

## Checklist for Expansion Joints

### 1. Medium

- Chemical composition
- Gaseous, liquid, paste-like
- Abrasion

### 2. Operation conditions

- Minimum and maximum temperature
- Maximum pressure
- Vacuum
- Axial range of movement (elongation / compression)
- Angular load
- Lateral offset
- Dynamic load

### 3. Installation Site

- Indoor or outdoor installation
- Exposure to sunlight (UV)
- Salt-containing atmosphere

### 4. Classification acc. to Pressure Equipment Directive?

Please regard the Pressure Equipment Directive, especially when gaseous media are used.  
Further Information on page 484.

### Temperature depending range of movement and pressure

The following list shows the dependencies of overpressure, range of movement and temperature for ERV expansion joints.

Type	Working Temperature max.	Temperature depending range of movement*	Temperature depending working pressure		
			PN 10	Bellow PN 16	PN 25
ERV-R / ERV-CR / ERV-G ERV-G LT / ERV-GR ERV-W	50° C	100 %	10 bar	16 bar	—
	70° C	80 %	8 bar	12 bar	—
	100° C	60 %	6 bar	10 bar	—
ERV-BR	50° C	100 %	10 bar	16 bar	—
	70° C	80 %	8 bar	12 bar	—
ERV-OR	50° C	100 %	—	—	25 bar
	70° C	80 %	—	—	20 bar
	100° C	60 %	—	—	15 bar
ERP	50° C	100 %	10 bar	—	—
	70° C	80 %	8 bar	—	—
	100° C	60 %	6 bar	—	—
ROTEX	70° C	100 %	10 bar	16 bar	—
	100° C	75 %	7,5 bar	12 bar	—
	130° C	50 %	5 bar	8 bar	—
ERV-GS / ERV-GS HNBR	60° C	100 %	10 bar	16 bar	—
	100° C	60 %	6 bar	10 bar	—
ERV...TA / ERV...TA OHM (ERV...TAS / ERV...TAS OHM)	50° C	50 %	6 bar (10 bar)	10 bar	10 bar
	70° C	40 %	5 bar (8 bar)	8 bar	8 bar
	100° C**)	30 %	4 bar (6 bar)	6 bar	6 bar

\*) For type specific range of movement see data sheets.  
Depending on media, a reduction of working conditions may be necessary. Please ask our sales team in case of questions.

\*\*\*) Not suitable for ERV-BR.