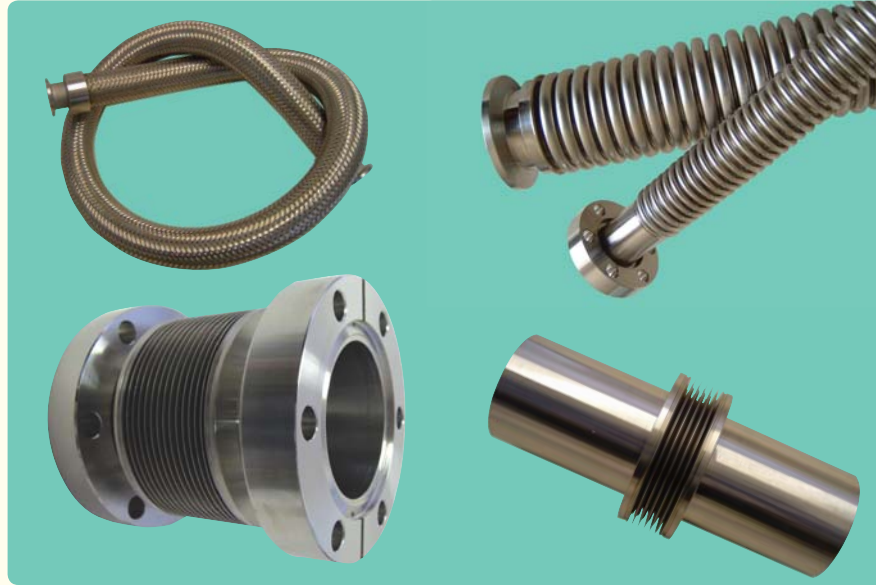


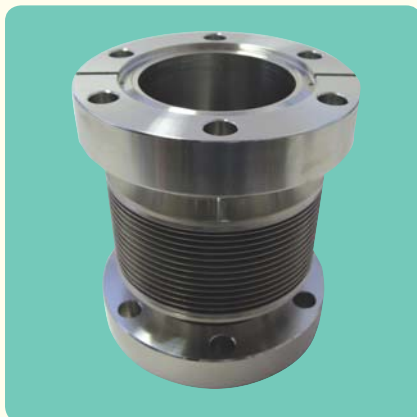
Bellows & Flexible Hoses



LewVac supplies flexible stainless steel hoses for use in applications where solid tube would not be practical or for purposes of vibration isolation. These hoses are manufactured from thin wall tube which is corrugated to allow flexing in all directions, along with a small amount of axial compression and extension. Also available are reinforced PVC hoses for backing or exhaust lines.

For applications which require greater flexibility, particularly axial compression and extension, LewVac offer a range of edge welded bellows. Edge welded bellows are manufactured from a series of formed metal diaphragms welded together, each diaphragm contributing to the overall extension allowable, so the more discs the greater the extension attainable and also the greater the lateral offset achievable.

Edge Welded Bellows



Specifications:

Material

Flanges 304 or 304L St.St.

Bellows AM350 or 316L St.St.

Temperature Range

AM350 -75°C to 450°C

316L -250°C to 450°C

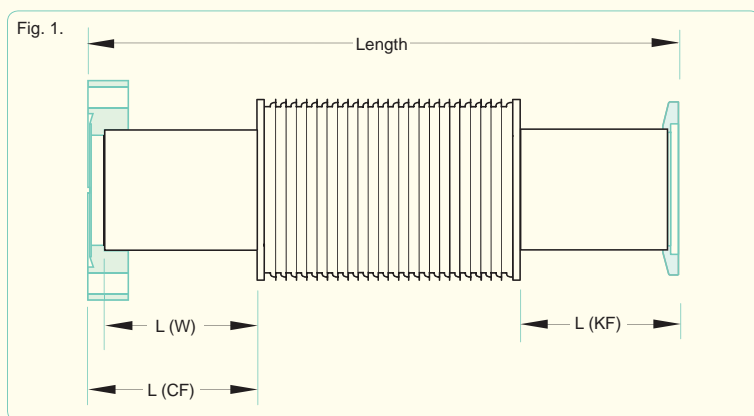
(May be limited by gasket / seal material)

Vacuum Range

CF flanged / weldable To below 1×10^{-11} TorrKF & LF flanged To below 1×10^{-8} Torr

Features:

- AM350 stainless steel as standard for long lifetime (typically 10^6 cycles).
- 316L stainless steel available for lower cycle requirement applications (typically 10^3 cycles).
- Titanium, Inconel® or Hastelloy® available on request.
- Custom sizes and designs available upon request.



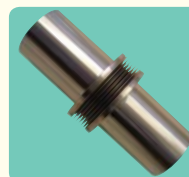
All dimensions are nominal in millimetres unless otherwise specified

DN16



Flange Type	Through Bore	Max Bellow OD	Stroke	Extended Length	Compressed Length	L	Part Code	Price £	Price €
CF	16.0	31.5	12.0	104.0	92.0	44.0	EWB16CF-12	POA	POA
CF	16.0	31.5	25.0	123.0	98.0	44.5	EWB16CF-25	POA	POA
CF	16.0	31.5	38.0	141.0	103.0	45.0	EWB16CF-38	POA	POA
CF	16.0	31.5	50.0	159.0	109.0	45.5	EWB16CF-50	POA	POA
CF	16.0	31.5	76.0	195.0	119.0	46.0	EWB16CF-76	POA	POA
KF	16.0	31.5	12.0	101.0	89.0	42.5	EWB16KF-12	POA	POA
KF	16.0	31.5	25.0	120.0	95.0	43.0	EWB16KF-25	POA	POA
KF	16.0	31.5	38.0	138.0	100.0	43.5	EWB16KF-38	POA	POA
KF	16.0	31.5	50.0	157.0	107.0	44.0	EWB16KF-50	POA	POA
KF	16.0	31.5	76.0	192.0	116.0	44.5	EWB16KF-76	POA	POA
Weldable	16.0	31.5	12.0	95.0	83.0	39.5	EWB16W-12	POA	POA
Weldable	16.0	31.5	25.0	114.0	89.0	40.0	EWB16W-25	POA	POA
Weldable	16.0	31.5	38.0	132.0	94.0	40.5	EWB16W-38	POA	POA
Weldable	16.0	31.5	50.0	150.0	100.0	41.0	EWB16W-50	POA	POA
Weldable	16.0	31.5	76.0	186.0	110.0	41.5	EWB16W-76	POA	POA

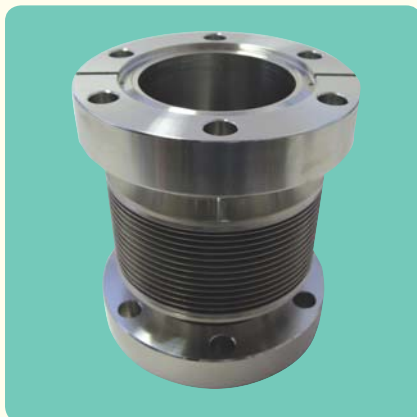
DN40



Flange Type	Through Bore	Max Bellow OD	Stroke	Extended Length	Compressed Length	L	Part Code	Price £	Price €
CF	39.0	59.0	12.0	143.0	131.0	64.0	EWB40CF-12	POA	POA
CF	39.0	59.0	25.0	159.0	134.0	63.5	EWB40CF-25	POA	POA
CF	39.0	59.0	38.0	178.0	140.0	66.0	EWB40CF-38	POA	POA
CF	39.0	59.0	50.0	192.0	142.0	65.5	EWB40CF-50	POA	POA
CF	39.0	59.0	76.0	228.0	152.0	67.5	EWB40CF-76	POA	POA
KF	39.0	59.0	12.0	140.0	128.0	62.5	EWB40KF-12	POA	POA
KF	39.0	59.0	25.0	156.0	131.0	62.0	EWB40KF-25	POA	POA
KF	39.0	59.0	38.0	175.0	137.0	64.5	EWB40KF-38	POA	POA
KF	39.0	59.0	50.0	189.0	139.0	64.0	EWB40KF-50	POA	POA
KF	39.0	59.0	76.0	225.0	149.0	66.0	EWB40KF-76	POA	POA
Weldable	39.0	59.0	12.0	132.0	120.0	58.5	EWB40W-12	POA	POA
Weldable	39.0	59.0	25.0	147.0	122.0	57.5	EWB40W-25	POA	POA
Weldable	39.0	59.0	38.0	167.0	129.0	60.5	EWB40W-38	POA	POA
Weldable	39.0	59.0	50.0	182.0	132.0	60.5	EWB40W-50	POA	POA
Weldable	39.0	59.0	76.0	216.0	140.0	61.5	EWB40W-76	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Edge Welded Bellows



Specifications:

Material

Flanges 304 or 304L St.St.

Bellows AM350 or 316L St.St.

Temperature Range

AM350 -75°C to 450°C

316L -250°C to 450°C

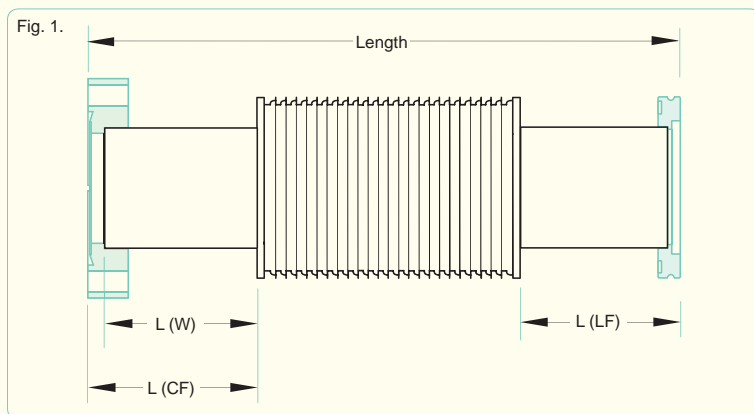
(May be limited by gasket / seal material)

Vacuum Range

CF flanged / weldable To below 1×10^{-11} TorrKF & LF flanged To below 1×10^{-8} Torr

Features:

- AM350 stainless steel as standard for long lifetime (typically 10^6 cycles).
- 316L stainless steel available for lower cycle requirement applications (typically 10^3 cycles).
- Titanium, Inconel or Hastelloy available on request.
- Custom sizes and designs available upon request.



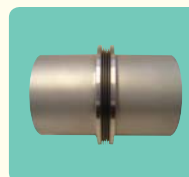
All dimensions are nominal in millimetres unless otherwise specified

DN63



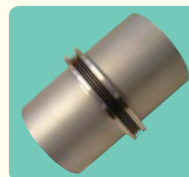
Flange Type	Through Bore	Max Bellow OD	Stroke	Extended Length	Compressed Length	L	Part Code	Price £	Price €
CF	65.0	90.0	25.0	204.0	179.0	86.0	EWB63CF-25	POA	POA
CF	65.0	90.0	38.0	225.0	187.0	88.5	EWB63CF-38	POA	POA
CF	65.0	90.0	50.0	243.0	193.0	89.5	EWB63CF-50	POA	POA
CF	65.0	90.0	76.0	276.0	200.0	89.5	EWB63CF-76	POA	POA
KF	65.0	90.0	25.0	203.0	178.0	85.0	EWB63KF-25	POA	POA
KF	65.0	90.0	38.0	223.0	185.0	87.5	EWB63KF-38	POA	POA
KF	65.0	90.0	50.0	240.0	190.0	88.0	EWB63KF-50	POA	POA
KF	65.0	90.0	76.0	274.0	198.0	88.0	EWB63KF-76	POA	POA
Weldable	65.0	90.0	25.0	185.0	160.0	76.0	EWB63W-25	POA	POA
Weldable	65.0	90.0	38.0	206.0	168.0	79.0	EWB63W-38	POA	POA
Weldable	65.0	90.0	50.0	224.0	174.0	80.0	EWB63W-50	POA	POA
Weldable	65.0	90.0	76.0	258.0	182.0	80.0	EWB63W-76	POA	POA

DN100



Flange Type	Through Bore	Max Bellow OD	Stroke	Extended Length	Compressed Length	L	Part Code	Price £	Price €
CF	102	132	25.0	213.0	188.0	92.0	EWB100CF-25	POA	POA
CF	102	132	38.0	232.0	194.0	93.5	EWB100CF-38	POA	POA
CF	102	132	50.0	246.0	196.0	94.0	EWB100CF-25	POA	POA
CF	102	132	76.0	278.0	202.0	94.5	EWB100CF-76	POA	POA
LF	102	132	25.0	211.0	186.0	91.0	EWB100LF-25	POA	POA
LF	102	132	38.0	231.0	193.0	92.5	EWB100LF-38	POA	POA
LF	102	132	50.0	244.0	194.0	93.0	EWB100LF-50	POA	POA
LF	102	132	76.0	276.0	200.0	93.5	EWB100LF-76	POA	POA
Weldable	102	132	25.0	191.0	166.0	81.0	EWB100W-25	POA	POA
Weldable	102	132	38.0	210.0	172.0	82.5	EWB100W-38	POA	POA
Weldable	102	132	50.0	224.0	174.0	83.0	EWB100W-50	POA	POA
Weldable	102	132	76.0	256.0	180.0	83.5	EWB100W-76	POA	POA

DN160



Flange Type	Through Bore	Max Bellow OD	Stroke	Extended Length	Compressed Length	L	Part Code	Price £	Price €
CF	162.5	195	25	239.0	214.0	105.0	EWB160CF-25	POA	POA
LF	162.5	195	25	226.0	201.0	98.5	EWB160LF-25	POA	POA
Weldable	162.5	195	25	214.0	189.0	91.0	EWB160W-25	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Formed Bellows - Weldable



Specifications:

Material

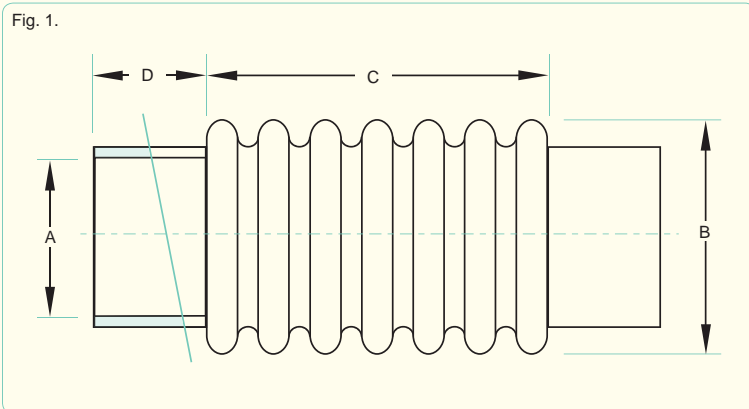
321 St.St.

Temperature Range

-250°C to 450°C

Features:

- Type 321 stainless steel as standard.
- Highly flexible.
- Flanged versions available upon request.
- Custom sizes and designs available upon request.



Weldable Formed Bellows



A	B	C	D	Wall Thickness	Axial Deflection +/-	Part Code	Price £	Price €
6.35	9.40	25.40	12.70	0.13	+2.54 / -6.35	FL-FB6.35	£28	€35
7.93	11.68	25.40	12.70	0.13	+2.54 / -6.35	FL-FB7.93	£30	€38
9.52	14.48	38.10	12.70	0.13	+3.81 / -9.40	FL-FB9.52	£32	€40
12.70	19.05	38.10	12.70	0.15	+3.81 / -9.40	FL-FB12.70	£34	€43
15.87	22.10	38.10	12.70	0.15	+3.81 / -9.40	FL-FB15.87	£34	€43
19.05	26.42	38.10	12.70	0.15	+3.81 / -9.40	FL-FB19.05	£37	€47
22.22	31.75	50.80	12.70	0.15	+5.08 / -12.70	FL-FB22.22	£37	€47
25.40	34.80	50.80	19.05	0.15	+5.08 / -12.70	FL-FB25.40	£40	€50
28.57	37.08	50.80	19.05	0.15	+5.08 / -12.70	FL-FB28.57	£40	€50
31.75	40.64	50.80	19.05	0.15	+5.08 / -12.70	FL-FB31.75	£40	€50
34.92	45.97	50.80	19.05	0.15	+5.08 / -12.70	FL-FB34.92	£40	€50
38.10	48.26	50.80	19.05	0.15	+5.08 / -12.70	FL-FB38.10	£42	€53
41.27	52.07	50.80	19.05	0.15	+5.08 / -12.70	FL-FB41.27	£48	€60
44.45	56.90	50.80	19.05	0.15	+5.08 / -12.70	FL-FB44.45	£48	€60
50.80	63.25	63.50	19.05	0.15	+6.35 / -15.24	FL-FB50.80	£48	€60
57.15	71.37	63.50	19.05	0.15	+6.35 / -15.24	FL-FB57.15	£57	€72
63.50	75.69	63.50	19.05	0.15	+6.35 / -15.24	FL-FB63.50	£59	€74
76.20	95.76	76.20	25.40	0.20	+7.62 / -19.05	FL-FB76.20	£65	€82
88.90	109.2	88.90	25.40	0.20	+8.89 / -22.10	FL-FB88.90	£85	€107
101.6	121.4	101.6	25.40	0.20	+10.16 / -25.40	FL-FB101.6	£105	€132
114.3	134.1	101.6	25.40	0.20	+10.16 / -25.40	FL-FB114.3	£120	€150
127.0	146.1	127.0	25.40	0.20	+12.7 / -31.75	FL-FB127.0	£135	€169
152.4	174.0	127.0	31.75	0.25	+12.7 / -31.75	FL-FB152.4	£155	€194
203.2	235.0	152.4	31.75	0.51	+15.25 / -38.10	FL-FB203.2	£175	€219
254.0	287.3	152.4	31.75	0.51	+15.25 / -38.10	FL-FB254.0	£235	€294
304.8	352.6	152.4	31.75	0.51	+15.25 / -38.10	FL-FB304.8	£280	€350

- Through ID of bellows is approximately 95% of cuff ID.
- Axial deflection is approximately +10% and -25% of length, C.
- Lateral deflection is approximately 10% of length, C.

Please note : A minimum order quantity may apply to some of these items. Please contact our sales office for further details.

Flexible Hoses



Specifications:

Material

304 St.St.

Temperature Range

CF flanged -250°C to 450°C

KF flanged -20°C to 150°C (200°C*)

Vacuum Range

CF flanged To below 1×10^{-11} TorrKF flanged To below 1×10^{-8} Torr

* - Increased upper limit for intermittent use.

Features:

- 304 stainless steel as standard.
- Highly flexible.
- Custom sizes and designs available upon request.

Fig. 1.

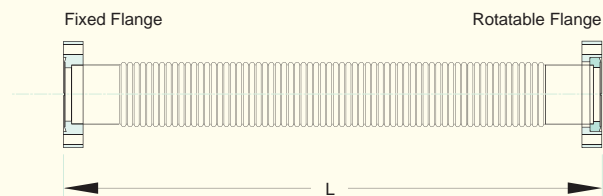
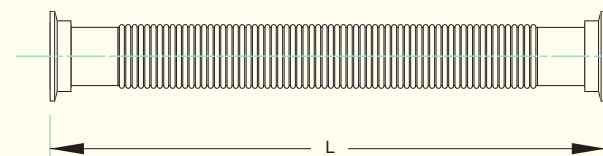


Fig. 2.



All dimensions are nominal in millimetres unless otherwise specified

CF Flanged Hoses



Braided flexible hoses are also available, please contact sales office for details.

Flange	Fig.	Bend Rad.	L	Part Code	Price £	Price €
DN16CF	1	60	250	FL-H250-16CF	£59	€74
DN16CF	1	60	500	FL-H500-16CF	£64	€80
DN16CF	1	60	750	FL-H750-16CF	£68	€85
DN16CF	1	60	1000	FL-H1000-16CF	£73	€92
DN40CF	1	115	500	FL-H500-40CF	£89	€112
DN40CF	1	115	750	FL-H750-40CF	£96	€120
DN40CF	1	115	1000	FL-H1000-40CF	£102	€128
DN63CF	1	150	500	FL-H500-63CF	£233	€292
DN63CF	1	150	750	FL-H750-63CF	£251	€314
DN63CF	1	150	1000	FL-H1000-63CF	£269	€337
DN100CF	1	275	500	FL-H500-100CF	£307	€384
DN100CF	1	275	750	FL-H750-100CF	£332	€415
DN100CF	1	275	1000	FL-H1000-100CF	£358	€448
DN160CF	1	275	500	FL-H500-160CF	£453	£567
DN160CF	1	275	750	FL-H750-160CF	£502	€628
DN160CF	1	275	1000	FL-H1000-160CF	£551	€689

KF Flanged Hoses



Braided flexible hoses are also available, please contact sales office for details.

Flange	Fig.	Bend Rad.	L	Part Code	Price £	Price €
DN10KF	2	60	250	FL-H250-10KF	£28	€35
DN10KF	2	60	500	FL-H500-10KF	£33	€42
DN10KF	2	60	750	FL-H750-10KF	£38	€48
DN10KF	2	60	1000	FL-H1000-10KF	£42	€53
DN10KF	2	60	1500	FL-H1500-10KF	£44	€55
DN10KF	2	60	2000	FL-H2000-10KF	£47	€59
DN16KF	2	60	250	FL-H250-16KF	£31	€39
DN16KF	2	60	500	FL-H500-16KF	£36	€45
DN16KF	2	60	750	FL-H750-16KF	£42	€53
DN16KF	2	60	1000	FL-H1000-16KF	£47	€59
DN16KF	2	60	1500	FL-H1500-16KF	£52	€65
DN16KF	2	60	2000	FL-H2000-16KF	£57	€72
DN25KF	2	68	250	FL-H250-25KF	£33	€42
DN25KF	2	68	500	FL-H500-25KF	£37	€47
DN25KF	2	68	750	FL-H750-25KF	£43	€54
DN25KF	2	68	1000	FL-H1000-25KF	£50	€63
DN25KF	2	68	1500	FL-H1500-25KF	£57	€72
DN25KF	2	68	2000	FL-H2000-25KF	£64	€80
DN40KF	2	115	250	FL-H250-40KF	£41	€52
DN40KF	2	115	500	FL-H500-40KF	£49	€62
DN40KF	2	115	750	FL-H750-40KF	£58	€73
DN40KF	2	115	1000	FL-H1000-40KF	£67	€84
DN40KF	2	115	1500	FL-H1500-40KF	£76	€95
DN40KF	2	115	2000	FL-H2000-40KF	£85	€107
DN50KF	2	125	250	FL-H250-50KF	£59	€74
DN50KF	2	125	500	FL-H500-50KF	£71	€89
DN50KF	2	125	750	FL-H750-50KF	£83	€104
DN50KF	2	125	1000	FL-H1000-50KF	£91	€114
DN50KF	2	125	1500	FL-H1500-50KF	£99	€124
DN50KF	2	125	2000	FL-H2000-50KF	£107	€134

All dimensions are nominal in millimetres unless otherwise specified

Flexible Hoses

**Specifications:****Material**

304 St.St.

Temperature Range

-20°C to 150°C (200°C*)

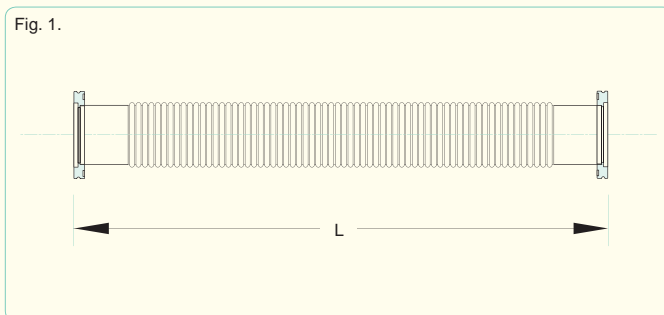
Vacuum RangeTo below 1×10^{-8} Torr

* - Increased upper limit for intermittent use.

Features:

- 304 stainless steel as standard.
- Highly flexible.
- Custom sizes and designs available upon request.

Fig. 1.

**LF Flanged Hoses**

Braided flexible hoses are also available, please contact sales office for details.

Flange	Bend Rad.	L	Part Code	Price £	Price €
DN63LF	150	500	FL-H500-63LF	£128	€160
DN63LF	150	750	FL-H750-63LF	£147	€184
DN63LF	150	1000	FL-H1000-63LF	£167	€209
DN100LF	275	500	FL-H500-100LF	POA	POA
DN100LF	275	750	FL-H750-100LF	POA	POA
DN100LF	275	1000	FL-H1000-100LF	POA	POA
DN160LF	275	500	FL-H500-160LF	POA	POA
DN160LF	275	750	FL-H750-160LF	POA	POA
DN160LF	275	1000	FL-H1000-160LF	POA	POA

