

Products CATALOG

- Thermocouple Extension/Compensating Cables
- Thermocouple Wires
- Heat Resistant Wires

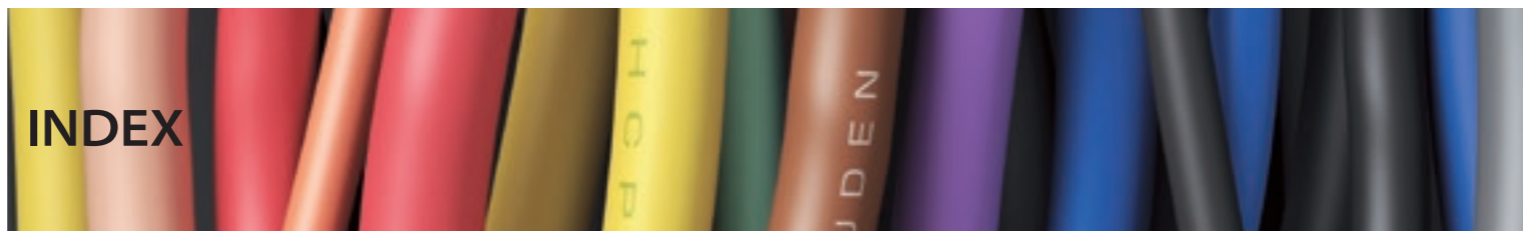


Message

The temperature measurement and control has rapidly become more and more important along with the great advances of all of the industries in recent years. Especially, the Thermocouple Extension and Compensating Cables are indispensable for heating management in terms of the automation and the labor saving such as steel, chemistry, electric power, industrial waste disposal, the semiconductor mono-crystalline refinements, and the synthetic resin molding machines, etc. Ever since its establishment in 1950, Our company, a professional manufacturer of the Thermocouple Extension and Compensating Cables has been dedicated to responding to our customers promptly and adequately, catching accurately the needs in time with our customers by cultivating the technological ability and the consistent system of the quality control through the manufacturing achievements over many years. We shall satisfy our customers not only with the Japanese standard (JIS) but also the American standard (ASTM) and the European standard (IEC), and offer our products that can manage and control the temperature safely and accurately on site including all the plants in the world in the future. Additionally, in this regard we must not be satisfied with the current achievements but continue to strive unremittingly to contribute to the society as a manufacturer.



Thermocouple Extension/Compensating Cables



Thermocouple Extension / Compensating Cables

■ What is Thermocouple Extension/Compensating Cable?

How to Choose a Model P3-6

Single Pair

PVC Types (Temp.Range: up to 60°C~105°C)

Polyvinyl Chloride PVC Insulation and Sheath, Flat/Round shape, without or with Shield (BA, SA, BT)

General PVC,(Temp.60°C) **VVF / VVF-BA / VVR / VVR-SA** P7-8

Special Heat-resistant PVC,(Temp.105°C) **SHVVF / SHVVF-BT** P9

General or Flame-retardant General PVC,(Temp.60°C) **FR-VVR / FR-VVR-SA** P10

Glass Fiber Types (Temp.200°C)

Glass Fiber Braided Insulation and Sheath, Flat or Round Shape, without or with Shield (BT)

Heat Resistance (Temp.200°C) **GGBF/GGBF-BT/GGBR/GGBR-BT** P11-12

FEP Types (Temp.200°C)

Teflon® (FEP) Insulation and Sheath, Flat or Round shape, without or with Shield (BT)

Heat Resistance (Temp.200°C) **FEPFEPF / FEPFEPF-BT/ FEPFEPR / FEPFEPR-BT** P13-14

Other Types (Temp.Range: up to 75 ~ 135°C)

Other Materials of Insulation and Sheath

Polyethylene (Temp.75°C),Round Shape,with Shield(SA) **EER-SA** P15

Halogen-free Polyolefin (Temp.75°C), Round Shape,with Shield(SA) **EMEMR-SA** P15

Flame-retardant Elastomer (Temp.135°C), Round Shape,without or with Shield(BT) **FR-SPHR / FR-SPHR-BT** P16

Flexible/Vibration-proof Heat Resistant Types (Temp.Range: up to 60 ~ 200°C)

Flexible Heat-resistant Materials of Insulation and Sheath,Round Shape.

200°C FEP Insulation, Flexible Fluorine-Contained Heat-resistant Rubber (FRW) Sheath **KX-1-Toughler** P17

90°C Special Polyethylene Insulation, Flame-retardant Special Elastomer Sheath **KCB Tough EV3** P17

60°C Special Polyethylene Insulation, Flexible PVC Sheath **KCB Sofura** P17

FEP(UL) Type (Temp.200°C)

UL Certificated FEP Insulation and Sheath

Heat Resistance (Temp.200°C) **FEPFEPF-BT(UL)** P18

Multi-Pair(twisting)

PVC Types (Temp.Range: up to 60 ~ 105°C)

Polyvinyl Chloride PVC Insulation and Sheath, Round Shape, with Shield (SA, SL)

General or Flame-retardant General PVC, with shield (SA) (Temp.60°C) **VVR-SA / FR-VVR-SA** P19-20

General or Flame-retardant General PVC, with shield (SL),(Temp.60°C) **VVR-SL / FR-VVR-SL** P21-22

FEP Types (Temp.200°C)

FEP Insulation and Sheath, Round Shape,with Shield (BT)

Heat Resistance (Temp.200°C) **FEPFEPR-BT** P23-24

Others (Temp.75°C)

Other Materials of Insulation and Sheath,Round Shape,with Shield (SA)

Polyethylene (Temp.75°C) **EER-SA** P25-26

Halogen-free Polyolefin (Temp.75°C) **EMEMR-SA** P25-26

■ Reference Technical Materials of Thermocouple

Extension/Compensating Cables P27-29

Thermocouple Wires (Duplex Type)



■ What is Thermocouple Wire(Duplex Type)?

How to Choose a Model P30

Types of Thermocouple Wires(Duplex Type)

Heat-resistant PVC Insulation and Sheath,Flat Shape **HVVF** Heat Resistance(Temp.80°C) P31

Glass Fiber Braided Insulation and Sheath, Flat Shape **GGBF** Heat Resistance(Temp.200°C) P31

Silica Glass Fiber Braided Insulation and Sheath, Flat Shape **SSBF** Heat Resistance(Temp.400°C) P32

Alumina Fiber Braided Insulation and Sheath, Flat Shape **CCBF** Heat Resistance(Temp.Range.450 ~ 750°C) P32

FEP Insulation and Sheath,Flat Shape **FEPFEPF** Heat Resistance(Temp.200°C) P33

UL Certificated FEP Insulation and Sheath,Flat Shape **FEPFEPF(UL)** Heat Resistance(Temp.200°C) P33

FEP Insulation and Sheath,Flat Shape,with a Molding Cover **FEPFEPF(M)** Heat Resistance(Temp.200°C) P34

■ Reference Technical Materials of Thermocouple Wires

(Duplex Type) P34-35

Heat Resistant Wires



■ What is Heat-resistant Wire? P36

Types of Heat Resistant Wires

Flexible Fluorine-Contained Heat-resistant Rubber Insulation **600V FRW** Heat Resistance(Temp.200°C) P36

Silicon Rubber Insulation and Glass Fiber Braided Sheath **600V LKGB** Heat Resistance(Temp.180°C) P37

Teflon® Insulation **FEP/PFA/ETFE/PTFE** Heat Resistance (Temp.Range.150 ~ 260°C) P38

Fluorinated Ethylene Propylene Insulation(FEP) and Flexible Fluorine-Contained Heat-resistant Rubber Sheath (FRW) **FF Toughler** Heat Resistance(Temp.200°C) P39

Glass Fiber Braided Insulation **NiGB** Max.Heat Resistance (Temp.300°C) P40

Silica Glass Fiber Braided Insulation **NSBL/28NSBL** Max.Heat Resistance (Temp.400°C) P41-42

Mica-Tape Double Wrapped and Silica Glass Fiber Braided, Special Heat-resistant Varnished Insulation **NSBL 6x4-I** Max.Heat Resistance (Temp.400°C) P43

Mica-Tape Double Wrapped and Silica Glass Fiber Braided Insulation **NSBL 6x5** Max.Heat Resistance (Temp.500°C) P44

■ Reference Technical Materials of Heat-resistant Wires P45-49

■ Instructions on Products P50

Thermocouple Extension/Compensating Cables



Thermocouple Extension/Compensating Cable is a lead cable used to connect between Thermocouple Sensor and Thermometer for measuring the temperature. We would like to introduce our products of Thermocouple Extension/Compensating Cables as follows:

How to Choose a Model

An example, based on IEC-60584-3-2007

FR-KX-IEC-1-G-VV R-SL-WAZV 1P × 1.5SQ(7/0.52)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

- ① FR(Flame-retardant), ② Cable Type, ③ Standard(Color Code), ④ Division Symbols(Class & Tolerance),
- ⑤ Materials of Insulation & Sheath ⑥ Shape, ⑦ Shield, ⑧ Armor, ⑨ Pair, ⑩ Conductor Size, ⑪ Conductor Combination

① Flame-retardant (● IEC 60332-3 Cat.A, ● IEC 60332-3 Cat.C)

② ③ Types, Standards and Colors

There are many types of Thermocouple Extension/Compensating Cables. Please choose the type corresponding with Thermocouple Sensor type which is chosen according to Temperature Range(°C) and the Accuracy(Class & Tolerance).

Sensors	Types	Conductor Composition		Colors	
		Positive (PX)	Negative (NX)	IEC Standard (60584-3-2007)	ASTM E230-2012
K	KX	Chromel®	Alumel®	Green(+) White(-) Green(Sheath)	Yellow(+) Red(-) Yellow(Sheath)
	KCA	Iron	Constantan	Green(+) White(-) Green(Sheath)	—
	KCB	Copper	Constantan	Green(+) White(-) Green(Sheath)	—
J	JX	Iron	Constantan	Black(+) White(-) Black(Sheath)	White(+) Red(-) Black(Sheath)
T	TX	Copper	Constantan	Brown(+) White(-) Brown(Sheath)	Blue(+) Red(-) Blue(Sheath)
E	EX	Chromel®	Constantan	Violet(+) White(-) Violet(Sheath)	Purple(+) Red(-) Purple(Sheath)
R	RCA	Copper	Copper-Nickel alloy	Orange(+) White(-) Orange(Sheath)	Black(+) Red(-) Green(Sheath)
	RCB			Orange(+) White(-) Orange(Sheath)	
S	SCA	Copper	Copper-Nickel alloy	Orange(+) White(-) Orange(Sheath)	Black(+) Red(-) Green(Sheath)
	SCB			Orange(+) White(-) Orange(Sheath)	
B	BC	Copper	Copper	Gray(+) White(-) Gray(Sheath)	Gray(+) Red(-) Gray(Sheath)
N	NX	Nickel-Chromium-Silicon	Nickel-Silicon	Pink(+) White(-) Pink(Sheath)	Orange(+) Red(-) Orange(Sheath)
	NC	Copper-Nickel alloy	Copper-Nickel alloy	Pink(+) White(-) Pink(Sheath)	

④ ⑤ Division Symbols(Class & Tolerance) and Materials of Insulation and Sheath

Accuracy(Class & Tolerance) is influenced by the wiring environment(temperature in particular) and the material of insulation.

Please choose a suitable kind of material for Insulation from below item ⑤ and a Division Symbol according to the Standards in below item ④.

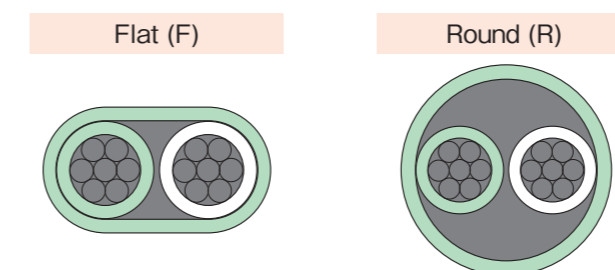
④ Division Symbols(Class & Tolerance)

Class & Tolerance	Division Symbols		Materials used mainly
	IEC St.	ASTM St.	
Precision Class	1-G	SP	PVC
Normal Class	2-G	ST	
Precision Class	1-H	SP	Glass Fiber
Normal Class	2-H	ST	
Precision Class	1-S	SP	Teflon®
Normal Class	2-S	ST	

Remarks:
 1) IEC standard: G(General), H(Heat-resistance), S(Special heat-resistance)
 2) ASTM Standard: SP(Special Tolerance), ST(Standard Tolerance)

⑥ Types of Shapes

Please confirm the wiring area and environment and then choose the shape below.



⑤ Materials of Insulation and Sheath

Symbols	Materials of Insulation & Sheath	Temperature Range (°C)
V	General PVC(Polyvinyl chloride)	up to 60
HV	Heat-resistant PVC	up to 80
SHV	Special heat-resistant PVC	up to 105
TV	Cold-proof PVC	bottom to - 20
FR-V	Flame-retardant general PVC	up to 60
FR-HV	Flame-retardant heat-resistant PVC	up to 90
FR-SHV	Flame-retardant Special heat-resistant PVC	up to 105
E	Polyethylene	up to 75
FR-E	Flame-retardant Polyethylene *1	up to 75
C	Cross-linked Polyethylene	up to 105
EM	Non-Halogen (Halogen-free) Polyolefin, (Eco material)	up to 75
GB	Glass Fiber	up to 200
FEP	Fluorinated Ethylene Propylene	up to 200
ETFE	Ethylene-TetraFluoroEthylene	up to 150
PFA	PerFluoroAlkoxy	up to 260



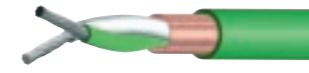
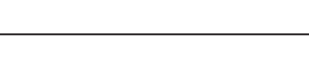



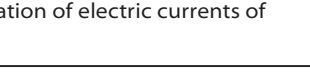
*1: Flame-retardant Polyethylene applies to IEC 60332-1 only

7 Types of Shields

Usually wired together with other kinds of cables of high voltage and multi-electric current, when approaching to the electrical machinery and apparatus, temperature indicating error and variation from inductive interference can occur in Thermocouple Extension/Compensating Cable which transmits a tiny voltage and a feeble signal during measurement. In order to remove the electrical noise, metal Shields are used to eliminate those inductive interference.

1) Electro-static Shields



These types of shields are used to eliminate Electro-static inductive disorder from the voltage of power cables.

Shields	BA	Plain Copper Wire Braided Shield	Excellence in flexibility and shielding effect. They are used mainly in a thin and Flat shape cable.	
	BT	Tinned Copper Wire Braided Shield		
	SA	Copper Tape Shield (individual, used both in Single and Multi-Pair)	SA (a piece of 0.05-0.1mm Copper Tape) is one of the most common shields. Excellence in shielding effect. Used both in Single and Multi-Pair of Round shape cable.	
	EDSA	Copper Tape Shield(individual) + Copper Tape Shield(Overall, used in Multi-Pair)		
	ESA	Copper Tape Shield (individual, used in Multi-Pair only)		
	SL	Alumi-Mylar Tape with a Drain Wire Shield (individual, used mostly in single pair)		
	EDSL	Alumi-Mylar Tape with a Drain Wire Shield (individual) + Alumi-Mylar Tape with a Drain Wire Shield (Overall, used in Multi-Pair)	It is lighter and more flexible than Copper Tape. It is a kind of economical shield, used mainly in a Round shape cable.	
	ESL	Alumi-Mylar Tape with a Drain Wire Shield(individual, used in Multi-Pair only)		

Applicable for Steel Tape Shield(SF), Tinned Copper Wire Braided + Steel Wire Braided Shield(BTF)

2) Electro-magnetic Shields

These types of shields are used to eliminate Electro-magnetic inductive disorder because of the variation of electric currents of power cables

Shields	SAF	Copper Tape + Steel Tape	SAF is composed of a piece of 0.05-0.1mm voltage-inductive Copper Tape and a piece of magnetic Steel Tape. It can eliminate Electro-magnetic inductive disorder due to an electric current from outside.	
	BAF	Plain Copper Wire + Steel Wire Braided	BAF is composed of a piece of 0.05-0.1mm of voltage-inductive Copper Wires and magnetic Steel Wires. It can eliminate Electro-magnetic inductive disorder because of an electric current from outside. BAF is more flexible than SAF.	





10-11 Conductor Size and Combination

The characteristics of Thermal-Electro-Motive-Force(EMF) converted into temperature in a Thermocouple Thermometer is not influenced by the thickness of the conductor. Please choose a suitable conductor size and its combination after considering the mechanical characteristics such as a wiring environment, distance, flexibility, etc.

Nominal Sectional Area	Conductor Combination	Main wiring places and Features
2.3SQ	7/0.65	Wiring to a long distance, used mainly in a big plant
2.0SQ	7/0.6	Similar to 7/0.65, but the price is a little cheaper
1.5SQ	7/0.52	Mostly used in a big plant of overseas
1.3SQ	4/0.65	Wiring to a long distance, wired mainly inside a big equipment
1.25SQ	7/0.45	Similar to 4/0.65, a little flexibility, the diameter is compact, too
1.25SQ	40/0.2	Flexibility, used mostly in Cabtire specification
1.0SQ	7/0.44	Mostly used in a big plant of overseas
0.75SQ	24/0.2	Flexibility, used mostly inside an equipment
0.75SQ	30/0.18	More flexible than 24/0.2, used mostly inside an equipment
0.5SQ	7/0.32	Wiring to a short distance and a narrow place, used inside equipment, too
0.5SQ	7/0.3	Wiring to a short distance and a narrow place, used inside equipment, too
0.5SQ	20/0.18	Flexibility, used mostly inside an equipment

8 Types of Armors

Armor is applied for the purpose of protecting the surface of cable from mechanical damage and supporting the mechanical strength to cables.

Armors	Stainless-Steel Wire(OBS)	As a protective layer, the most commonly used to prevent damage to cables. Nominal 0.12 ~ 0.20 mm diameter Stainless- Steel Wire (OBS), Tinned Copper Wire (OBT) and Steel Wire (OBF) are applied as a braided Armor in a density of above 90% around the surface of cables.	
	Tinned Copper Wire (OBT)		
	Steel Wire (OBF)		
	Galvanized Steel Wire, PVC (WAZV)	For the purpose of preventing the damage to cables buried directly to the ground, Armor of Galvanized Steel Wire (WAZV) or (WAZE) is used widely as a protective layer, playing a role as a tension plate for sharing the burden which adds tension to the cable during or after the installation of the Submarine Cable and the cable for standing stakes. The surface of Inner sheath of the cable is spiraled by some of the suitable size of Galvanized Steel Wires according to the outer diameter and the tension of the cable. For the sake of anti-rust and anti-rodent, on the surface of Armor, PVC (WAZV) or PE (WAZE) Outer Sheath is covered.	
	Galvanized Steel Wire, PE (WAZE)		
	Galvanized Steel-Tape, PVC (TAZV)	For the purpose of preventing the damage to the cable buried directly to the ground, Armor of Galvanized Steel Tape (TAZV) or (TAZE) is used widely as a protective layer. The surface of Inner Sheath of the cable is wrapped by two pieces of the suitable thickness Galvanized Steel Tape corresponding to the outer diameter of the cable: one of the Galvanized Steel Tapes is helically applied over the Inner Sheath, and then the other is wrapped, overlapping the first one. In general, for the purpose of anti-rust and anti-rodent, the surface of the Armor, PVC (TAZV) or PE (TAZE) Outer Sheath is covered.	
	Galvanized Steel-Tape, PE (TAZE)		
	Galvanized Steel Corrugated Tube, PVC (MAZV)	Armor of Galvanized Steel Corrugated Tube is manufactured as follows: First, a piece of Galvanized Steel tape is affixed to the surroundings of the cable, and then its joints are welded continuously. At last, produce a linear corrugated pattern on the surface of the tape. Armor of Galvanized Steel Corrugated Tube is applied for the cable buried directly to the ground for the purpose of making a cable excellent in compressive strength and easy to be used for the construction because of its features: lightness and flexibility. For the purpose of anti-corrosion and preventing attacks by termites, rats and other vermin, on the surface of Armor, PVC (MAZV) or PE (MAZE) Outer Sheath is covered. In addition to that, there is an effect as an electro-magnetic shielding layer.	
Galvanized Steel Corrugated Tube, PE (MAZE)			

9 Pair

Each pair consists of 2cores called 1P which is composed of a Positive (PX) and a Negative (NX).

Pair	1Pair	2Pairs	3Pairs	4Pairs	5Pairs	10Pairs
Symbols	1P	2P	3P	4P	5P	10P

Insulation and Sheath: General PVC, Shape: Flat (F)

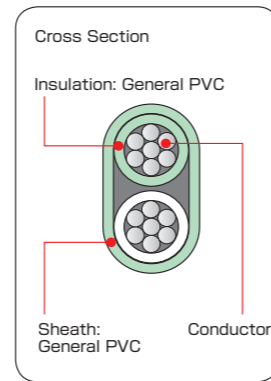
Type (P3) - Division Symbol (P4) - **VVF**

Rated Temp.Range **60~105°C**

- Features:** Excellence in Damp-proof, Water-proof
Applicable for some other kinds of PVC materials as follows:
- Heat-resistant PVC(HV)
 - Special heat-resistant PVC(SHV)
 - Cold-proof PVC(TV)
 - Flame-retardant PVC Sheath(FR-VVF,FR-HVVF,FR-SHVVF)



Conductor	Nominal sectional area (SQ)	0.5	0.75	1.0	1.25	1.3	1.5	2.3
Conductor (No./mm)		7/0.32	24/0.2	7/0.44	7/0.45	4/0.65	7/0.52	7/0.65
Nom.O.D (mm)		0.96	1.13	1.32	1.35	1.57	1.56	1.95
Insulation	Nom.thick (mm)	0.40	0.50	0.60	0.60	0.60	0.60	0.60
Approx.O.D (mm)		1.76	2.13	2.52	2.55	2.77	2.76	3.15
Sheath	Nom.thick (mm)	0.50	0.80	1.00	1.00	1.00	1.00	1.00
Approx.O.D (mm)		2.8 × 4.6	3.8 × 5.9	4.6 × 7.1	4.6 × 7.1	4.8 × 7.6	4.8 × 7.6	5.2 × 8.4
Electric Characteristics	Voltage resistance (V/min)	AC500	AC500	AC500	AC500	AC500	AC500	AC500
Insulation resistance (M Ω km)		Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500
Max. Length (m)		2000	2000	2000	2000	2000	2000	2000
Weight (kg/km)		23	37	54	56	61	65	84



Insulation and Sheath: General PVC, Shape: Round (R)

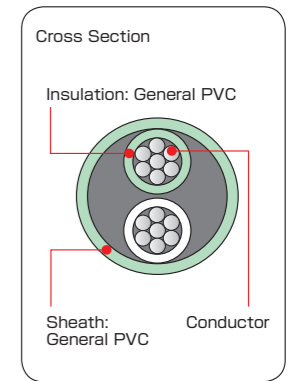
Type (P3) - Division Symbol (P4) - **VVR**

Rated Temp.Range **60~105°C**

- Features:** Excellence in Damp-proof, Water-proof
Applicable for some other kinds of PVC materials as follows:
- Heat-resistant PVC(HV)
 - Special heat-resistant PVC(SHV)
 - Cold-proof PVC(TV)
 - Flame-retardant PVC Sheath(FR-VVR,FR-HVVR,FR-SHVVR)



Conductor	Nominal sectional area (SQ)	0.5	0.75	1.0	1.25	1.3	1.5	2.3
Conductor (No./mm)		7/0.32	24/0.2	7/0.44	7/0.45	4/0.65	7/0.52	7/0.65
Nom.O.D (mm)		0.96	1.13	1.32	1.35	1.57	1.56	1.95
Insulation	Nom.thick (mm)	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Approx.O.D (mm)		2.16	2.33	2.52	2.55	2.77	2.76	3.15
Sheath	Nom.thick (mm)	1.00	1.00	1.00	1.00	1.00	1.00	1.10
Approx.O.D (mm)		6.8	7.1	7.5	7.5	8.0	8.0	8.9
Electric Characteristics	Voltage resistance (V/min)	AC500	AC500	AC500	AC500	AC500	AC500	AC500
Insulation resistance (M Ω km)		Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500
Max. Length (m)		2000	2000	2000	2000	2000	2000	2000
Weight (kg/km)		50	53	66	68	76	81	106



Insulation and Sheath: General PVC, Shape: Flat (F), Shield: Plain Copper Wire Braided (BA)

Type (P3) - Division Symbol (P4) - **VVF-BA**

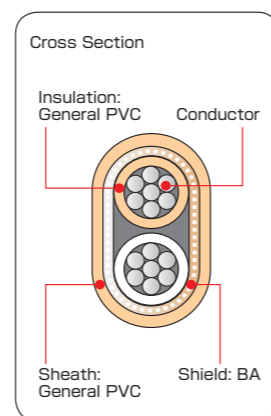
Rated Temp.Range **60~105°C**

- Features:** Excellence in Electro-static effect, Damp-proof, Water-proof
Applicable for some other kinds of PVC materials as follows:
- Heat-resistant PVC(HV)
 - Special heat-resistant PVC(SHV)
 - Cold-proof PVC(TV)
 - Flame-retardant PVC Sheath(FR-VVF,FR-HVVF,FR-SHVVF)



Applicable for Tinned Copper Wire Braided Shield(BT)

Conductor	Nominal sectional area (SQ)	0.5	0.75	1.0	1.25	1.3	1.5	2.3
Conductor (No./mm)		7/0.32	24/0.2	7/0.44	7/0.45	4/0.65	7/0.52	7/0.65
Nom.O.D (mm)		0.96	1.13	1.32	1.35	1.57	1.56	1.95
Insulation	Nom.thick (mm)	0.40	0.50	0.60	0.60	0.60	0.60	0.60
Approx.O.D (mm)		1.76	2.13	2.52	2.55	2.77	2.76	3.15
Shield	Nom.thick (mm)	0.30	0.30	0.3	0.30	0.30	0.30	0.30
Sheath	Nom.thick (mm)	0.50	0.80	1.00	1.00	1.00	1.00	1.00
Approx.O.D (mm)		3.4 × 5.2	4.4 × 6.5	5.2 × 7.7	5.2 × 7.7	5.4 × 8.2	5.4 × 8.2	5.8 × 8.9
Electric Characteristics	Voltage resistance (V/min)	AC500	AC500	AC500	AC500	AC500	AC500	AC500
Insulation resistance (M Ω km)		Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500
Max. Length (m)		2000	2000	2000	2000	2000	2000	2000
Weight (kg/km)		35	51	68	70	78	85	103



Insulation and Sheath: General PVC, Shape: Round (R), Shield: Copper Tape (SA)

Type (P3) - Division Symbol (P4) - **VVR-SA**

Rated Temp.Range **60~105°C**

- Features:** Excellence in Electro-static effect, Damp-proof, Water-proof
Applicable for some other kinds of PVC materials as follows:
- Heat-resistant PVC(HV)
 - Special heat-resistant PVC(SHV)
 - Cold-proof PVC(TV)
 - Flame-retardant PVC Sheath(FR-VVR,FR-HVVR,FR-SHVVR)
- Applicable for other types of shields:**
- Plain Copper Wire Braided Shield (BA)
 - Tinned Copper Wire Braided Shield (BT)



Remarks: Many sizes are on stock sale.

Conductor	Nominal sectional area (SQ)	0.75	1.0	1.25	1.3	1.5	2.3	AWG16
Conductor (No./mm)		24/0.2	7/0.44	7/0.45	4/0.65	7/0.52	7/0.65	1/1.29
Nom.O.D (mm)		1.13	1.32	1.35	1.57	1.56	1.95	1.29
Insulation	Nom.thick (mm)	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Approx.O.D (mm)		2.33	2.52	2.55	2.77	2.76	3.15	2.49
Shield	Nom.thick (mm)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Sheath	Nom.thick (mm)	1.00	1.00	1.00	1.10	1.10	1.10	1.00
Approx.O.D (mm)		7.4	7.8	7.9	8.5	8.5	9.3	7.7
Electric Characteristics	Voltage resistance (V/min)	AC500	AC500	AC500	AC500	AC500	AC500	AC500
Insulation resistance (M Ω km)		Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500	Min. 500
Max. Length (m)		2000	2000	2000	2000	2000	2000	2000
Weight (kg/km)		75	83	85	98	104	127	88

