

Elaflex Red Band / ERV-R

Specification

For water, drinking water (approval DVGW W 270, ACS as well as WRAS), 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.

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

Materials

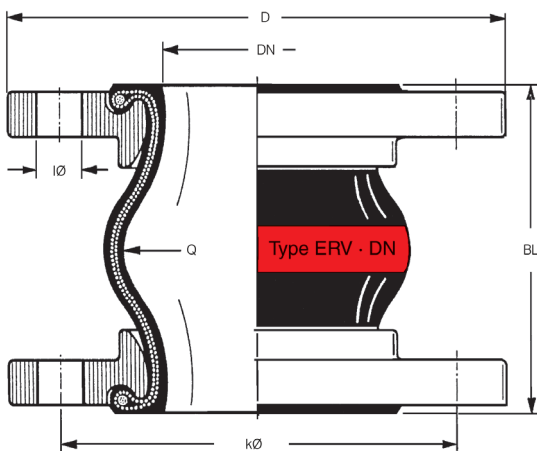
- Liner Butyl (IIR)/EPDM, seamless, low permeation
- Reinforcement PA textile cord, Butyl rubberized
- Cover EPDM, ozone proof, heat resistant
- Marking Red band, ERV DN ..., PN ..., production date
- Flanges* Swivelling, DIN PN 10/16, carbon steel, zinc plated

Operating conditions

Temperature range (depending on medium) -40°C up to +100°C, temporarily up to +120°C. Electrically dissipative.

Notes

- ♦ Table shows PN10/16 flanges – many other flange types are available
 - * For rubber expansion joints DN 25 bellows DN 32 are used
- Specifications subject to change without notice © ELAFLEX



Product by FlexEJ Ltd

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Bellows size DN	Length BL		PN	Weight approx.	Effect. area	Flange measurements mm *			Part number *
	in.	mm				mm	bar	kg	
1"	25	130	16	1.9	15	115	85	4 x 14	ERV-R 25.16 *
1 1/4"	32	130	16	3.4	15	140	100	4 x 18	ERV-R 32.16
1 1/4"	32	160	16	3.6	15	140	100	4 x 18	ERV-R 32x160.16
1 1/2"	40	130	16	4.0	20	150	110	4 x 18	ERV-R 40.16
1 1/2"	40	160	16	4.2	20	150	110	4 x 18	ERV-R 40x160.16
2"	50	130	16	4.6	30	165	125	4 x 18	ERV-R 50.16
2"	50	150	16	4.7	30	165	125	4 x 18	ERV-R 50x150.16
2"	50	160	16	4.8	30	165	125	4 x 18	ERV-R 50x160.16
2 1/2"	65	130	16	5.3	50	185	145	4 x 18	ERV-R 65.16
2 1/2"	65	150	16	5.4	50	185	145	4 x 18	ERV-R 65x150.16
2 1/2"	65	160	16	5.5	50	185	145	4 x 18	ERV-R 65x160.16
3"	80	130	16	6.9	85	200	160	8 x 18	ERV-R 80.16
3"	80	150	16	7.0	85	200	160	8 x 18	ERV-R 80x150.16
3"	80	160	16	7.1	85	200	160	8 x 18	ERV-R 80x160.16
4"	100	130	16	8.0	125	220	180	8 x 18	ERV-R 100.16
4"	100	150	16	8.1	125	220	180	8 x 18	ERV-R 100x150.16
4"	100	160	16	8.2	125	220	180	8 x 18	ERV-R 100x160.16
5"	125	130	16	9.9	185	250	210	8 x 18	ERV-R 125.16
5"	125	150	16	10.1	185	250	210	8 x 18	ERV-R 125x150.16
5"	125	160	16	10.2	185	250	210	8 x 18	ERV-R 125x160.16
6"	150	130	16	12.3	250	285	240	8 x 22	ERV-R 150.16
6"	150	150	16	12.4	250	285	240	8 x 22	ERV-R 150x150.16
6"	150	160	16	12.5	250	285	240	8 x 22	ERV-R 150x160.16
8"	200	130	16	16.5	400	340	295	8 x 22	ERV-R 200.10
8"	200	150	16	16.6	400	340	295	8 x 22	ERV-R 200x150.10
8"	200	160	16	16.7	400	340	295	8 x 22	ERV-R 200x160.10
8"	200	175	16	16.8	400	340	295	8 x 22	ERV-R 200x175.10
10"	250	130	16	21.6	600	395	350	12 x 22	ERV-R 250.10
10"	250	175	16	21.9	600	395	350	12 x 22	ERV-R 250x175.10
10"	250	200	10	22.1	600	395	350	12 x 22	ERV-R 250x200.10
12"	300	130	16	29.3	800	445	400	12 x 22	ERV-R 300.10
12"	300	200	10	29.8	800	445	400	12 x 22	ERV-R 300x200.10
14"	350	200	16	43.0	1000	505	460	16 x 22	ERV-R 350.10
16"	400	200	16	46.0	1375	565	515	16 x 26	ERV-R 400.10
18"	450	200	10	50.0	1780	615	565	20 x 26	ERV-R 450.10
18"	450	250	10	53.0	1780	615	565	20 x 26	ERV-R 450x250.10
20"	500	200	10	57.0	2185	670	620	20 x 26	ERV-R 500.10
24"	600	200	10	70.0	3080	780	725	20 x 30	ERV-R 600.10
28"	700	260	10	117.0	4800	895	840	24 x 30	ERV-R 700.10
32"	800	250	10	129.5	5440	1015	950	24 x 33	ERV-R 800.10
36"	900	300	10	184.0	7100	1115	1050	28 x 33	ERV-R 900.10
40"	1000	300	10	245.0	8700	1230	1160	28 x 36	ERV-R 1000.10

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Range of movement

Red Band ERV-R							
Length	Bellow size	Installation length		Axial *		Lateral *	Angular *
BL	DN	EL min.	EL max.	L min.	L max.	l	degree
mm	mm	mm	mm	mm	mm	mm	degree
130	25-80	120	135	100	150	±30	±30
130	100-150	120	135	100	150	±30	±20
130	200	115	140	105	160	±30	±10
130	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
175	250	165	185	160	210	±10	± 5
200	250-300	190	210	160	235	±30	±10
200	350-600	190	210	160	235	±30	± 8
250	450	240	260	210	285	±35	±10
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

* Allowable static range of movement in service with usage of collar flanges up to 50°C
Please note: Data not valid for *combined* movements

Permissible vacuum [mbar]

DN	32	40	50	65	80	100	125	150	200	250	300	350	400	450	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.	-700	-700	-700				
With VSRV														max.	max.	max.	max.	-700	-700	-700

Data measured at room temperature with new expansion joints of standard length and non swelling media. For swelling media use a safety factor. A compressed installation improves the table listed vacuum resistance. The maximum permissible elongation (L max.) reduces the vacuum resistance by 50%.

In this case we recommend using vacuum support spirals or vacuum support rings (see page 41 of the Elaflex section).
For dependencies of overpressure, range of movement and temperature please see table on page 8 of the Elaflex section.

Approvals

These certificates can be obtained from sales@flexej.co.uk
There is an overview of all certificates on page 47 of the Elaflex section

