Applications

Applications of FEP BL cables for Shipbuilding

The development of the new BL cable series has been advanced in co-operation with customers coming from the shipbuilding field. The new cables are available in high temperature and oil resistant types. All SAB BL types are constructed with tinned copper strands in class 5 in order to offer advantages in corrosion resistance and flexibility. Due to the approval by DNV·GL, American Bureau of Shipping and Russian Maritime Register of Shipping, it also offers a "certain planning reliability for classification". These cables are suitable for adverse conditions in engine rooms. They are both oil and fuel resistant, have very good chemical resistances and excellent fire performance.

Exemplary applications:

BL TA 180 C	Ship engine rooms, control panels for ship diesel engines

Applications of FEP Cables

These cables are used, for example, in new technologies where high demands for resistance against chemicals and solvents must be fulfilled. Compared to ETFE, FEP has slightly better resistance. Further advantages are the excellent temperature resistance and flexibility at cold temperatures as well as the good electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics.

Exemplary applications:

Li6YbI **Li6Yvz** **TD 801 F** **TD 833 CF** **TD 838 CF TP** **TA 866 F** **TA 867 CF**	Applications in high-frequency and broad-band techniques, coaxial and microwave techniques, high information velocity with exact information transmission at the same time, chemical industry, furnace construction, brick works, heating appliances

Application of ETFE Cables

These cables are used for example in new technologies if high demands for resistance against chemicals and solvents must be fulfilled. Further advantages are the low and high temperature resistance as well as the good electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics.

Exemplary applications:

Li7YbI	Applications in high-frequency and broad-band techniques, coaxial and microwave techniques, high information velocity with exact information transmission at the same time, chemical industry, furnace construction, brick works, heating appliances

Application of PFA Cables

These cables are used for example in new technologies if excellent resistance against chemicals and solvents is requested. Further advantages are the excellent temperature resistance and flexibility at low temperatures as well as the good electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics.

Exemplary applications:

LiPFAvn	Applications in high-frequency and broad-band techniques, coaxial and microwave techniques, high information velocity with exact information transmission at the same time, chemical industry, furnace construction, brick works, heating appliances

Selection Table

		L/5	L/6	L/7	L/8	L/9	L/10	L/11	L/11	L/11	L/12	L/12	L/12	L/12
								375 V			900 V			
	Cable Type	BL TA 180 C	TD 801 F	TD 833 CF	TD 838 CF TP	TA 866 F	TA 867 CF	Li6YbI	Li6Yvz	LiPFAvn	Li7YbI	Li6YbI	Li6Yvz	LiPFAvn
Basic construction	ETFE cable										●			
	FEP cable	●	●	●	●	●	●	●	●			●	●	
	PFA cable									●				●
	Single conductor							●	●	●	●	●	●	●
	Data cable		●	●	●									
	Connection cable	●				●	●							
	Copper strands acc. to ASTM B 286		●	●	●			●	●	●	●	●	●	●
	Copper strands acc. to IEC 60228, VDE 0295, class 5	●				●	●							
	Color code with reference to DIN 47100		●	●	●									
	Color code acc. to HD 308					●	●							
	Color code acc. to EN 50334 + VDE 0293-334	●												
	Shielded	●		●	●		●							
	Twisted pairs				●									
Temperature range fixed installation*	+260°C									●				●
	+250°C													
	+200°C		●	●	●			●	●			●	●	
	+180°C	●	●	●	●	●	●	●	●	●		●	●	●
	+150°C	●	●	●	●	●	●	●	●	●	●	●	●	●
	+135°C	●	●	●	●	●	●	●	●	●	●	●	●	●
	- 90°C	●	●	●	●	●	●	●	●	●	●	●	●	●
Voltage	Peak operating voltage max. 375 V		●	●	●			●	●	●				
	Peak operating voltage max. 900 V										●	●	●	●
	Nominal voltage Uo/U: 300/500 V	●				●	●	●	●	●		●	●	●
	Voltage UL: 600 V	●	●	●	●	●	●							
	Voltage cUL: 600 V	●	●	●	●	●	●							
	Test voltage: 2000 V	●	●	●	●	●	●	●	●	●				
	Test voltage: 2500 V										●	●	●	●
Standards & Approvals	UL recognized	●	●	●	●	●	●	●	●	●		●	●	●
	cUL recognized	●	●	●	●	●	●							
	Approvals: DNV-GL, ABS, RS	●												
	Flame retardant and self-extinguishing acc. to IEC 603332-1-2 and VDE 0482-332-1-2	●	●	●	●	●	●	●	●	●	●	●	●	●
	Fire performance: UL FT1	●	●	●	●	●	●							
	Fire performance: UL FT2	●	●	●	●	●	●	●	●	●		●	●	●
	Fire performance: no flame propagation acc. to IEC 60332-3-22 + VDE 0482-332-3-22 cat. A	●												
Charac-teristics	Chemical resistance	A	A	A	A	A	A	A	A	A	A	A	A	A
	Oil resistant acc. to UL standard 758		A	A	A	A	A	A	A	A	A	A	A	A
	Oil and fuel resistance	A												

from / to — A = very good — limited time of use

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

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