

## high pressure rubber expansion joint typ I

### flat waved and elastic

810 a – 4.09 E



with layers of highly tear-resistant synthetic fibre (Nylon-Cord)  
for 16 bar working pressure – approx. fivefold safety  
for vacuum up to 9 m WS (q.v. leaflet 810 b)

both sides: swivel flange drilled acc. to DIN PN 10 / 16  
(from DN 200 = PN 10), with rubber collars, selfsealing –  
flanges made of galvanized steel, with smooth holes

- "black" = NEOPRENE-CR (inside and outside); for industrial water, sea water, waste water (sewage works), light acids or brines, coolant, compressed air up to + 60°C
- "red" = EPDM (inside / outside) for industrial water, saline solutions, concentrated brines, solvent as well as warm air up to + 70°C, temporary up to + 90°C; for **potable water** acc. to requirements of DVGW leaflet W 270 category D1+D2 of KTW recommendation  
**for heating systems** with warm water up to + 90 / 70°C use **typ I – "ROTEX"**, q.v. leaflet 816
- "yellow" = PERBUNAN N (NBR 1), electroconductive ( $R = 10^3 - 10^6$  Ohm), aging resistant; for fuel, oil (hydraulic oil), fat, oleaginous compressor air, coolant with corrosion prevention oil up to + 90°C; city gas and natural gas up to + 70°C – with **DIN-DVGW qualification certificate**
- "green" = HYPALON (inside / outside) for inorganic and organic acids as well as heavy basics and other aggressive chemicals up to + 80°C; for oleaginous compressor air up to + 90°C  
for high chemical and thermal exposure with **PTFE inliner**, q.v. leaflet 813 a
- "white" = PERBUNAN N, bright (NBR 3) – acc. to German Food Law – for food and luxury food, also oil- und fat containing up to + 80°C; cleaning temporary up to + 100°C valid
- "orange" = for liquid gas acc. to DIN 51622 at filling stations and tank trucks, temp. – 30°C bis + 70°C, max. 20 bar WP, burstpressure > 100 bar, electroconductive, with flanges PN 40, **sizes: DN 25 to DN 100**

DN	length 1) mm	nominal pressure bar	allowed movement range				W 2) mm	bellow effective face cm <sup>2</sup>	g 2) mm	weight approx. kg
			axial + mm	axial - mm	lat. +/- mm	<° +/- °				
25	130	16 / 10	30	30	30	30	81	15	66	1,5
32	130	16 / 10	30	30	30	30	81	15	66	2,5
40	130	16 / 10	30	30	30	30	86	20	70	3,0
50	130	16 / 10	30	30	30	30	96	30	84	4,0
65	130	16 / 10	30	30	30	25	111	50	105	4,5
80	130	16 / 10	30	30	30	25	122	85	116	5,5
100	130	16 / 10	30	30	30	20	142	125	138	7,0
125	130	16 / 10	30	30	30	20	168	185	165	8,5
150	130	16 / 10	30	30	30	20	192	250	190	11,0
200	130	16 / 10	30	30	30	10	252	400	250	17,0
250	130	16 / 10	30	30	30	10	302	600	300	23,5
300	130	16 / 10	30	30	30	10	354	800	350	27,0
350	200	16 / 10	35	40	35	8	430	1000	420	39,5
400	200	10	35	40	35	8	480	1375	455	42,0
450	250	10	20	40	30	6	545	1800	512	47,8
500	200	10	35	40	35	8	580	2185	555	59,5
600	200	10	35	40	35	8	680	3080	670	70,0
700	250/275/300	10	35	40	35	6	820	4800	785	135,0
800	250	10	35	40	35	6	890	5440	885	125,0
900	300	10	40	40	40	5	1020	7100	980	205,0
1000	300	10	40	40	40	5	1120	8700	1085	245,0

1) = length allowance: – 0 to + 5 mm

special lengths q.v. leaflet 812

2) q.v. leaflet 810 b

valid utilisation factor for pressure / temperature respectively movement range q.v. leaflet 810 b

special flange types: **stainl.steel** (1.4571/ AISI316) up to DN 300 **on stock**; larger sizes as well as light alloy and drilling acc. to DIN PN 6, PN 25, naval norm, SAE, ANSI or BS are available

for quotations / purchase orders: please mention discharge medium, concentration of medium, max. working-temperature and -pressure and vacuum

intallation- / assembly- and maintainance-instructions see leaflet 814 a + b