

EXPANSION JOINTS: BALANCE SERIES

BALANCE X: DN80-450



LOGGERS

INTRODUCTION

Pipeline systems are exposed to temperature variations, setting in foundations, forces and deformations causing movement and/or stress in the system. To ensure flawless operation of the system it is necessary to insert flexible parts to absorb the movements preventing structural damage.

To provide excellent vibration isolation and flexibility to the pipeline system Loggers has designed and manufactured top of the line stainless steel expansion joints, the Balance[®] series. With the Balance[®] series Loggers offers a complete program of expansion joints for various applications including one or more approvals by certification authorities as ABS, Bureau Veritas, and German Lloyds. For each situation we can offer you solutions (without affecting the pipeline system) with Loggers qualified expansion joints that:

- Compensate movement
- Compensate expansion
- Adsorb stress in the system
- Reduce noise transmissions
- Reduce vibration
- Compensate ground and foundation settling
- Compensate inaccurate assembly
- Serve as dismantling joints on fittings

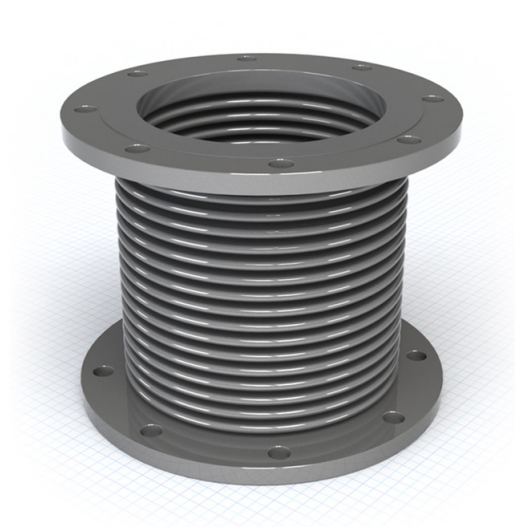
Our complete portfolio consists of standard expansion joints as well as our special customized expansion joints. Balance[®] series expansion joints are used worldwide for various applications like exhaust gas lines, low and high pressure pipe lines.

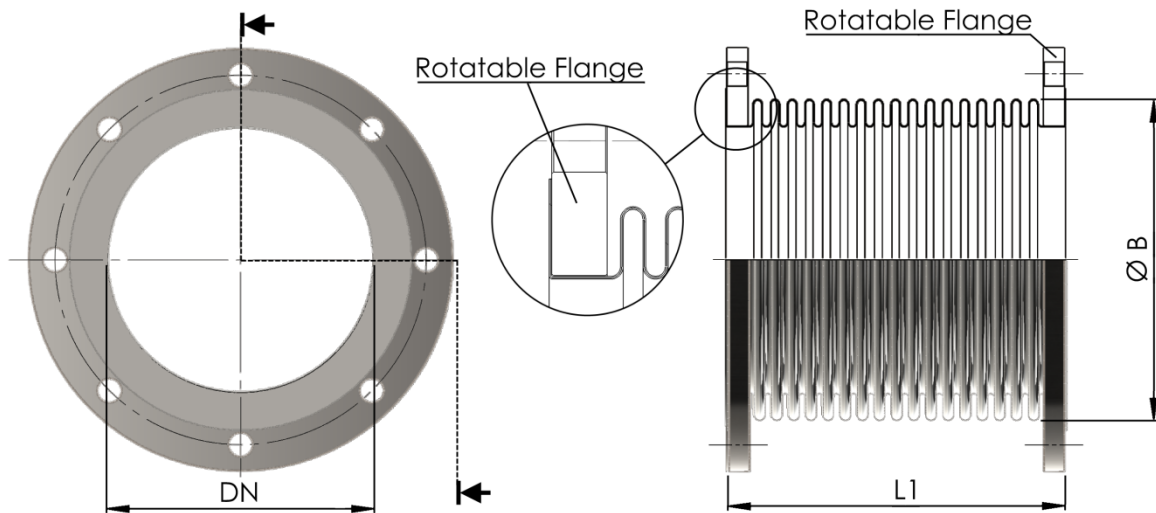
BALANCE X: DN80-450

The Balance[®] X is a stainless steel expansion joint with rotatable flanges according to DIN PN 6. It is used for compensating movements and misalignments in exhaust systems. Due to the double ply bellows this compensator is more flexible in comparison to similar single ply compensators. The maximum operating temperature of the Balance[®] X is +550 °C, the maximum working pressure 2,5 bar (120 °C).

CONSTRUCTION AND DESIGN

- Stainless steel expansion joint AISI 321
- With rotatable flanges acc. DIN PN 6
- Double ply bellows material
- Standard length
- Max. temperature: 550 °C
- Max. pressure: 2,5 bar (120 °C)
- Stock item





Dimensions in millimeters (mm)

TECHNICAL DATA

Article No.	DN	L1	Bellows (material: AISI 321)			Movements ¹ (mm)		Springrate (N/mm)		Flange (Carbon steel)		
			B (mm)	Plies	Thickness (mm)	Axial +/-	Lateral +/-	Axial +/-	Lateral +/-	D outside	Bolt circle	Holes x d
330 420 080	80	255	100.2	2	0,3	50	19	24	41	190	150	4 x 18
330 420 100	100	255	132.2	2	0,3	50	15	27	44	210	170	4 x 18
330 420 125	125	255	159.2	2	0,3	48	15	48	80	240	200	8 x 18
330 420 150	150	255	183.2	2	0,3	50	13	53	95	265	225	8 x 18
330 420 175	175	255	211	2	0,3	49	12	63	148	295	255	8 x 18
330 420 200	200	255	242	2	0,4	60	14	50	154	320	280	8 x 18
330 420 250	250	255	303	2	0,4	60	11	58	278	375	335	12 x 18
330 420 300	300	305	359	2	0,4	65	10	59	418	440	395	12 x 22
330 420 350	350	305	393	2	0,4	63	8	64	548	490	445	12 x 22
330 420 400	400	305	447	2	0,4	76	11	44	308	540	495	12 x 22
330 420 450	450	310	501	2	0,4	76	11	50	350	595	550	12 x 22

¹ Movements (axial/lateral) are not in combination.

ABOUT LOGGERS

Loggers is **thought leader** and international recognized solution provider in the field of shock, vibration and noise control. With **excellent technical know-how** in combination with proven market knowledge and experience Loggers designs, develops and engineers **innovative solutions** for the most complex and challenging situations for leading clients worldwide for over 90 years.

Loggers understands all difficulties in the area of vibration, shock and noise control entirely.

We bring up the best and most cost effective solution for every challenge, regardless of its complexity. Loggers defines and engineers all deliverables necessary for solving your problem, ranging from standard to tailor-made solutions. Loggers' state-of-the-art portfolio contains all products and services to provide you with the optimal solution for relatively simple as well as the most complex challenges.

Products

- Vibration mounts
- Expansion joints
- Shock mounts

Services

- Assessment of current situation (on site)
- Analysis design including construction drawings
- Structural design and stress analysis
- Vibration measurement, calculation and analysis, if needed on site
- Solution definition based on:
 - standard products
 - customized products, or even
 - tailor-made new products, including prototyping
- Complete simulation of solution to ensure its effectiveness
- Testing including certification by independent certification authorities
- On site support during installation

Loggers understands both business and technology and brings both worlds together in satisfying customers' needs in rapidly changing environments. By working closely with clients Loggers enables them to realize their strategic targets through solving specific operational issues in the following market segments:

- Shipbuilding
- Dredging
- Defense
- Machinery
- Offshore
- Transportation



Version 03
April 2013

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