

Rubber Bellows Expansion Joint Type W53

Type W53 is a low convolution bellows compensator with good sound insulating characteristics. It is characterized by a very high expansion capability, especially in the angular direction.

Design:

Low corrugated rubber bellow with reinforcing inserts and integral sealing bead (therefore self-sealing without additional gaskets) for accomodating the swivel flanges. The flanges are provided with through holes.

Type W53 are non-EU manufactured.



Details for type 53

Bellow colour code	Core (inner)	Reinforcing material	Cover (outer)	Permissible operating data						Hardness shore A
				bar	°C	bar	°C	bar	°C	
red	EPDM	Nyloncord	EPDM	16	50	12	70	10	90	55
yellow	NBR	Nyloncord	CR	16	50	12	80	10	90	60

Suitable for vacuum up to 0.8 bar abs., without supporting ring.
 Suitable for vacuum up to 0 bar abs., with supporting ring.
 DN 20 - DN 50 suitable for vacuum without supporting ring.
 Burst pressure DN 20 - DN 600 > 48 bar.



DN	length BL mm	Bellow		Flange PN 10		Movement absorption		Weight Design A kg
		Ø A mm	Eff. surface mm²	Ø D mm	Ø PCD mm	axial + mm	axial - mm	
20	130	81	1700	105	75	30	30	1,5
25	130	81	1700	115	85	30	30	1,9
32	130	81	1700	140	100	30	30	3,1
40	130	86	1800	150	110	30	30	3,5
50	130	96	3200	165	125	30	30	3,7
65	130	111	5300	185	145	30	30	5,3
80	130	122	8500	200	160	30	30	6,8
100	130	142	12800	220	180	30	30	7,9
125	130	168	18700	250	210	30	30	9,6
150	130	192	25900	285	240	30	30	12,9
200	130	252	41000	340	295	30	30	16,2
250	130	302	59600	395	350	30	30	21,5
300	130	354	82200	445	400	30	30	24,5
350	200	420	90700	505	460	30	50	38,3
400	200	480	101800	565	515	30	50	38,0
500	200	580	169200	670	620	30	50	56,5
600	200	680	307800	780	725	30	50	75,2

Permissible % of indicated movement relative to temperature:
 up to 50°C ~ 100%
 up to 70°C ~ 75%
 up to 90°C ~ 60%

Flanges: (Design A)

Swivel flanges both sides (Design A) with integral rubber profile, so that additional gaskets are not required (self-sealing).

The flanges are drilled acc. to DIN PN10 or PN16 as standard. Other specifications in accordance with DIN, ANSI, BS. Special flanges are also available.

Flange Material: Standard S 235 JRG2 (RSt 37-2) zinc plated and yellow passivated.

Application:

Type 53 Red **For warm water and cooling water**
 For cold and hot water (up to 90°C), also with the addition of chemicals for water treatment. Industrial water, acids, lyes, alcohols, esters and ketones.
 Not suitable for oil-related media.

Type 53 Yellow NBR
 For oils, fats, gas, diesel fuel, kerosene, crude oil.

Temperature range -20 to + 90 ° C
 Not suitable for lead-free gasoline and hot water.

Designs:

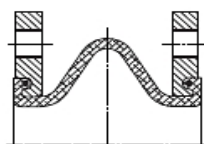
Design A both sides with loose flanges, untied

Design B and E with tie rod construction up to DN300 with rubber bushes (B), from DN350 with spherical washers

Design C with tie rod construction and thrust limitation up to DN300 (C), from DN350 connecting rod laid inside and outside with spherical washers

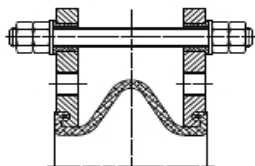
Supporting ring stainless steel in spiral form design up to DN300 and from DN350 full ring design

Design A



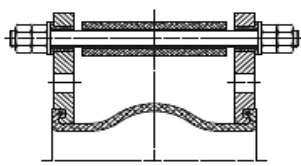
DN 20 - 600

Design B



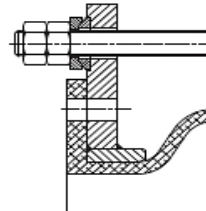
DN 20 - 300

Design C



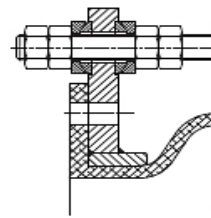
DN 20 - 300

Design E



DN 350 - 600

Design M



DN 350 - 600