



Material description

The elastic material for **Flexjoint EP** consists of an EPDM elastomer (ethylen-propylen-diene unvulcanized rubber with saturated polymethylene main chain) with the following properties:

- excellent properties for protecting against attack from ozone and uv
- long term high temperature resistance (up to + 90° Celsius)
- long term high flexibility at low temperatures (down to – 40° Celsius)

Additionally EPDM materials for **Flexjoint EP** are generally very resistant to chemicals:

- alkali, acids and saline solutions
- water and steam
- polar solvents, such as alcohol and ketone

Low resistance to homopolar emollients and solvents (e.g. mineral oils, benzene, fuels and aromatic compounds, such as toluene).

Prolonged contact with these agents should be avoided.

Contact during the installation phase with the torch will not impair the material properties.

Flexjoint EP 20

Horizontal movement	(max. ±30 mm)
Shear movement	(max. ±20 mm)
Vertical movement	(max. ±25 mm)

Flexjoint EP 40

Horizontal movement	(max. ±60 mm)
Shear movement	(max. ±40 mm)
Vertical movement	(max. ±50 mm)

Flexjoint EP 75

Horizontal movement	(max. ±100 mm)
Shear movement	(max. ± 75 mm)
Vertical movement	(max. ± 85 mm)

Flexjoint EP 100

Horizontal movement	(max. ±150 mm)
Shear movement	(max. ±100 mm)
Vertical movement	(max. ±125 mm)

Flexjoint EP 125

Horizontal movement	(max. ±200 mm)
Shear movement	(max. ±125 mm)
Vertical movement	(max. ±170 mm)

Characteristics	Units of measure	Specifications	Values
Hardness	Shore A	DIN 53505	40 ± 5
Tensile strength	N/mm ²	DIN 53504	> 10
Elongation at break	%	DIN 53504	> 700
Compression set (at 23°C and 70°C)	%	DIN ISO 815-1	20% or 44%
Resistance to ozone cracking	crack level	DIN 53509-1	crack level 0
Water vapour permeability	μ	DIN EN ISO 12572	83.000 μ
Fire behaviour		DIN EN 13501-1	class E
Resistance to alkalis (storing in lime water)		DIN EN 1847	average > 5%
Folding under low temperature – 40°C		DIN EN 495-5	no crack
Resistance to aging (UV, temp./water)		DIN EN 1297 ⁴	no crack

