

Electric Wire and cable business

OKI Robot Cable Series

Highly bendable robot cable

ORP cable series

Fixed	Torsion
Swinging bending	Sliding bending

UL 758 Style 2464 80°C 300 V

Our unique special elastomer is used to insulate the core wire. Suitable for all robot moving parts.



Features

- Available in a wide range of types (sliding, swinging, and twisting) for all robot movements.
- Excellent flexibility, which makes routing easier.
- Quick delivery available for your desired volume starting from 10 m (1 m units).

Specifications

Material/configuration

Conductor	Tin-plated, soft copper, twisting cable
Insulator	Special elastomer
Insulator identification	By (Table 1)
Shielding	Tin-plated, soft copper cable; braided
Sheath material (sheath color)	Oil-proof PVC (black matte)

Usage environment

Application	Fixed and moving parts between equipment and within equipment indoors
Operation temperature range	-10 to 80°C

Line-up

Shielding	Twisted pair type
Without shielding	Conductor size: 0.2 to 0.5 sq. mm Number of pairs: 1 to 20
With shielding	Conductor size: 0.2 to 0.5 sq. mm Number of pairs: 1 to 20

Applicable standards

UL758 Style 2464 (Rating: 80°C, 300 V)

Build-to-order manufacturing of UL listing (CL 3) standard-compliant products is available.

Sheath labeling

ORP □ SQ △△ OKI ELECTRIC CABLE AWM 2464 80C 300V VW-1

□ : Conductor cross-sectional area (mm²) 0.2/0.3/0.5 △△ : Without shielding: No indication/With shielding: -SB

Special characteristics

Electrical performance

Conductor cross-sectional area	Conductor resistance Ω /km (20°C)	Insulator resistance MΩ -km (20°C)	Withstand voltage V·1 minute interval
0.2 sq. mm (AWG25)	105 or less	100 or more	AC 2000
0.3 sq. mm (AWG23)	72 or less	100 or more	AC 2000
0.5 sq. mm (AWG21)	44 or less	100 or more	AC 2000

Mobility

Mode	Performance	Test conditions
Sliding bending	100 million times or more	Bend radius R: about 6 times the outer diameter of the cable Sliding speed: 70 times per minute Movement distance: 350 mm
Swinging bending	20 million times or more	Bend radius R: about 8 times the outer diameter of the cable Bend angle: ±90° Bend speed: 40 times per minute Load: 4.9 N Count: one round trip is one count
Torsion	20 million times or more	Torsion angle: ±180° Torsion speed: 70 times per minute Interval X: 500 mm

Note. Under Oki test conditions and methods. For details, see page 3.
These values are for reference only and are not guaranteed values.