

WILLBRANDT Rubber Expansion Joint Type 54

■ mainly in stock

DN 25 to DN 100

Type 54 is a high corrugated rubber expansion joint for hydraulic systems. In combination with flanges according to SAE 3000 it is characterised by its large opening and large movement absorption. It is only available in an oil-resistable rubber compound.

Type 54 is almost exclusively used in the hydraulic systems to absorb expansion and vibration, and to insulate sound.



Bellow design	High corrugated rubber bellow with reinforcement and shaped sealing bead with core ring, self-sealing (no additional seals required). Suitable for swiveling flanges.	Flange version	Both sides with swiveling flange made of galvanized steel, drilled according to SAE 3000.
Pressure resistance	Max. 2 bar For higher pressures (max. 10 bar) please note our type 50 with SAE flanges.	Approvals	No approvals are available.
Vacuum resistance	- DN 25 to 80 up to -500 mbar - DN 90 to 100 up to -300 mbar - With vacuum supporting spiral from DN 50 to DN 100 vacuum-proof - For nominal sizes DN 25 to DN 40, type 50 yellow must be used for a vacuum (length 130 mm).	Accessories	- Vacuum supporting spiral/rings - Guide sleeves - Potential equalisation - Flame-resistant protective covers - Dust and splash protection covers - Earth cover / sun protection cover Further information on page 99 - 105.

Specifications

Bellow		Core (inner)	Bellow design Reinforcement	Cover (outer)	Permissible operating data			
Colour code	Colour marking				°C	bar	°C	bar
yellow		NBR	Polyamide	CR	-20	2	80	2

Application

Type 54 yellow NBR

Good resistance to heat and ageing, particularly in the absence of air (e.g. in oil). Excellent resistance to swelling (weak-polar and non-polar media, e.g. mineral oils, lubricating greases, animal

and vegetable fats or oils). No resistance to esters, ketones, aromatic or chlorinated hydrocarbons or lead-free fuels.

Important information

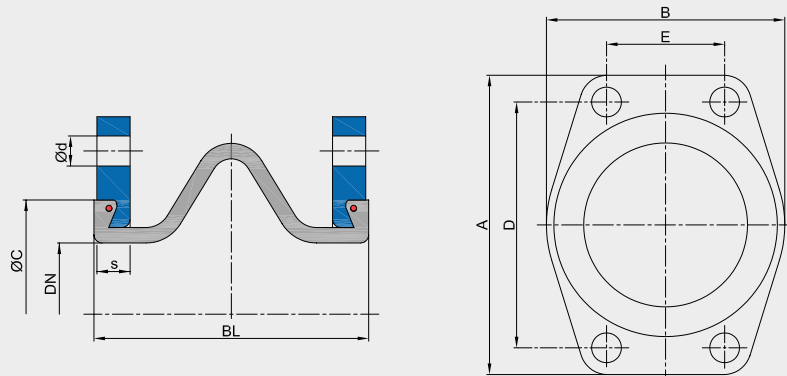
Only use DIN 7984 hexagon socket screws with a flat head to screw the expansion joints together. The bellows must not be painted or insulated at media temperatures >50 °C. Please also note the planning instructions.

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Design A - without tie rods

Can be used for absorb movements in all directions (for combined movements, refer to the movement diagram in the technical appendix), for vibration and noise damping.

The expansion joint's reaction force must be absorbed through appropriate pipeline guidance (see planning instructions in the appendix).



Dimensions for design A

DN	Length BL	Bellows		Flange SAE 3000							Movement absorption				Weight kg
		Ødi	ØC	A	B	D	E	Ød	n	s	axial + mm	axial - mm	lateral ± mm	angular ± ∠°	
25	65	25	43	70	59	52.4	26.2	11	4	11	2.5	2.5	2.5	3.5	0.4
32	65	32	50	81	73	58.7	30.2	13	4	11	2.5	2.5	2.5	3.5	0.5
40	100	40	62	95	83	70.0	35.7	13	4	13	5.0	5.0	5.0	5.0	0.8
50	100	48	72	103	97	77.8	42.9	13	4	13	5.0	5.0	5.0	5.0	1.0
65	100	63	87	115	109	89.0	50.8	13	4	14	5.0	5.0	5.0	5.0	1.2
80	100	80	104	136	131	106.4	62.0	17	4	14	5.0	5.0	5.0	5.0	1.8
90	100	80	104	152	140	120.6	70.0	17	4	14	5.0	5.0	5.0	5.0	1.9
100	100	100	130	162	152	130.2	77.8	17	4	16	5.0	5.0	5.0	5.0	2.5

Important information

Please note the appropriate fixed point constructions and plain bearings in your piping system!
For fastening the expansion joints, please use only flat-head hexagon socket screws DIN 7984.
Information on this can be found in our planning instructions.

