

# NEWS ERV Rubber Expansion Joints

### EXTENSION OF OUR WAREHOUSE

ELAFLEX is the No . 1 supplier in Europe of Rubber Expansion Joints in sizes from DN 25 up to DN 1000.

One of the most important customer requirements is fast availability. In the beginning of 2006 the extension of our company building was completed with the opening of our new additional 1.800 square metre warehouse.

The extension not only brought more storage room. Newly arranged workstations for the flange assembling and a new truck loading bay also provide a better workflow. Our customers can count on short lead times as before.



### PRODUCTION RANGE

The bellows length of 130 mm, introduced by ELAFLEX in 1965, has become an acknowledged global standard for the sizes from DN 25 up to DN 300.

At customers request in recent years we have extended our range of mould-manufactured expansion joints up to DN 1000 and with additional lengths: 150 mm (DN 50 - 200), 160 mm (DN 25 - 200), 175 mm (DN 200 / 250) and 200 mm (DN 250 / 300).



### 25 BAR WORKING PRESSURE

Beside our proven Rubber Expansion Joints for working pressures of 16 bar we also offer a compensator for up to 25 bar:

Type ERV Orange Band is mainly used for liquid petroleum gas pipelines and LPG tankers. Available up to DN 100. The NBR liner is also suitable for many other media, such as petroleum based products, town and natural gas. Burst pressure is above 100 bar.



### LOW COST RUBBER EXPANSION JOINTS

Type ERP (Red Spot) has two nylon textile cord reinforcements and therefore is very flexible. The materials used correspond to type ERV Red Band. ERP is mainly suitable for water, working pressure up to 10 bar. Sizes up to DN 150.

The price level is similar to our multi purpose expansion joint ERV-CR. This abrasion-resistant type with a max. working pressure of 16 bar is available in all sizes, up to DN 1000.



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### "ALL-ROUNDER"

For highly aggressive or sensitive media, all ERV up to size DN 300 are available with an additional factory mounted Teflon lining (Part Number ERV-TA).

Seamless construction of virginal PTFE, with sealing surface. Approved for a working pressure of 6 bar. From DN 50 this type is also available with a PTFE vacuum support ring (Part Number ERV-TAS).

### STAINLESS STEEL FLANGES

Up to size DN 200 we now stock stainless steel flanges with limiters (tie rods) for our customers.

Round ERV flanges of stainless steel up to DN 300 are also available ex stock. These flanges made of AISI 316 Ti are drilled according to DIN PN 16 (from DN 200: PN 10).



## LARGE VARIETY OF FLANGE TYPES

The number of different flange types and flange materials available from ELAFLEX are endless:

Hot galvanized according to DIN standard, galvanized to BS 10 E or JIS 16K, brass according to NATO standard VG 95959-1, stainless steel corresponding to ASA 150 lbs, or of hot stamped aluminium according to DIN 28460 (for road tankers) - these are just a few samples of the most important dimensions we can deliver **ex stock**.

The strength of ELAFLEX also shows when it comes to deliver special types, e. g. Rilsan powder coated flanges or custom made flanges corresponding to our customers drawings.



### EUROPEAN PRESSURE EQUIPMENT DIRECTIVE

ERV Rubber Expansion Joints are subject to the European Pressure Equipment Directive 97/23/EG - depending on size, expected working pressure as well as the transferred medium.

ELAFLEX has been certified by Germanischer Lloyd, and fulfils all requirements of the different PED categories as manufacturer.

According to the prescibed procedures, we effect pressure tests, apply certfication stamps and issue declarations of conformity.

For detailed information see catalogue page 498. Declarations of conformity can also be downloaded from www.elaflex.de/english/certificates.



### **ERV-WHITE BAND**

A change in the manufacturing process of our White Band expansion joints led to an improvement of all technical data (i. e. extensibility, tensile strength) to come up to the increased requirements of e.g. the beverage industry.

ERV-W is available in all sizes, DN 25-1000. Suitable for edible liquids, vegetable oils and other foodstuffs, up to 80° C (briefly up to 100° C).

## LONG SERVICE-LIFE EXPECTANCY

A long term practical test basically confirmed the estimated service life chart known for Red Band and ROTEX expansion joints. Especially ROTEX, our safety expansion joint for central heating installations prooved its excellent resistance for permanent stress through hot water.

After 12 years of operation within a heating system at permanently 90° C, ROTEX compensators still were absolutely flexible and accomplished a burst pressure of more than 50 bar.

The picture shows ROTEX in another application (cooling water circulation of a machine, permanent temperature min. 90° Celsius).

### APPROVED FOR MILITARY PURPOSE

In June 2005 ELAFLEX successfully passed an audit by the German military forces and accomplished a prolongation of its approval. This approval for the delivery according to the NATO AQAP 4 standard has been valid since 1985. ELAFLEX is still its sole supplyer of rubber expansion joints according VG 95958/59.

## FLAME RESISTANT COMPENSATORS

The test criteria of the Notified Bodies (classification companies for ships) require new testing for the use in ship's engine rooms.

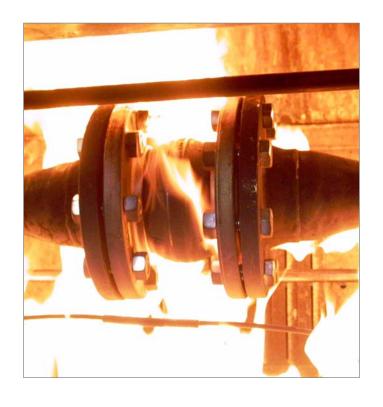
Our Yellow Steel expansion joints recently passed all necessary trials, such as flame resistance tests at 800° C for 30 minutes according EN ISO 15540/41, hydraulic pressure impulse tests acc. EN ISO 6803, burst pressure tests and an endurance test with one million lateral movements. Our Yellow Steel compensators are approved to the "Marine Equipment Directive" (M.E.D.) and the requirements of the International Convention for the Safety of Life at Sea (SOLAS).

Certificates can be downloaded from www.elaflex.de/ english/certificates.









### YARDSTICK FOR PRODUCT MARKING

The different colour markings introduced by ELAFLEX in the 1960's for easy identification of the rubber type have been adopted by many other manufacturers.

Meanwhile unfortunately also our style of identification with a wraparound coloured band is being copied. We point out to our customers, that we found cheaply made compensators on the market, showing the band type marking, i.e. yellow band but not suitable for all petroleum based products.

# Original ERV Yellow Band (installation on board of a road tanker)

### MADE IN GERMANY

All bellows for ELAFLEX Rubber Expansion Joints are exclusively and without exeption manufactured by our partner Contitech in Hannover.

Buying from us, you will only get premium quality from one source, made in Germany. You will NOT get internationally sourced no-name compensators branded as own products.

Delivery from one source, for more than fourty years: that means, customers may rely on consistently high quality.



This new type with an inner rubber of Viton is suitable for a large amount of chemicals. Due to its high resistance against aromatics it is recommended especially for the use with benzene, xylol, toluene or fuels with an aromatic content of more than 50%, where the resistance of our Yellow Band expansion joints is not sufficient.

At the Achema 2006 exhibition we introduce this new type - and ask for your opinion!

### WELL-DESERVED RETIREMENT

After being 44 years with us, we said goodbye to Mr Jürgen Hess, our long-standing sales manager and authorized signatory who has retired.

Since the beginning of our compensators production, Mr Hess was in charge of ELAFLEX "ERV" Rubber Expansion Joints.

His successful and committed work will be continued. With immediate effect, Mr Tobias Cienia and Mr Peter Schümann (who joined ELAFLEX in February 2006) will be in charge of our ERV department as sales managers.





