

# Drag chain cables



### Properties

- Strain relieved with aramide yarn
- For direct connector assembly
- High chemical resistance against acids and alkalies
- For high mechanical and thermal stability
- Halogen free and non-corrosive fire gases
- Improved crush resistance
- Metal free

### Applications

- Medium to large drag chains
- Cabling in industrial applications
- As control or data cable in industry robots, cranes, production lines and automation systems
- Cable design allows for a permanent load with more than one million drag chain cycles

### Design

Cable design	up to 12 tight tubes strength member
Strain relief and rodent protection	aramide yarn
Jacket material	TPU (optional TPU flame retardant)
Jacket colour	black

According to IEC 60794-1-2

### Ordering information

12.../FSN(ZN)YZ...130
12.../FSN(ZN)YU...130 (Flame retardant outer jacket)

Please see page 169.

# Drag chain cables

Specification					
Fiber types	mm	E9	G50, G62.5		
Jacket Ø	mm	13	13		
Tube Ø	mm	0.9	0.9	coloured	
Approx. weight	kg/km	128	128		

Mechanical properties					
Tensile strength	during installation	N	4000	4000	IEC 60794-1-2 E1
	in service	N	2000	2000	
Min. bend radius	during installation	mm	200	200	IEC 60794-1-2 E11
	in service	mm	100	100	
Crush resistance	short-term	N/dm	4000	4000	IEC 60794-1-2 E3
	long-term	N/dm	2000	2000	
Repeated bending	r = 100 mm, weight = 5 kg	cycles	5000	5000	IEC 60794-1-2 E6
Flexing	r = 120 mm velocity = 0.5 m/s, L = 2.0 m	cycles	100 000	100 000	IEC 60794-1-2 E8
Flexing	r = 100 mm velocity = 2 m/s, L = 2.0 m	cycles	1 000 000	1 000 000	HUBER+SUHNER drag chain test

Thermal properties					
Temperature range	during installation	°C	−10 to +50	−10 to +50	IEC 60794-1-22 F1
	in service	°C	−40 to +85	−30 to +85	
	in storage	°C	−40 to +85	−40 to +85	

Combustion properties					
Fire load	MJ/m	3.49			
Fire propagation	on a vertical single cable		p*		IEC 60332-1-2
2011/65/EC (RoHS)		compliant			

p = passed

\* only with TPU flame retardant outer jacket