

VIBRATION ABSORBER

Expansion Joints

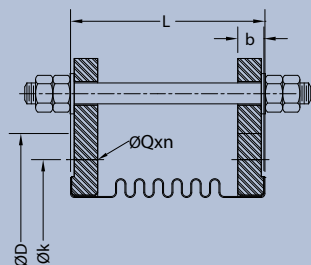


Metal bellows can be used in applications where the vibration is high frequency and low amplitude.

Vibration absorbing expansion joints are manufactured from multi-ply bellows to absorb and dampen vibrations.

These expansion joint are equipped with tie rods for limiting the movements and absorbing the pressure of the pump raise, to prevent thrust forces from being transmitted into the pipe.

Available in various types of stainless steel materials, vibration expansion joint is adapted for all purposes and medium where temperatures are higher than rubber expansion joints limits.



Advantages

- » They are designed for versatile usage in systems where pump vibrations occur
- » Standard range is made from multi-ply bellows with several thin layers of stainless steel
- » Pressure and temperature bearing capacity, noise and vibration absorption and overall cyclic service life
- » Range of vibration absorbers can resolve many problems related to mechanical vibration and have a higher pressure and temperature rating than rubber bellows
- » Rubber bushes can be added on the tie rods to help reduce the noise

Applications

- » Power stations
- » Pulp and paper plants
- » Heating and ventilating systems
- » Shipbuilding
- » Off-shore installations
- » Chemical/petrochemical plants

DESIGN VALUES

Bellows Material	304, 316, 321
Balance of Material	Carbon Steel, Stainless Steel
Design Pressure	16 barg
Design Temperature	300°C

Nominal Diameter	Length (L) (mm)	Effective Area (cm ²)	Spring Rates		EN 1092				
			Axial (N/mm)	Lateral (N/mm)	ØD (mm)	Øk (mm)	b (mm)	n	ØQ (mm)
50	130	37	88	102	165	125	16	4	18
65	130	57	94	149	185	145	16	4	18
80	130	79	85	234	200	160	18	8	18
100	130	131	105	292	220	180	18	8	18
125	130	186	148	745	250	210	20	8	18
150	130	269	217	1.544	285	240	20	8	22
200	130	443	260	2.909	340	295	22	12	22
250	160	664	282	3.130	405	355	24	12	26
300	210	942	313	2.498	460	410	26	12	26
350	210	1143	529	5.138	520	470	28	16	26
400	220	1484	371	2.878	580	525	30	16	30
450	220	1845	530	7.196	640	585	32	20	30
500	270	2262	450	5.331	715	650	34	20	33

Please consult with our technical department for different working conditions and design parameters.

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