

DW231

Features:

DW231 combines high strength carbon fibre with increased temperature epoxy resin, processed by filament winding technology. The composite can be applied directly on the component or sleeves can be produced which are pressed onto the rotor to achieve an interference fit. By minimizing of the gap between the rotor and stator and with regard to low eddy current losses the used material improves the performance and efficiency of high speed rotors.

Benefits:

- Excellent chemical resistance
- Low density – high strength
- Low eddy current losses
- Improved performance and efficiency

Applications:

- Fly wheels
- Separating cans
- Rotor reinforcement
- Cyclic springs

Feasibility:

- From Ø 10mm to Ø 1.500mm
- Length up to 12.000mm
- More dimensions upon request



TYPICAL PROPERTIES

Physical properties	Typical values	Units
Fibre	Carbon	-
Matrix	Epoxy	-
Color	Black	-
Density	1.52	g/cm ³
Mechanical properties		
Tensile strength	2.420	, MPa
E-modulus	145.000	, MPa
Max. elongation	1.7	, %
Thermal properties		
Op. temp. continuous	-40 / +140	°C
Coeff. of expansion	0.4	, 10 ⁻⁶ 1/K

All data are approximate values