

## Applications

■ Modern electronics and miniaturized appliances require data cables with the smallest cross sections, best screenings and highest flexibility. SAB data cables meet these requirements to a high degree. Different types of screenings, i.e. single or double screens, tinned copper wrappings or braids, protect the cables against outer high-frequency interference. Different types of strandings (in layers or pair-wise) can prevent mutual interference of adjoining circuits. Especially in the computer era, data cables have become essential and they must be continuously adjusted to the latest technical developments. The color code with reference to DIN 47100 guarantees a perfect assignment of the conductors for the connection of the cable. The cables are produced with reference to the usual DIN VDE regulations.

### ■ PVC data cables

SAB data cables are used for the transmission of measuring, control and voice signals in electronic control appliances, in electronics for data processing systems, for paging and intercom systems, weighing installations, office machines, etc. The cables can be used for fixed installations and flexible applications with free movement, without tensile load and mechanically guided movement in dry, damp and wet conditions. They are not suitable for outdoor use.

#### Exemplary applications:

LiYY	Scales, construction of appliances and control panels, construction of low-voltage, switchboard plants, communication technologies
LiYCY	Scales, construction of appliances and control panels, construction of low-voltage switchboard plants, process controls, construction of appliances for electric installations, test and control techniques
LiYCY (B) TP	Measuring, control and voice signals, e.g. in low-voltage switchboard plants, scales and appliance engineering, in communication technologies, in control and measuring technologies, in office and computing machines
LiYDY-CY TP	Measuring, control and voice signals, e.g. in scales and low-voltage switchboard plant engineering, for interference-prone operation controls, in control and measuring technologies, in high-sensitive data processing systems
SRD D 311 SRD D 321 C SRD D 351 C (B) TP	Measuring, control and voice signals, e.g. in medicine technologies, in scales and low-voltage switchboard plant engineering, in control and measuring technologies, for interference-prone operation controls, in high-sensitive data-processing systems
DC 300 DS DC 300 DS TP	Measuring, control and voice signals, e.g. in scales and low-voltage switchboard plant engineering, for interference-prone process controls, in control and measuring technologies, in high-sensitive data processing systems

### ■ FEP insulated coaxial cables

RG 179 FEP is a high temperature coax cable with an excellent resistance to chemicals and solvents. This cable is suitable for attenuation poor and distortionless transmission of signals referring to RG 179 (75  $\Omega$  impedance). RG 316 FEP is a FEP insulated coax cable with TPE outer jacket in reference to RG 316 (50  $\Omega$  impedance). The TPE outer jacket is especially used where plugs are tightly encapsulated.

#### Exemplary applications:

RG 179 FEP	High broadband transmission
RG 316 FEP	Telecommunication e. g. cell phone and industrial communication

# DATA CABLES

## Selection index

		Cable type	DC 300 DS	DC 300 DS TP	SRY D 311	SRY D 321 C	SRY D 351 C (B) TP	LIYY	LIYCY	LIYCY (B) TP	LIYDY-CY TP	RG 179 FEP	RG 316 FEP
Basic construction	Bare copper strands with reference to DIN VDE 0812							x	x	x	x		
	Bare copper strands acc. to. ASTM B 286			x	x	x							
	Tinned copper strands acc. to. ASTM B 286	x	x										
	Tinned copper strands, fine wires												x
	Silver-plated strands, fine wires											x	
	Overall copper screen	x	x		x	x		x	x	x			x
	Silver-plated screen											x	
	No coupling of individual signals, low influence of nighboured cable circuits, effective suppression of crosstalk and side-to-side crosstalk effects			x			x			x	x		
Temperature range static*	Drain wire	x	x			x				x	x		
	+ 180 °C												
	+ 90 °C												
	+ 80 °C												
	+ 70 °C												
	- 30 °C												
	- 50 °C												
- 90 °C													
Voltage	Voltage UL/CSA 300 V	x	x	x	x	x							
	Peak operating voltage max. 350 V	x	x										
	Peak operating voltage < 0.25 mm <sup>2</sup> = max. 350 V							x	x	x	x		
	Peak operating voltage ≥ 0.25 mm <sup>2</sup> = max. 500 V												
	Peak operating voltage 900 V											x	x
	Testing voltage < 0.25 mm <sup>2</sup> = 800 V							x	x	x	x		
	Testing voltage ≥ 0.25 mm <sup>2</sup> = 1200 V												
	Testing voltage 800 V	x	x										
Standards and approvals	Testing voltage 1500 V			x	x	x							
	Testing voltage 2000 V											x	x
	Burning characteristics: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2	x	x	x	x	x	x	x	x	x			
	Burning characteristics: flame retardant and self-extinguishing acc. to UL VW1	x	x										
Charac-teristics	Burning characteristics: flame retardant and self-extinguishing acc. to CSA FT1 FT2	x	x	x	x	x							
	UL/CSA Approval	x	x	x	x	x							
	Oil resistance acc. to internal standard	x	x	x	x	x	x	x	x	x			
	Very good chem. resistance											x	
	Flexibility			x	x	x	x	x	x	x			

Temperature range:



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