

# High-Flex Robotic Torsion Cable

This cable is designed for movement application with torsion. It is very suitable for industrial robots and manipulators.



## Overview

### High-Flex Robotic Torsion Cable

Engineered for demanding industrial environments, this high-flex robotic cable provides exceptional performance in continuous motion applications. Featuring ultra-fine stranded bare copper conductors and a robust PUR jacket, it offers superior resistance to torsion, bending, oil, and abrasion. Designed for reliability in drag chains and automated systems, this cable ensures consistent signal and power transmission even under extreme temperature conditions.

## Electrical Specifications

Rated Voltage	UL/CSA 300V; IEC/VDE d0.5mm <sup>2</sup> : 300/300V; >0.5mm <sup>2</sup> : 300/500V
Test Voltage	2000V/min (AC) for both core/core and core/shield
Insulation Resistance	1000 M $\Omega$ m

## Mechanical Performance

### Minimum Bending Radius

**3 D**

Fixed Application

**5 D**

Mobile Application

Drag Chain Life	10000000 cycles
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## Environmental Conditions

### Temperature Range

**-50 °C**

Fixed Min

**80 °C**

Max

## Cable Construction

### Construction Materials

Component	Material/Standard
Conductor	Ultra-fine stranded bare copper (IEC 60228/VDE 0295 class 6)
Insulation	TPEE
Shielding	Tinned copper spiral shield
Jacket	PUR (Grey, RAL 7001)

## Features & Compliance

### Certification

UL20936

### Product Features

Halogen Free, Flame Resistant (FT2), Oil Resistant, Abrasion Resistant, Anti-Hydrolysis, EMI Shielded