

EXPANSION JOINTS: BALANCE SERIES

BALANCE IV: DN40-400



LOGGERS



**BUREAU
VERITAS**

INTRODUCTION

Pipeline systems are exposed to temperature variations, settling 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 delivers 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 like 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
- Absorb 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 systems.

BALANCE IV: DN40-400

The Balance® IV is a relatively short stainless steel expansion joint with carbon steel weld ends. It is used for compensating movements and misalignments in exhaust systems in situations with limited installation space. Despite of its short length it can still compensate some small lateral movements. 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® IV is +550 °C, the maximum working pressure 2,5 bar (50 °C).

DESCRIPTION

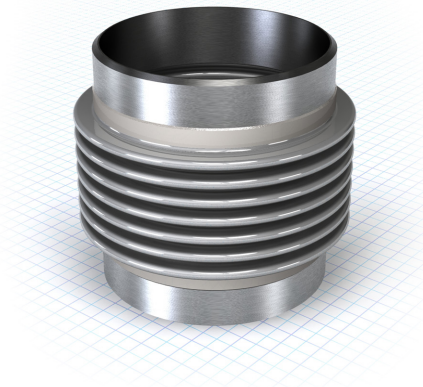
Stainless steel expansion joint AISI 321. Double ply bellows.
Carbon steel weld ends.

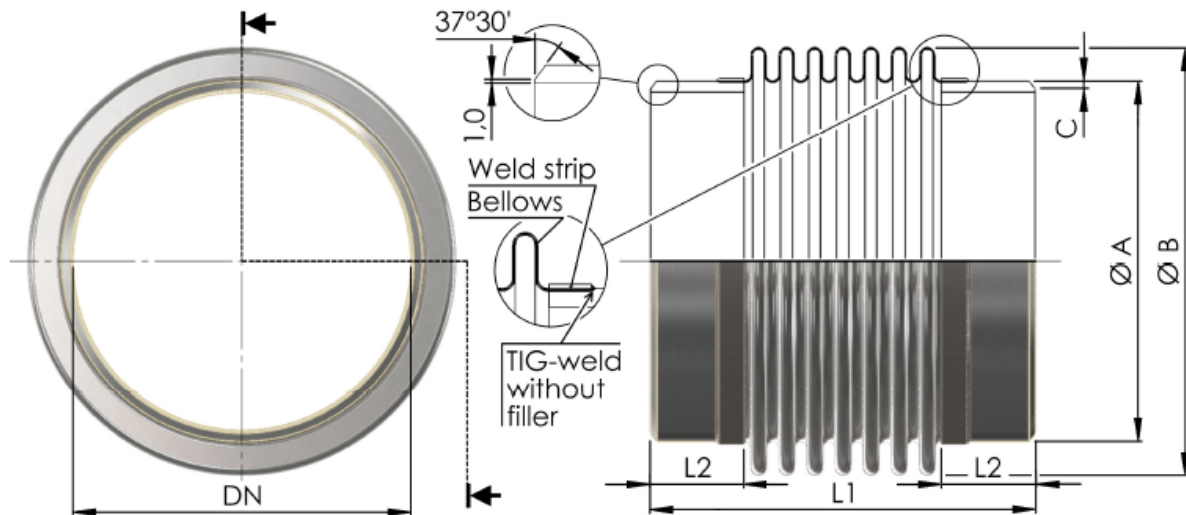
APPROVALS

Approved by Bureau Veritas.

CHARACTERISTICS

- Stainless steel expansion joint AISI 321
- Double ply bellows material
- Short length
- Carbon steel weld ends
- Max. temperature: 550 °C
- Max. pressure: 2,5 bar (50 °C)
- Stock item





Dimensions in millimeters (mm)

TECHNICAL DATA

Article No.	DN	L1	Bellows (material: AISI 321)			Welding ends (material: carbon steel)			Movements ¹ (mm)		Springrate (N/mm)	
			B (mm)	Plies	Thickness (mm)	A (mm)	C (mm)	L2 (mm)	Axial +/-	Lateral +/-	Axial +/-	Lateral +/-
330 040 040	40	150	60,3	1	0,3	48,3	2,6	30	25	8	47	89
330 040 050	50	150	78,3	2	0,3	60,3	2,9	30	25	8	68	166
330 040 065	65	150	96,7	2	0,3	76,1	2,9	30	25	8	56	169
330 040 080	80	150	109,7	2	0,3	88,9	3,2	30	25	8	63	219
330 040 100	100	150	140,5	2	0,3	114,3	3,6	37	25	6	59	293
330 040 125	125	150	165,7	2	0,3	139,7	3,6	35	25	5	71	420
330 040 150	150	150	200,5	2	0,3	168,3	4	35	25	5	56	389
330 040 200	200	150	251,1	2	0,3	219,1	4,5	35	25	5	69	608
330 040 250	250	150	305,2	2	0,3	273	5	35	25	4	86	933
330 040 300	300	150	360,9	2	0,3	323,9	5,6	35	25	4	81	1042

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



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