## **Applications**



#### 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, and with appropriate protection class in low temperature applications as well as in hazardous 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, and appropriate protection class in low temperature applications as well as in hazardous 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

#### Clean Room Torsion Cables

SABclean cables are used in clean rooms where combined twisting and bending stresses occur. The high quality insulation with its smooth surface and slide wrapping increases cable life expectancy under extreme twisting and bending stresses. The outer jacket made of specially formulated TPE is highly resistant to abrasion, oil, notching, microbes and hydrolysis. In addition, the surface quality prevents adhesion to adjacently installed cables. SABclean cables meet the highest requirements acc. to ISO 14644-1 and US Federal Standard 209 E.

#### **Exemplary applications:**

SABclean RT 793 D SABclean RT 795 D Production of semi-conductors, machines for display manufacturing, devices for biological or medical engineering, food and medical production

You will find further information about the safe application of cables in Chapter O.

C

3



# **Selection Table**



(	2
4	1

		C/5	G/6	C/7	C/8	6/0	C/10
	e Dahla Trana	RT 123	RT 123 D	RT 113	RT 113 D	SABclean RT 793 D	SABclean RT 795 D
Application	Color conductors		•	•	•		
	Numbered conductors	•	•	•		•	•
	Copper shielding		•		•	•	•
	Torsion angle 450° /0.5m	•	•				
	Torsion angle 360° /0.5m					•	•
	Torsion angle 270° /0.5m			•	•		
	+ 90°C			1 2			
Temperature range fixed laying*	+ 80°C						
	+ 70°C						
	- 40°C						
	- 50°C						
Voltage	0.14 mm <sup>2</sup> - 0.34 mm <sup>2</sup> :						
	Peak operating voltage max. 350 V			•			
	from 0.50 mm²: Nominal voltage Uo/U 300/500 V	•	•	•		•	•
	0.14 mm² - 0.34 mm²: Voltage UL/CSA 300 V	•	•	•	•		
	from 0.50 mm <sup>2</sup> : Voltage UL/ CSA 600 V	•	•	•		•	•
	0.14 mm² - 0.34 mm²: Test voltage conductor/conductor: 1500 V	•	•	•	•		
	0.14 mm² - 0.34 mm²: Test voltage conductor/shielding: 1200 V		•		•		
	from 0.50 mm <sup>2</sup> : Test voltage conductor/conductor: 2000 V			•			
	from 0.50 mm <sup>2</sup> : Test voltage conductor/conductor: 3000 V	•	•			•	•
	from 0.50 mm <sup>2</sup> : Test voltage conductor/shielding: 2000 V		•			•	•
Standards	Halogen-free acc. to IEC 60754-1 + VDE 0482-754-1	•	•				
	Fire performance: IEC 60332-1-2 + VDE 0482-332-1-2	•	•	•	•		
	Fire performance UL VW-1		•	•			
	Fire performance CSA FT1, FT2		•	•			
	UL recognized	•	•	•	•	•	•
	CSA approved	•	•	•		•	•
stics	Very good oil resistance acc. to EN 50363-10-2 + VDE 0207-363-10-2						
	Very good oil resistance acc. to EN 50363-4-1 + VDE 0207-363-4-1			•	•		
ster	Oil rating 60°C acc. to UL 758, Fuel oil acc. to CSA C22.2 No. 210.2-M90			•			
Characteristics	Good chemical resistance		•				
	Very good continuous flexibility			•			
from	1 = up to 22 AWG		*Tho #	emnerature		for flow	ble one



1 = up to 22 AWG 2 = from 20 AWG \*The temperature range for flexible application is mentioned on the corresponding catalog page

