

FZ-3600 Series

■ Outline: FZ-3600 series products are glass fiber and mineral filled compounds based on cross-linked polyphenylene sulfide (PPS) polymers

	Method	Unit	FZ-3600	FZ-3600-D5	FZ-3600-H5
General Information			General Purpose	High Strength	High Strength Low Outgassing
Physical Properties					
Specific gravity	ISO 1183/A	g/cm ³	1.96	1.88	1.97
Mold shrinkage (parallel) ^a	ISO 294-4	%	0.3	0.3	0.3
Mold shrinkage (transverse) ^a	ISO 294-4	%	0.6	0.6	0.6
Water absorption (23°C, sat.)	ISO 62	Wt.%	0.02	0.02	0.02
Mechanical Properties					
Tensile strength	ISO 527-1, -2	MPa	110	130	140
Tensile modulus	ISO 527-1, -2	MPa	17500	17000	17500
Tensile elongation at break	ISO 527-1, -2	%	0.9	1.1	1.1
Flexural strength	ISO 178	MPa	200	210	220
Flexural modulus	ISO 178	MPa	16500	16500	17000
Flexural elongation at break	ISO 178	%	1.3	1.5	1.5
Charpy impact strength	ISO 179/1eU	kJ/m ²	18	24	21
Charpy notched impact strength	ISO 179/1eA	kJ/m ²	8	9	9
Unnotched impact strength (Izod)	ISO 180/A	kJ/m ²	17	24	19
Notched impact strength (Izod)	ISO 180/A	kJ/m ²	6	7	7
Rockwell hardness	ISO 2039/2	M-Scale	100	100	100
Thermal Properties					
Melting temperature	ISO 11357	°C	280	280	280
Glass transition temperature (10 K/min)	ISO 11357	°C	90	90	90
Deflection temperature (1.82 MPa)	ISO 75-1, -2 /A	°C	265	265	265
Coefficient of thermal expansion	ISO 11359-1, -2	m/mK	1.7x10 ⁻⁵	1.8x10 ⁻⁵	1.7x10 ⁻⁵
Flammability* (at thickness h)	UL-94	class	V-0	V-0	V-0
Tested thickness (h)	UL-94	mm	0.73	0.73	0.73
Electrical Properties					
Dielectric strength (t=1.6mm)	IEC 60243-1	kV/mm	16	16	16
Dielectric constant, 1MHz	IEC 60250	-	5	5	5
Dissipation factor, 1MHz	IEC 60250	-	0.007	0.006	0.006
Volume resistivity	IEC 60093	Ohm*cm	10 ¹⁶	10 ¹⁶	10 ¹⁶
Comparative tracking index (CTI)	IEC 60112	Volt	250	250	250
Arc resistance	ASTM D495	sec.	180	180	180
Processing Conditions					
Cylinder temperature		°C	300-340	300-340	300-340
Mold temperature		°C	120-150	120-150	120-150

*UL file No. E53829

*a) Measured by rectangle type specimen with film gate, GF was orientated with following mold flow completely

