

| SKUPINA<br>4<br>Section | Hmot-<br>nosť<br>Weight | Efekt.<br>prierez<br>Effect.<br>Area | Veľkosť<br>telesá<br>Size<br>DN | PN<br>Teleso<br>Bellow<br>bar | Rozmer prírub <sup>1)</sup><br>[mm]<br>Flanges <sup>1)</sup><br>Measurements [mm] |      |         | Výrob.<br>dĺžka<br>Length<br>[mm]<br>BL | Objednacie<br>číslo <sup>1)</sup><br>Part <sup>1)</sup><br>Number<br>Typ |
|-------------------------|-------------------------|--------------------------------------|---------------------------------|-------------------------------|-----------------------------------------------------------------------------------|------|---------|-----------------------------------------|--------------------------------------------------------------------------|
|                         | ≈ kg                    | Q[cm <sup>2</sup> ]                  | inch                            | mm                            | D                                                                                 | k    | n x l   |                                         |                                                                          |
|                         |                         |                                      |                                 |                               |                                                                                   |      |         |                                         |                                                                          |
|                         | 1,9                     | 15                                   | 1"                              | 25                            | 115                                                                               | 85   | 4 x 14  | 130                                     | ERV-R 25.16 <sup>2)</sup>                                                |
|                         | 3,4                     | 15                                   | 1¼"                             | 32                            | 140                                                                               | 100  | 4 x 18  | 130                                     | ERV-R 32.16                                                              |
|                         | 3,6                     |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 32x160.16                                                          |
|                         | 4,0                     | 20                                   | 1½"                             | 40                            | 150                                                                               | 110  | 4 x 18  | 130                                     | ERV-R 40.16                                                              |
|                         | 4,2                     |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 40x160.16                                                          |
|                         | 4,6                     | 30                                   | 2"                              | 50                            | 165                                                                               | 125  | 4 x 18  | 130                                     | ERV-R 50.16                                                              |
|                         | 4,7                     |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 50x150.16                                                          |
|                         | 4,8                     |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 50x160.16                                                          |
|                         | 5,3                     | 50                                   | 2½"                             | 65                            | 185                                                                               | 145  | 4 x 18  | 130                                     | ERV-R 65.16                                                              |
|                         | 5,4                     |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 65x150.16                                                          |
|                         | 5,5                     |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 65x160.16                                                          |
|                         | 6,9                     | 85                                   | 3"                              | 80                            | 200                                                                               | 160  | 8 x 18  | 130                                     | ERV-R 80.16                                                              |
|                         | 7,0                     |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 80x150.16                                                          |
|                         | 7,1                     |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 80x160.16                                                          |
|                         | 8,0                     | 125                                  | 4"                              | 100                           | 220                                                                               | 180  | 8 x 18  | 130                                     | ERV-R 100.16                                                             |
|                         | 8,1                     |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 100x150.16                                                         |
|                         | 8,2                     |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 100x160.16                                                         |
|                         | 9,9                     | 185                                  | 5"                              | 125                           | 250                                                                               | 210  | 8 x 18  | 130                                     | ERV-R 125.16                                                             |
|                         | 10,1                    |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 125x150.16                                                         |
|                         | 10,2                    |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 125x160.16                                                         |
|                         | 12,3                    | 250                                  | 6"                              | 150                           | 285                                                                               | 240  | 8 x 22  | 130                                     | ERV-R 150.16                                                             |
|                         | 12,4                    |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 150x150.16                                                         |
|                         | 12,5                    |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 150x160.16                                                         |
|                         | 16,5                    | 400                                  | 8"                              | 200                           | 340                                                                               | 295  | 8 x 22  | 130                                     | ERV-R 200.10                                                             |
|                         | 16,6                    |                                      |                                 |                               |                                                                                   |      |         | 150                                     | ERV-R 200x150.10                                                         |
|                         | 16,7                    |                                      |                                 |                               |                                                                                   |      |         | 160                                     | ERV-R 200x160.10                                                         |
|                         | 16,8                    |                                      |                                 |                               |                                                                                   |      |         | 175                                     | ERV-R 200x175.10                                                         |
|                         | 21,6                    | 600                                  | 10"                             | 250                           | 395                                                                               | 350  | 12 x 22 | 130                                     | ERV-R 250.10                                                             |
|                         | 21,9                    |                                      |                                 |                               |                                                                                   |      |         | 175                                     | ERV-R 250x175.10                                                         |
|                         | 22,1                    |                                      |                                 |                               |                                                                                   |      |         | 200                                     | ERV-R 250x200.10                                                         |
|                         | 29,3                    | 800                                  | 12"                             | 300                           | 445                                                                               | 400  | 12 x 22 | 130                                     | ERV-R 300.10                                                             |
|                         | 29,8                    |                                      |                                 |                               |                                                                                   |      |         | 200                                     | ERV-R 300x200.10                                                         |
|                         | 43,0                    | 1000                                 | 14"                             | 350                           | 505                                                                               | 460  | 16 x 22 | 200                                     | ERV-R 350.10                                                             |
|                         | 46,0                    | 1375                                 | 16"                             | 400                           | 565                                                                               | 515  | 16 x 26 | 200                                     | ERV-R 400.10                                                             |
|                         | 50,0                    | 1780                                 | 18"                             | 450                           | 615                                                                               | 565  | 20 x 26 | 200                                     | ERV-R 450.10                                                             |
|                         | 53,0                    |                                      |                                 |                               |                                                                                   |      |         | 250                                     | ERV-R 450x250.10                                                         |
|                         | 57,0                    | 2185                                 | 20"                             | 500                           | 670                                                                               | 620  | 20 x 26 | 200                                     | ERV-R 500.10                                                             |
|                         | 70,0                    | 3080                                 | 24"                             | 600                           | 780                                                                               | 725  | 20 x 30 | 200                                     | ERV-R 600.10                                                             |
|                         | 117,0                   | 4800                                 | 28"                             | 700                           | 895                                                                               | 840  | 24 x 30 | 260                                     | ERV-R 700.10                                                             |
|                         | 129,5                   | 5440                                 | 32"                             | 800                           | 1015                                                                              | 950  | 24 x 33 | 250                                     | ERV-R 800.10                                                             |
|                         | 184,0                   | 7100                                 | 36"                             | 900                           | 1115                                                                              | 1050 | 28 x 33 | 300                                     | ERV-R 900.10                                                             |
|                         | 245,0                   | 8700                                 | 40"                             | 1000                          | 1230                                                                              | 1160 | 28 x 36 | 300                                     | ERV-R 1000.10                                                            |



**ROTRING** - High-Tech gumený kompenzátor, vhodný pre použitie pre vodu, pitnú vodu (s osvedčením DVGW W 270), pre studenú a teplú užitkovú vodu, morskú vodu, chladiace vody s prísadami chemikálií pre úpravu vody, slabé kyseliny a zásady, roztoky solí, technické alkoholy, estery a ketóny. Pracovná teplota (v závislosti od média) -40° až +100° C, krátkodobu do +120° C. Elektricky nevodivý.

**Nevhodné** pre produkty z minerálnych olejov, chladiace vody s prísadami olejových antikoročných aditív, stlačený vzduch s prísadami olejov.

Vnútro : Butyl (IIR)/EPDM, bezošvé, nízka difúzia  
Výstuž : PA-textilný kord, pogumovaný Butylom  
Povrch : EPDM, odolný voči ozónu a teplu  
Značenie : červený pruh, ERV DN, PN, dátum výroby  
Prírubby<sup>1)</sup> : otočné, DIN PN 10/16, pozinkovaná oceľ

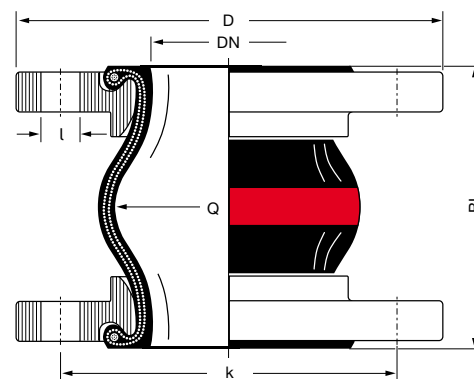


**Typ  
ERV-R**

**RED BAND** expansion joints in High-Tech design for water, drinking water (approval DVGW W 270 as well as ACS, conform to FDA), cold and warm waste water, seawater, cooling water, also with chemical additives for water treatment, low concentrated acids and alkalis, salt solutions, technical alcohols, esters and ketones. Temperature (depending on medium) range -40° C up to +100° C, temporarily up to +120° C. Electrically dissipative.

**Not suitable** for all kinds of mineral oil products, cooling water with added oil containing corrosion preventatives, oily compressor air.

Liner : Butyl (IIR)/EPDM, seamless, low permeation  
Reinforcement : PA textile cord, Butyl rubberized  
Cover : EPDM, ozone proof, heat resistant  
Marking : Red band, ERV DN ..., PN ..., production date  
Flanges<sup>1)</sup> : Swiveling, DIN PN 10/16, carbon steel, zinc plated



<sup>1)</sup> Príklad objednania. Iné prírubové normy a materiály - vid str. 461 - 464.

<sup>2)</sup> Pre kompenzátory DN 25 sú použité telesá DN 32.

<sup>1)</sup> Examples. Other flange standards and materials see catalogue pages 461 - 464.

<sup>2)</sup> For rubber expansion joints DN 25 bellows DN 32 are used.

## Povolené pohyby kompenzátorov typu R - Range of Movement Type ERV-R

| ERV-R                         |                                      |                                       |                 | Hodnoty povolených statických pohybov v pracovnom stave pre teploty do + 50°C pri použití originálnych prírub s límcem<br>Allowable static range of movement in service with usage of collar flanges up to 50°C |                |           |         |
|-------------------------------|--------------------------------------|---------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|---------|
| Dĺžka<br>Length<br>BL<br>[mm] | Vlnovec<br>Bellow Size<br>DN<br>[mm] | Montážna dĺžka<br>Installation Length |                 | axial                                                                                                                                                                                                           |                | lateral   | angular |
|                               |                                      | EL min.<br>[mm]                       | EL max.<br>[mm] | L min.<br>[mm]                                                                                                                                                                                                  | L max.<br>[mm] | l<br>[mm] | α       |
| 130                           | 25 – 80                              | 120                                   | 135             | 100                                                                                                                                                                                                             | 150            | ± 30      | ± 30    |
|                               | 100 – 150                            | 120                                   | 135             | 100                                                                                                                                                                                                             | 150            | ± 30      | ± 20    |
|                               | 200                                  | 115                                   | 140             | 105                                                                                                                                                                                                             | 160            | ± 30      | ± 10    |
|                               | 250 – 300                            | 125                                   | 140             | 120                                                                                                                                                                                                             | 160            | ± 15      | ± 5     |
| 150                           | 50 – 200                             | 140                                   | 160             | 115                                                                                                                                                                                                             | 180            | ± 30      | ± 15    |
| 160                           | 32 – 200                             | 150                                   | 170             | 130                                                                                                                                                                                                             | 195            | ± 35      | ± 15    |
| 175                           | 200                                  | 165                                   | 185             | 160                                                                                                                                                                                                             | 210            | ± 15      | ± 5     |
|                               | 250                                  | 165                                   | 185             | 160                                                                                                                                                                                                             | 210            | ± 10      | ± 5     |
| 200                           | 250 – 300                            | 190                                   | 210             | 160                                                                                                                                                                                                             | 235            | ± 30      | ± 10    |
|                               | 350 – 600                            | 190                                   | 210             | 160                                                                                                                                                                                                             | 235            | ± 30      | ± 8     |
| 250                           | 450                                  | 240                                   | 260             | 210                                                                                                                                                                                                             | 285            | ± 35      | ± 10    |
|                               | 800                                  | 240                                   | 260             | 210                                                                                                                                                                                                             | 285            | ± 35      | ± 5     |
| 260                           | 700                                  | 250                                   | 270             | 220                                                                                                                                                                                                             | 290            | ± 30      | ± 5     |
| 300                           | 900 – 1000                           | 290                                   | 310             | 260                                                                                                                                                                                                             | 340            | ± 40      | ± 5     |

## Povolený pracovný podtlak - Permissible vacuum [kPa]

| DN                    | 32   | 40   | 50   | 65   | 80   | 100  | 125  | 150  | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 600  | 700  | 800 | 900 | 1000 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|------|
| bez / without VSD/VSR | max. | max. | max. | -70  | -60  | -40  | -30  | -30  | -30  | -20  | -10  |      |      |      |      |      |      |     |     |      |
| s / with VSD          |      |      | max. | max. | max. | max. | max. | max. | -60  | -40  | -20  |      |      |      |      |      |      |     |     |      |
| s / with VSR          |      |      |      |      |      |      | max. | max. | max. | max. | max. | max. | max. | -70  | -70  | -70  |      |     |     |      |
| s / with VSRV         |      |      |      |      |      |      |      |      |      |      |      |      |      | max. | max. | max. | max. | -70 | -70 | -70  |

Uvedené dáta boli namerané na nových kompenzátoroch so štandardnou dĺžkou pri izbovej teplote, pri použití média nespôsobujúceho bobtnanie gumového telesa. Pri mediach spôsobujúcich deštrukciu gumového telesa je potrebné použiť bezpečnostný faktor. Inštalácia kompenzátorov stlačených na povolené hodnoty (EL<sub>min</sub>) zlepšuje vákuovú odolnosť telesa. Maximálne hodnoty (EL<sub>max</sub>) znižujú vákuovú odolnosť telesa o 50%. V tomto prípade doporučujeme použitie vákuovej výstužnej špirály (VSD) alebo vákuových krúžkov (VSR, VSRV) - viď katalóg str. 468.

Vzájomné závislosti tlakov, pohybov a teplôt nájdete v našom katalógu na str. 404.

Data measured at room temperature with new expansion joints in standard length and non swelling media. For swelling media use a safety factor. A compressed installation improves the in the table listed vacuum resistance. The maximum permissible elongation (L<sub>max</sub>) reduces the vacuum resistance by 50%. For this case we recommend to use vacuum support spirals or vacuum support rings (see catalogue page 468).

Dependencies of overpressure, range of movement and temperature please see table on catalogue page 404.

## Osvedčenia - Approvals

Tieto certifikáty pre typ **ERV-R** si môžete stiahnuť zo stránky [www.elaflex.de/zertifikate/](http://www.elaflex.de/zertifikate/)

These certificates for type **ERV-R** can be downloaded from [www.elaflex.de/en/certificates/](http://www.elaflex.de/en/certificates/)

