Gages for Composite Materials/Plastics



Gage Factor

Approx. 2.1

 Applicable Linear Expansion Coefficients

1, 3, 6, 9

 Self-temperaturecompensation Range

0 to 150°C

Applicable Adhesives and Operating Temperature Ranges

CC-33A: -196 to 120°C CC-35: -30 to 120°C EP-34B: -55 to 150°C

■Foil Strain Gages for Composite Materials

The KFRP gages are self-temperature compensation gages (SELCOM® gages) suitable for strain measurement of composite materials such as CFRP and GFRP. The special gage pattern minimizes the effect of self-heating due to gage current and the effect of reinforcement against low-elasticity materials.

■ Types, lengths and codes of leadwire cables pre-attached to KFRP gages

<u> </u>	ypes, lengths and codes of readwire cables pre attached to furth gages								
Туре	2 polyester-coated copper wires	3 polyester-coated copper wires	Vinyl-coated fl	lat 2-wire cable	Vinyl-coated fla	at 3-wire cable	Middle-temp. 2-wire cable	Middle-temp. 3-wire cable	Fluoroplastic coated high/lowi-temp. 3-wire cable
Length	C1,	D22	C1	D22	C1	D22		C1,D22	
2 cm	N2C2	N2C3							
3	N3C2	N3C3							
4	N4C2	N4C3							
5	N5C2	N5C3							
10	N10C2	N10C3							
15	N15C2	N15C3	L15C2R	L15C2S	L15C3R	L15C3S	R15C2	R15C3	F15C3
30	N30C2	N30C3	L30C2R	L30C2S	L30C3R	L30C3S	R30C2	R30C3	F30C3
50	N50C2	N50C3	L50C2R	L50C2S	L50C3R	L50C3S	R50C2	R50C3	F50C3
1 m	N1M2	N1M3	L1M2R	L1M2S	L1M3R	L1M3S	R1M2	R1M3	F1M3
2			L2M2R	L2M2S	L2M3R	L2M3S	R2M2	R2M3	F2M3
3			L3M2R	L3M2S	L3M3R	L3M3S	R3M2	R3M3	F3M3
4			L4M2R	L4M2S	L4M3R	L4M3S	R4M2	R4M3	F4M3
5			L5M2R	L5M2S	L5M3R	L5M3S	R5M2	R5M3	F5M3
6			L6M2R	L6M2S	L6M3R	L6M3S	R6M2	R6M3	F6M3
8			L8M2R	L8M2S	L8M3R	L8M3S	R8M2	R8M3	F8M3
10			L10M2R	L10M2S	L10M3R	L10M3S	R10M2	R10M3	F10M3
15			L15M2R	L15M2S	L15M3R	L15M3S	R15M2	R15M3	F15M3
20			L20M2R	L20M2S	L20M3R	L20M3S	R20M2	R20M3	F20M3
30 m			L30M2R	L30M2S	L30M3R	L30M3S	R30M2	R30M3	F30M3
Oprg. temp. range	-196 to	150°C		–10 to	80°C		-100 to	150°C	-196 to 200°C
Remarks	Twisted for 50c	m and 1m long	L-6; L-9 for	6m or longer	L-7; L-10 for	6m or longer	L-11	L-12	L-3

KFRP Gages •Uniaxial 120Ω

	Leadwire Cable – Type and Shape	Operating Temp. Range	Leadwire Length	Model
	Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer)		1m	KFRP-5-120-C1-1 L1M3R
		-10 to 80°C	3m	KFRP-5-120-C1-1 L3M3F
		10 00 0	5m	KFRP-5-120-C1-1 L5M3R
	Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)		1m	KFRP-5-120-C1-1 L1M2F
		-10 to 80°C	3m	KFRP-5-120-C1-1 L3M2F
		10 00 0	5m	KFRP-5-120-C1-1 L5M2F
3	Middle-temperature 3-wire cable L-12		1m	KFRP-5-120-C1-1 R1M3
		−100 to 150°C	3m	KFRP-5-120-C1-1 R3M3
		10 .00 0	5m	KFRP-5-120-C1-1 R5M3
	Middle-temperature 2-wire cable L-11		1m	KFRP-5-120-C1-1 R1M2
		-100 to 150°C	3m	KFRP-5-120-C1-1 R3M2
			5m	KFRP-5-120-C1-1 R5M2
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3		1m	KFRP-5-120-C1-1 F1M3
		-196 to 200°C	3m	KFRP-5-120-C1-1 F3M3
			5m	KFRP-5-120-C1-1 F5M3
	3 polyester-coated copper wires		30cm	KFRP-5-120-C1-1 N30C3
	30cm	-196 to 150°C	50cm	KFRP-5-120-C1-1 N50C3
	50cm·1r	1	1m	KFRP-5-120-C1-1 N1M3
	2 polyester-coated copper wires		30cm	KFRP-5-120-C1-1 N30C2
15 x 5 mm		-196 to 150°C	50cm	KFRP-5-120-C1-1 N50C2
	50cm·1r	n	1m	KFRP-5-120-C1-1 N1M2
120Ω 10	Silver-clad copper wires	-196 to 200°C	25mm	KFRP-5-120-C1-1
	Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer)		1m	KFRP-2-120-C1-1 L1M3F
		−10 to 80°C	3m	KFRP-2-120-C1-1 L3M3F
			5m	KFRP-2-120-C1-1 L5M3F
	Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)		1m	KFRP-2-120-C1-1 L1M2F
		−10 to 80°C	3m	KFRP-2-120-C1-1 L3M2F
			5m	KFRP-2-120-C1-1 L5M2F
•	Middle-temperature 3-wire cable L-12		1m	KFRP-2-120-C1-1 R1M3
		-100 to 150°C	3m	KFRP-2-120-C1-1 R3M3
			5m	KFRP-2-120-C1-1 R5M3
	Middle-temperature 2-wire cable L-11		5m 1m	KFRP-2-120-C1-1 R5M3 KFRP-2-120-C1-1 R1M2
	Middle-temperature 2-wire cable L-11	-100 to 150°C		
	Middle-temperature 2-wire cable L-11	-100	1m	KFRP-2-120-C1-1 R1M2
	Middle-temperature 2-wire cable L-11 Fluoroplastic-coated high/low-temp. 3-wire cable L-3	-100 to 150°C	1m 3m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2
		-100 to 150°C	1m 3m 5m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 R5M2
		-100 to 150°C	1m 3m 5m 1m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 R5M2 KFRP-2-120-C1-1 F1M3
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires	-100 to 150°C -196 to 200°C	1m 3m 5m 1m 3m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 R5M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F3M3 KFRP-2-120-C1-1 F5M3
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 30cm	-100 to 150°C -196 to 200°C	1m 3m 5m 1m 3m 5m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F3M3 KFRP-2-120-C1-1 F5M3 KFRP-2-120-C1-1 N30C3
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires	-100 to 150°C -196 to 200°C	1m 3m 5m 1m 3m 5m 3m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F3M3 KFRP-2-120-C1-1 F5M3 KFRP-2-120-C1-1 N30C3
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 30cm 50cm-1r 2 polyester-coated copper wires	-100 to 150°C -196 to 200°C	1m 3m 5m 1m 3m 5m 3m 5m 5m 5m 5om	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F3M3 KFRP-2-120-C1-1 F5M3 KFRP-2-120-C1-1 N30C3 KFRP-2-120-C1-1 N50C3 KFRP-2-120-C1-1 N1M3
10 x 5 mm	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 3 polyester-coated copper wires 2 polyester-coated copper wires 30cm 30cm	-100 to 150°C -196 to 200°C -196 to 150°C	1m 3m 5m 1m 3m 5m 3m 5m 1m 3m 5m 1m 3m 5m 1m 1m 3m 5m 1m	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 F5M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F5M3 KFRP-2-120-C1-1 N30C3 KFRP-2-120-C1-1 N50C3 KFRP-2-120-C1-1 N1M3 KFRP-2-120-C1-1 N30C2
10 x 5 mm 2 mm	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 30cm 50cm-1r 2 polyester-coated copper wires	-100 to 150°C -196 to 200°C -196 to 150°C	1m 3m 5m 1m 3m 5m 3m 5m 3m 5m 30cm 50cm 1m 30cm	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 F5M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F5M3 KFRP-2-120-C1-1 N30C3 KFRP-2-120-C1-1 N50C3 KFRP-2-120-C1-1 N1M3 KFRP-2-120-C1-1 N30C2
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 3 polyester-coated copper wires 2 polyester-coated copper wires 30cm 30cm	-100 to 150°C -196 to 200°C -196 to 150°C	1m 3m 5m 1m 3m 5m 3m 5m 1m 3m 5m 30cm 50cm 1m 30cm 50cm	KFRP-2-120-C1-1 R1M2 KFRP-2-120-C1-1 R3M2 KFRP-2-120-C1-1 F1M3 KFRP-2-120-C1-1 F3M3 KFRP-2-120-C1-1 F5M3 KFRP-2-120-C1-1 N30C3 KFRP-2-120-C1-1 N50C3 KFRP-2-120-C1-1 N1M3 KFRP-2-120-C1-1 N30C2 KFRP-2-120-C1-1 N30C2
		Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer) Middle-temperature 3-wire cable L-12 Middle-temperature 2-wire cable L-11 Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 3 polyester-coated copper wires 2 polyester-coated copper wires 30cm 50cm·1n 2 polyester-coated copper wires 10 Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)	Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) 10 CC1-1 3 6 9 Middle-temperature 3-wire cable L-12 100 to 150°C Middle-temperature 2-wire cable L-11 100 to 150°C Middle-temperature 2-wire cable L-11 100 to 150°C Fluoroplastic-coated high/low-temp. 3-wire cable L-3 15 x 5 mm 5 mm 120Ω 2 polyester-coated copper wires 10 Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) 15 x 5 mm 120Ω Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) 15 x 5 mm 15 mm 120Ω Vinyl-coated flat 3-wire cable L-6 (L-9 for 6m or longer) 15 x 5 mm 15 mm 15 mm 120Ω Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer) 15 x 5 mm 15 mm 16 mm 17 mm 18 mm 19 mm 19 mm 19 mm 10	Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) 1m -10 to 80°C 5m 1m -100 to 150°C 5m 5m 5m 5m 5m 5m 5m 5

KFRP Gages •Triaxial 120Ω

		Range	Length	
	Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer		1m	KFRP-5-120-D22-1 L1M3S
		−10 to 80°C	3m	KFRP-5-120-D22-1 L3M3S
		10 00 0	5m	KFRP-5-120-D22-1 L5M3S
	Vinyl-coated flat 2-wire cable 1-6 (I-9 for 6m or longer)		1m	KFRP-5-120-D22-1 L1M2S
	The state of the s	-10 to 80°C	3m	KFRP-5-120-D22-1 L3M2S
		10 00 0	5m	KFRP-5-120-D22-1 L5M2S
` -	Middle-temperature 3-wire cable 1-12		1m	KFRP-5-120-D22-1 R1M3
-	winder temperature of wire cable. E. 12	-100 to 150°C	3m	KFRP-5-120-D22-1 R3M3
-D22-1		10 130 0	5m	KFRP-5-120-D22-1 R5M3
3	Middle-temperature 2-wire cable 1-11		1m	KFRP-5-120-D22-1 R1M2
	Wildule-temperature 2-wire cable 12-11	-100	3m	KFRP-5-120-D22-1 R3M2
9		10 150 0	5m	KFRP-5-120-D22-1 R5M2
-	Fluoroplastic-coated high/low-temp, 3-wire cable, L-:	R	1m	KFRP-5-120-D22-1 F1M3
	Theoreplastic coated highlight temp. I will capit Li	-196	3m	KFRP-5-120-D22-1 F3M3
-		to 200°C	5m	KFRP-5-120-D22-1 F5M3
-	3 polyester-coated copper wires		30cm	KFRP-5-120-D22-1 N30C3
-	30cm	-196	50cm	KFRP-5-120-D22-1 N50C3
5	50cm·1n		1m	KFRP-5-120-D22-1 N1M3
-	2 polyester-coated copper wires		30cm	KFRP-5-120-D22-1 N30C2
		-196		KFRP-5-120-D22-1 N50C2
	50cm·1m	to 150°C		KFRP-5-120-D22-1 N1M2
	O'l control or control			
	Silver-clad copper wires	-196	25mm	KFRP-5-120-D22-1
10		to 200°C		0 120 522 1
	Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer		1m	KFRP-2-120-D22-1 L1M35
		to 80°C	3m	KFRP-2-120-D22-1 L3M35
_			5m	KFRP-2-120-D22-1 L5M3S
	Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)	40	1m	KFRP-2-120-D22-1 L1M2S
		−10 to 80°C	3m	KFRP-2-120-D22-1 L3M25
)-D22-1			5m	KFRP-2-120-D221 L5M2S
	Middle-temperature 3-wire cable L-12		1m	KFRP-2-120-D22-1 R1M3
	THE PROPERTY OF THE PROPERTY O	–100 to 150°C	3m	KFRP-2-120-D22-1 R3M3
			5m	KFRP-2-120-D22-1 R5M3
9	Middle-temperature 2-wire cable L-11		1m	KFRP-2-120-D22-1 R1M2
		−100 to 150°C	3m	KFRP-2-120-D22-1 R3M2
			5m	KFRP-2-120-D22-1 R5M2
	Fluoroplastic-coated high/low-temp. 3-wire cable L-3		1m	KFRP-2-120-D22-1 F1M3
-		−196 to 200°C	3m	KFRP-2-120-D22-1 F3M3
			5m	KFRP-2-120-D22-1 F5M3
	3 polyester-coated copper wires		30cm	KFRP-2-120-D22-1 N30C3
		to 150°C	50cm	KFRP-2-120-D22-1 N50C3
	50cm·1n	1	1m	KFRP-2-120-D22-1 N1M3
45°	2 polyester-coated copper wires		30cm	KFRP-2-120-D22-1 N30C2
	30cm	−196 to 150°C	50cm	KFRP-2-120-D22-1 N50C2
	50cm·1r	1	1m	KFRP-2-120-D22-1 N1M2
120Ω	Silver-clad copper wires			
700	• •	-196	25mm	KFRP-2-120-D22-1
	-D22-1 3 6 9 45° 19 x 19 mm 5 mm 120Ω 10 -D22-1 3 6 9	Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer) Middle-temperature 3-wire cable L-12 Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 30cm 10 Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer) Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer) Vinyl-coated flat 2-wire cable L-11 Fluoroplastic-coated high/low-temp. 3-wire cable L-3 Middle-temperature 2-wire cable L-11 Fluoroplastic-coated high/low-temp. 3-wire cable L-3 3 polyester-coated copper wires 3 polyester-coated copper wires	Vinyl-coated flat 2-wire cable L-12	Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer) -10

KFRP Gages •Uniaxial 350Ω

Patterr	1	Leadwire Cable – Type and Shape	Operating Temp. Range	Leadwire Length	Model
		Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer)		1m	KFRP-5-350-C1-1 L1M3R
Г			–10 to 80°C	3m	KFRP-5-350-C1-1 L3M3R
	3		10 00 0	5m	KFRP-5-350-C1-1 L5M3R
KFRP-5-35				1m	KFRP-5-350-C1-1 L1M2R
			−10 to 80°C	3m	KFRP-5-350-C1-1 L3M2R
	6 9		10 00 0	5m	KFRP-5-350-C1-1 L5M2R
	9	Middle-temperature 3-wire cable L-12		1m	KFRP-5-350-C1-1 R1M3
			−100 to 150°C	3m	KFRP-5-350-C1-1 R3M3
			10 100 0	5m	KFRP-5-350-C1-1 R5M3
		Middle-temperature 2-wire cable L-11		1m	KFRP-5-350-C1-1 R1M2
			−100 to 150°C	3m	KFRP-5-350-C1-1 R3M2
			10 100 0	5m	KFRP-5-350-C1-1 R5M2
		Fluoroplastic-coated high/low-temp. 3-wire cable L-3		1m	KFRP-5-350-C1-1 F1M3
			−196 to 200°C	3m	KFRP-5-350-C1-1 F3M3
			10 200 C	5m	KFRP-5-350-C1-1 F5M3
		3 polyester-coated copper wires		30cm	KFRP-5-350-C1-1 N30C3
		30cm	-196	50cm	KFRP-5-350-C1-1 N50C3
		50cm·1m	to 150°C	1m	KFRP-5-350-C1-1 N1M3
		2 polyester-coated copper wires		30cm	KFRP-5-350-C1-1 N30C2
Uniaxial			-196	50cm	KFRP-5-350-C1-1 N50C2
Base Size	15 x 5 mm	50cm·1m	to 150°C	1m	KFRP-5-350-C1-1 N1M2
Gage Length	5 mm	Silver-clad copper wires			
Gage ResistancePieces per Pack	350Ω 10	Silver-clau copper wires	-196 to 200°C	25mm	KFRP-5-350-C1-1
		Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer)		1m	KFRP-2-350-C1-1 L1M3R
			−10 to 80°C	3m	KFRP-2-350-C1-1 L3M3R
			10 00 0	5m	KFRP-2-350-C1-1 L5M3R
KFRP-2-35		Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)		1m	KFRP-2-350-C1-1 L1M2R
	3		–10 to 80°C	3m	KFRP-2-350-C1-1 L3M2R
	6 9		10 00 0	5m	KFRP-2-350-C1-1 L5M2R
	9	Middle-temperature 3-wire cable L-12		1m	KFRP-2-350-C1-1 R1M3
			−100 to 150°C	3m	KFRP-2-350-C1-1 R3M3
			10 130 0	5m	KFRP-2-350-C1-1 R5M3
		Middle-temperature 2-wire cable L-11		1m	KFRP-2-350-C1-1 R1M2
			−100 to 150°C	3m	KFRP-2-350-C1-1 R3M2
			10 130 C	5m	KFRP-2-350-C1-1 R5M2
		Fluoroplastic-coated high/low-temp. 3-wire cable L-3		1m	KFRP-2-350-C1-1 F1M3
		The second of th	-196	3m	KFRP-2-350-C1-1 F3M3
			to 200°C	5m	KFRP-2-350-C1-1 F5M3
		3 polyester-coated copper wires		30cm	KFRP-2-350-C1-1 N30C3
		30cm	-196	50cm	KFRP-2-350-C1-1 N50C3
		50cm·1m	to 150°C	1m	KFRP-2-350-C1-1 N1M3
Uniovial		2 polyester-coated copper wires		30cm	KFRP-2-350-C1-1 N30C2
Uniaxial			-196	50cm	KFRP-2-350-C1-1 N50C2
Base Size	10 x 5 mm	50cm·1m	to 150°C	1m	KFRP-2-350-C1-1 N1M2
Gage Length	2 mm	Cilver alad construires			
Gage Resistance	350Ω 10	Silver-clad copper wires	−196 to 200°C	25mm	KFRP-2-350-C1-1
Pieces per Pack					

KFRP Gages •Triaxial 350Ω

Pattern		Leadwire Cable – Type and Shape	Operating Temp. Range	Leadwire Length	Model
		Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer)		1m	KFRP-5-350-D22-1 L1M3S
			−10 to 80°C	3m	KFRP-5-350-D22-1 L3M3S
			10 00 0	5m	KFRP-5-350-D22-1 L5M3S
		Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)		1m	KFRP-5-350-D22-1 L1M2S
			−10 to 80°C	3m	KFRP-5-350-D22-1 L3M2S
11			10 00 0	5m	KFRP-5-350-D22-1 L5M2S
	\	Middle-temperature 3-wire cable L-12		1m	KFRP-5-350-D22-1 R1M3
/			-100	3m	KFRP-5-350-D22-1 R3M3
KFRP-5-350	-D22-1		to 150°C	5m	KFRP-5-350-D22-1 R5M3
	3	Middle temperature Quire cable 1 11		1m	KFRP-5-350-D22-1 R1M2
	6	Middle-temperature 2-wire cable L-11	-100	3m	KFRP-5-350-D22-1 R3M2
	9		to 150°C	5m	KFRP-5-350-D22-1 R5M2
		Fluorenlastic aceted high/law targe 2 wire cable 1.2		1m	
		Fluoroplastic-coated high/low-temp. 3-wire cable L-3	-196	3m	
			to 200°C	5m	
		3 polyester-coated copper wires		30cm	KFRP-5-350-D22-1 L5M2S KFRP-5-350-D22-1 R1M3 KFRP-5-350-D22-1 R3M3 KFRP-5-350-D22-1 R5M3 KFRP-5-350-D22-1 R1M2 KFRP-5-350-D22-1 R3M2
		30cm	-196 to 150°C	50cm	
		50cm·1m		1m	
		2 polyester-coated copper wires		30cm	
Triaxial, 0°/90°	/45°	2 polyester-coated copper wires 30cm	-196	50cm	
Base Size	19 x 19 mm	50cm·1m	to 150°C	1m	
Gage Length	5 mm			1111	KFRP-5-550-D22-1 N1W2
Gage Resistance	350Ω	Silver-clad copper wires	-196	0Emm	VEDD 5 100 D00 1
Pieces per Pack	10		to 200°C	25mm	KFRP-3-120-D22-1
		Vinyl-coated flat 3-wire cable L-7 (L-10 for 6m or longer)		1m	KFRP-2-350-D22-1 L1M3S
			−10 to 80°C	3m	KFRP-2-350-D22-1 L3M3S
				5m	KFRP-2-350-D22-1 L5M3S
		Vinyl-coated flat 2-wire cable L-6 (L-9 for 6m or longer)		1m	KFRP-2-350-D22-1 L1M2S
			−10 to 80°C	3m	KFRP-2-350-D22-1 L3M2S
	,			5m	KFRP-2-350-D22-1 L5M2S
I		Middle-temperature 3-wire cable L-12		1m	KFRP-2-350-D22-1 R1M3
KFRP-2-350-D22-1			-100 to 150°C	3m	KFRP-2-350-D22-1 R3M3
	3			5m	KFRP-2-350-D22-1 R5M3
	6	Middle-temperature 2-wire cable L-11		1m	KFRP-2-350-D22-1 R1M2
	9		−100 to 150°C	3m	KFRP-2-350-D22-1 R3M2
			10 100 0	5m	KFRP-2-350-D22-1 R5M2
		Fluoroplastic-coated high/low-temp. 3-wire cable L-3		1m	KFRP-2-350-D22-1 F1M3
			−196 to 200°C	3m	KFRP-2-350-D22-1 F3M3
			10 200 0	5m	KFRP-2-350-D22-1 F5M3
		3 polyester-coated copper wires		30cm	KFRP-2-350-D22-1 N30C3
		30cm	-196	50cm	KFRP-2-350-D22-1 N50C3
		50cm·1m	to 150°C	1m	KFRP-2-350-D22-1 N1M3
Triovial 00/000/450		2 polyester-coated copper wires		30cm	KFRP-2-350-D22-1 N30C2
Triaxial, 0°/90°/45°		= 30cm	-196	50cm	KFRP-2-350-D22-1 N50C2
Base Size	15 x 15 mm	50cm·1m	to 150°C	1m	KFRP-2-350-D22-1 N1M2
Gage Length	2 mm			1111	13 11 2 000-D22-1 14 1WZ
Gage ResistancePieces per Pack	350Ω 10	Silver-clad copper wires	-196	25mm	KEDD_2_250 D20 1
	10		to 200°C	43HHH	KFRP-2-350-D22-1