

Weight ≈ kg	Effect. Area Q [cm <sup>2</sup> ]	Size DN		Bellows bar	Flanges <sup>1)</sup> Measurements [mm]			Length [mm] BL	Part <sup>1)</sup> Number Type
		inch	mm		D	k	n x l		
2,0	10	1"	25	16	115	85	4 x 14	130	ERV-GS HNBR 25.16 <sup>2)</sup>
3,5	15	1¼"	32		140	100	4 x 18		ERV-GS HNBR 32.16
4,0	20	1½"	40		150	110			ERV-GS HNBR 40.16
5,0	30	2"	50		165	125			ERV-GS HNBR 50.16
5,5	50	2½"	65		185	145			ERV-GS HNBR 65.16
7,1	85	3"	80		200	160			8 x 18
7,2							150	ERV-GS HNBR 80x150.16	
8,3	125	4"	100		220	180	8 x 18	130	ERV-GS HNBR 100.16
8,4								150	ERV-GS HNBR 100x150.16
10,1	185	5"	125		250	210	8 x 22	130	ERV-GS HNBR 125.16
10,2								150	ERV-GS HNBR 125x150.16
12,6	250	6"	150		285	240	8 x 22	130	ERV-GS HNBR 150.16
12,7								150	ERV-GS HNBR 150x150.16
16,9	400	8"	200		340	295	12 x 22	130	ERV-GS HNBR 200.10
17,2								175	ERV-GS HNBR 200x175.10
22,3	600	10"	250		395	350	12 x 22	130	ERV-GS HNBR 250.10
22,6				175				ERV-GS HNBR 250x175.10	
29,9	800	12"	300	445	400	12 x 22	130	ERV-GS HNBR 300.10	
30,4								ERV-GS HNBR 300x200.10	
44,0	1000	14"	350	505	460	16 x 22	200	ERV-GS HNBR 350.10	
47,5	1375	16"	400	565	515	16 x 26		ERV-GS HNBR 400.10	
51,0	1780	18"	450	615	565	20 x 26	200	ERV-GS HNBR 450.10	
54,0							250	ERV-GS HNBR 450x250.10	
57,5	2185	20"	500	670	620	20 x 26	200	ERV-GS HNBR 500.10	
70,0	3080	24"	600	780	725	20 x 30		ERV-GS HNBR 600.10	



**Type  
ERV-GS  
HNBR**

**YELLOW STEEL HNBR** expansion joints for petroleum based products, DIN EN fuels up to 50% aromatic content, cooling water with oily anticorrosion additives, lubrication and hydraulic oil, seawater. Very good aging, weathering and ozone resistance. Temperature (depending on medium) range -35°C up to +100°C, temporarily up to +120°C. Fire resistant to ISO 15540 up to 30 min. at 800°C. Electrically dissipative.

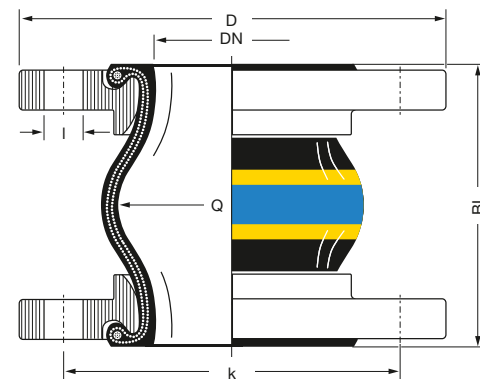
Liner : HNBR (nitrile), seamless, high abrasion resistant

Reinforcement : Steel wire cord

Cover : Chloroprene CR

Marking : Yellow-blue-yellow bands, ERV DN ..., PN ..., production date

Flanges<sup>1)</sup> : Swivelling, DIN PN 10/16, carbon steel, zinc plated



<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.

• Range of Movement Type ERV-GS HNBR

ERV-GS HNBR		Allowable static range of movement in service with usage of collar flanges up to +60°C *)					
Length BL [mm]	Bellow Size DN [mm]	Installation Length		axial		lateral	angular
		EL min. [mm]	EL max. [mm]	L min. [mm]	L max. [mm]	l [mm]	α
130	25 – 80	120	135	100	145	± 15	± 20
	100 – 150	120	135	100	145	± 15	± 15
	200 – 300	125	140	115	150	± 10	± 15
150	80 – 150	140	160	115	170	± 15	± 15
175	200 – 250	165	185	150	195	± 15	± 15
200	300 – 350	190	210	170	230	± 25	± 10
	400 – 600	190	210	160	230	± 25	± 15
250	450	240	260	210	280	± 30	± 15

\*) Please note: Data not valid for combined movements. For calculation hints see page 475. Please contact our sales team.

• 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.	max.	-900	-800	-700	-700	-700	-700	-600	-400	-400	-300	-300	-200				
with VSD			max.	max.	max.	max.	max.	max.	max.	max.	-800									
with VSR							max.	max.	max.	max.	max.	max.	max.	-900	-800	-700				
with VSRV															max.	max.				

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 vacuum resistance listed in the table above. 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 468).

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

• Approvals

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



/ Overview of all certificates on catalogue page 472