

# EXPANSION JOINTS: ERV SERIES

ERV YELLOWSTEEL DN25-600



## INTRODUCTION

Temperature variations, settling in foundations, vibrations, forces and deformations cause noise, movement and/or stress in pipeline systems. To ensure flawless operation of the system it is necessary to insert flexible parts to absorb the movements preventing structural damage.

Loggers' rubber expansion joints (also known as rubber compensators) neutralize the negative effects of these factors for pipeline systems that are exposed to chemicals and/or high pressures. The ERV series consists of a wide program of high quality rubber expansion joints for various applications that carry one or more approvals by certification authorities. For every situation Loggers has the appropriate qualified rubber expansion joints that, amongst others:

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

The ERV series rubber expansion joints are used worldwide for various applications like chemical pipelines, fuel pipelines and (cooling) water pipelines.

## ERV YELLOWSTEEL DN25-600

The ERV Yellowsteel rubber expansion joint is used for flexible connections in high-pressure pipeline systems for petrochemical applications. It is suitable for use with fuels, DIN fuels with up to 50% aromatics, oil contaminated cooling water, lubricant and hydraulics oil and salt water. The flanges of the ERV Yellowsteel are rotatable and standard available in DIN PN10 and PN16. The operating temperature depends on the medium and ranges from -20 °C to +90 °C. The ERV Yellowsteel is flame-resistant for 30 minutes at 800 °C, allowing machine chamber applications without using the optional fire protection cover. The maximum working pressure is 16 bar, 10 bar for the largest diameters.

## CONSTRUCTION

- Durable nitrile rubber (NBR) inner wall, seamless
- Steel wire reinforced
- Chloroprene (CR) outer wall
- Electrically conductive
- Rotatable flanges, galvanized steel

## OPTIONS

- Most sizes available in different neutral lengths
- Flanges according to DIN PN6, PN25, PN40, ASA 150 lbs or BS10
- Flanges in stainless steel or bronze
- Tie rods
- PTFE lining
- Vacuum support rings
- Fire protection cover

## APPROVALS

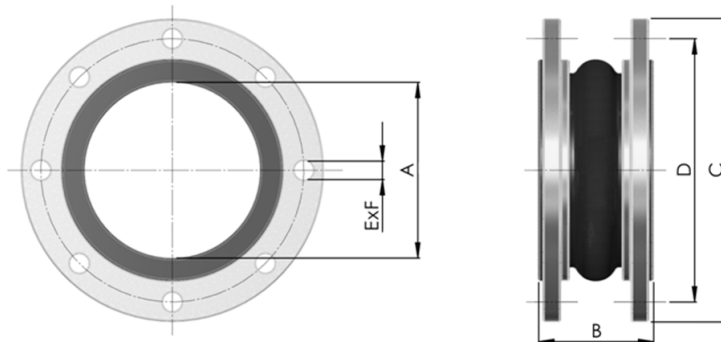
Approved by Det Norske Veritas, Lloyd's Register, Bureau Veritas, Germanischer Lloyd, Nippon Koykai, American Bureau of Shipping and Marine Equipment Directive.

Complies with the DIN VG 95958/9 standard: Expansion joints - Bellows made of elastomers PN 10 and PN 16.

## MOVEMENTS

The maximum movements for the ERV Yellowsteel expansion joint stated below apply to the neutral length for operating temperatures up to +100 °C and are not in combination (no lateral/axial movements simultaneously). Use of the optional vacuum ring leads to a reduction of 50%.

Nominal diameter (mm)	Compression (mm)	Elongation (mm)	Lateral (mm)	Angular (degrees)
25-80	30	15	15	20
100-150	30	15	15	15
200-300	15	20	10	5
300-350	40	30	25	10



## TECHNICAL DATA

Article no.	Inside diameter A (mm)	Length B (mm)	Working pressure (bar)	Flange dimensions class	Outside diameter C (mm)	Pitch D (mm)	E x F (number x mm)
300042025	25	130	16	DIN PN10/16	115	85	4x14
300042032	32	130	16	DIN PN10/16	140	100	4x18
300042040	40	130	16	DIN PN10/16	150	110	4x18
300042050	50	130	16	DIN PN10/16	165	125	4x18
300042065	65	130	16	DIN PN10/16	185	145	4x18
300042080	80	130	16	DIN PN10/16	200	160	8x18
300042100	100	130	16	DIN PN10/16	220	180	8x18
300042125	125	130	16	DIN PN10/16	250	210	8x18
300042150	150	130	16	DIN PN10/16	285	240	8x22
300042201	200	130	10	DIN PN10	340	295	8x22
300042200	200	130	16	DIN PN16	340	295	12x22
300042251	250	130	10	DIN PN10	395	350	12x22
300042250	250	130	16	DIN PN16	405	355	12x26
300042301	300	130	10	DIN PN10	445	400	12x22
300042300	300	130	16	DIN PN16	460	410	12x26
300042351	350	200	10	DIN PN10	505	460	16x22
300042401	400	200	10	DIN PN10	565	515	16x26
300042501	500	200	10	DIN PN10	670	620	20x26
300042601	600	200	10	DIN PN10	780	725	20x30

# 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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