

EXPANSION JOINTS: BALANCE SERIES

BALANCE VII: DN40-600



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 VII: DN40-600

The Balance® VII is a stainless steel expansion joint with stainless steel weld ends. It is used for compensating movements and misalignments in exhaust systems in situations with relatively 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® VII is +550 °C, the maximum working pressure 2,5 bar (120 °C).

APPROVALS

Approved by Bureau Veritas.

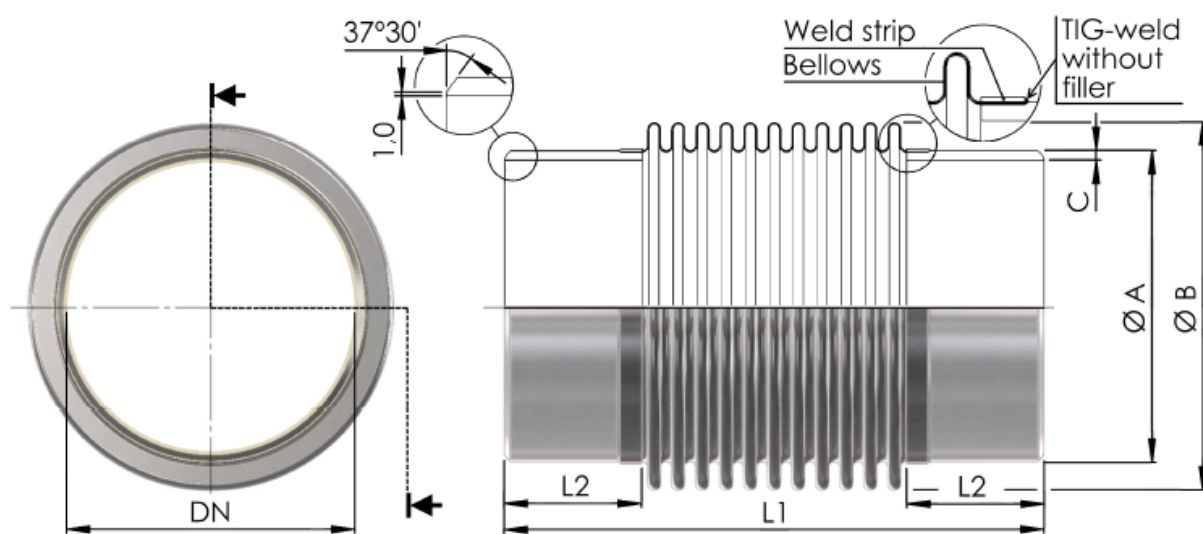
DESCRIPTION

Stainless steel expansion joint AISI 316 TI. Double ply bellows.
Stainless steel weld ends.

CHARACTERISTICS

- Stainless steel expansion joint AISI 316 TI
- Stainless steel weld ends AISI 316 TI
- 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 316Ti (1.4571)				Welding ends material: AISI 316Ti (1.4571)			Movements ¹ (mm)		Springrate (N/mm)	
			B (mm)	Conv	Plies	Thickness (mm)	A (mm)	C (mm)	L2 (mm)	Axial +/-	Lateral +/-	Axial +/-	Lateral +/-
300 250 040	40	245	57,7	22	1	0,3	48,3	2	50	29	18	30	7
300 250 050	50	245	69,7	13	2	0,3	60,3	2	50	29	15	34	11
300 250 065	65	245	87,5	13	2	0,3	76,1	2	50	32	15	56	50
300 250 080	80	245	100,3	13	2	0,3	88,9	2	50	38	15	53	35
300 250 100	100	245	129,8	11	2	0,3	114,3	2	50	44	10	34	40
300 250 125	125	245	157,8	11	2	0,3	139,7	2	50	33	10	86	122
300 250 150	150	245	186,6	9	2	0,3	168,3	2	50	38	10	91	229
300 250 200	200	245	239,7	9	2	0,3	219,1	2	50	27	10	108	465
300 250 250	250	245	293,6	9	2	0,3	273	2	50	38	8	76	509
300 250 300	300	295	346,5	9	2	0,3	323,9	2	50	45	7	76	773
300 250 350	350	295	378,2	9	2	0,3	355,6	2	70	44	6	112	1330
300 250 400	400	295	435	9	2	0,3	406,4	2	60	50	3	91	1144
300 250 450	450	300	487,8	8	2	0,4	457	2	60	50	3	101	1081
300 250 500	500	340	585,6	9	2	0,4	508	3	70	73	2	89	1526
300 250 600	600	330	642,6	9	2	0,4	610	3	70	68	2	119	2027

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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