







General Recommendations





Distribution Ties are designed and manufactured to secure conductors in the top groove of insulators.

Distribution Ties provide an improved method of securing conductors compared to hand ties. Distribution Ties provide superior abrasion protection for the conductor under all types of motion, including low frequency sway oscillation, high frequency aeolian vibration and galloping.

The neoprene component surrounds the bare conductor with a resilient cushioning where the conductor would come into contact with the insulator and with the centre section of the tie. In the case of Distribution Ties being applied over Armor Rods, the tube is not necessary as contact with the bare conductor is prevented by the Armor Rod.

On vertically mounted insulators, Distribution Ties can normally accommodate line angles of up to 10° depending on insulator orientation. In all cases the conductor should rest in the preferred insulator groove, independently of the tie, so the tie is not required to force the conductor to remain in the groove. Due to the construction of Distribution Ties, if an impact load is applied to one side of the insulator and then released, the distribution ties retains a memory and will return to its original position.

SAFETY CONSIDERATIONS

- Do not modify this product in any way.
- This product is intended for use by qualified linesmen only.
- When working in the area of energised line with this product, extra care should be taken to prevent accidental electrical contact.
- For proper performance and personal safety, be sure to select the proper size PREFORMED™ products before application.
- PREFORMEDTM products are precision devices. To ensure proper performance, they should be stored in cartons under cover and handled carefully.









For Aluminium Based Conductors AAC, AAAC and ACSR



Insulator Colour Codes: 76mm neck - Yellow 112mm neck - Blue

Fittings to suit 112mm neck insulators are available, substitute suffix -76 for -112

Part Number	Conductor Diameter Range (mm)	Standard Pack Quantity	Colour Code
AWDT-053-76	4.80 - 5.49	75	Purple
AWDT-060-76	5.50 - 6.19	50	White
AWDT-068-76	6.50 - 7.03	100	Brown
AWDT-075-76	7.04 - 7.99	100	Blue
AWDT-090-76	8.00 - 9.06	50	Red
AWDT-102-76	9.07 - 10.29	50	Purple
AWDT-113-76	10.30 - 11.65	50	Black
AWDT-125-76	11.66 - 13.19	50	Red
AWDT-140-76	13.20 - 14.99	50	Blue
AWDT-163-76	15.00 - 17.19	50	Orange
AWDT-180-76	17.20 - 19.19	50	Black
AWDT-210-76	19.20 - 21.60	50	Red
AWDT-220-76	21.70 - 22.59	50	Green
AWDT-240-76	22.60 - 24.59	50	Blue
AWDT-255-76	24.60 - 25.60	50	Orange
AWDT-270-76	27.00 - 27.50	50	Red
AWDT-290-76	27.80 - 31.40	50	Black

For Galvanised Conductors - SC/GZ



Insulator Colour Codes: 76mm neck - Yellow 112mm neck - Blue

Fittings to suit 112mm neck insulators are available, substitute suffix -76 for -112

Part Number	Conductor Stranding	Conductor Diameter (mm)	Standard Pack Quantity
GDT-043-76	3/2.00	4.31	75
GDT-048-76	7/1.60	4.80	50
GDT-055-76	3/2.75	5.93	75
GDT-060-76	7/2.00	6.00	75
GDT-083-76	7/2.75	8.25	75
GDT-090-76	7/3.25	9.00	75
GDT-102-76	7/3.25 19/2.00	9.75 10.00	50
GDT-113-76	7/3.75	11.30	50
GDT-120-76	7/4.00	12.00	50
GDT-138-76	19/2.75	13.80	50
GDT-145-76	19/2.90	14.50	50
GDT-150-76	19/3.00	15.00	50
GDT-163-76	19/3.25	16.30	50

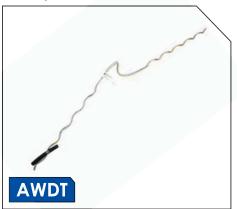








For Aluminium Based Conductors AAC, AAAC and ACSR over Armoured Conductor



Note: The range of a tie for armoured conductor is the diameter with armouring not the bare conductor.

Insulator Colour Codes: 76mm neck - Yellow 112mm neck - Blue These Distribution Ties are designed to be applied over PLP Preformed Armor Rods. These are the preferred package for the support point on medium to long spans in distribution and medium voltage line designs. The package gives maximum protection and holding capacity at the support point, where wind sway or arc-over could be considered a problem. Where there is a known vibration issue, it is highly recommended that a PLP spiral damper (SVD) be installed.

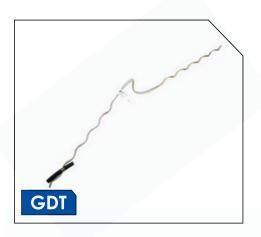
Fittings to suit 112mm neck insulators are available, substitute suffix -76 for -112.

Part Number (Distribution Tie)	Part Number (Armor Rods)	Conductor Stranding	Conductor Diameter (mm)
AWDT-113A-76	AAR-053	7/1.75	5.25
AWDT-125A-76	AAR-063	7/2.00	6.00
AWDT-140A-76	AAR-075	7/2.50	7.50
AWDT-163A-76	AAR-090	7/3.00	9.00
AWDT-210A-76	AAR-113	7/3.75	11.25
AWDT-220A-76	AAR-135	7/4.50	13.50
AWDT-240A-76	AAR-143	7/4.75	14.25
AWDT-255A-76	AAR-163	19/3.25	16.25
AWDT-270A-76	AAR-175	30/7/2.50	17.50
AWDT-290A-76	AAR-188	19/3.75	18.75



Note: Typical Armor-Rods to be used with the above ties.

For Galvanised Conductors - SC/GZ over Armoured Conductor



Fittings to suit 112mm neck insulators are available, substitute suffix -76 for -112

Part Number (Distribution Tie)	Part Number (Armor Rods)	Conductor Stranding	Conductor Diameter (mm)
GDT-102A-76	GAR-055	3/2.75	5.93
GDT-104A-76	GAR-060	7/2.00	6.00
GDT-125A-76	GAR-075	7/2.50	7.50
GDT-163A-76	GAR-100	7/3.25	9.75

Insulator Colour Codes: 76mm neck - Yellow 112mm neck - Blue **Note:** The range of a tie for armoured conductor is the diameter with armouring not the bare conductor.

Note: Typical Armor-Rods to be used with the above ties.





Plastic Ties for Covered Conductors



The Distribution Tie is used with pin type or post type insulators on cross-arms. Alternatively it may be used with pole top mounted insulators on armless construction. Running angles up to 15° are recommended.

Part Number	Conductor Diameter Range (mm)	Neck Diameter (mm)	Standard Pack Quantity
TTF-1105	7.52 - 10.16	76	50
TTF-1100	10.17 - 13.72	76	50
TTF-1101	13.73 - 18.54	76	50
TTF-1102	18.55 - 23.37	76	50
TTF-1103	23.38 - 27.94	76	50
TTF-1104	27.95 - 33.00	76	50

SAFETY CONSIDERATIONS

- Intended Use: Plastic Line Ties and Plastic Side Ties are intended for use with plastic jacketed conductors. Consult PLP about voltage limitations with Plastic Ties.
- Caution: Plastic Line Ties and Plastic Side Ties are intended for use on lines which have been designed electrically for jacketed conductors and insulated ties. Under certain field conditions, burning and tracking may occur on the tie; therefore, the product must be evaluated by the intended user to determine if it is suitable for use in a particular area.
- Mechanical: Testing has shown Plastic Line Ties and Plastic Side Ties will develop unbalanced and lift-off loads equivalent to, or in excess of, a well-made hand tie over jacketed conductor.
- Caution: The performance of plastic ties is significantly influenced by the line design and the environmental conditions; consequently, under certain situations tracking can occur. The individual utility must determine if the product is safe for their intended use.

