

NEW Mobile use Coaxial Cable specialized for Digital Microwave Link

Applications

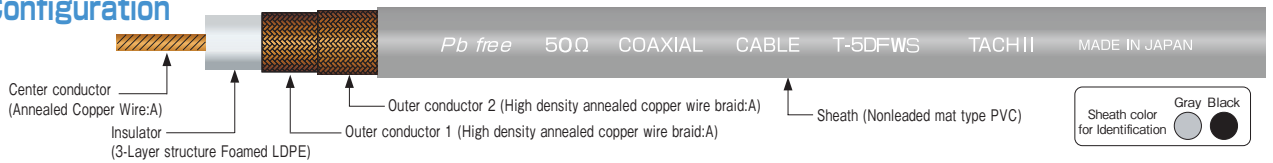
TACHII has newly developed this series as specialized coaxial cable for sending/receiving between control unit and head unit in Microwave link system at actual relay fields. These cables can be also utilized as analog and digital signal transmission up to 1GHz.

Check!!
Technical Support
on Page 3-4

Features

- TACHII has employed our original composite stranded wire conductor in center conductor for TCX-5DFWS, and succeeded to greatly improve cable management and flex resistance. In addition, TACHII has materialized significant increase of transmission distance, comparing with conventional 5D-2W. (Refer to Max. transmission distance example on Page 3 as a guide of transmission distance.)
- The solid wire conductor type, TCX-5DFW can transmit the longest 450m and more as 5D class, and the composite stranded wire type, TCX-5DFWS can transmit more than 400m. (Refer to Max. transmission distance example on Page 3 as a guide of transmission distance.)
- TACHII has been newly offering the specialized N-type connector (Refer to Page 25), also included harness finished products. The connector cap is attached as standard item to harness finished products to protect N-type connector. Please refer to Page 37 on the details.
- For the sheath materials, TACHII has employed environment-friendly nonleaded mat type PVC. Polyethylene sheath (Black only) is also available for anchoring TCX-5DFW at outdoor.

Configuration



Construction Properties

Model	Center conductor	conductor Insulator	Outer conductor 1 (Braid)		Outer conductor 2 (Braid)		Finished cable		Electrical properties			
	Structure Wires/mm	O.D. mm	Structure Spindles/Wires/mm	Density %	Structure Spindles/Wires/mm	Density %	O.D. mm	Weight approx. kg/100m	Conductor resistance Ω/km	Capacitance pF/m	Characteristic impedance Ω	Return loss dB
TCX-5DFW	1/1.80A	5.0	24/7/0.14A	94	24/8/0.14A	96	8.2	11.9	7.10 max.	84	50±2	20.9min.
TCX-5DFWS	7/0.60A+0.203A×6							11.5	8.38 max.	85.5		

Nominal Attenuation

Model	Nominal Attenuation Value (dB/100m)											
	10 MHz	30 MHz	72 MHz	88 MHz	90 MHz	130 MHz	180 MHz	220 MHz	270 MHz	440 MHz	750 MHz	770 MHz
TCX-5DFW	2.6	3.7	5.9	6.6	6.6	8.2	9.5	10.6	11.9	15.4	20.6	20.9
TCX-5DFWS	3.0	4.3	6.7	7.4	7.5	9.1	10.8	12.0	13.4	17.4	23.4	23.7

※IF signal for Microwave Link is transmitted by 130MHz.

※Nominal value means the central figure measured by TACHII.

NEW Facility use Coaxial Cable specialized for Digital Microwave Link

Applications

Best choice for exclusive wire to install Digital Microwave Link devices at large-scale facilities. Use for wire anchoring.

Check!!
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Features

- TACHII has materialized the highest ultra low attenuation as 8D size by employing 3-layer structure high foamed HDPE for insulator. The loop resistance between center conductor and Outer conductor can be kept at extremely low abt. 4.5Ω/km and power source voltage drop can be kept to the minimum. Because of these, the ultra long distance transmission has been materialized both transmission in IF signal (130MHz) and power for Microwave Link to inconceivable extent with 8D size before. (Refer to Page 4 on Max. taransmission distance example.)
- For outer conductor, TACHII has doubly processed Tin plated Annealed Copper Wire High Density Braid in addition to AL/PET tape, and keeps unprecedented anti-noise property. TACHII's cable can especially work on the installation etc. under the intense electric field and offer advantages.
- For sheath material, TACHII has employed weather-resitant polyethylen proven as the cables at large-scale facilities, and materialized to minimize the deterioration the UV influence.
- This product is specialized for anchoring digital Microwave Link wire, not recommendable to use for other application as transmission cable, especially do not use for high frequency exceeding 500MHz.

Configuration



Construction Properties

Model	Center conductor	conductor Insulator	Outer conductor 2 (Braid)		Outer conductor 3 (Braid)		Finished cable		Electrical properties				
	Structure Wires/mm	O.D. mm	Structure Spindles/Wires/mm	Density %	Structure Spindles/Wires/mm	Density %	O.D. mm	Weight approx. kg/100m	Conductor resistance Ω/km	Loop resistance Ω/km	Capacitance pF/m	Characteristic impedance Ω	Return loss dB
TCX-8DHFBW(PE)	1/3.00A	8.1	24/7/0.2TA	94	24/8/0.2TA	95	12.5	24.9	2.46max.	4.46	83	50±2	20.9min.

Nominal Attenuation

Model	Nominal Attenuation Value (dB/100m)		
	10 MHz	130 MHz	400 MHz
TCX-8DHFBW(PE)	2.1	4.4	7.7

※IF signal for Microwave Link is transmitted by 130MHz.

※Nominal value means the center figure measured by TACHII.