

# Robotic Torsion Communication Cable FD 938 CY-TP

This cable is designed for movement applications with torsion, making it suitable for industrial robots and manipulators. It demonstrates good resistance to oil and can be used in high-temperature environments.



## Overview

### Robotic Torsion Communication Cable

This high-performance communication cable is engineered specifically for demanding robotic applications involving continuous flexing and torsion. It features an ultra-fine stranded bare copper conductor and a robust PVC jacket, ensuring extreme resistance to oil, abrasion, and hydrolysis. Designed for reliability, it provides excellent EMI protection and maintains flexibility even in challenging industrial environments.

## Electrical Specifications

### Rated Voltage

**300 V**

UL/CSA

**300 V**

IEC/VDE ( $\leq 0.5\text{mm}^2$ )

**500 V**

IEC/VDE ( $> 0.5\text{mm}^2$ )

### Test Voltage

2000V/min (AC) for both core/core and core/shield

### Insulation Resistance (20°C)

e100M@M

## Mechanical & Environmental

### Temperature Range

Application	Range
Fixed	-40°C to 105°C
Mobile	-5°C to 105°C

### Minimum Bending Radius

- Fixed Application: 3D (D=cable diameter)
- Mobile Application: 5D (D=cable diameter)

### Drag Chain Application

10000000 cycles

## Construction

### Conductor

Ultra-fine stranded bare copper (IEC 60228/VDE 0295 class 6)

### Insulation

TPEE

### Shielding

Tinned copper spiral shield

### Jacket Color

Grey (RAL 7001)

## Certifications & Features

### Certifications

UL2517

### Key Features

Torsion Resistant, Bending Resistant, Oil Resistant, Abrasion Resistant, Anti-Hydrolysis, EMI Shielded, Flame Resistant (VW-1/FT1)