Insulation and Jacket Material Characteristics

Material	Abbreviation	Temperature range/ flexible	Flame retardance	Tensile strength N/mm²	Elongation at break %	Abrasion resistance	Dielectric constant at 800 Hz approx.	Specific resistance Ω x cm	Break-down voltage kV/mm	Radiation resistance cJ/kg
PVC special	Y	+5/+70°C	very good	15	250	medium	4.0	10^{13}	12	8×10^{7}
PVC cold resistant	YK	-20/+70°C	very good	15	250	medium	4.0	10^{13}	12	8×10^{7}
PVC heat resistant	YW	+5/+105°C	very good	18	200	medium	3.5	10^{13}	18	8×10^{7}
PVC oil reistant	YOE	+5/+70°C	very good	15	250	medium	4.0	10^{13}	12	8×10^{7}
PUR halogen-free	11Y	-40/+90°C	moderate	30	400	very good	6.0	10^{12}	20	5×10^{7}
PE	2Y	-40/+70°C	moderate	20	500	good	2.4	10^{17}	100	7×10^{6}
TPE	12Y/13Y	-40/+90°C (up to +135°C)	moderate	30	500	good	3.3	10^{14}	30	1×10^{7}
Besilen®	2G	+180°C	good	7	200	moderate	3.2	10^{15}	20	2×10^{7}
FEP	6Y	+ 180°C	very good	20	250	good	2.1	10^{18}	20	5×10^{6}
PFA	–	+ 250°C	very good	20	250	good	2.1	10^{18}	20	2×10^{6}
ETFE	7Y	+150°C	very good	45	250	good	2.6	10^{16}	30	5×10^{7}
SABIX® * on basis of PP	–	-40/+90°C	–	30	500	good	2.3	10^{16}	30	–
SABIX FRNC* on basis of PO	–	-40/+90°C	very good	9	125	moderate	4.7	10^{14}	–	5×10^{7}
SABIX** reticulated	–	-40/+125°C	very good	12	125	moderate	5.0	–	–	–

The values in this table are approximates and are not complete
(Technical modification subject to alteration)

* depending on type
** electron beam crosslinked types