

RED BAND RUBBER BELLOWS EXPANSION JOINTS

TEMPERATURE RATING 100 °C (212 °F)
APPROVED FOR POTABLE WATER USE



The **Red Band** expansion joints are low corrugation, highly elastic rubber bellows expansion joints, characterised by high movement absorption in all directions. The low corrugation achieves low flow resistance, and the expansion joints reduce up to 70 % of the incoming energy. They are designed to specifically absorb expansion and vibration, and to absorb noise and insulate sound.

The **Red Band** are constructed with temperature resistant polyamide fabric for permanent use in installations for many years use with hot and cold water, drinking water, water with water treatment additives, seawater, clean air, weak acids and alkalis, salt solutions, technical alcohols, esters & ketones. Temperature range is -40 to **+100 °C** (+212 °F), with brief short term rating up to **+120 °C** (+248 °F).

The **Red Band** are used in building technology, plant engineering, water & wastewater works, engine construction, shipbuilding, HVAC, and petrochemical, industrial and solar & wind energy engineering.

The **Red Band** are manufactured within the **European Union**, and are equivalents to, and interchangeable with, *Elaflex ERV-R* Red Band, *Trelleborg Teguflex C, P & W* Red Band, and *Stenflex A, R & AG* expansion joints.

Construction :

Liner : Butyl (IIR) / EPDM.
Reinforcement : Polyamide.
Cover : EPDM, with One Red Stripe (Model 49 - One Blue Stripe).
Resistant to Weather, Aging & Ozone.
Electrically Dissipative Surface Area.
Not Suitable for Oils, Fuels, or Water containing Oils.

Ends :

Flanges are swivel (rotating) both sides, with integral rubber sealing face. Additional gaskets are not required. Standard drilling is PN10 or PN16. Other drillings to PN6, PN25, PN40, ANSI 150/300, BS10, JIS, TW, TTMA, VG, SAE3000, or special designs are also available. Model 49 have tapped/threaded bolt holes.

Standard material is Carbon Steel S235JRG2 (RSt 37-2), Zinc Plated.
Also available with Hot Dipped Galvanised Carbon Steel, Stainless Steel, Aluminium, Bronze, or other materials.

Model 46 are supplied with Threaded BSPT Male or BSP Female Ends.

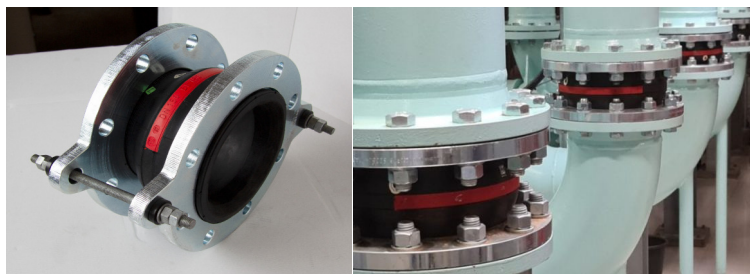


Model 46

Pressure Ratings :

<i>Model 49 :</i>	DN32 to DN350 :	25 BarG @ 50 °C	18 BarG @ 70 °C	12 BarG @ 100 °C
	DN400 & DN500 :	16 BarG @ 50 °C	16 BarG @ 70 °C	10 BarG @ 100 °C
<i>All Other Models :</i>	DN20 to DN200 :	16 BarG @ 50 °C	12 BarG @ 70 °C	10 BarG @ 100 °C
<i>Models 50 & 55 :</i>	DN250 :	16 BarG @ 50 °C	12 BarG @ 70 °C	10 BarG @ 100 °C
<i>Model 50 :</i>	DN300 to DN400 :	16 BarG @ 50 °C	12 BarG @ 70 °C	10 BarG @ 100 °C
<i>Model 55 :</i>	DN300 to DN400 :	10 BarG @ 50 °C	10 BarG @ 70 °C	10 BarG @ 100 °C
<i>Model 55SO :</i>	DN250 & DN300 :	10 BarG @ 50 °C	10 BarG @ 70 °C	10 BarG @ 100 °C
<i>Models 50 & 55 :</i>	DN450 to DN1000 :	10 BarG @ 50 °C	8 BarG @ 70 °C	6 BarG @ 100 °C

Model 52 : Check with factory.



Approvals :

Models 46, 49, 50, 55 and 55SO are Type Approved by *Lloyds Register of Shipping*, and *DNV*, and are approved for **Potable (Drinking) Water** use by *WRAS* (UK), *ACS* (France), & *ELL* (Germany) (depending on bore size & ends).

Lengths :

Bore DN / NB		Lengths (mm)						
mm	inch	Model 49	Model 50	Model 55	Model 55SO	Model 46 Female	Model 46 Male	Model 52
20	¾	-	130	125	160	190	214	-
25	1	-	130	125	160	182	214	-
32	1¼	100	130	125	160	190	240	150
40	1½	100	130	125	160	198	250	150
50	2	100	130	125/150	160	198	260	150
65	2½	100	130	125/150	160	-	-	150
80	3	100	130	150	160	-	-	175
100	4	100	130	150	160	-	-	175
125	5	100	130	150	160	-	-	175
150	6	100	130	150	160	-	-	175
200	8	100	130	150/175	160	-	-	150/200
250	10	100	130	175	200	-	-	150/250
300	12	100	130	200	200	-	-	150/165/175
350	14	100	200	200	-	-	-	200
400	16	110	200	200	-	-	-	250/300
450	18	-	200	250	-	-	-	250
500	20	110	200	-	-	-	-	250
600	24	-	200	-	-	-	-	250
700	28	-	250	260/275	-	-	-	-
800	32	-	250	250	-	-	-	-
900	36	-	300	300	-	-	-	-
1000	40	-	300	300	-	-	-	-

Vacuum Ratings :

Model 46 : Rated for Vacuum.

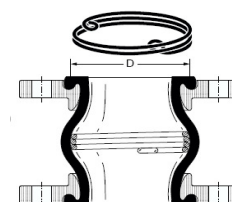
Models 49, 50, 55, 55SO & 52 :

DN20 to DN50 - Rated for Vacuum.

DN65 to DN250 - Rated for -0.2 BarG Vacuum ;

- For higher vacuum, Internal Vacuum Ring required.

DN300 & Above - Internal Vacuum Ring required.



Other Grades :

Double Red SP Band - PEEK Reinforced, rated up to **+130 °C** ; **DIN 4809** approved.

Red Spot - Economy version for lower pressure requirements : 10 BarG @ 50 °C ; 6 BarG @ 90 °C.

Model **51 Red/Blue** Band rated up to **+130 °C** ; Model **51 Lilac** Band rated up to **+150 °C**.

Model **39 Lilac** Band rated up to **+180 °C**.

Distributor :

Mercia Flexibles • www.merciaflexibles.co.uk

Ludlow Eco Park • Ludlow • Shropshire • SY8 1FF • United Kingdom

Tel.: +44 (0)1584 874999 • Email: enquiries@merciaflexibles.co.uk