

Oxide/oxide ceramic matrix composite “Keramiklech”, standard material MvM-2220 for applications up to 1100°C

Keramiklech Type, old name	MvM1514N-2220	
Keramiklech Type, new name	MvM-2220	test standard
Fibre (Fabric)	Nitivity-2220S	–
Matrix	70% Al ₂ O ₃ 30% SiO ₂	–
Thickness per layer [mm]	0,75	–
Density [g/cm ³]	1,9	–
Bending strength [MPa] anisotrop 0/90° at room temperature	60-70	DIN 658-3, 3 point bending
Tensile strength [MPa] at 1000 °C	–	DIN 658-1
Thermal expansion coefficient [10 ⁻⁶ 1/K]	6-8	DIN 1159-1
Thermal conductivity [W/mK]	< 1,5	DIN 1159-2
Recommended continuous service temperature [°C]	< 1150 °C	–
Recommended continuous service temperature [°C] with mechanical load	< 1100 °C	–
Maximum continuous service temperature [°C] with high mechanical load	< 1100 °C	–