



Glass fiber and mineral filled series. (cross linked PPS)

Properties	Test Method	Unit	FZ-3600	FZ-3600-D5	FZ-3600-B5	FZ-3600-L4	FZ-3500
General Information			GF/Filler GP	GF/Filler High strength	GF/Filler High flow	GF/Filler Dimensional stability	GF/Filler High CTI & Arc resistance
	<ASTM>						
Physical							
Specific gravity	D-792	-	1.96	1.88	1.86	2.00	2.00
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt.%	0.02	0.02	0.02	0.02	0.02
Mold shrinkage, MD /TD ^a	D-955	%	0.25/1.0	0.25/1.0	0.25/1.1	0.25/1.0	0.25/1.0
Mechanical							
Tensile strength	D-638	MPa	125	140	130	120	100
Tensile modulus	D-638	MPa	18500	18500	17500	21000	18500
Tensile elongation at break	D-638	%	0.8	1.0	0.9	0.8	0.6
Poisson's ratio	-	-	0.34	0.34	0.34	0.33	0.33
Flexural strength	D-790	MPa	200	230	200	175	150
Flexural modulus	D-790	MPa	17500	17000	15000	20000	17500
Flexural elongation at break	D-790	%	1.3	1.6	1.5	1.2	0.9
Izod impact strength	D-256	J/m					
notched / un notched			70/260	85/320	80/300	70/230	55/200
Compressive strength	D-695	MPa	150	180	170	150	120
Rockwell hardness, R/M	D-785	-	121/100	121/100	121/100	121/100	121/100
Coefficient of friction ^b , static /dynamic	-	-	0.35/0.35	0.35/0.35	0.35/0.35	0.35/0.35	0.35/0.35
Thermal							
Distortion temp. of under load, 1.82MPa	D-648	°C	265	265	265	265	265
Coefficient of thermal expansion ^c , -30 to 90°C	D-648	m/mK	1.7x10 ⁻⁵	1.8x10 ⁻⁵	1.9x10 ⁻⁵	1.7x10 ⁻⁵	1.7x10 ⁻⁵
UL Flammability ^d , t~0.8mm	UL-94	-	V-0	V-0	V-0	V-0	V-0
Electrical							
Dielectric strength, t=1.6mm	D-149	kv/mm	16	16	16	16	18
Dielectric constant, 1MHz	D-150	-	5	5	5	5	5
Dissipation factor, 1MHz	D-150	-	0.007	0.006	0.006	0.007	0.008
Comparative tracking index (CTI)	D-3638	Volt	250	250	250	250	275
Arc resistance	D-495	sec.	180	180	180	180	190
Volume resistibility	D-257	Ohm.cm	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶
Process Conditions							
Cylinder temperature	-	°C	300-340	300-340	300-340	300-340	300-340
Mold temperature	-	°C	120-150	120-150	120-150	120-150	120-150

a: MD; Mold direction, TD; Transverse direction, b: P=150KPa, V=0.3m/s, PPS vs. carbon steel, c: Average value of MD & TD, d: UL file No. E53829



Glass fiber & mineral filled series. (linear PPS)

Properties	Test Method	Unit	FZ-6600	FZ-6600-B2	FZ-6600-D5
General Information	<ASTM>		GF/Filler GP	GF/Filler High flow	GF/Filler High strength
Physical					
Specific gravity	D-792	-	1.96	1.89	1.91
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt.%	0.02	0.02	0.02
Mold shrinkage, MD /TD ^a	D-955	%	0.25/1.0	0.25/1.0	0.25/1.0
Mechanical					
Tensile strength	D-638	MPa	135	140	150
Tensile modulus	D-638	MPa	18500	18000	19000
Tensile elongation at break	D-638	%	0.9	1.0	1.0
Poisson's ratio	-	-	0.34	0.34	0.34
Flexural strength	D-790	MPa	210	230	240
Flexural modulus	D-790	MPa	17500	17000	18000
Flexural elongation at break	D-790	%	1.6	1.7	1.7
Izod impact strength notched / un notched	D-256	J/m	80/340	80/350	80/360
Compressive strength	D-695	MPa	150	170	160
Rockwell hardness, R/M	D-785	-	121/100	121/100	121/100
Coefficient of friction ^b , static /dynamic	-	-	0.35/0.35	0.35/0.35	0.35/0.35
Thermal					
Distortion temp. of under load, 1.82MPa	D-648	°C	265	265	265
Coefficient of thermal expansion ^c , -30 to 90°C	D-648	m/mK	1.7x10 ⁻⁵	1.8x10 ⁻⁵	1.7x10 ⁻⁵
UL Flammability ^d , t~0.8mm	UL-94	-	V-0	V-0	V-0
Electrical					
Dielectric strength, t=1.6mm	D-149	kv/mm	16	16	16
Dielectric constant, 1MHz	D-150	-	5	5	5
Dissipation factor, 1MHz	D-150	-	0.006	0.006	0.006
Comparative tracking index (CTI)	D-3638	Volt	250	250	250
Arc resistance	D-495	sec.	180	180	180
Volume resistibility	D-257	Ohm.cm	10 ¹⁶	10 ¹⁶	10 ¹⁶
Process Conditions					
Cylinder temperature	-	°C	300-340	300-340	300-340
Mold temperature	-	°C	120-150	120-150	120-150

a: MD; Mold direction, TD; Transverse direction, b: P=150KPa, V=0.3m/s, PPS vs. carbon steel, c: Average value of MD & TD, d: UL file No. E53829