Application

Torsional data cables

Torsional data cables are designed for applications as connection cables in various industrial areas, e.g. industrial plant construction, industrial robot construction and the manufacturing of machine tools. These cables are suitable for medium mechanical stress, particularly from scrubbing or abrasion, as well as continuous torsional and linear stress in free moving applications without tensile load. The cables can be used in cable tracks, in dry, wet or damp conditions, low temperature application as well as in explosion proof areas.

Torsional control cables

Torsional control cables are designed for applications as connection cables in various industrial areas, e.g. industrial plant construction, industrial robot construction and the manufacturing of machine tools. These cables are suitable for medium mechanical stress, particularly from scrubbing or abrasion, as well as continuous torsional and linear stress in free moving applications without tensile load. The cables can be used in cable tracks, in dry, wet or damp conditions, low temperature application as well as in explosion proof areas.

Exemplary applications:

RT 123 **RT 123 D** **RT 113** **RT 113 D**	Packaging, wood working, textile, welding and cutting machine construction, car manufacturing industry, industrial robot construction, electrical drive, control, and measurement technology, construction of industrial plants and machine tooling construction

Hybrid torsional cable

Hybrid torsional cables are designed for applications as connection cables in industrial transportation. These cables are suitable for medium mechanical stress as well as continuous torsional and linear stress in free moving applications without tensile load. This cables are used where combined twisting and bending stress occur.

Exemplary applications:

SABIX® A 883	transportation vehicles and locomotives within railcars and boxes

Selection index

	Cable type	RT 123	RT 123 D	RT 113	RT 113 D	SABIX® A 833
Application	Screened		x		x	
	Inner jacket					x
	Torsion angle 450°	x	x			
	Torsion angle 270°			x	x	
Temperature range static*	+ 90 °C			2		
	+ 85 °C					
	+ 80 °C			1		
	– 40 °C					
	– 50 °C					
Voltage	Voltage 300 V (UL/CSA) up to 22 AWG Voltage max. 600 V (UL/CSA) from 20 AWG	x	x			
	Voltage 300 V (UL) up to 22 AWG Voltage max. 600 V (UL/CSA) from 20 AWG			x		
	Voltage 300 V (UL)				x	
	Up to 22 AWG: Peak operating voltage max. 350 V / Testing voltage 1500 V	x	x	x	x	
	From 20 AWG: Nominal voltage Uo/U 300/500 V Testing voltage 3000 V	x	x			
	From 20 AWG: Nominal voltage Uo/U 300/500 V Testing voltage 2000 V			x		
	Nominal voltage Uo/U 300/500 V Testing voltage 2000 V					x
Standard	Burning characteristics: UL VW-1 + CSA FT1 and FT2, IEC 60332-1-2 and EN 60332-1-2	x	x			
	Burning characteristics up to 22 AWG: UL VW-1, IEC 60332-1-2 and EN 60332-1-2			x	x	
	Burning characteristics from 20 AWG: UL VW-1 + CSA FT1 and FT2, IEC 60332-1			x		
	Burning characteristics: flame retardant and self-extinguishing acc. to IEC 60332-1-2 and EN 60332-1-2					x
	UL/CSA acc. to AWM Style	x	x			
	UL acc. to AWM Style up to AWG 22 UL/CSA acc. to AWM Style from AWG 20			x		
	UL acc. to AWM Style				x	
	Zero halogen acc. to DIN VDE and IEC	x	x			x
Characteristic	Very good oil resistance acc. to DIN VDE	x	x	x	x	
	Good oil resistance					x
	Good chemical resistance	x	x			
	Continuous flexibility	x	x	x	x	
	Good UV resistance					x
	Good ozone resistance					x
	Good weather resistance					x

Temperature range:
from
to

1 = up to 22 AWG
2 = from 20 AWG

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