



Section 1	Weight App. ≈ kg	Effect. Area Q:cm2	Bellows Size DN		Press. Nom. bar	Flange 1) Measurements mm			Length BL mm	Part Number Type
			in.	mm		D	k Ø	l x Ø		
	1,9	15	1"	<b>25</b>	16	115	85	4 x 14	130	ERV-R 25.16 2)
	3,4	15	1 1/4"	<b>32</b>		140	100		130	ERV-R 32.16
	3,6								160	ERV-R 32x160.16
	4,0	20	1 1/2"	<b>40</b>		150	110		130	ERV-R 40.16
	4,2								160	ERV-R 40x160.16
	4,6	30	2"	<b>50</b>		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								130	ERV-R 65.16
	5,4	50	2 1/2"	<b>65</b>		185	145		150	ERV-R 65x150.16
	5,5								160	ERV-R 65x160.16
	6,9	85	3"	<b>80</b>		200	160		130	ERV-R 80.16
	7,0								150	ERV-R 80x150.16
	7,1								160	ERV-R 80x160.16
	8,0								130	ERV-R 100.16
	8,1	125	4"	<b>100</b>		220	180	8 x 18	150	ERV-R 100x150.16
	8,2								160	ERV-R 100x160.16
	9,9	185	5"	<b>125</b>		250	210		130	ERV-R 125.16
	10,1								150	ERV-R 125x150.16
	10,2								160	ERV-R 125x160.16
	12,3				130				ERV-R 150.16	
	12,4	250	6"	<b>150</b>	285	240		150	ERV-R 150x150.16	
	12,5							160	ERV-R 150x160.16	
	16,5	400	8"	<b>200</b>	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"	<b>250</b>	395	350		130	ERV-R 250.10	
	21,9							175	ERV-R 250x175.10	
	22,1							200	ERV-R 250x200.10	
	29,3	800	12"	<b>300</b>	445	400		130	ERV-R 300.10	
	29,8							200	ERV-R 300x200.10	
	43,0	1000	14"	<b>350</b>	16	505	460	16 x 22	200	ERV-R 350.10
	46,0	1375	16"	<b>400</b>		565	515	16 x 26		ERV-R 400.10
	57,0	2185	20"	<b>500</b>	10	670	620	20 x 26	300	ERV-R 500.10
	70,0	3080	24"	<b>600</b>		780	725	20 x 30		ERV-R 600.10
	117,0	4800	28"	<b>700</b>	10	895	840	24 x 30	275	ERV-R 700.10
	129,5	5440	32"	<b>800</b>		1015	950	24 x 33	250	ERV-R 800.10
	184,0	7100	36"	<b>900</b>		1115	1050	28 x 33	300	ERV-R 900.10
	245,0	8700	40"	<b>1000</b>		1230	1160	28 x 36		ERV-R 1000.10

Specifications subject to change without notice · Copyright ELAFLEX

## Type ERV-R



**RED BAND** expansion joints in High-Tech design for water, drinking water (approval DVGW W 270 as well as ACS), 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.

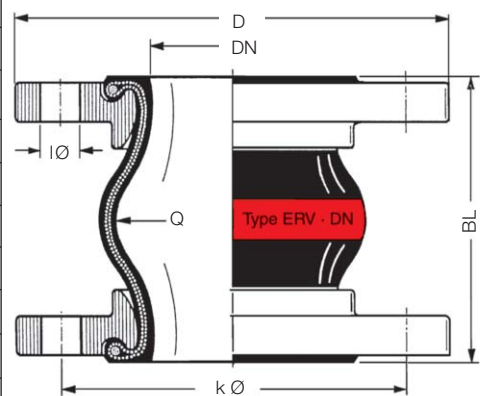
*Liner* : Butyl (IIR) / EPDM, seamless, low permeation

*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



1) Examples. - Other flange standards and materials see catalogue pages 1-31/3.

2) For rubber expansion joints DN 25 bellows DN 32 are used.

## Range of Movement Type ERV-R

ERV-R		Allowable static range of movement in service with usage of collar flanges up to 50° C					
Length <b>BL</b> [mm]	Bellow size <b>DN</b> [mm]	Installation Length		axial		lateral	angular
		EL min. [mm]	EL max. [mm]	L min. [mm]	L max. [mm]	I [mm]	
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	800	240	260	210	285	± 35	± 5
260	700	250	270	220	290	± 30	± 5
300	900 - 1000	290	310	260	340	± 40	± 5

## Permissible Vacuum [mbar]

DN	32	40	50	65	80	100	125	150	200	250	300	350	400	500	600	700	800	900	1000
without VSD / VSR	max.	max.	max.	-700	-600	-400	-300	-300	-300	-200	-100								
with VSD			max.	max.	max.	max.	max.	max.	-600	-400	-200								
with VSR							max.	max.	max.	max.	max.	max.	max.	-700	-700				
with VSRV														max.	max.	max.	-700	-700	-700

Data measured at room temperature with new expansion joints 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 max.) reduces the vacuum resistance by 50%. For this case we recommend to use vacuum support spirals or vacuum support rings (see catalogue page 1-36).

Dependencies of overpressure, range of movement and temperature please see table on catalogue page 1-6.

## Approvals

These certificates for type ERV-R can be downloaded from [www.flexej.co.uk](http://www.flexej.co.uk)



Overview of all certificates on catalogue page 1-2