

## **WrapTEr Helical Fittings**

TE Connectivity are a leader in the design and supply of Helical Fittings for use on Utility and Distribution Networks across the ANZ region.

TE Connectivity can provide a wide range of WrapTEr helical terminations, joints, protection, restoration, repair and support fittings for use on bare and insulated overhead conductor. Each fitting is custom designed for a particular conductor range and type.

All fittings are manufactured from premium materials, which are compatible with the materials used in the conductor / cable onto which they are applied. This ensures maximum electrical and mechanical performance, whilst minimising corrosion potential.

## **Key Features of WrapTEr Helical Fittings**

Uniform grip to stop any distortion of the conductor or damage to the conductor

Type Tested to AS 1154 at an Independent NATA certified Mechanical laboratory

Colour coding to the requirements of AS 1154.3

Easy Installation by hand or live line methods, no need for any special tools

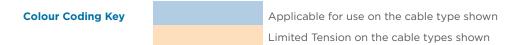






## **Contents and Selection Guide**

Application	Fitting Type	Prefix	Mi	Min Strength Rating on Conductor Type ( UTS )						
Termination	Deadend		AAC	AAAC	ACSR	HDC	SC/GZ			
	Aluminium Alloy	FAD	90%	90%	60-85%			5		
-	Aluminium Clad Steel	FSLD			90%			6		
1	Copper	FCD				90%		7		
	Galvanised Steel	FGD					90%	8		
Protection	Armour Rod									
	Aluminium Alloy	NAA						9		
	Copper	NCA						10		
	Galvanised Steel	NGA						10		





## **PRODUCT NOMENCLATURE**

F A D 0515 - 0540 - 6 L

Fit	tting Rating	Fitt	ting Material		ting Material Fitting Application	Co	ottom nductor Range		Conductor Range	Dia	oop mater (for dends)	Fit	tting Lay
F	FULL TENSION	А	ALUMINIUM	А	ARMOUR	0410	Ø 4.1 mm	0445	Ø 4.45 mm	3	Ø 40	R	RIGHT HAND LAY
N	NON TENSION	С	COPPER	В	BIRD DIVERTER	ТО		ТО		4	Ø 45	L	LEFT HAND
L	LIMITED TENSION	L	ALUMINIUM CLAD STEEL	D	DEADEND	2980	Ø 29.80 mm	3080	Ø 30.80 mm	5	Ø 55	N	NEOPRENE COVER
FS	FULL TENSION SPECIFIC APPLICATION	G	GALVANISED STEEL	G	GUY GRIP					6	Ø 60		,
		Р	POLYMERIC	J	SPLICE (JOIN)					7	Ø 65		
		М	MULTI	Р	PROTECTION					8	Ø 75		
		D	DOUBLE INSULATED	S	SIDE TIE							_	

TOP TIE

## **Full Tension Aluminium Dead-End**

FAD Aluminium based dead-ends are designed to carry out terminations on overhead distribution networks for AAC, AAAC and ACSR style conductors. Their single, one piece design provides a uniform clamping load over a large cross section of the conductor.

A wide range of fittings have been developed to cover all conductors sizes/styles, with each specific application range as per the below table.



#### RATED HOLDING STRENGTH

On AAC and AAAC style conductors, WrapTEr FAD fittings hold a minimum of 90% of the ultimate tensile strength of the conductor, onto which they are applied. For strength ratings on ACSR conductors, please consult TE.

#### ORDERING INFORMATION

Catalogue Number	No. of	Conductor	Conductor	Pack	Colour
	Rods	Stranding	OD Range	Quantity	Code
FAD0515-0540-6	4	7/1.75	5.15 - 5.40	50	Purple
FAD0655-0710-6	4	7/2.25	6.55 - 7.10	50	Brown
FAD0735-0760-6	4	7/2.50	7.35 - 7.60	50	Blue
FAD0795-0860-6	4	7/2.75	7.95 - 8.60	40	White
FAD0865-0935-6	4	7/3.00	8.65 - 9.35	40	Red
FAD1015-1050-6	4	7/3.40	10.15 - 10.50	40	Blue
FAD1080-1130-6	4	7/3.75	10.80 - 11.30	25	Black
FAD1305-1405-6	6	7/4.50	13.05 - 14.05	20	Green
FAD1385-1445-6	6	7/4.75	13.85 - 14.45	20	Blue
FAD1565-1690-7	5	19/3.25	15.65 - 16.90	15	Orange
FAD1705-1780-7	5	19/3.50	17.05 - 17.80	10	Blue
FAD1855-1935-8	6	19/3.75	18.55 - 19.35	10	Black
FAD2020-2185-8	6	37/3.00	20.20 - 21.85	10	Red
FAD2245-2420-8	7	37/3.25	22.45 - 24.20	10	Blue
FAD2375-2620-8	6	19/4.75	23.75 - 26.20	10	Blue
FAD2530-2730-8	8	37/3.75	25.30 - 27.30	10	Black
FAD2860-3085-8	8	61/3.25	28.60 - 30.85	10	Orange

## **Full Tension Copper Dead-End**

FCD style dead-ends are designed to be an effective method of carrying out terminations on hard-drawn Copper and Copper alloy conductors.

The material used is ideally suited for highly polluted and coastal conditions.

#### RATED HOLDING STRENGTH

On hard-drawn Copper conductors, WrapTEr FCD fittings hold a minimum of 90% of the ultimate tensile strength of the conductor, onto which they are applied.



#### ORDERING INFORMATION

Catalogue Number	No. of Rods	Conductor Stranding	Conductor OD Range	Pack Quantity	Colour Code	
FCD0480-0525-6	4	7/1.75	4.80 - 5.25	50	Purple	
FCD0600-0630-6	5	7/2.00	6.00 - 6.30	50	Yellow	
FCD0790-0875-6	5	7/2.75	7.90 - 8.75	40	White/Purple	
FCD0900-0925-5	6	7/3.00	9.00 - 9.25	30	Red	
FCD0990-1065-6	4	19/2.00	9.90 - 10.65	20	Purple/Yellow	
FCD1070-1125-6	5	19/2.14	10.70 - 11.25	20	Black	
FCD1255-1320-6	6	19/2.56	12.55 - 13.20	15	Yellow	
FCD1320-1375-6	6	19/2.75	13.20 - 13.75	10	White	
FCD1450-1505-6	6	19/3.00	14.50 - 15.05	10	Red	
FCD1810-1900-6	6	37/0.103	18.10 - 19.00	5	White	



## **Full Tension Galvanised Steel Dead-End**

FGD Full tension dead-ends are designed specifically to be used as a termination on SC/GZ style conductors.

Dead-ends are typically used for the termination of guy wires, stay conductors and earth wires.



#### RATED HOLDING STRENGTH

On all SC/GZ style conductors, FGD fittings hold a minimum of 90% of the ultimate tensile strength of the conductor, onto which they are applied.

#### ORDERING INFORMATION

Catalogue Number	No. of Rods	Conductor Stranding	Conductor OD Range	Pack Quantity	Colour Code	
FGD0370-0385-3	4	7/1.25	3.70 - 3.85	50	Green	
FGD0420-0440-4	4	3/2.00	4.20 - 4.40	50	Yellow	
FGD0465-0500-4	4	7/1.60	4.65 - 5.00	50	Black	
FGD0550-0595-4	4	3/2.75	5.50 - 5.95	50	White	
FGD0550-0595-4L*	4	3/2.75	5.50 - 5.95	50	White	
FGD0595-0620-5	5	7/2.00	5.95 - 6.20	50	Yellow	
FGD0790-0830-7	5	7/2.75	7.90 - 8.30	20	White	
FGD0970-1020-7	5	7/3.25	9.70 - 10.20	20	Yellow/Orange	
FGD1085-1170-7	6	7/3.75	10.85 - 11.70	20	Black	
FGD1185-1220-7	6	7/4.00	11.85 - 12.20	15	Black	
FGD1305-1395-8	5	19/2.75	13.05 - 13.95	5	White	
FGD1600-1640-8	6	19/3.25	16.00 - 16.40	5	Orange	

<sup>\*</sup> Left hand lay

## **Full Tension Specific ALCLAD Dead-End**

FSLD Full tension dead-ends are designed specifically to be used as a termination on ACSR style conductors.

The unique one piece design, provides maximum strength and quick and simple installation.

#### RATED HOLDING STRENGTH

On all ACSR style conductors, FSLD fittings hold a minimum of 90% of the ultimate tensile strength of the conductor, onto which they are applied.



#### ORDERING INFORMATION

Catalogue Number	No. of Rods	Conductor Stranding	Pack Quantity	Colour Code
FSLD0525-5	3	3/4/1.75	50	Purple
FSLD0590-5	3	6/0.074 + 1/0.133	30	Yellow
FSLD0750-5	3	6/1/2.50	30	Blue
FSLD0810-0880-5	4	6/0.105 + 1/0.188	25	White
FSLD0900-5	4	6/1/3.00	25	Red
FSLD0980-1030-5	3	3/4/3.37	25	Orange
FSLD1125-5	3	6/1/3.75	25	Black
FSLD1410-1430-5	3	6/4.75 + 7/1.60	20	Blue



## **Aluminium Armour Rods**

Armour Rods are designed to be used as protection against bending, compressive stresses, abrasion and arcing damage on conductors.

• Type NAA: Aluminium Armour rods for use on AAC/ AAAC/ACSR conductor



#### ORDERING INFORMATION

Catalogue Number	No. of Rods	Conductor Stranding AAC/AAAC	Conductor Stranding ACSR	Conductor OD Range	Pack Quantity	Colour Code
NAA0495-0530	7	7/1.75	3/4/1.75	4.95 - 5.30	50	Purple
NAA0495-0530-S*	7 (3&4)	7/1.75	3/4/1.75	4.95 - 5.30	50	Purple
NAA0735-0785	8	7/2.50	6/1/2.50 - 3/4/2.50	7.35 - 7.85	50	Blue
NAA0735-0785-S*	8 (4&4)	7/2.50	6/1/2.50 - 3/4/2.50	7.35 - 7.85	50	Blue
NAA0880-0930	9	7/3.00	6/1/3.00 - 4/3/3.00	8.80 - 9.30	40	Red
NAA0880-0930-S*	9 (3&3&3)	7/3.00	6/1/3.00 - 4/3/3.00	8.80 - 9.30	40	Red
NAA0990-1050	9	7/0.134		9.90 - 10.50	40	Purple
NAA1110-1180	10	7/3.75	6/1/3.75 - 4/3/3.75	11.10 - 11.80	25	Black
NAA1110-1180-S*	10 (4&3&3)	7/3.75	6/1/3.75 - 4/3/3.75	11.10 - 11.80	25	Black
NAA1325-1400	11	7/4.50		13.25 - 14.00	20	Green
NAA1325-1400-S*	11 (4&4&3)	7/4.50		13.25 - 14.00	20	Green
NAA1400-1490	11	7/4.75	6/4.75 + 7/1.60	14.00 - 14.90	20	Blue
NAA1605-1665	12	19/3.25		16.05 - 16.65	15	Orange
NAA1725-1790	12	19/3.50	30/7/2.50	17.25 - 17.90	15	Blue
NAA1790-1880	12	19/3.75		17.90 - 18.80	10	Black
NAA1790-1880-S*	12 (4&4&4)	19/3.75		17.90 - 18.80	10	Black
NAA2070-2150	11	37/3.00	30/7/3.00	20.70 - 21.50	5	Red
NAA2150-2305	12	37/3.25	30/7/3.25	21.50 - 23.05	10	Blue
NAA2360-2480	13	19/4.75	30/7/3.50	23.60 - 24.80	5	Purple/Blue
NAA2585-2630	12	37/3.75	54/7/3.00	25.85 - 26.30	5	Black
NAA2895-30.76	13	61/3.25	54/7/3.25	28.95 - 30.70	3	Red
NAA3070-3225	12	54/7/3.50		30.70 - 32.25	3	Purple

<sup>\*</sup>Subset as shown

Rods are labelled, bundled in a set and taped at both ends



## **Copper Armour Rods**

Armour Rods are designed to be used as protection against bending, compressive stresses, abrasion and arcing damage on conductors.

Type NCA: Copper Armour rods for use on copper conductors



#### ORDERING INFORMATION

Catalogue Number	No. of Rods	Conductor Stranding	Conductor OD Range	Pack Quantity	Colour Code
NCA0600-0635	9	7/2.00	6.00 - 6.35	25	Yellow
NCA0800-0850	9	7/2.75	8.00 - 8.50	20	White
NCA0895-0945	10	7/3.00	8.95 - 9.45	15	Red
NCA1000-1065	10	19/2.00	10.00 - 10.65	10	Yellow
NCA1785-1870	13	37/1.03	17.85 - 18.70	5	Blue

#### **Galvanised Steel Armour Rods**

Armour Rods are designed to be used as protection against bending, compressive stresses, abrasion and arcing damage on conductors.

 Type NGA: Galvanised Steel Armour rods for use on SG/GZ conductors



#### ORDERING INFORMATION

Catalogue	No. of	Conductor	Conductor	Pack	Colour
Number	Rods	Stranding	OD Range	Quantity	Code
NGA0410-0440	8	3/2.00	4.10 - 4.40	50	Yellow
NGA0480-0600	9	7/2.00	4.80 - 6.00	50	Black/Yellow/White
NGA0785-0830	10	7/2.75	7.85 - 8.30	30	White
NGA0950-1025	11	7/3.25	9.50 - 10.25	20	Orange/Yellow
NGA1110-1180	12	7/3.75	11.10 - 11.80	20	Black

Rods are labelled, bundled in a set and taped at both ends



# WrapTEr Helicals Quick Reference Guide

IOTES



TE Connectivity (NYSE: TEL) is a \$14 billion global technology leader. Our connectivity and sensor solutions are essential in today's increasingly connected world. We collaborate with engineers to transform their concepts into creations – redefining what's possible using intelligent, efficient and high-performing TE products and solutions proven in harsh environments. Our 80,000 people, including 7,500 design engineers, partner with customers in over 150 countries across a wide range of industries. We believe EVERY CONNECTION COUNTS – **te.com.** 

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