

TDS

EDGE WELDED BELLOWS



Edge welded bellows, or diaphragm welded bellows, are flexible connecting elements between vacuum flanges or end fittings of any kind. The edge welded bellows is not a rigid body but can overcome a specified working stroke.

Main applications:

- Feedthrough
- Expansion joint
- Vibration isolator

Edge welded bellows serve as feedthrough to introduce movements into the vacuum or to separate the vacuum chamber from mechanical parts.

Edge welded bellows can be used as compensator to balance thermal

Edge welded bellows are often used for vibration decoupling e. g. between vacuum pump and measuring instrument.

Welded bellows are widely used for transfer with a Z travel both in compression and elongation. Angular adjustment is highly suitable as well.

Welded bellows are available in KF, ISO and CF flanges, or end fittings according to the customer's drawing, fully low UHV compatible.

Lengths upon request, or according to customer's drawing.

Specifications :

- Material Stainless steel 304, 304L, 316, 316L, 347, semi austenitic Stainless Steel AM350, Inconel 718, Hastelloy C22, Titanium, ...
- Temperature -250/450°C for 316L, -250/300°C for AM350
- Leak rate < 1.10⁻¹⁰ mbar.l/s
- Compress rate about 50-70%
- Stretch rate about 5-15%
- Service life 100-1000-3000 thousand times (according to the temperature and pressure)
- Convolution rigidity 0.5-20 N/mm

Standard dimensions :

Model	OD	ID
WB-10	10.0	5.0
WB-10.5	10.5	5.0
WB-12.5	12.5	7.0
WB-13.5	13.5	6.0
WB-15	15.0	6.5
WB-16.2	16.2	8.0
WB-18	18.0	6.5
WB-18	18.0	9.0
WB-18	18.0	10.5
WB-20	20.0	10.0
WB-21.5	21.5	11.5
WB-24	24.0	10.0
WB-24	24.0	12.0
WB-25	25.0	16.0
WB-26	26.0	13.7
WB-26	26.0	13.8
WB-28.3	28.3	14.1
WB-30.1	30.1	16.6
WB-31.5	31.5	16.9
WB-31.8	31.8	19.0
WB-34	34.0	21.0
WB-34.2	34.2	13.8
WB-35	35.0	12.7
WB-35	35.0	22.0
WB-36.4	36.4	17.0
WB-36.7	36.7	23.0
WB-37	37.0	19.0
WB-38.1	38.1	25.4
WB-39.4	39.4	19.0
WB-40	40.0	22.0
WB-41.5	41.5	22.0
WB-42.9	42.9	30.2

Model	OD	ID
WB-44.2	44.2	31.0
WB-44.2	44.2	28.0
WB-44.4	44.4	22.4
WB-44.4	44.4	19.0
WB-44.5	44.5	19.0
WB-45	45.0	25.0
WB-46	46.0	33.0
WB-48	48.0	31.8
WB-49.4	49.4	31.4
WB-49.5	49.5	33.0
WB-50	50.0	35.0
WB-50.8	50.8	38.1
WB-51	51.0	31.4
WB-52	52.0	28.0
WB-52.4	52.4	39.6
WB-54	54.0	41.0
WB-55	55.0	35.0
WB-55	55.0	38.0
WB-55.6	55.6	42.8
WB-57	57.0	30.0
WB-57.15	57.15	44.45
WB-58.2	58.2	46.0
WB-58.9	58.9	46.05
WB-59	59.0	39.0
WB-60	60.0	40.0
WB-61	61.0	35.0
WB-61.9	61.9	49.1
WB-62	62.0	24.0
WB-64.5	64.5	39.0
WB-65	65.0	43.0
WB-65	65.0	45.0
WB-66	66.0	53.5

Model	OD	ID
WB-68	68.0	50.0
WB-70	70.0	50.0
WB-71.5	71.5	58.7
WB-74.6	74.6	61.9
WB-75	75.0	55.8
WB-75	75.0	60.0
WB-76.2	76.2	50.8
WB-79	79.0	49.0
WB-80	80.0	58.0
WB-80	80.0	60.0
WB-85	85.0	63.0
WB-88	88.0	65.0
WB-90	90.0	50.0
WB-90	90.0	55.0
WB-90	90.0	58.0
WB-90	90.0	65.0
WB-92	92.0	76.0
WB-92	92.0	76.3
WB-92.02	92.02	73.08
WB-95	95.0	65.0
WB-95	95.0	73.0
WB-98.43	98.43	81.74
WB-100	100.0	65.0
WB-105	105.0	75.0
WB-105	105.0	80.0
WB-106.7	106.7	90.7
WB-107.95	107.95	91.9
WB-107.9	107.9	96.0
WB-108	108.0	80.0
WB-108	108.0	96.0
WB-109	109.0	80.0
WB-115	115.0	85.0
WB-119	119.0	89.0
WB-120	120.0	80.0
WB-120	120.0	95.0
WB-120.8	120.8	101.6
WB-123.78	123.78	104.8
WB-123.78	123.78	108.0
WB-125	125.0	95.0
WB-125	125.0	102.0
WB-125	125.0	108.0
WB-127	127.0	110.95
WB-130	130.0	90.0

Model	OD	ID
WB-130	130.0	110.0
WB-132	132.0	102.0
WB-140	140.0	100.0
WB-140	140.0	110.0
WB-140	140.0	120.0
WB-145	145.0	105.0
WB-145	145.0	110.0
WB-145	145.0	125.0
WB-147	147.0	131.0
WB-150	150.0	110.0
WB-150	150.0	120.0
WB-160	160.0	120.0
WB-160	160.0	130.0
WB-169	169.0	149.0
WB-170	170.0	140.0
WB-180	180.0	140.0
WB-180	180.0	150.0
WB-185	185.0	150.0
WB-190	190.0	150.0
WB-200	200.0	167.0
WB-200	200.0	177.0
WB-209.55	209.55	190.50
WB-218	218.0	190.0
WB-218	218.0	198.0
WB-235	235.0	200.0
WB-254	254.0	224.0
WB-270	270.0	207.0
WB-270	270.0	216.0
WB-270	270.0	230.0
WB-285	285.0	252.0
WB-290	290.0	265.0
WB-310	310.0	280.0
WB-350	350.0	300.0
WB-364	364.0	320.0
WB-430	430.0	390.0
WB-600	600.0	550.0
WB-750	750.0	700.0
WB-800	800.0	750.0
WB-900	900.0	800.0
WB-1000	1000.0	900.0