Bulk Flat Flexible Cables

FLEXLINK® is a range of flat flexible cables supplied on the reel for any application where space reduction and flexibility are the most important criteria. They can be installed in printers and computers for consumer electronics, used for special machines or for board-to-board connections. Bulk flexible flat cables can also be used for the cabling of switch rotary connectors for airbag® modules. AXON' offers standard as well as custom designed versions for switch rotary connectors.

Standard bulk Flat Cables FLEXLINK®

BULK FLAT FLEXIBLE CABLE PRODUCTION

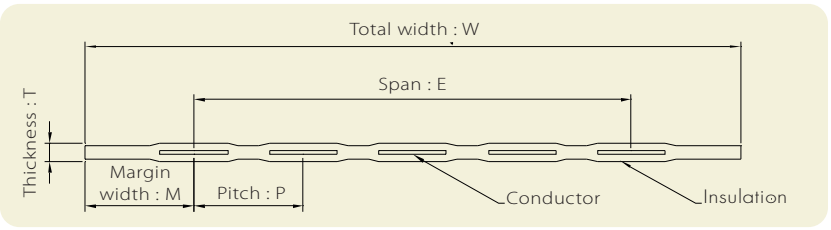
Advantages

- Very flexible cables,
- Space saving cabling,
- Compatible with most crimp contacts.

General characteristics

- Temperature rating:
  - Polyester insulation: -40°C to +105°C
  - Polyimide insulation: -90°C to +200°C
- Standard packaging:
  - 150 m for Polyester insulated flat cables,
  - 20 m for Polyimide insulated flat cables,
- Bare copper or tin plated copper conductors,
- Polarization on track 1 if required.

General drawing

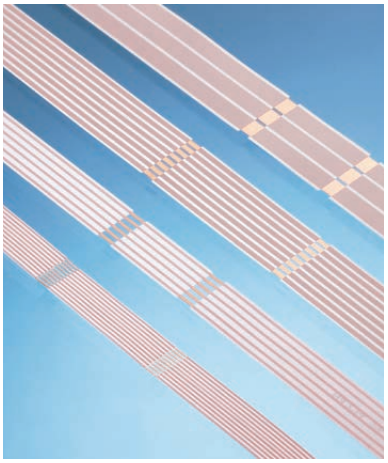


Dimensions

Conductor reference	S	M	L
Pitch P (mm)	1.27	2.54	2.54
Total width W (mm)	1.27 x (N+1)	2.54 x (N+1)	2.54 x (N+1)
Margin width M (mm)	1.27	2.54	2.54
Cable thickness T (mm) for Polyester version	0.28	0.28	0.28
Cable thickness T (mm) for Polyimide version	0.20	0.20	0.20

Electrical properties

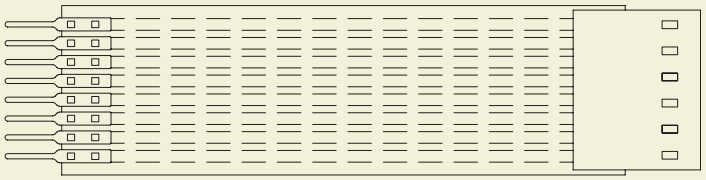
Conductor characteristics		S	M	L
Current rating (A)		0.9 max.	3.0 max.	
Voltage rating (V A.C.)		300 max.		
Insulation resistance conductor to conductor (MΩ. m min)		10 at 500 V DC		
Capacitance (typical value at 1KHz)	Cb (balanced, pF/m)	52	40	33
	Co (unbalanced, pF/m)	75	56	46
Impedance (typical value at 1KHz)	Zb (balanced, Ω)	162	157	180
	Zo (unbalanced, Ω)	110	110	130
Resistance (Ω/km max) at 20°C		410	194	240



BULK FLAT CABLE

Special assemblies

Flexlink® cable with crimped contacts



Connector assemblies on request.

Identification code

M 1 S P 55

NUMBER OF CONDUCTORS
For 1.27 pitch: M insulation: 4 to 55
H insulation: 4 to 48
For 2.54 pitch: M insulation: 2 to 27
H insulation: 2 to 23

CONDUCTOR MATERIAL
T = Tin plated
U = Bare copper
P = Polarization: First conductor: tin plated. Others: bare copper.

CONDUCTOR SIZE
For 1.27 pitch: S = 0.66 x 0.076
For 2.54 pitch: L = 1.27 x 0.076
M = 1.57 x 0.076

PITCH
1 = 1.27 mm
2 = 2.54 mm

INSULATION MATERIAL
M = Polyester
H = Polyimide (only available with bare copper conductors)

Custom-designed cables for switch rotary connectors

General characteristics

Conductor

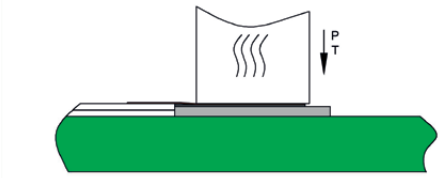
Thickness: between 0.035 and 0.20 mm.
Width: between 0.80 and 10 mm.
Copper or tin plated copper.
Different conductor widths can be mixed in the same hybrid cable.

Insulation

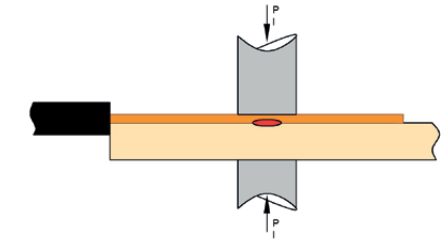
Polyester insulation with flame retardant adhesive.

Processing forms

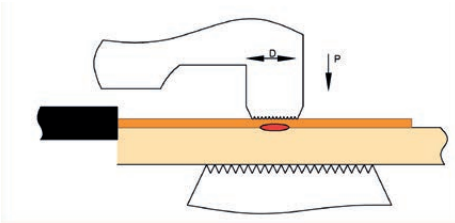
Hotbar soldering



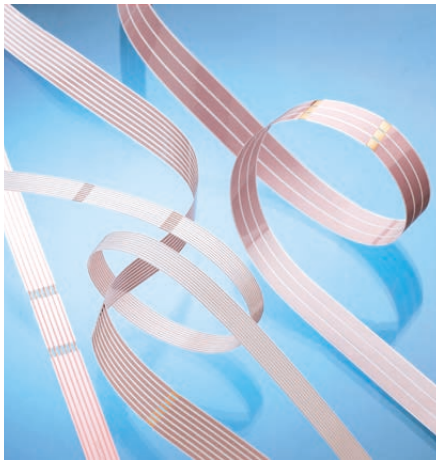
Electrical welding



Ultrasonic welding



P : PRESSURE - T: TEMPERATURE - I: CURRENT - D : MOVEMENT



BULK FLAT CABLE

CABLE ASSEMBLY FOR SWITCH ROTARY CONNECTOR

Specific tests

- Flexion,
- Torsion,
- Dry heat or with humidity,
- Salt spray,
- Cassette rotation test (between -40°C/+90°C with or without humidity).

Don't hesitate to contact us for specific requirements.