

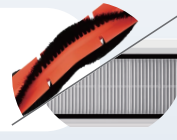
Flex Yarn



Clean room Supplies



Appliance Parts



Medical Supplies



Industrial Fabric



Electronic Component



- + Matrix material : Nylon6, Nylon66 or Polyester / Rec. Polyester with Carbonization Fusion Technology (CFT) or Metallization Fusion Technology (MFT).
- ⚙ Customized color.
- ⤿ Replacing metal wire with premium performance of flexing resistant, tenacity, also softer and lighter.
- Ω Various choices for different levels:
 Flex⁺ Stable electrical resistance in $10^{-2} \sim 10^{-3}$ (Ω/cm)
 Flex³ Stable electrical resistance in $10^2 \sim 10^3$ (Ω/cm)
 Flex⁶ Stable electrical resistance in $10^5 \sim 10^6$ (Ω/cm)
- 🛡 Reduce dust adsorption, Antibacterial, Non-allergenic, Fast electric charge dissipated, Antistatic / Conduct electricity, EMI-protection.



ISO 9001:2015



Recycled Claim Standard



Professional color customized

Flex Yarn

Specification

Composition	Nylon6, Nylon66 or Polyester / Rec. Polyester
Color	Standard : Gray  Black  Color options : Green  Blue  Red  Sliver  Color can be customized for standard specification.
Flex Yarn's Spec.	50~1100D Standard Tenacity: 50-100D / 36F 150-250D / 48F 300D / 96F High Tenacity : 50-70D / 24F 100-250D / 48F 1100D / 192F
Melting Temp.	Nylon 6 - 220°C Nylon 66 - 260°C Polyester - 255°C
Core Fiber Tenacity	Standard Tenacity : >3 g/D High Tenacity : >5 g/D
Elongation	Standard Tenacity : 15 ~ 45 % High Tenacity : 10 ~ 30 %
Electrical Resistance	Flex ⁴ 10 ⁻² ~ 10 ⁻³ (Ω/cm) Flex ³ 10 ² ~ 10 ³ (Ω/cm) Flex ⁶ 10 ⁵ ~ 10 ⁶ (Ω/cm)

Test Report

Category	Flex Yarn-Flex ³		Conductive fabric (made from Flex ³)	
Test method	Washing color fastness	Light color fastness	Washing color fastness	Perspiration color fastness
	AATCC TM61 - 2020 1A	AATCC TM16.3 - 2020 option3	AATCC TM61 - 2020 1A	AATCC TM15 - 2013
Specimen	350D/190D	190D	230D Conductive yarn + 300D/75D Polyester	
Result	4.5 grade	4 grade	4.5 grade	4.5 grade
Test report				
Electrical Resistance	Before ≤10 ³ (Ω/cm) After ≤10 ³ (Ω/cm)			

Internal Test

Purpose	To know the changes of electrical resistance of conductive fabric after dyeing.
Specimen	Conductive fabric
Composition	350D Conductive yarn + 300D Polyester
Color dyeing condition	20min in 130°C 3atm
Electrical Resistance	Before ≤10 ³ (Ω/cm) After ≤10 ³ (Ω/cm)



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耀億工業股份有限公司

YAOI FABRIC CO., LTD.

<https://www.yaoi.com.tw>

No.334, Sec. 6, Chang Mei Rd., Homei, ChangHua, Taiwan

Jason Xie

CELLPHONE +886 921 360 088

EMAIL jason.xie@yaoi.com.tw



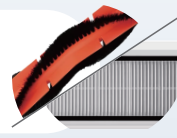
Flex Yarn



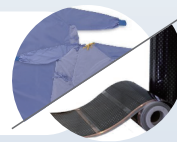
無塵室產品



電器零件



醫療產品



工業用布



電子產品



+ ESG製程:碳化融合技術(CFT)/金屬融合技術(MFT)
原材料可使用: Nylon6、Nylon66、Polyester、
Rec. Polyester。

● 顏色可客製化。

⌒ 取代金屬線，具更優質之表現，柔韌、高強度、輕量化。

Ω 多種電阻值供選擇:
Flex ⁺ 電阻值穩定介於 $10^{-2} \sim 10^{-3}$ (Ω/cm)
Flex ³ 電阻值穩定介於 $10^2 \sim 10^3$ (Ω/cm)
Flex ⁶ 電阻值穩定介於 $10^5 \sim 10^6$ (Ω/cm)

🛡 灰塵不易沾附、抗菌、不致敏、快速移除電荷、抗靜電或
導電功能、EMI防護。



ISO 9001:2015



回收聲明標準



專業顏色客製

Flex Yarn

規格

成分	Nylon6, Nylon66 or Polyester / Rec. Polyester		
顏色	標準色 : 灰  黑  顏色選擇 : 綠  藍  紅  銀  顏色可客製		
Flex Yarn 產品規格	50~1100D 常規強度 : 50-100D / 36F 150-250D / 48F 300D / 96F 高強度 : 50-70D / 24F 100-250D / 48F 1100D / 192F		
熔點	Nylon 6 - 220°C Nylon 66 - 260°C Polyester - 255°C		
強度	常規強度 : >3 g/D 高強度 : >5 g/D		
引伸	常規強度 : 15 ~ 45 % 高強度 : 10 ~ 30 %		
電阻值	Flex ¹ 10 ⁻² ~ 10 ⁻³ (Ω/cm) Flex ³ 10 ² ~ 10 ³ (Ω/cm) Flex ⁶ 10 ⁵ ~ 10 ⁶ (Ω/cm)		

測試報告

項目	Flex ³ 導電紗		Flex ³ 導電布	
測試方式	水洗測試	光照測試	水洗測試	色牢度
	AATCC TM61 - 2020 1A	AATCC TM16.3 - 2020 option3	AATCC TM61 - 2020 1A	AATCC TM15 - 2013
規格	350D/190D	190D	230D Conductive yarn + 300D/75D Polyester	
結果等級	4.5 級	4 級	4.5 級	4.5 級
報告 QR CODE				
電阻值	之前 ≤10 ³ (Ω/cm) 之後 ≤10 ³ (Ω/cm)			

內部測試

目的	導電布經後製程高溫高壓染色後電阻值變化
種類	導電布
成分	350D Conductive yarn + 300D Polyester
染色條件	20min in 130°C 3atm
電阻值	之前 ≤10 ³ (Ω/cm) 之後 ≤10 ³ (Ω/cm)



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耀億工業股份有限公司
YAO I FABRIC CO., LTD.
<https://www.yaoi.com.tw>
彰化縣和美鎮彰美路六段334號

謝旭凌
Jason

0921 360 088
jason.xie@yaoi.com.tw

