

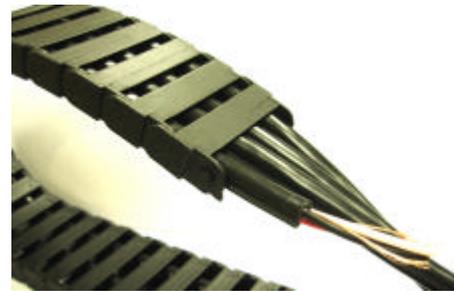


Symmetric Motor Drive Cables

SYM Series

Patent pending

The SYM series is a non-shielded, noise-resistant motor drive cable that connects the servo amplifier to the servo motor.



Outline

- ◆ Unlike conventional cable, the SYM series symmetric motor drive cable from Oki Electric Cable Co., Ltd. has remarkably improved noise-current recovery efficiency thanks to the following cable structure.
 - (1) The drive conductor and grounding conductor are well balanced.
 - (2) Original structure to keep low Loop-inductance.

Features

- ◆ Noise-resistance
The noise-current recovery efficiency is significantly improved as compared to conventional non-shielded cable, with a unique cable structure from Oki Electric Cable Co., Ltd. This enables recovery efficiency that is equal to that of shielded cable.
- ◆ Space savings
By reducing wasteful space and materials, the VCT cable is reduced in diameter by about 10%. The VCT-SB (shielded cable) is reduced in diameter by about 15%. Moreover, this enables the cable to be made lighter by 20% or more.
- ◆ Construction characteristics
Removing the shield, making the cable diameter small, and lightening the cable improves flexibility and remarkably improves the laying and installation characteristics.

Item		Conventional product (1) (Non-shielded) VCT	Conventional product (2) (Shielded) VCT-SB	Symmetric motor drive cable
Characteristic impedance	Between U and V (GND)	151	64	72
	Between V and G (GND)	181	65	72
	Between W and G (GND)	151	64	72
Comparison of noise current recovery efficiency (reference value)		0.5	1	1
External view				

Highlight 1
The characteristic impedance is as low as in shielded cable and the level is uniform.

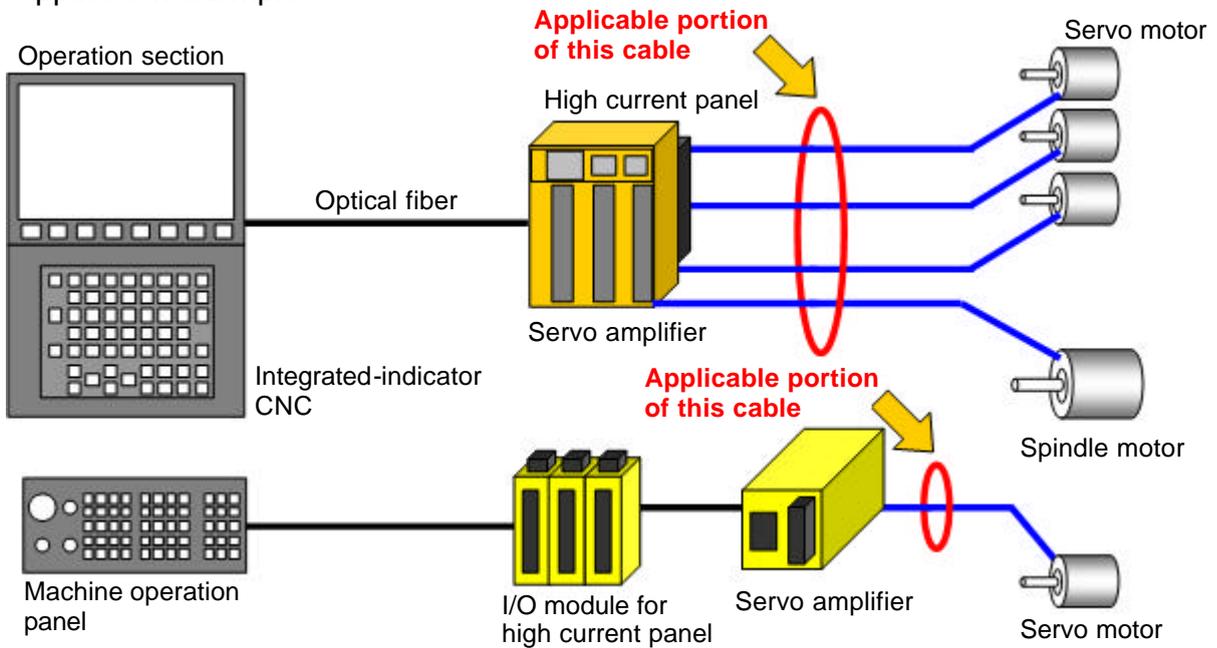
Highlight 2
The noise current recovery efficiency is equal to that of shielded cable.

Highlight 3
The drive conductor and grounding conductor are balanced, and the inductance is low.

■ Applications

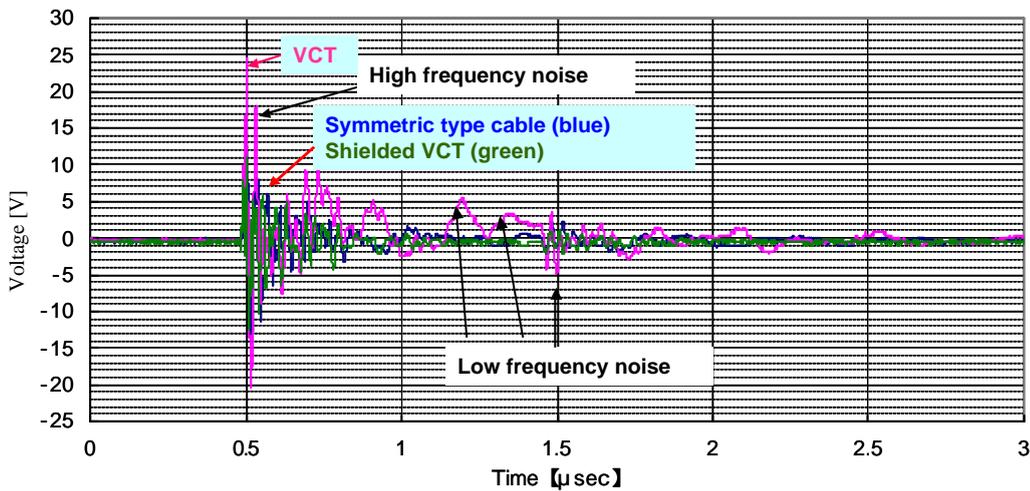
- ◆ The SYM series is a noise-resistant motor drive cable that connects between the servo amplifier and the servo motor.

■ Application example



■ Actual comparison of motor terminal noise voltage

Motor terminal noise voltage (Cable length: 30 m) 3.5 SQ



Noise is 1/2 of that of a general purpose VCT, and the
**Noise is 1/2 of that of a general purpose VCT, and the
 same level as that of a shielded cable.**