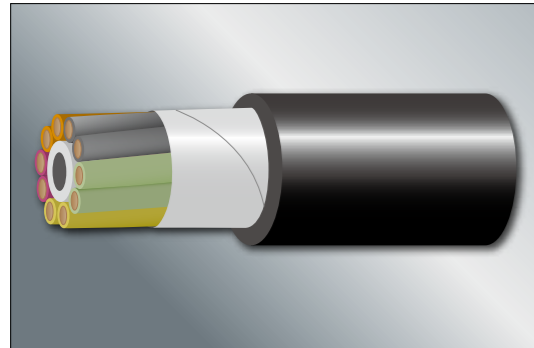


F-CO-FHV



Features

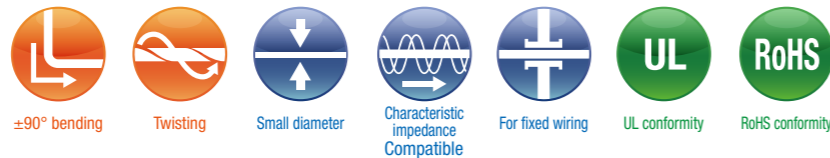
- Composites multiple power supply wires, signal wires, and an air tube into one cable.
- Applicable for both movable and fixed sections.
- Can also be adapted UL standards.

Use

- Power supply and signal transmission for robots, machine tools, and other equipment

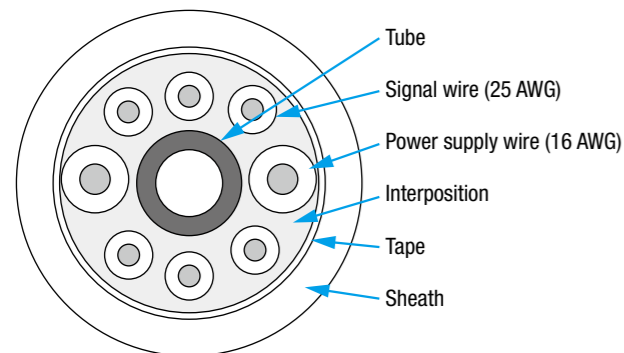
Characteristics

- Rating temperature: 80°C
- Rating voltage: 300 V



Cable structure and performance

Case of combining power supply wires (2 of 16 AWG), signal wires (6 of 25 AWG) and an air tube



Example of cable structure

Example of structural specifications

Item	Unit	Standard value		
Rating	—	300V, 80°C		
Wire type	—	Signal wire	Power supply wire	Tube
No. of wire cores	—	6	2	1
Conductor	AWG size	25	16	—
	Configuration	No./mm	40/0.08	7/38/0.08
	Outer diameter (approx.)	mm	0.58	1.71
Insulator	Standard thickness	mm	0.2	
	Stranded outer diameter (approx.)	mm	0.98	2.27
Tube	Stranded outer diameter (approx.)	mm	—	4.0
Stranded outer diameter (approx.)		mm	8.6	
Finished outer diameter (max.)		mm	10.7	
Allowable bending radius		mm	65	
Max. conductor resistance (at 20°C)		Ω/km	105	16.1
Withstand voltage		—	To withstand 2,000 VAC for 1 min	

RA-CO-FHV



Features

- Multiple cables or air tubes having different ratings are fused to become flat.
- Adaptable for UL standards and specifications of low dust and abrasion resistance.

Use

- Wiring of robots and machine tools where U-shape bending is applied

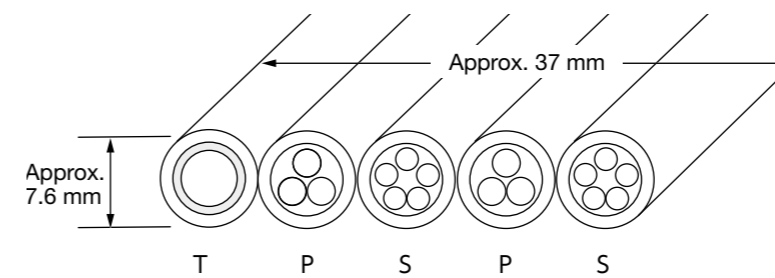
Characteristics

- Rating temperature: 80°C
- Rating voltage: 300 V



Cable structure and performance

Case of fusing power supply cables (2 of 3-core 16 AWG), signal transmission cables (2 of 5-pair 25 AWG), and an air tube



Example of cable structure

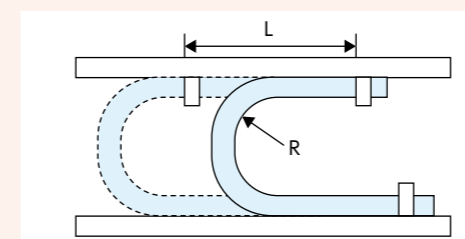
T: Air tube
P: Power supply cable
(Example: UL2570-SX (FA) 3 × 16 AWG)
S: Signal transmission cable
(Example: UL2464-SX(FA) 5P × 25 AWG)

Manufacturing conditions

- Max. number of fusible pieces (total number of pieces including cables and tubes): 20 pcs. (as a guide)
- Max. fusible width: Approx. 120 mm
- Max. outer diameter of each cable to be fused: 14 mm
- Air tube material: Soft nylon that we designate (as certain polymers like polyurethane are not fusible)

Bending characteristics of thermally fused flat cable

⟨U-shape bending test data⟩



Cleared 10 million times
No fault with conductor and shield
No fault such as peeling off in between respective units

- *Test conditions
- Bending radius R = 50 mm
 - Movement stroke L = Approx. 300 mm