

MB master bellows®

Derating factors

N205

Depending on the working temperature and the number of cycles required, working pressure and movements must be adjusted accordingly.

The following tables show the pressure and the movements derating factors to be applied depending on working temperature, and those for movements to be applied depending on the number of cycles, for expansion joints with bellows made in stainless steel 1.4541 EN 10028-7 (AISI 321).

Pressure derating factors		Movements derating factors		Number of cycles derating factors	
T °C	k1	T °C	K2	Cycles	k3
20	1.00	20	1.00	3000	1
100	0.82	100	0.95	4500	0.90
150	0.78	150	0.94	6000	0.85
200	0.74	200	0.93	10000	0.75
250	0.71	250	0.90	15000	0.65
300	0.67	300	0.88	30000	0.55
350	0.64	350	0.86	100000	0.45
400	0.62	400	0.85	400000	0.35
450	0.61	450	0.83	1000000	0.30
500	0.60	500	0.80	10000000	0.20

$PN \cdot k1 \geq$ Working pressure

$C \cdot k2 \cdot k3 \geq$ Required axial movement

$\alpha \cdot k2 \cdot k3 \geq$ Required angular movement

Where:

PN - Nominal pressure

C - Nominal axial movement

α - Nominal angular movement

T - Working temperature

k1, k2, k3 - Derating factors

The constant effort towards technical and qualitative improvement of our products might involve modifications of the dimensional and operational characteristics given in this data sheet, at any time and without warning. For applications requiring exact characteristics and/or a critical dimensional or operational conformity, please consult our Technical Department.