

SUSTEEL — High Tracking Resistance Grade

< Characteristics >

Item	Unit	Method	TR-65-12 (1201-004) High Tracking	TR-60-E2 (1401-010) High Strength	G-10-12 General Type
Specific gravity	—	ISO 1183	1.89	1.69	1.96
Tensile strength	MPa	ISO 527	90	93	125
Tensile elongation	%	ISO 527	0.5	2.1	0.9
Flexural strength	MPa	ISO 178	150	157	215
Flexural deflection	%	ISO 178	0.9	2.8	1.2
Flexural modulus	GPa	ISO 178	18.4	8.4	19
Charpy impact strength (notched)	KJ/m ²	ISO 179	5.4	8.6	7.0
Deflection temp. (1.80MPa)	°C	ISO 75	>260	241	>260
under load (0.45MPa)	°C	ISO 75	>260	>260	>260
Tracking resistance (CTI)	V	IEC60112	600	600	175
Bar flow length (t=1.0mm)	mm	TOSOH	110	103	130
Mold shrinkage (MD)	%	TOSOH	0.3	0.3	0.3
(TD)	%	TOSOH	0.4	0.6	0.6
Gas amount (340°C)	ml/g	TOSOH	1.2	1.7	0.7
Tightening torque strength	N•m	TOSOH	1.6	2.4	2.2

Above values are not guaranteed, only the indication

< Injection Conditions >

Pellet Drying	150deg C*2hr-120 deg C*5hr	Injection Pressure	50-150 MPa
Cylinder Temperatures(Rear)	270-300 deg C	Injection Speed	Middle-High
(Middle)	270-300 deg C	Back Pressure	1-20 MPa
(Nozzle)	290-330 deg C	Screw Speed	100-150rpm
Mold Temperature	135-150 deg C		



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Method of Tightening torque strength

- 1) Make molded article like figure 1
- 2) Insert hexagon shaped socket to the hole of molded article like figure 2
- 3) Tighten molded article and fasten by digital torque wrench like figure 3
- 4) Measure torque when the hole is broken as the bolt tightening torque strength

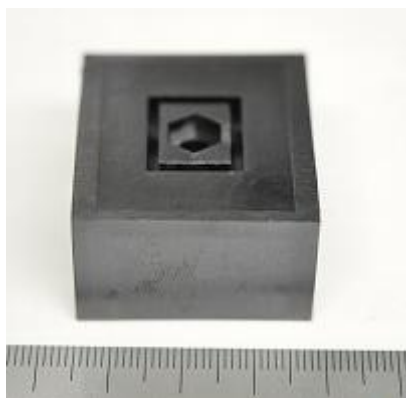


Figure1: Molded article



Figure2: Insert hexagon shaped socket



Figure3: Measurement



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