

Technical characteristics

Characteristics of insulation and sheath materials

Material	Abbreviation	Temperature range/flexible	Flame retardance	Tensile strength	Elongation at break	Abrasion resistance	Dielectric constant at 800 Hz	Specific resistance	Breakdown voltage	Radiation resistance
				N/mm ²	%					
PVC special	Y	+5/+70 °C	very good	15	250	medium	4,0	10 ¹³	12	8 x 10 ⁷
PVC cold resistant	YK	-20/+70 °C	very good	15	250	medium	4,0	10 ¹³	12	8 x 10 ⁷
PVC heat resistant	YW	+5/+105 °C	very good	18	200	medium	3,5	10 ¹³	18	8 x 10 ⁷
PVC oil resistant	YOE	+5/+70 °C	very good	15	250	medium	4,0	10 ¹³	12	8 x 10 ⁷
PUR halogen-free	11Y	-40/+90 °C	moderate	30	400	very good	6,0	10 ¹²	20	5 x 10 ⁷
PE	2Y	-40/+70 °C	moderate	20	500	good	2,4	10 ¹⁷	100	7 x 10 ⁶
TPE	12Y/ 13Y	-40/+90 °C (bis +135 °C)	moderate	30	500	good	3,3	10 ¹⁴	30	1 x 10 ⁷
Besilen®	2G	+180 °C	good	7	200	moderate	3,2	10 ¹⁵	20	2 x 10 ⁷
FEP	6Y	+180 °C	very good	20	250	good	2,1	10 ¹⁸	20	5 x 10 ⁶
PFA	—	+ 250 °C	very good	20	250	good	2,1	10 ¹⁸	20	2 x 10 ⁶
ETFE	7Y	+ 150 °C	very good	45	250	good	2,6	10 ¹⁶	30	5 x 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 x 10 ⁷
SABIX*** crosslinked	—	-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