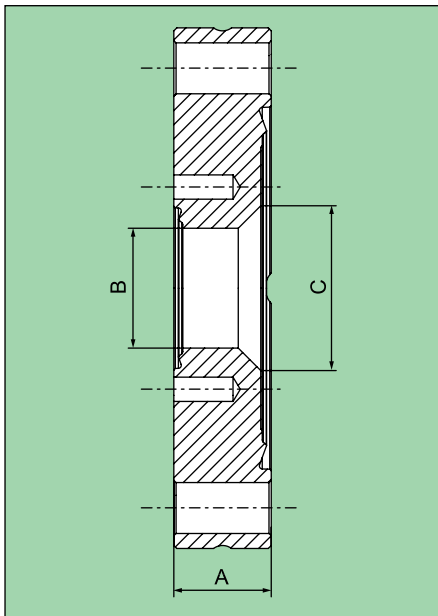
Stainless steel AISI 304 (1.4301)



Weld neck flange, rotatable

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	38	1.50	18	0.71	1	0.04	33024-GESD-0001
40	1 1/2	63	2.48	40	1.57	1.6	0.06	33032-GESD-0001
63	2 1/2	105	4.13	70	2.76	2	0.08	33036-GESD-0001
100	4	135	5.31	108	4.25	2	0.08	33040-GESD-0001
160	6	167	6.61	159	6.26	2	0.08	33044-GESD-0001

Stainless steel AISI 304 (1.4301)

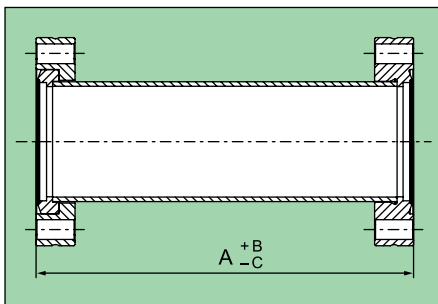


Reducing flange

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
40/ 16	1 1/2/ 5/8	13	0.51	16	0.63	22	0.87	33032-CEUC-ACZ1 ¹⁾
63/ 40	2 1/2/ 1 1/2	17.5	0.69	39	1.54	50	1.97	33036-CEUC-ABQ1 ¹⁾
100/ 40	4/ 1 1/2	20	0.79	39	1.54	55	2.17	33040-CEUC-ABQ1 ¹⁾
100/ 63	4/ 2 1/2	20	0.79	66	2.60	85	3.35	33040-CEUC-ADA1 ¹⁾
160/ 40	6/ 1 1/2	22	0.87	39	1.54	60	2.36	33044-CEUC-ABQ1 ¹⁾
160/100	6/ 4	22	0.87	104	4.09	120	4.72	33044-CEUC-ADB1 ¹⁾
40/ 16	1 1/2/ 5/8	13	0.51	16	0.63	22	0.87	33032-CEUC-ADC1 ²⁾
63/ 40	2 1/2/ 1 1/2	17.5	0.69	39	1.54	50	1.97	33036-CEUC-ADD1 ²⁾
100/ 40	4/ 1 1/2	20	0.79	39	1.54	55	2.17	33040-CEUC-ADD1 ²⁾
100/ 63	4/ 2 1/2	20	0.79	66	2.60	85	3.35	33040-CEUC-ADE1 ²⁾
160/ 40	6/ 1 1/2	22	0.87	39	1.54	60	2.36	33044-CEUC-ADD1 ²⁾
160/100	6/ 4	22	0.87	104	4.09	120	4.72	33044-CEUC-ADF1 ²⁾

DN 40/16 = 6 × M4 DN 100/40 = 6 × M6 DN 160/ 40 = 6 × M6
 DN 63/40 = 6 × M6 DN 100/63 = 8 × M8 DN 160/100 = 16 × M8

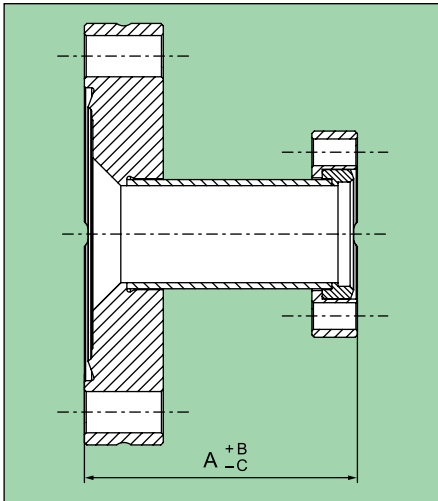
¹⁾ Stainless steel AISI 304 (1.4301) ²⁾ Stainless steel AISI 316LN (1.4429)



Intermediate piece

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	76	2.99	0.5	0.02	0.5	0.02	33024-GEZS-0001
40	1 1/2	126	4.96	1	0.04	1	0.04	33032-GEZS-0001
63	2 1/2	210	8.27	1	0.04	1	0.04	33036-GEZS-0001
100	4	270	10.63	1	0.04	1	0.04	33040-GEZS-0001
160	6	334	13.15	1.5	0.06	1.5	0.06	33044-GEZS-0001

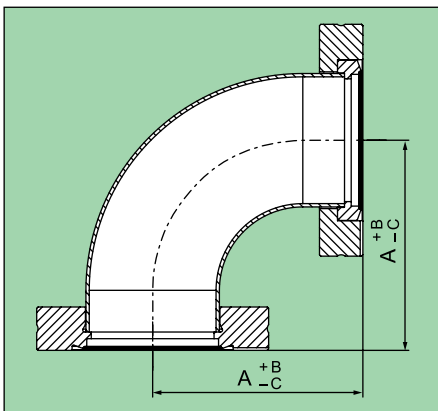
Stainless steel AISI 304 (1.4301)



Reducing piece

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
40/ 16	1½/⅝	45	1.77	1	0.04	1	0.04	33032-CEUP-ACW1
63/ 40	2½/1½	75	2.95	1	0.04	1	0.04	33036-CEUP-ACV1
100/ 40	4/1½	75	2.95	1	0.04	1	0.04	33040-CEUP-ACV1
100/ 63	4/2½	95	3.74	1	0.04	1	0.04	33040-CEUP-ACX1
160/100	6/4	105	4.13	1.5	0.06	1.5	0.06	33044-CEUP-ACY1

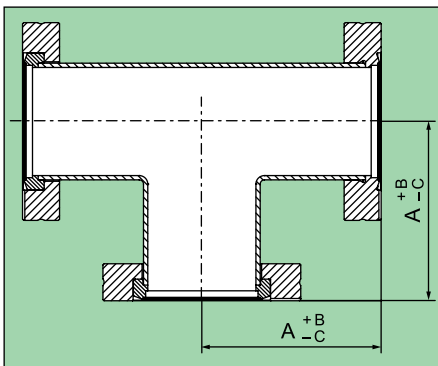
Stainless steel AISI 304 (1.4301)



Elbow 90°

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	⅝	38	1.50	0.5	0.02	0.5	0.02	33024-GEKR-0001
40	1½	63	2.48	0.5	0.02	0.5	0.02	33032-GEKR-0001
63	2½	105	4.13	1	0.04	1	0.04	33036-GEKR-0001
100	4	135	5.31	1	0.04	1	0.04	33040-GEKR-0001
160	6	167	6.57	1.5	0.06	1.5	0.06	33044-GEKR-0001

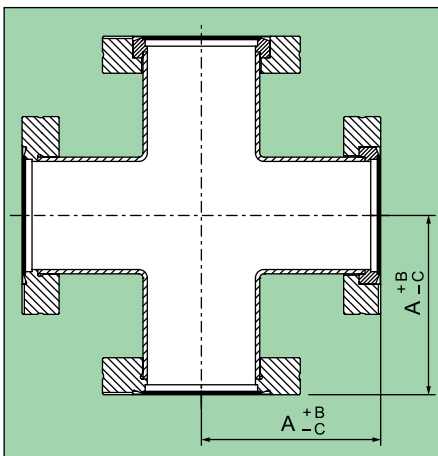
Stainless steel AISI 304 (1.4301)



T-Piece

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	⅝	38	1.50	0.5	0.02	0.5	0.02	33024-GETS-0001
40	1½	63	2.48	0.5	0.02	0.5	0.02	33032-GETS-0001
63	2½	105	4.13	1	0.04	1	0.04	33036-GETS-0001
100	4	135	5.31	1	0.04	1	0.04	33040-GETS-0001
160	6	167	6.57	1.5	0.06	1.5	0.06	33044-GETS-0001

Stainless steel AISI 304 (1.4301)

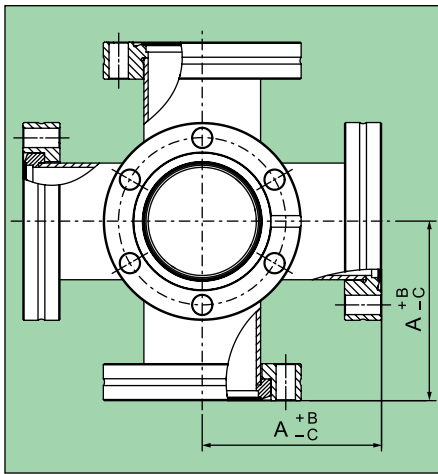


Cross

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	⅝	38	1.50	0.5	0.02	0.5	0.02	33024-GEKX-0001
40	1½	63	2.48	0.5	0.02	0.5	0.02	33032-GEKX-0001
63	2½	105	4.13	1	0.04	1	0.04	33036-GEKX-0001
100	4	135	5.31	1	0.04	1	0.04	33040-GEKX-0001
160	6	167	6.57	1.5	0.06	1.5	0.06	33044-GEKX-0001

Stainless steel AISI 304 (1.4301)



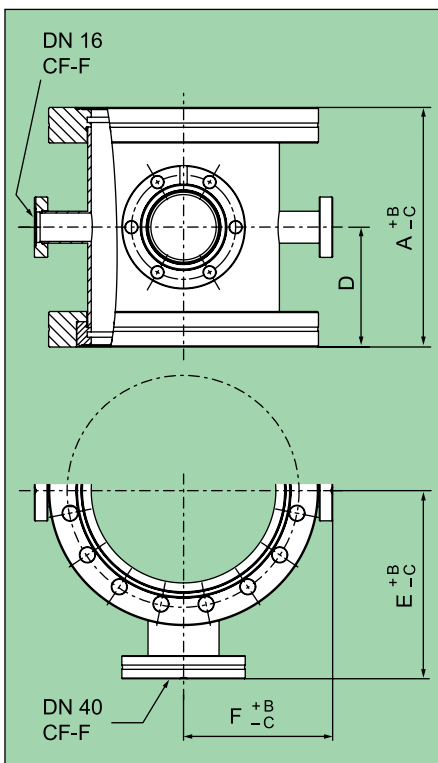


Double cross

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
40	1½	63	2.48	0.5	0.02	0.5	0.02	33032-GEKY-0001
63	2½	105	4.13	1	0.04	1	0.04	33036-GEKY-0001
100	4	135	5.31	1	0.04	1	0.04	33040-GEKY-0001
160	6	167	6.57	1.5	0.06	1.5	0.06	33044-GEKY-0001

Stainless steel AISI 304 (1.4301)

3 × rotatable flange, 3 × fixed flange



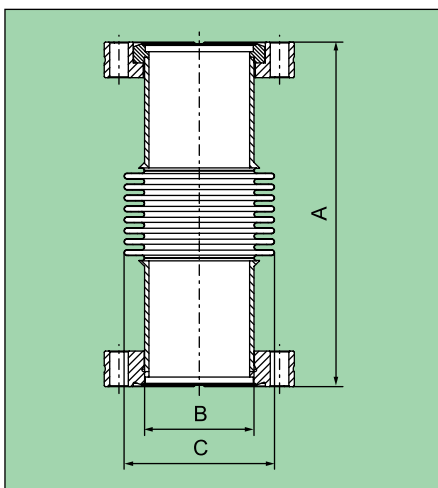
Reducing cross

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
100	4	135	5.31	1	0.04	1	0.04	33040-GEKZ-0001
		D		E		F		
		mm	inch	mm	inch	mm	inch	
		67.5	2.66	106	4.17	84	3.31	

Stainless steel AISI 304 (1.4301)

2 × DN 16 CF-F

2 × DN 40 CF-F

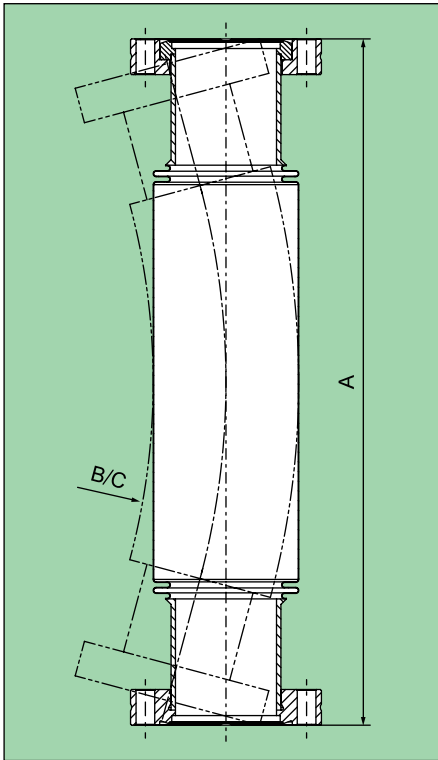


Spring bellows, short

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	76	2.99	15	0.59	22	0.87	33024-GEFK-0001
40	1½	126	4.96	40	1.57	55	2.17	33032-GEFK-0001
63	2½	139	5.47	62	2.44	80	3.15	33036-GEFK-0001
100	4	142	5.59	92	3.62	116	4.57	33040-GEFK-0001
160	6	250	9.84	154	6.06	187	7.36	33044-GEFK-0001

A = Uncompressed length

Flange: stainless steel AISI 304 (1.4301)
 Bellows: stainless steel AISI 316Ti (1.4571)
 Internal pressure: DN 16– 40: max. 4.0 bar
 DN 63– 160: max. 1.5 bar

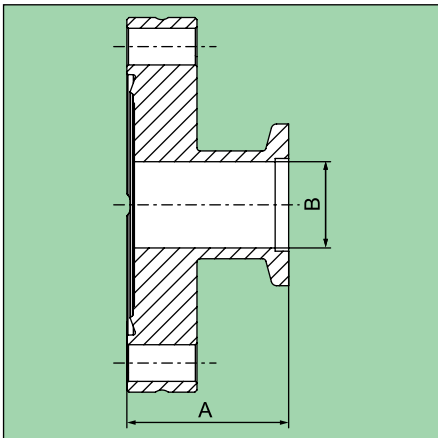


Spring bellows, long

DN		A		B		C		Ordering numbers
mm	inch	mm	inch	mm	inch	mm	inch	
16	5/8	250	9.84	70	2.76	50	1.97	33024-GEFK-ABR1
16	5/8	500	19.69	70	2.76	50	1.97	33024-GEFK-ABS1
16	5/8	750	29.53	70	2.76	50	1.97	33024-GEFK-ABT1
16	5/8	1000	39.37	70	2.76	50	1.97	33024-GEFK-ABP1
40	1 1/2	250	9.84	130	5.12	100	3.94	33032-GEFK-ABR1
40	1 1/2	500	19.69	130	5.12	100	3.94	33032-GEFK-ABS1
40	1 1/2	1000	39.37	130	5.12	100	3.94	33032-GEFK-ABT1

B = Radius for several bendings
 C = Radius for one bending

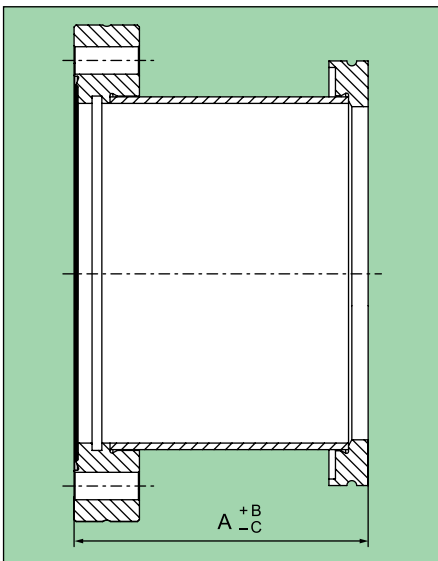
Flange: stainless steel AISI 304 (1.4301)
 Bellows: stainless steel AISI 316Ti (1.4571)
 Internal pressure: max. 5 bar



Adapter flange ISO-KF

DN				A		B		Ordering numbers
CF-F		ISO-KF		mm	inch	mm	inch	
16	5/8	16	5/8	35	1.38	16	0.63	33024-CEAK-ACK1
16	5/8	25	1	35	1.38	16	0.63	33024-CEAK-ABW1
40	1 1/2	16	5/8	30	1.18	16	0.63	33032-CEAK-ACK1
40	1 1/2	25	1	30	1.18	26	1.02	33032-CEAK-ABW1
40	1 1/2	40	1 1/2	50	1.97	37	1.46	33032-CEAK-ABJ1
63	2 1/2	40	1 1/2	35	1.38	41	1.61	33036-CEAK-ABJ1
100	4	40	1 1/2	50	1.97	41	1.61	33040-CEAK-ABJ1

Stainless steel AISI 304 (1.4301)



Adapter flange ISO-K

DN				A		B, C		Ordering numbers
CF-F		ISO-K		mm	inch	mm	inch	
63	2 1/2	63	2 1/2	90	3.54	1	0.04	33036-CEAF-ABJ1
100	4	100	4	90	3.54	1	0.04	33040-CEAF-ACS1
160	6	160	6	90	3.54	1.5	0.06	33044-CEAF-ACU1

Stainless steel AISI 304 (1.4301)