

Applications

■ Modern electronics and miniaturized appliances require data cables with the smallest cross sections, best shielding and highest flexibility. SAB data cables meet these requirements to a high degree. Different types of shieldings, i.e. single or double shields, 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.

■ Applications of 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 technologies
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
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

■ Applications of sensor cables

The sensor cables are especially designed for the application at the polar circle or in extremely hot regions. The high flexibility and robustness as well as the large temperature range make these products especially suitable for temperature measuring and test technique. The smooth jacket surface doesn't produce a stick-slip effect and the slim cable construction enables small bending radii to $2 \times d$. This makes equally possible a comfortable laying especially for narrow spaces. Furthermore, these cables can be used for miniature sensors, as strain gauge feed cable or as connection cable for modular technique due to the small outer diameters and sections.

Exemplary applications:


Sensor minus 50 Sensor plus 150 Sensor plus 250	Temperature measurement and test technique, truck and car test runs, miniature sensors, as strain gauge feed cable or as connection cable in modular technique
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Selection Table



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		Cable Type										
		F/5	F/6	F/7	F/9	F/11	F/12	F/13	F/14	F/15	F/16	
		DC 300 DS	DC 300 DS TP	L'YY	L'YCY	L'YCY (B) TP	L'YDY-CY TP	S 355	Sensor minus 50	Sensor plus 150	Sensor plus 250	
Basic construction	Bare copper strands with reference to VDE 0812			●	●	●	●					
	Bare copper strands, fine wires							●				
	Tinned copper strands								●	●		
	Tinned copper strands acc. to ASTM B 286	●	●									
	Silver plated strands								●	●	●	
	Overall copper shielding	●	●		●	●	●					
	No coupling of individual signals, low influence of neighboring cable circuits effective suppression of crosstalk and side-to-side crosstalk effects		●			●	●					
	Drain wire	●	●			●	●					
Temperature range fixed installation*	+250°C										●	
	+150°C										●	
	+125°C										●	
	+105°C										●	
	+ 90°C										●	
	+ 80°C										●	
	+ 70°C										●	
	- 30°C	●	●	●	●	●	●					
	- 50°C	●	●	●	●	●	●	●	●	●	●	
	- 90°C	●	●	●	●	●	●	●	●	●	●	
Voltage	Peak operating voltage max. 48 V								●	●	●	
	Peak operating voltage max. 300 V							●				
	Peak operating voltage max. 350 V	●	●	● ¹	● ¹	● ¹	● ¹					
	Peak operating voltage max. 500 V			● ²	● ²	● ²	● ²					
	Voltage UL 300 V							●				
	Voltage UL/CSA 300 V	●	●									
	Testing voltage 600 V								●	●	●	
	Testing voltage 1200 V (conductor/shielding)				●	●	●					
	Testing voltage 1500 V (conductor/conductor)			●	●	●	●					
Testing voltage 2000 V	●	●										
Standards and approvals	Fire performance flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2	●	●	●	●	●	●					
	Fire performance UL VW-1	●	●									
	Fire performance CSA FT1, FT2	●	●									
	UL recognition	●	●					●				
	CSA approved	●	●									
Characteristics	Very good oil resistance							●	●	●	●	
	Oil resistance acc. to internal standard	●	●	●	●	●	●					
	Very good chemical resistance							●			●	
	Good flexibility			●	●	●	●	●				

 from ¹ < 0.25 mm²
 to ² ≥ from .25 mm²
³ depending on dimension

*The temperature range for flexible application is mentioned on the corresponding catalog page