Applications

Application of Besilen® single conductors

Our Besilen® ignition cables and Besilen® high-voltage ignition cables are suitable for the application at high or very unsteady ambient temperatures of up to +180°C. Besilen® insulated wires and Besilen® insulated strands are suitable for the use at high ambient temperatures especially for the internal wiring of lamps and appliances as well as for the wiring of switchboard plants and distributors, at low mechanical loads.

Exemplary applications:

SC 113	Flexible applications for internal wiring of lamps, heating appliances, switchboard plants and distributors in industries such as smelteries, steelworks and hot-rolling mills, industrial oven and textile machine construction, lamp, illumination and electric industries, wood working and paper processing industries

Application of Besilen® single conductors with fiberglass braiding

These Besilen® cables with fiberglass braiding are for use at high ambient temperatures for internal wiring e.g. of lamps, heating appliances and electric machines as well as for wiring of switchboard plants and distributors. The fiberglass braiding offers protection against mechanical damage and at the same time offers excellent heat resistance.

Exemplary applications:

SC 123	Application at ambient temperatures higher than +55°C, for internal wiring of e.g. lamps and illuminations, heating appliances, household, kitchen and laboratory appliances, electric machines, switchboard plants and distributors, medical appliances

Application of Besilen® sheathed cables

Our Besilen® sheathed cables are suitable for applications at high ambient temperatures in dry, damp and wet rooms as well as for outdoor use; as flexible connection cable with low mechanical load. The mechanical load capacity can be enhanced by using a steel wire armoring, a fiberglass braiding or an inner sheath. The EMC characteristics can be improved by use of an overall copper screen. If these cables are used for fixed installation, they are only to be installed in ventilated tube systems or conduits.

Exemplary applications:

BiHF-J **BiHF(K)-J** **SC 600 HDTR**	Application in plastics processing, packaging machine construction, smelteries, steelworks and hot-rolling mills, safety technology, measuring and control technologies, cement, glass and ceramic industries, refrigeration, heat and air-conditioning technologies, power plants, sauna construction
BiHFP-J **SC 600 HDTRS**	Application in plastics processing, packaging and textile machine engineering, smelteries, steelworks and hot-rolling mills, cement, glass and ceramic industries sauna construction, refrigeration, heat and air-conditioning technologies, paper industry, foundries
BiHF/Cu/Bi-J **BiHF/Cu/Bi(K)-J** **SC 600 C HDTR**	Application in packaging and textile machine construction, refrigeration, heat and air-conditioning, plastics processing, smelteries, steelworks and hot-rolling mills, cement, glass and ceramic industries, plastic processing machine construction

Note:

If hermetically sealed and used at temperatures higher than 90°C the mechanical characteristics of Silicone rubber will be reduced.

Selection index

	Cable type	SC 600 HDTR	SC 600 C HDTR	SC 600 HDTRS	SC 113	SC 123	BiHF-J / BiHF(K)-J	BiHFP-J	BiHF/Cu/Bi-J / BiHF/Cu/Bi(K)-J
Application	Single conductor				x	x			
	Screen		x						x
	Steel wire braiding			x				x	
	Color code: up to 5 conductors colored acc. to HD 308 (VDE 0293 part 308); from 6 conductors black conductors with consecutive numbers acc. to EN 50334; from 3 conductors a green-yellow earth wire	x	x	x			x	x	x
	Inner jacket		x						x
Temperature range static*	+ 250 °C								
	+ 200 °C								
	+ 180 °C								
	– 40 °C								
Voltage	UL / cUL 600 V	x	x	x					
	Nominal voltage Uo/U 300/300 V Testing voltage 2000 V				x	x			
	Nominal voltage Uo/U 300/500 V Testing voltage 2000 V	x	x	x			x	x	x
Standards and approvals	Zero halogen acc. to DIN VDE 0472 part 815 and IEC 60754-1	x	x	x	x	x	x	x	x
	Burning characteristics: flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2	x	x	x	x	x	x	x	x
	Burning characteristics: flame retardant and self-extinguishing acc. to cUL FT1 and FT2	x	x	x					
	Corrosiveness of conflagration gases: IEC 60754-2 + EN 50267-2-2 + VDE 0482 part 267-2-2 - no development of corrosive conflagration gases	x	x	x	x	x	x	x	x
	UL / cUL approval	x	x	x					
Special features	Min. bending radius x d free movement	6	10	10	7,5	7,5	6	10	10
	Weather resistance	x	x	x	x		x	x	x
	Flexibility	x	x	x	x	x	x	x	x
	Protection against mechanical damage		x	x				x	

Temperature range:
from
to
short time use

*The temperature range for flexing is mentioned on the particular catalog page