Heat Resistant Wires

What is Heat Resistant Wire?

Heat-resistant Wire is used as a lead wire which is connected to some Electric generator, apparatus or device (such as Electric Motors, an Electric Furnace, etc.) in high temperature.

Flexible Fluorine-Contained Heat-resistant Rubber(FRW) Wire

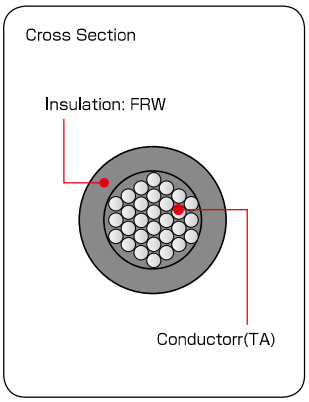
600V FRW

Temp.Range −60 ~ 200℃ **Rated voltage** 600V

This kind of Heat-resistant Wire is insulated Flexible Fluorine-Contained Heat-resistant Rubber (FRW). It is excellent in Heat-resistance for the continuous use in the temperature of 200℃.

Features: Excellence in Heat-resistance, Flexibility, Cold-proof, Water-proof, Chemical proof, Flame-retardant.

- **Conductor:** TA (Tin-coated Copper Wire)
- **Insulation:** Flexible Fluorine-Contained Heat-resistant Rubber (FRW)
- **Standard Color:** Black
- **Main Usage:**
  ①As a lead wire for an Electric generator, Heating apparatus, Refrigerator and others etc.
  ②As a lead wire for Heat-resistant Motor, Car, Work apparatus wiring, Wiring in the board which needs a space-saving, Resistor, Anti-oil device, Measuring apparatus etc.
  ③As a lead wire for wiring inside an equipment with a severe environmental condition



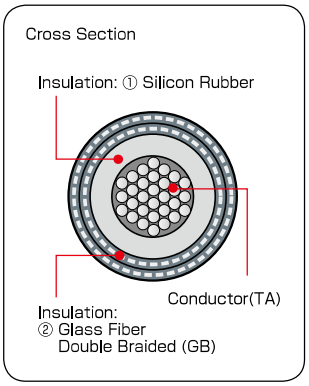
Nominal sectional area	Conductor		Nom. thick	Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	FRW Insulatlation		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm²)	Core/mm	mm	mm	mm	Max. Ω /km	V/min	Min. MΩ·km	N	M	kg/km
0.75SQ	30/0.18	1.2	0.5	2.2	25.8	AC1500	2500	14	1000	10
1.25SQ	50/0.18	1.5	0.55	2.6	15.5	AC1500	2000	19	1000	17
2SQ	37/0.26	1.8	0.6	3.0	9.91	AC1500	1500	27	1000	24
3.5SQ	45/0.32	2.5	0.6	3.7	5.38	AC1500	1500	37	1000	42
5.5SQ	35/0.45	3.1	0.7	4.5	3.50	AC1500	1500	49	1000	62

Silicon Rubber and Glass Fiber Double Braided (GB) Wire

600V LKGB

Temp.Range −60～180℃ **Rated voltage** 600V

This Heat-resistant Wire is insulated Silicon Rubber and Glass Fiber Double Braided. It is excellent in Heat-resistance for the continuous use in the temperature of 180℃, because Glass Fiber is double braided on the surface of Silicon Rubber Insulation.



- **Conductor:** TA (Tin-coated Copper Wire)
- **Insulation:** ①Silicon Rubber
  ②Glass Fiber Double Braided (GB)
- **Standard color:** White (Applicable for Red, Green, Yellow, Blue, Brown, Orange, Purple, Gray, etc.)
- **Main Usage:** As a lead wire for an Electric generator, an Electric Motor, an Electric Furnace, and others. etc.

Nominal sectional area	Conductor		Nom.thick of Insulation		Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	Silicon Rubber Insulatlation	Double Braided Glass Fiber		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm2)	Core/mm	mm	mm	mm	mm	Max. Ω /km	V/mm	Min. MΩ /km	N	M	kg/km
0.75SQ	30/0.18	1.2	1.1	0.5	4.4	25.8	AC1500	200	14	1000	30
1.25SQ	50/0.18	1.5	1.1	0.5	4.7	15.5	AC1500	150	19	1000	40
2SQ	37/0.26	1.8	1.1	0.5	5.0	9.91	AC1500	150	27	1000	50
3.5SQ	45/0.32	2.5	1.1	0.5	5.7	5.38	AC1500	100	37	1000	70
5.5SQ	35/0.45	3.1	1.1	0.5	6.3	3.50	AC1500	80	49	1000	90
8SQ	50/0.45	3.7	1.1	0.5	6.9	2.45	AC2000	70	61	1000	120
14SQ	88/0.45	4.9	1.1	0.6	8.3	1.39	AC2000	70	88	500	200
22SQ	7/20/0.45	7.0	1.4	0.6	11.0	0.892	AC2000	60	115	500	310
38SQ	7/34/0.45	9.1	1.4	0.6	13.1	0.525	AC2500	50	162	500	520
60SQ	19/20/0.45	11.6	1.8	0.6	16.2	0.329	AC2500	40	217	200	750
80SQ	19/27/0.45	13.6	1.8	0.7	18.5	0.243	AC2500	40	257	100	1040
100SQ	19/34/0.45	15.2	2.3	0.7	21.2	0.193	AC2500	40	298	100	1270
150SQ	27/34/0.45	18.7	2.3	0.7	24.7	0.136	AC3000	40	395	100	1810
200SQ	37/34/0.45	21.2	2.9	0.7	28.4	0.0993	AC3000	40	469	100	2370
250SQ	37/42/0.45	23.6	2.9	0.7	30.8	0.0803	AC3000	40	556	100	2860

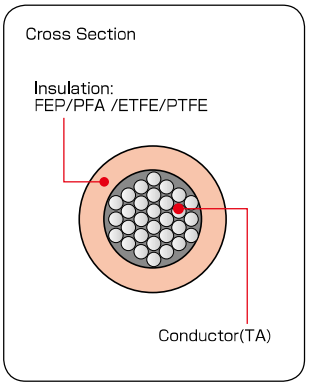
Teflon®(FEP/PFA/ETFE/PTFE) Wire

FEP/PFA /ETFE/PTFE

Temp.Range −253～260℃ Rated voltage 600V

This kind of Heat-resistant Wire is insulated Teflon® (FEP/PFA /ETFE/PTFE).
It is excellent in Heat-resistance for continuous use in the temperature of 150℃~260℃.

＊⚠Some limited wiring can be used below -80 ℃.



- **Conductor:** TA (Tin-coated Copper Wire), SA (Silver-coated Copper Wire), NA (Nickel-coated Copper Wire)
- **Insulation:** ETFE(-100～150 ℃),FEP(-253～200℃), PFA(-195～260 ℃),PTFE(-253～260 ℃)
- **Standard Color:** Black, White, Red, Green, Yellow, Blue, Brown, Orange, Gray, and Transparent
- **Main Usage:** As a lead wire for an Electric generator, Heating apparatus, Refrigerator and others etc.

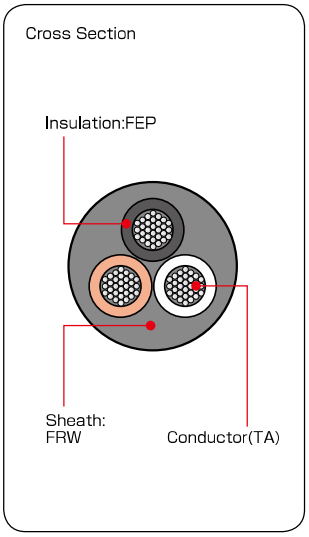
Nominal sectional area	Conductor		Nom. thick	Standard overall diam.	Electrical Properties						Approx Length	Weight
	Combination	Outer diam.	FEP/PFA / ETFE/PTFE Insulation		Conductor Resistance 20℃ (Max. Ω /km)			Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm²)	Core/mm	mm	mm	mm	SA	TA	NA	V/min	Min. MΩ /km	N	M	kg/km
0.3SQ	12/0.18	0.72	0.4	1.5	60.8	65.6	64.9	AC 1500	2500	7	100	6
0.5SQ	19/0.18	0.9	0.4	1.7	38.4	41.4	41	AC 1500	2500	10	100	8
0.75SQ	30/0.18	1.2	0.4	2.0	24.3	26.3	26	AC 1500	2500	14	100	12
1.25SQ	50/0.18	1.5	0.4	2.3	14.6	15.8	15.6	AC 1500	2000	19	100	17
2SQ	37/0.26	1.8	0.4	2.6	9.5	10.3	10.2	AC 1500	1500	27	100	24
3.5SQ	45/0.32	2.5	0.4	3.3	5.09	5.49	5.53	AC 1500	1500	37	100	34
5.5SQ	35/0.45	3.1	0.5	4.1	3.29	3.5	3.51	AC 1500	1500	49	100	63
8.0SQ	50/0.45	3.7	0.6	4.9	2.3	2.24	2.46	AC 1500	1500	61	100	89
14SQ	88/0.45	4.9	0.7	6.3	1.31	1.41	1.39	AC2000	1500	88	100	153
22SQ	7/20/0.45	7.0	0.8	8.6	0.838	0.904	0.894	AC2000	1000	115	100	243
38SQ	7/34/0.45	9.1	0.9	10.9	0.493	0.532	0.526	AC2000	900	162	100	402
60SQ	19/20/0.45	11.6	0.9	13.4	0.309	0.316	0.329	AC2500	900	217	100	602
80SQ	19/27/0.45	13.6	1.0	15.6	0.225	0.243	0.24	AC2500	900	257	100	782
100SQ	19/34/0.45	15.2	1.0	17.2	0.172	0.186	0.184	AC2500	900	298	100	1040

FEP Insulation and Flexible Fluorine-Contained Heat-resistant Rubber(FRW) Sheath Wire

FF Toughler

Temp.Range −60 ~ 200℃ **Rated voltage** 600V

This kind of Heat-resistant Wire is insulated FEP and Sheathed Flexible Fluorine-Contained Heat-resistant Rubber (FRW). It is excellent in Heat-resistance for the continuous use in the temperature of 200℃.



- **Conductor:** TA (Tin-coated Copper Wire)
- **Insulation:** Fluorinated Ethylene Propylene (FEP)
- **Sheath:** Flexible Fluorine-Contained Heat-resistant Rubber (FRW)
- **Standard Color:** Black
- **Identification of colors:** 2Core (Black/White), 3Core (Black/White/Red), 4Core (Black/White/Red/Green)
- **Features:** ①Flexibility: Since a conductor is composed of thin stranded Tin-coated copper wire, insulated Fluorinated Ethylene Propylene (FEP) and Sheathed Flexible Fluorine-Contained Heat-resistant Rubber (FRW), it is very excellent in Flexibility and Vibration-resistance.
  ②Heat-resistance: Fluorinated Ethylene Propylene insulation (FEP) and Flexible Fluorine-Contained Heat-resistant Rubber sheath (FRW) has both heat and cold- resistance, it is excellent in Heat-resistance for the continuous use in the temperature of -60℃~200℃.
  ③Eco-Environment : Because of very excellent in Oil-proof, Water-proof, Cold-proof, Flame-retardant, and Chemical proof, it is suitable for the use in a clean room under the indoor severe environmental condition.
  It also can comply with RoHS
- **Usage:** It is suitable to be used for the place where the wire bear, the Robot's power supply under a high temperature and some other conveyor chain equipments which always need flexing, bending, twisting. It is suitable for the use in the field of the electrical machinery and apparatus for the movement of both indoor and outdoor, and parts of sputtering.

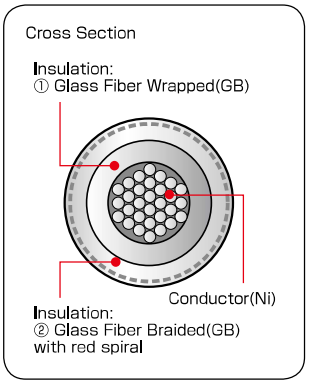
Nominal sectional area	Conductor		Insulation		Core (No./mm)	Sheath		Electrical Properties			Approx Length	Weight
	Combination	Outer diam.	Nom.thick.	Overall diam.		Nom.thick.	Overall diam.	Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance		
SQ (mm2)	Core/mm	mm	mm	mm		mm	mm	Max. Ω /km	V/mm	Min. MΩ /km	M	kg/km
0.75SQ	3/50/0.08	1.3	0.4	2.1	2	1.5	7.2	25.80	AC1500	1500	500	85
					3		7.5					100
					4		8.0					125
1.25SQ	7/36/0.08	1.55	0.4	2.35	2	1.5	7.7	15.50	AC1500	1500	500	105
					3		8.0					130
					4		8.7					160
2SQ	7/57/0.08	2.1	0.4	2.9	2	1.5	8.8	9.91	AC1500	1500	500	135
					3		9.2					170
					4		10.0					215
3.5SQ	7/100/0.08	2.6	0.4	3.4	2	1.5	9.9	5.38	AC1500	1500	500	185
					3		10.4					240
					4		11.3					305

Glass Fiber Wrapped and Braided Insulation(GB) Wire

NiGB

Max. Temp 300℃ **Rated voltage** 200V

This kind of Heat-resistant Wire is Glass Fiber Wrapped and Glass Fiber Braided Insulation.
It is excellent in Heat-resistance for medium and high temperature range,
its continuous use temperature is 300℃.
It is a kind of low-cost Heat-resistant wire.



- **Conductor:** Nickel (Ni)
- **Insulation:** ①Glass Fiber Wrapped (GB)
  ②Glass Fiber Braided (GB)
- **Standard Color:** White with red spiral
- **Main Usage:** As a lead wire for an Electric Furnace, High temperature Furnace, and Electric generator apparatus in high temperature etc.

Nominal sectional area	Conductor		Nom. Thick	Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	Glass Fiber Wrapped and Braided		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm²)	Core/mm	mm	mm	mm	Max. Ω /km	V/mm	Min. MΩ /km	N	M	kg/km
0.75SQ	14/0.26	1.2	0.37	2.0	148	AC500	0.1	8	1000	12
1.25SQ	24/0.26	1.5	0.57	2.7	86.3	AC500	0.1	10	1000	18
2SQ	37/0.26	1.8	0.57	3.0	56.0	AC500	0.1	15	1000	26
3.5SQ	22/0.45	2.5	0.57	3.7	31.4	AC500	0.1	25	600	43
5.5SQ	35/0.45	3.1	0.57	4.3	19.7	AC500	0.1	30	400	63
8SQ	50/0.45	3.7	0.57	5.1	13.8	AC500	0.1	40	200	88
14SQ	7/12/0.45	5.4	0.90	7.2	8.23	AC500	0.1	55	100	159
22SQ	7/20/0.45	7.0	0.90	8.8	4.95	AC500	0.1	70	100	224
38SQ	7/34/0.45	9.1	0.90	10.9	2.85	AC500	0.1	100	100	397

Warning notice :

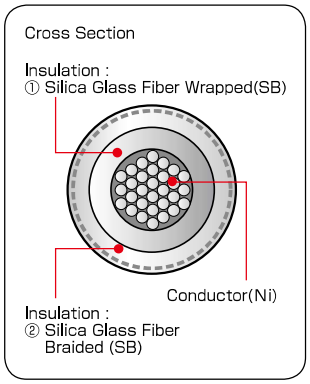
1. When power turns on, it becomes very high temperature by self-generation of heat. For the buildings with which an electric wire is in contact or approach please use the materials which shall not yield to the high temperature, and please arrange the wiring at the place away from people's reach.
2. The glass fiber currently used for the electric wire is very weak in the material to too much crookedness. Please avoid use in a place (equipment) with the crookedness after electric wire construction, or an intense vibration. (fixed wiring).
3. Since this electric wire is hygroscopic and has a threat of sparking (short circuit) if applied in the place of humidity and moisture, therefore please do not carry out wiring.

Silica Glass Fiber Wrapped and Braided Insualation(SB) Wire

NSBL

Max. Temp 400℃ **Rated voltage** 200V

This kind of Heat-resistant Wire is Silica Glass Fiber Wrapped and Silica Glass Fiber Braided Insulation. It is a Super Heat-resistant Wire for the continuous use in the temperature of 400℃.



- **Conductor:** Nickel (Ni)
- **Insulation:** ①Silica Glass Fiber Wrapped (SB)
  ②Silica Glass Fiber Braided (SB)
- **Standard Color:** White
- **Main Usage:** As a lead wire for a high temperature furnace and other high temperature apparatus, etc.

Nominal sectional area	Conductor		Nom.thick of Insulation	Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	Silica Glass Fiber Wrapped and Braided		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm²)	Core/mm	mm	mm	mm	Max. Ω/km	V/min	Min. MΩ·km	N	M	kg/km
0.75SQ	14/0.26	1.2	0.65	2.5	148	AC500	0.1	10	1000	17
1.25SQ	24/0.26	1.5	0.65	2.8	86.3	AC500	0.1	15	1000	23
2SQ	37/0.26	1.8	0.65	3.1	56.0	AC500	0.1	20	1000	30
3.5SQ	22/0.45	2.5	0.65	3.7	31.4	AC500	0.1	30	600	47
5.5SQ	35/0.45	3.1	0.65	4.4	19.7	AC500	0.1	40	400	69
8SQ	50/0.45	3.7	0.65	5.0	13.80	AC500	0.1	50	200	99
14SQ	7/12/0.45	5.4	0.75	6.9	8.23	AC500	0.1	70	100	156
22SQ	7/20/0.45	7.0	0.75	8.5	4.94	AC500	0.1	90	100	249
38SQ	7/34/0.45	9.1	1.15	11.4	2.85	AC500	0.1	130	100	453

Warning notice :

1. When power turns on, it becomes very high temperature by self-generation of heat. For the buildings with which an electric wire is in contact or approach please use the materials which shall not yield to the high temperature, and please arrange the wiring at the place away from people's reach.
2. The glass fiber currently used for the electric wire is very weak in the material to too much crookedness. Please avoid use in a place (equipment) with the crookedness after electric wire construction, or an intense vibration.(fixed wiring).
3. Since this electric wire is hygroscopic and has a threat of sparking (short circuit) if applied in the place of humidity and moisture, therefore please do not carry out wiring.

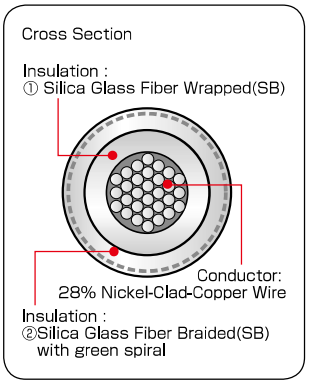
Silica Glass Fiber Wrapped and Braided Insulation(SB) Wire

28NSBL

Max. Temp 400℃ **Rated voltage** 200V

This kind of Heat-resistant Wire is Silica Glass Fiber Wrapped and Silica Glass Fiber Braided Insulation. It is a Super Heat-resistant Wire for the continuous use in the temperature of 400℃.

There is approximately 2.5 times conductivity in comparison with Heat-resistant Wire of NSBL and it is harmless to the human body because Silica Glass Fiber material is used instead of the Asbestos material.



●Conductor: 28% Nickel-Clad-Copper Wire
●Insulation: ①Silica Glass Fiber Wrapped(SB)
②Silica Glass Fiber Braided (SB)
●Standard Color: White with green spiral
●Main Usage: As a lead wire for a high temperature furnace and other high temperature apparatus, etc.

Nominal sectional area	Conductor		Nom.thick	Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	Silica Glass Fiber Wrapped and Braided		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm²)	Core/mm	mm	mm	mm	Max. Ω /km	V/mm	Min. MΩ /km	N	M	kg/km
0.75SQ	14/0.26	1.2	0.65	2.5	37.7	AC 500	0.1	—	1000	17
1.25SQ	24/0.26	1.5	0.65	2.8	22	AC 500	0.1	—	1000	23
2SQ	37/0.26	1.8	0.65	3.1	14.2	AC 500	0.1	—	1000	30
3.5SQ	22/0.45	2.5	0.65	3.7	8.01	AC 500	0.1	—	600	47
5.5SQ	35/0.45	3.1	0.65	4.4	5.03	AC 500	0.1	—	400	69
8.0SQ	7/7/0.45	3.7	0.65	5.0	3.52	AC 500	0.1	—	200	99
14SQ	7/12/0.45	5.4	0.75	6.9	2.09	AC 500	0.1	—	100	156
22SQ	7/20/0.45	7.0	0.75	8.5	1.25	AC 500	0.1	—	100	249
38SQ	7/34/0.45	9.1	1.15	11.3	0.741	AC 500	0.1	—	100	453

Warning notice :

1. When power turns on, it becomes very high temperature by self-generation of heat. For the buildings with which an electric wire is in contact or approach please use the materials which shall not yield to the high temperature, and please arrange the wiring at the place away from people's reach.
2. The glass fiber currently used for the electric wire is very weak in the material to too much crookedness. Please avoid use in a place (equipment) with the crookedness after electric wire construction, or an intense vibration.(fixed wiring).
3. Since this electric wire is hygroscopic and has a threat of sparking (short circuit) if applied in the place of humidity and moisture, therefore please do not carry out wiring.

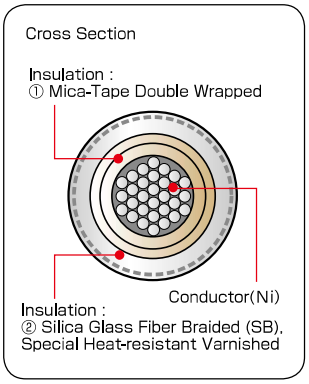
Mica-Tape Double Wrapped and Silica Glass Fiber Braided Insulation(SB) Wire

NSBL 6×4-I

Max. Temp 400℃ **Rated voltage** 600V

This kind of Heat-resistant Wire is Nickel Conductor, Mica-Tape Double Wrapped and Silica Glass Fiber Braided, Special Heat-resistant Varnished Insulation.

It is a Super Heat-resistant Wire for the continuous use in the temperature of 400℃. It can be used for the continuous use in the temperature of 500℃, in case of a varnish un-disposed article.



- **Conductor** Nickel (Ni)
- **Insulation** ①Mica-Tape Double Wrapped
  ②Silica Glass Fiber Braided (SB), Special Heat-resistant Varnished
- **Standard Color:** White
- **Main Usage:** As a lead wire for a high temperature furnace and high temperature apparatus, etc.

Nominal sectional area	Conductor		Nom. thick of Insulation		Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	Mica-Tape Wrapped	Silica Glass Fiber Braided		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm2)	Core/mm	mm	mm	mm	mm	Max. Ω /km	V/mm	Min. MΩ /km	N	M	kg/km
0.75SQ	14/0.26	1.2	0.52	0.45	3.2	148	AC1500	5.0	10	1000	26
1.25SQ	24/0.26	1.5	0.52	0.45	3.5	86.3	AC1500	5.0	15	1000	27
2SQ	37/0.26	1.8	0.52	0.45	3.8	56.0	AC1500	5.0	20	1000	36
3.5SQ	22/0.45	2.5	0.52	0.45	4.5	31.4	AC1500	5.0	30	600	50
5.5SQ	35/0.45	3.1	0.52	0.45	5.4	19.7	AC1500	5.0	40	400	76
8SQ	50/0.45	3.7	0.52	0.45	5.7	13.8	AC1500	5.0	50	200	100
14SQ	7/12/0.45	5.4	0.52	0.90	8.3	8.23	AC2000	3.0	70	100	200
22SQ	7/20/0.45	7.0	0.52	0.90	9.9	4.94	AC2000	3.0	90	100	276
38SQ	7/34/0.45	9.1	0.52	0.90	12.0	2.85	AC2000	3.0	130	100	470
60SQ	19/20/0.45	11.6	0.52	0.90	14.5	1.58	AC2000	3.0	170	100	700
80SQ	19/27/0.45	13.6	0.52	1.35	17.4	1.21	AC3000	1.0	220	100	910
100SQ	19/34/0.45	15.2	0.52	1.35	19.0	1.10	AC3000	1.0	240	100	1120

Warning notice :

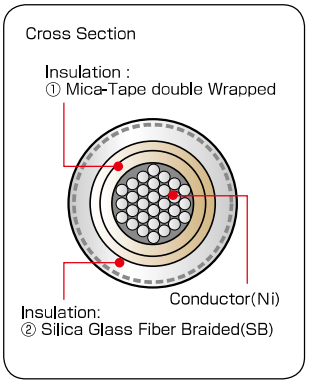
1. When power turns on, it becomes very high temperature by self-generation of heat. For the buildings with which an electric wire is in contact or approach please use the materials which shall not yield to the high temperature, and please arrange the wiring at the place away from people's reach.
2. The glass fiber currently used for the electric wire is very weak in the material to too much crookedness. Please avoid use in a place (equipment) with the crookedness after electric wire construction, or an intense vibration.(fixed wiring).
3. Since this electric wire is hygroscopic and has a threat of sparking (short circuit) if applied in the place of humidity and moisture, therefore please do not carry out wiring.

Mica-Tape double Wrapped and Silica Glass Fiber Braided Insulation(SB) Wire

NSBL 6×5

Max. Temp 500℃ **Rated voltage** 600V

This kind of Heat-resistant Wire is Nickel Conductor, Mica-Tape Double Wrapped and Silica Glass Fiber Braided Insulation.
It is a Super Heat-resistant Wire for the continuous use in the temperature of 500℃.
Silica Glass Fiber Braided Insulation is proceeded in a varnish un-disposed article, for the purpose of removing impurities gas generated in a high temperature.



- **Conductor:** Nickel (Ni)
- **Insulation:** ①Mica-Tape Double Wrapped ②Silica Glass Fiber Braided (SB)
- **Standard Color:** White
- **Main Usage:** As a lead wire for a high temperature furnace and high temperature apparatus, etc.

Nominal sectional area	Conductor		Nom.thick of Insulation		Standard overall diam.	Electrical Properties				Approx Length	Weight
	Combination	Outer diam.	Mica-Tape Wrapped	Silica Glass Fiber Braided		Conductor Resistance 20℃	Dielectric Strength Test	Insulation Resistance	Standard Voltage Value		
SQ (mm²)	Core/mm	mm	mm	mm	mm	Max. Ω /km	V/mm	Min. MΩ /km	N	M	kg/km
3.5SQ	22/0.45	2.5	0.52	0.45	4.5	31.4	AC1500	5.0	30	100	50
5.5SQ	35/0.45	3.1	0.52	0.45	5.1	19.7	AC1500	5.0	40	100	76
8SQ	50/0.45	3.7	0.52	0.45	5.7	13.8	AC1500	5.0	50	100	100
14SQ	7/12/0.45	5.4	0.52	0.9	8.3	8.23	AC2000	3.0	70	50	200
22SQ	7/20/0.45	7.0	0.52	0.9	9.9	4.94	AC2000	3.0	90	30	276
38SQ	7/34/0.45	9.1	0.52	0.9	12.0	2.85	AC2000	3.0	130	20	470

Warning notice :

1. When power turns on, it becomes very high temperature by self-generation of heat. For the buildings with which an electric wire is in contact or approach please use the materials which shall not yield to the high temperature, and please arrange the wiring at the place away from people's reach.
2. The glass fiber currently used for the electric wire is very weak in the material to too much crookedness. Please avoid use in a place (equipment) with the crookedness after electric wire construction, or an intense vibration.(fixed wiring).
3. Since this electric wire is hygroscopic and has a threat of sparking (short circuit) if applied in the place of humidity and moisture, therefore please do not carry out wiring.

Types of Conductor Materials

Material Types	Symbols	Heat Resistance (Temp.)	Density	Temp. Coefficient (20℃)	Resistance peculiar to volume μΩ・cm	Properties
Tin Coated Copper	TA	150℃	8.89	0.0039	1.80	It is used widely because Copper wire is uniformly electricity-coated by Tin. The soldering characteristics are good.
Silver-Coated Copper	SA	200℃	8.95	0.0039	1.72	Heat Resistance is improved because Copper wire is uniformly electricity-coated by Siliver.
Nickel-Coated Copper	NA	260℃	8.89	0.004	1.83	Excellence in Heat Resistance because Copper wire is uniformly electricity-coated by Nickle.
Nickel	Ni	500℃	8.79	0.006	9.60	To be use in high temperature, Excellence in Anti-corrosion
28 % Nickel Coated copper	28N	400℃	8.80	0.0039	2.46	This conductor is coated by 28%Nickle of peculiar to volume, it is of Super-Heat-resistant to the temperature of 400℃, High conductivity as well.

The Table of Properties and Material Types of Insulation and Sheath

Material Types		Symbols	Water-proof	Oil-proof	Chemical-proof	Environment	Insulation Resistance	Cold-proof(℃)	Temp. proof(℃)
Braided	Glass Fiber	GB	-	-	-	Excellent	Invalid	Frost-Free	350
	Silica Glass Fiber	SB	-	-	-	Excellent	Invalid	Frost-Free	700
	Alumina Fiber	CB	-	-	-	Excellent	Invalid	Frost-Free	1100
Teflon®	Flexible Teflon®	FRW	Good	Good	Good	Invalid	Excellent	— 60	200
	FEP	FEP	Excellent	Excellent	Excellent	Invalid	Excellent	— 253	200
	PFA	PFA	Good	Excellent	Excellent	Invalid	Excellent	— 195	260
	PTFE	PTFE	Excellent	Excellent	Excellent	Invalid	Excellent	— 253	260
	ETFE	ETFE	Good	Excellent	Excellent	Invalid	Excellent	— 100	150
Others	Elastomer	SPH	Good	Good	Good	Good	Excellent	— 60	135
	Silicone Rubber	K	Normal	Invalid	Normal	Good	Good	— 60	180

Current Tolerance Table

■ 600V LKGB

(A)

Products	size	Standard Electric Current Value	50℃	60℃	70℃	80℃	90℃	100℃	110℃	120℃	130℃	140℃	150℃	160℃	170℃
600V LKGB	0.5SQ	10	20.8	20.0	19.1	18.3	17.3	16.3	15.3	14.1	12.9	11.5	10.0	8.2	5.8
	0.75SQ	14	29.1	28.0	26.8	25.6	24.2	22.9	21.4	19.8	18.1	16.2	14.0	11.4	8.1
	1.25SQ	19	39.6	38.0	36.4	34.7	32.9	31.0	29.0	26.9	24.5	21.9	19.0	15.5	11.0
	2SQ	27	56.2	54.0	51.7	49.3	46.8	44.1	41.2	38.2	34.9	31.2	27.0	22.0	15.6
	3.5SQ	37	77.0	74.0	70.8	67.6	64.1	60.4	56.5	52.3	47.8	42.7	37.0	30.2	21.4
	5.5SQ	49	102.0	98.0	93.8	89.5	84.9	80.0	74.8	69.3	63.3	56.6	49.0	40.0	28.3
	8SQ	61	127.0	122.0	116.8	111.4	105.7	99.6	93.2	86.3	78.8	70.4	61.0	49.8	35.2
	14SQ	88	183.2	176.0	168.5	160.7	152.4	143.7	134.4	124.5	113.6	101.6	88.0	71.9	50.8
	22SQ	115	239.4	230.0	220.2	210.0	199.2	187.8	175.7	162.6	148.5	132.8	115.0	93.9	66.4
	38SQ	162	337.2	324.0	310.2	295.8	280.6	264.5	247.5	229.1	209.1	187.1	162.0	132.3	93.5
	60SQ	217	451.7	434.0	415.5	396.2	375.9	354.4	331.5	306.9	280.1	250.6	217.0	177.2	125.3
	80SQ	257	535.0	514.0	492.1	469.2	445.1	419.7	392.6	363.5	331.8	296.8	257.0	209.8	148.4
	100SQ	298	620.3	596.0	570.6	544.1	516.2	486.6	455.2	421.4	384.7	344.1	298.0	243.3	172.1
	150SQ	395	822.3	790.0	756.4	721.2	684.2	645.0	603.4	558.6	509.9	456.1	395.0	322.5	228.1
	200SQ	469	976.3	938.0	898.1	856.3	812.3	765.9	716.4	663.3	605.5	541.6	469.0	382.9	270.8
	250SQ	556	1157	1112	1065	1015	963.0	907.9	849.3	786.3	717.8	642.0	556.0	454.0	321.0

Safe Current Tolerance Calculating Formula

$$\text{600V LKGB (A)} = \sqrt{\frac{180-\theta}{30}} \times (N)$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

■ 600V FEP / 600V FRW

(A)

Products	size	Standard Electric Current Value	50℃	60℃	70℃	80℃	90℃	100℃	110℃	120℃	130℃	140℃	150℃	160℃	170℃	180℃	190℃
600V FEP 600V FRW	0.3SQ	7	14.1	13.6	13.1	12.6	12.1	11.5	10.9	10.3	9.6	8.9	8.1	7.3	6.3	5.1	3.6
	0.5SQ	10	20.1	19.4	18.7	18.0	17.2	16.4	15.6	14.7	13.7	12.7	11.6	10.4	9.0	7.3	5.2
	0.75SQ	14	28.2	27.2	26.2	25.2	24.1	23.0	21.8	20.6	19.2	17.8	16.3	14.5	12.6	10.3	7.3
	1.25SQ	19	38.2	36.9	35.6	34.2	32.7	31.2	29.6	27.9	26.1	24.2	22.1	19.7	17.1	14.0	9.9
	2SQ	27	54.3	52.5	50.6	48.6	46.5	44.4	42.1	39.7	37.1	34.4	31.4	28.1	24.3	19.8	14.0
	3.5SQ	37	74.5	71.9	69.3	66.6	63.8	60.8	57.7	54.4	50.9	47.1	43.0	38.5	33.3	27.2	19.2
	5.5SQ	49	98.6	95.3	91.8	88.2	84.4	80.5	76.4	72.0	67.4	62.4	56.9	50.9	44.1	36.0	25.5
	8SQ	61	122.8	118.6	114.3	109.8	105.1	100.2	95.1	89.7	83.9	77.6	70.9	63.4	54.9	44.8	31.7
	14SQ	88	177.1	171.1	164.9	158.4	151.7	144.6	137.2	129.3	121.0	112.0	102.2	91.5	79.2	64.7	45.7
	22SQ	115	231.4	223.6	215.5	207.0	198.2	189.0	179.3	169.0	158.1	146.4	133.6	119.5	103.5	84.5	59.8
	38SQ	162	326.0	315.0	303.5	291.6	279.2	266.2	252.5	238.1	222.7	206.2	188.2	168.4	145.8	119.0	84.2
	60SQ	217	436.7	421.9	406.5	390.6	374.0	356.6	338.3	318.9	298.3	276.2	252.1	225.5	195.3	159.5	112.8
	80SQ	257	517.2	499.6	481.4	462.6	442.9	422.2	400.6	377.7	353.3	327.1	298.6	267.0	231.3	188.8	133.5
	100SQ	298	599.7	579.3	558.3	536.4	513.5	489.6	464.5	437.9	409.6	379.2	346.2	309.6	268.2	218.9	154.8

Safe Current Tolerance Calculating Formula

$$\text{600V FEP (A)} \\ \text{600V FRW (A)} = 0.9 \times \sqrt{\frac{200-\theta}{30}} \times (N)$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

In the case of Multi-Core, pls refer to Electric Current Decrease Coefficient mentioned below and multiply the Safe Current Tolerance in above Table

The Electric Current Decrease Coefficient Table due to Multi-core.	Number of Core (C)	2 ~ 3	4	5 ~ 6	7 ~ 15
	Current Decrease Coefficient	0.70	0.63	0.56	0.49

Current Tolerance Table

■ 600V PFA / 600V PTFE

(A)

Products	Size	Standard Electric Current Value	50℃	60℃	70℃	80℃	90℃	100℃	110℃	120℃	130℃	140℃	150℃
600V PFA 600V PTFE	0.3SQ	7	16.7	16.3	15.9	15.4	15.0	14.5	14.1	13.6	13.1	12.6	12.1
	0.5SQ	10	23.8	23.2	22.6	22.0	21.4	20.8	20.1	19.4	18.7	18.0	17.2
	0.75SQ	14	33.3	32.5	31.7	30.9	30.0	29.1	28.2	27.2	26.2	25.2	24.1
	1.25SQ	19	45.2	44.2	43.0	41.9	40.7	39.5	38.2	36.9	35.6	34.2	32.7
	2SQ	27	64.3	62.7	61.2	59.5	57.8	56.1	54.3	52.5	50.6	48.6	46.5
	3.5SQ	37	88.1	86.0	83.8	81.6	79.3	76.9	74.5	71.9	69.3	66.6	63.8
	5.5SQ	49	116.7	113.9	111.0	108.0	105.0	101.8	98.6	95.3	91.8	88.2	84.4
	8SQ	61	145.3	141.8	138.2	134.5	130.7	126.8	122.8	118.6	114.3	109.8	105.1
	14SQ	88	209.5	204.5	199.3	194.0	188.5	182.9	177.1	171.1	164.9	158.4	151.7
	22SQ	115	273.8	267.2	260.5	253.5	246.4	239.0	231.4	223.6	215.5	207.0	198.2
	38SQ	162	385.8	376.5	366.9	357.1	347.1	336.7	326.0	315.0	303.5	291.6	279.2
	60SQ	217	516.7	504.3	491.5	478.4	464.9	451.0	436.7	421.9	406.5	390.6	374.0
	80SQ	257	611.9	597.2	582.0	566.5	550.6	534.1	517.2	499.6	481.4	462.6	442.9
	100SQ	298	709.5	692.4	674.9	656.9	638.4	619.3	599.7	579.3	558.3	536.4	513.5

Size	Standard Electric Current Value	160℃	170℃	180℃	190℃	200℃	210℃	220℃	230℃	240℃	250℃	
0.3SQ	7	11.5	10.9	10.3	9.6	8.9	8.1	7.3	6.3	5.1	3.6	
0.5SQ	10	16.4	15.6	14.7	13.7	12.7	11.6	10.4	9.0	7.3	5.2	
0.75SQ	14	23.0	21.8	20.6	19.2	17.8	16.3	14.5	12.6	10.3	7.3	
1.25SQ	19	31.2	29.6	27.9	26.1	24.2	22.1	19.7	17.1	14.0	9.9	
2SQ	27	44.4	42.1	39.7	37.1	34.4	31.4	28.1	24.3	19.8	14.0	
3.5SQ	37	60.8	57.7	54.4	50.9	47.1	43.0	38.5	33.3	27.2	19.2	
5.5SQ	49	80.5	76.4	72.0	67.4	62.4	56.9	50.9	44.1	36.0	25.5	
8SQ	61	100.2	95.1	89.7	83.9	77.6	70.9	63.4	54.9	44.8	31.7	
14SQ	88	144.6	137.2	129.3	121.0	112.0	102.2	91.5	79.2	64.7	45.7	
22SQ	115	189.0	179.3	169.0	158.1	146.4	133.6	119.5	103.5	84.5	59.8	
38SQ	162	266.2	252.5	238.1	222.7	206.2	188.2	168.4	145.8	119.0	84.2	
60SQ	217	356.6	338.3	318.9	298.3	276.2	252.1	225.5	195.3	159.5	112.8	
80SQ	257	422.2	400.6	377.7	353.5	327.1	298.6	267.0	231.3	188.8	133.5	
100SQ	298	489.6	464.5	437.9	409.6	379.2	346.2	309.6	268.2	218.9	154.8	

Safe Current Tolerance Calculating Formula

$$\text{600V PFA (A)} = \text{600V PTFE (A)} = 0.9 \times \sqrt{\frac{260-\theta}{30}} \times (N)$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

■ 600V ETFE

(A)

Products	size	Standard Electric Current Value	50℃	60℃	70℃	80℃	90℃	100℃	110℃	120℃	130℃	140℃
600V ETFE	0.3SQ	7	11.5	10.9	10.3	9.6	8.9	8.1	7.3	6.3	5.1	3.6
	0.5SQ	10	16.4	15.6	14.7	13.7	12.7	11.6	10.4	9.0	7.3	5.2
	0.75SQ	14	23.0	21.8	20.6	19.2	17.8	16.3	14.5	12.6	10.3	7.3
	1.25SQ	19	31.2	29.6	27.9	26.1	24.2	22.1	19.7	17.1	14.0	9.9
	2SQ	27	44.4	42.1	39.7	37.1	34.4	31.4	28.1	24.3	19.8	14.0
	3.5SQ	37	60.8	57.7	54.4	50.9	47.1	43.0	38.5	33.3	27.2	19.2
	5.5SQ	49	80.5	76.4	72.0	67.4	62.4	56.9	50.9	44.1	36.0	25.5
	8SQ	61	100.2	95.1	89.7	83.9	77.6	70.9	63.4	54.9	44.8	31.7
	14SQ	88	144.6	137.2	129.3	121.0	112.0	102.2	91.5	79.2	64.7	45.7
	22SQ	115	189.0	179.3	169.0	158.1	146.4	133.6	119.5	103.5	84.5	59.8
	38SQ	162	266.2	252.5	238.1	222.7	206.2	188.2	168.4	145.8	119.0	84.2
	60SQ	217	356.6	338.3	318.9	298.3	276.2	252.1	225.5	195.3	159.5	112.8
	80SQ	257	422.2	400.6	377.7	353.3	327.1	298.6	267.0	231.3	188.8	133.5
	100SQ	298	489.6	464.5	437.9	409.6	379.2	346.2	309.6	268.2	218.9	154.8

Safe Current Tolerance Calculating Formula

$$\text{600V ETFE (A)} = 0.9 \times \sqrt{\frac{150-\theta}{30}} \times (N)$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

■ NiGB

(A)

品名	size	Standard Electric Current Value	100℃	110℃	120℃	130℃	140℃	150℃	160℃	170℃	180℃	190℃
NiGB	0.75SQ	8	7.5	7.3	7.1	6.9	6.7	6.5	6.2	6.0	5.8	5.5
	1.25SQ	10	9.3	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.9
	2SQ	15	14.0	13.6	13.3	12.9	12.5	12.1	11.7	11.3	10.8	10.4
	3.5SQ	25	23.3	22.7	22.1	21.5	20.9	20.2	19.5	18.8	18.1	17.3
	5.5SQ	30	28.0	27.3	26.5	25.8	25.0	24.2	23.4	22.6	21.7	20.7
	8SQ	40	37.3	36.4	35.4	34.4	33.4	32.3	31.2	30.1	28.9	27.7
	14SQ	55	51.3	50.0	48.7	47.3	45.9	44.4	42.9	41.3	39.7	38.0
	22SQ	70	65.3	63.6	61.9	60.2	58.4	56.5	54.6	52.6	50.6	48.4
	38SQ	100	93.3	90.9	88.5	86.0	83.4	80.8	78.0	75.2	72.2	69.2
	size	Standard Electric Current Value	200℃	210℃	220℃	230℃	240℃	250℃	260℃	270℃	280℃	290℃
	0.75SQ	8	5.3	5.0	4.7	4.4	4.1	3.7	3.3	2.9	2.4	1.7
	1.25SQ	10	6.6	6.3	5.9	5.5	5.1	4.7	4.2	3.6	2.9	2.1
	2SQ	15	9.9	9.4	8.8	8.3	7.7	7.0	6.3	5.4	4.4	3.1
	3.5SQ	25	16.5	15.6	14.7	13.8	12.8	11.7	10.4	9.0	7.4	5.2
	5.5SQ	30	19.8	18.8	17.7	16.6	15.3	14.0	12.5	10.8	8.8	6.3
	8SQ	40	26.4	25.0	23.6	22.1	20.4	18.7	16.7	14.4	11.8	8.3
	14SQ	55	36.3	34.4	32.4	30.3	28.1	25.6	22.9	19.9	16.2	11.5
	22SQ	70	46.2	43.8	41.3	38.6	35.8	32.6	29.2	25.3	20.6	14.6
	38SQ	100	65.9	62.6	59.0	55.2	51.1	46.6	41.7	36.1	29.5	20.9

Safe Current Tolerance Calculating Formula

$$\text{NiGB (A)} = \sqrt{\frac{300-\theta}{230}} \times \text{(N)}$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

■ NSBL / NSBL 6 × 4-I / 28NSBL

(A)

Products	size	Standard Electric Current Value	150℃	200℃	210℃	220℃	230℃	240℃	250℃	260℃	270℃	280℃	
NSBL NSBL 6×4 -I 28NSBL*	0.75SQ	10	10.4	9.3	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.2	
	1.25SQ	15	15.6	14.0	13.6	13.3	12.9	12.5	12.1	11.7	11.3	10.8	
	2SQ	20	20.9	18.7	18.2	17.7	17.2	16.7	16.2	15.6	15.0	14.4	
	3.5SQ	30	31.3	28.0	27.3	26.5	25.8	25.0	24.2	23.4	22.6	21.7	
	5.5SQ	40	41.7	37.3	36.4	35.4	34.4	33.4	32.3	31.2	30.1	28.9	
	8SQ	50	52.1	46.6	45.4	44.2	43.0	41.7	40.4	39.0	37.6	36.1	
	14SQ	70	73.0	65.3	63.6	61.9	60.2	58.4	56.5	54.6	52.6	50.6	
	22SQ	90	93.8	83.9	81.8	79.6	77.4	75.1	72.7	70.2	67.7	65.0	
	38SQ	130	135.5	121.2	118.2	115.0	111.8	108.4	105.0	101.4	97.7	93.9	
	60SQ	170	177.2	158.5	154.5	150.4	146.2	141.8	137.3	132.6	127.8	122.8	
	80SQ	220	229.4	205.2	200.0	194.6	189.1	183.5	177.7	171.6	165.4	158.9	
	100SQ	240	250.2	223.8	218.1	212.3	206.3	200.2	193.8	187.2	180.4	173.4	
	size	Standard Electric Current Value	290℃	300℃	310℃	320℃	330℃	340℃	350℃	360℃	370℃	380℃	390℃
	0.75SQ	10	6.9	6.6	6.3	5.9	5.5	5.1	4.7	4.2	3.6	2.9	2.1
	1.25SQ	15	10.4	9.9	9.4	8.8	8.3	7.7	7.0	6.3	5.4	4.4	3.1
	2SQ	20	13.8	13.2	12.5	11.8	11.0	10.2	9.3	8.3	7.2	5.9	4.2
	3.5SQ	30	20.7	19.8	18.8	17.7	16.6	15.3	14.0	12.5	10.8	8.8	6.3
	5.5SQ	40	27.7	26.4	25.0	23.6	22.1	20.4	18.7	16.7	14.4	11.8	8.3
	8SQ	50	34.6	33.0	31.3	29.5	27.6	25.5	23.3	20.9	18.1	14.7	10.4
	14SQ	70	48.4	46.2	43.8	41.3	38.6	35.8	32.6	29.2	25.3	20.6	14.6
	22SQ	90	62.2	59.3	56.3	53.1	49.7	46.0	42.0	37.5	32.5	26.5	18.8
	38SQ	130	89.9	85.7	81.3	76.7	71.7	66.4	60.6	54.2	47.0	38.3	27.1
	60SQ	170	117.6	112.1	106.3	100.3	93.8	86.8	79.3	70.9	61.4	50.1	35.4
	80SQ	220	152.1	145.1	137.6	129.7	121.4	112.4	102.6	91.7	79.5	64.9	45.9
	100SQ	240	166.0	158.3	150.1	141.5	132.4	122.6	111.9	100.1	86.7	70.8	50.0

Safe Current Tolerance Calculating Formula

$$\begin{matrix}\text{NSBL} & \text{(A)} \\ \text{NSBL 6×4-I} & \text{(A)} \\ \text{28NSBL} & \text{(A)}\end{matrix} = \sqrt{\frac{400-\theta}{230}} \times \text{(N)}$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

*Please use 2 times of the Safe Current Tolerance in above mentioned Table to 28NSBL wire.
In the case of Multi-Core, pls refer to Electric Current Decrease Coefficient mentioned below and multiply the Safe Current Tolerance in above Table

The Electric Current Decrease Coefficient Table due to Multi-core.	Number of Core (C)	2 ~ 3	4	5 ~ 6	7 ~ 15
	Current Decrease Coefficient	0.70	0.63	0.56	0.49

Current Tolerance Table

■ NSBL 6 × 5

(A)

Products	Size	Standard Electric Current Value	300℃	310℃	320℃	330℃	340℃	350℃	360℃	370℃	380℃	390℃
NSBL 6 × 5	3.5SQ	30	27.9	27.3	26.4	25.8	25.0	24.1	23.4	22.6	21.6	20.7
	5.5SQ	40	37.3	36.4	35.3	34.4	33.4	32.2	31.2	30.1	28.8	27.7
	8.0SQ	50	46.6	45.5	44.1	43.0	41.8	40.3	39.0	37.7	36.0	34.6
	14.0SQ	70	65.2	63.7	61.8	60.2	58.5	56.4	54.6	52.8	50.4	48.4
	22.0SQ	90	83.9	81.9	79.4	77.4	75.2	72.5	70.2	67.9	64.8	62.3
	38.0SQ	130	121.2	118.4	114.8	111.8	108.7	104.8	101.5	98.1	93.7	90.0
	Size	Standard Electric Current Value	400℃	410℃	420℃	430℃	440℃	450℃	460℃	470℃	480℃	490℃
	3.5SQ	30	19.6	18.7	17.7	16.4	15.2	14.0	12.3	10.8	9.0	6.0
	5.5SQ	40	26.2	24.9	23.6	21.9	20.3	18.7	16.4	14.4	12.0	8.0
	8.0SQ	50	32.7	31.2	29.5	27.3	25.4	23.4	20.6	18.0	15.0	10.0
	14.0SQ	70	45.9	43.7	41.4	38.3	35.6	32.8	28.8	25.2	21.0	14.0
	22.0SQ	90	59.0	56.2	53.2	49.2	45.8	42.2	37.1	32.4	27.0	18.0
	38.0SQ	130	85.2	81.1	76.9	71.2	66.2	60.9	53.6	46.8	39.0	26.0

Safe Current Tolerance Calculating Formula

$$\text{NSBL } 6\times5\ (A) = \sqrt{\frac{500-\theta}{230}} \times (N)$$

θ=Use Temperature(℃)
N=Standard Electric Current Value

In the case of Multi-Core, pls refer to Electric Current Decrease Coefficient mentioned below and multiply the Safe Current Tolerance in above Table

The Electric Current Decrease Coefficient Table due to Multi-core.	Number of Core (C)	2 ~ 3	4	5 ~ 6	7 ~ 15
	Current Decrease Coefficient	0.70	0.63	0.56	0.49

Instructions on Products

Products	Instructions
Thermocouple Extension/ Compensating Cables	**●About The Choice of Cable Type** The cable will be connected to Thermocouple Sensor. Please make sure the type of Thermocouple Sensor first and then choose the type of Thermocouple Extension /Compensating Cable to match the same type of Thermocouple Sensor, otherwise correct temperature can not be measured. **●About The Cable Wiring Environment** ①Glass Fiber Braided type Cable can not be wired in an environment of damp and water. ②Please avoid using in an alkali atmosphere. ③The cable can not be used as an electric cable for power supplies. ④Please be noticed that the cable used outdoors and of a long-time storage, the color might fade. **●About The Colors** The color of cable in this Catalog is only an example. The color may be different for different type or different standard.
Thermocouple Wires (Duplex type)	**●About Standards** Our wire is based on the Standards of JIS-C1602 and JIS C-1605. **●About the Colors** The color code of our wire is based on the Standards of JIS C1610-2012 revised on June of 2012. **●About Wiring of Positive(+) and Negative(−)** Please be careful not to reverse Positive(+) and Negative(−) while wiring. **●About Sheath Bending Radius** The wire can be bent more than 2 times of bend radius of sheath outer diameter.
Heat-resistant Wires	**●About the use methods** The wire in this Catalog are used as a lead wire which is connected to some electric generator apparatus or device in high temperature etc. **●About Standard Voltage Value.** Please be careful not to use the Voltage above the Standard Value listed in this catalog. **●About the wiring environment** ①When power turns on, it becomes very high temperature by self-generation of heat. For the buildings with which an electric wire is in contact or approach please use the materials which shall not yield to the high temperature,and please arrange the wiring at the place away from the people's reach. ② The glass fiber currently used for the electric wire is a very weak material to too much crookedness. Please avoid using in a place (equipment) with the crookedness or an intense vibration (It must be used for fixed wiring). ③Since this electric wire is hygroscopic and may threaten a sparking (short circuit) if applied in the place of humidity and moisture, therefore please avoid wiring in such places.
Thermocouple Extension/ Compensating Cables, Thermocouple Wires (Duplex type), Heat-resistant Wires	**●About the weight of the cable(wire)** The weight of each kind of cable(wire) in this catalog is only a design value for your reference, sometimes there may be a little difference in the completed cable(wire), due to different type and materials of insulation and sheath. **●About the overall diameter of Thermocouple Extension/Compensating Cable** The Overall diameter (O.D) of each kind of cable in this catalog is only a design value for your reference. There might be ±10% error in a completed cable diameter.

FUKUDEN Products CATALOG

Thermocouple Extension /Compensating Cables

Thermocouple Wires

Heat Resistant Wires

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ISO9001

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