

Side Tie



General Recommendations



Side Ties are designed and manufactured to secure conductors to the side groove of the insulator.

Side Ties provide an improved method of securing conductors compared to hand ties. Side 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 Side Ties being applied over Armor Rods, the tube can be disposed of, as contact with the bare conductor is prevented by the Armor Rod.

On vertically mounted insulators, Side Ties can normally accommodate line angles of up to 40° depending upon the angle of the insulator and 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 Side Ties, if an impact load is applied to one side of the insulator and then released, the side ties retains a memory and will return to its original position.

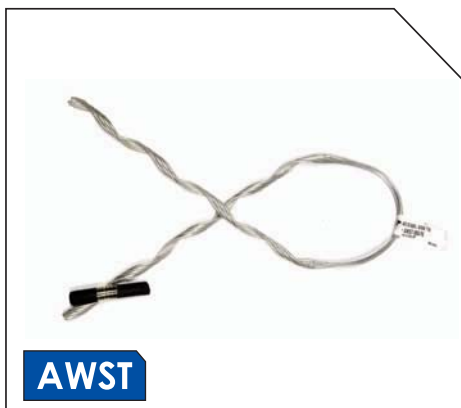
SAFETY CONSIDERATIONS

- This product is intended for a single (one-time) use and for the specified application, although it may be re-applied twice for retensioning within 90 days from initial installation.
- 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.
- PREFORMED™ products are precision devices. To ensure proper performance, they should be stored in cartons under cover and handled carefully.

Side Tie



For AAC, AAAC and ACSR over Bare Conductor



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

Part Number	Conductor Diameter Range (mm)	Standard Pack Quantity	Colour Code
AWST-053-76	4.80 - 5.49	75	Purple
AWST-060-76	5.50 - 6.19	75	Brown
AWST-068-76	6.20 - 7.03	100	Brown
AWST-075-76	7.04 - 7.99	75	Blue
AWST-090-76	8.00 - 9.06	50	Red
AWST-102-76	9.07 - 10.29	50	Purple
AWST-113-76	10.30 - 11.65	50	Purple
AWST-125-76	11.66 - 13.19	50	Orange
AWST-140-76	13.20 - 14.99	50	Blue
AWST-163-76	15.00 - 17.19	40	Orange
AWST-180-76	17.20 - 19.19	50	Black
AWST-210-76	19.20 - 21.69	50	Red
AWST-220-76	21.70 - 22.59	40	Green
AWST-240-76	22.60 - 24.59	50	Red
AWST-255-76	24.60 - 25.60	30	Orange
AWST-290-76	27.80 - 31.40	25	Black

Insulator Colour Codes:

76mm neck - Yellow

112mm neck - Blue

For SC/GZ Conductors over Bare Conductor



These Side 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 76mm and 112mm neck insulators are available, substitute suffix -54 for -76 or 112 respectively.

Part Number	Conductor Stranding	Conductor Diameter (mm)	Standard Pack Quantity	Colour Code
GST-043-54	3/2.00	4.31	100	Yellow
GST-048-54	7/1.60	4.80	100	Black
GST-055-54	3/2.75	5.93	100	White
GST-060-54	3/2.75	5.91	100	White
	7/2.00	6.00	100	Yellow
GST-083-54	7/2.75	8.25	50	White
GST-098-54	7/3.25	9.75	50	Orange
GST-102-54	19/2.00	10.00	50	Yellow
GST-113-54	7/3.75	11.30	50	Black
GST-120-54	7/4.00	12.00	50	Black
GST-138-54	19/2.75	13.80	50	White

Insulator Colour Codes:

54mm neck - Red

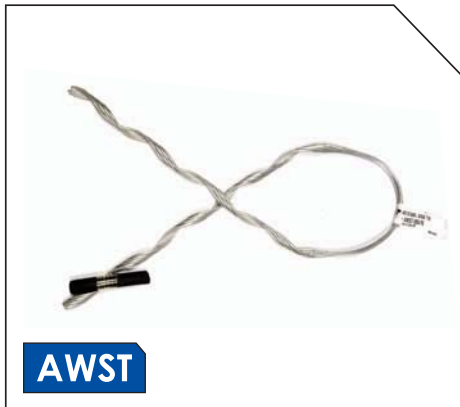
76mm neck - Yellow

112mm neck - Blue

Side Tie



For AAC, AAAC and ACSR over Armoured conductor



AWST

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

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

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.

For Galvanised Steel Conductors (SC/GZ)



GST

Fittings to suit 76mm and 112mm neck insulators are available, substitute suffix -54 for -76 or -112 respectively.

Part Number (Side Tie)	Part Number (Armor Rods)	Conductor Stranding	Conductor Diameter (mm)
GST-083A-54	GAR-038	3/2.00	4.31
GST-090A-54	GAR-043	7/1.60	4.80
GST-102A-54	GAR-055	3/2.75	5.93
GST-104A-54	GAR-060	7/2.00	6.00
GST-138A-54	GAR-083	3/4/2.50	7.50
GST-160A-54	GAR-098	7/3.25	9.75
	GAR-100	19/2.00	10.00

Insulator Colour Codes:
54mm neck - Red
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.



PREFORMED LINE PRODUCTS
(THAILAND) LTD.

Side Tie



Plastic Angled Tie for Covered Conductors



SSF

The plastic angle Side Tie is used with pin type or post type on cross-arms. Alternatively it may be used with pole top mounted insulators and side mounted insulators on armless construction. Turning angles from 11° to 40° are recommended.

Part Number	Conductor Diameter Range (mm)	Neck Diameter (mm)	Standard Pack Quantity
SSF-2205	7.52 - 10.16	76	50
SSF-2200	10.17 - 13.72	76	50
SSF-2201	13.73 - 18.54	76	50
SSF-2202	18.55 - 23.37	76	50
SSF-2203	23.38 - 27.94	76	50
SSF-2204	27.95 - 33.00	76	50

Plastic Tangent Tie for Covered Conductors



SSF

The plastic tangent Side Tie is used with side mounted insulators on armless construction. Running angles up to 15° are recommended.

Part Number	Conductor Diameter Range (mm)	Neck Diameter (mm)	Standard Pack Quantity
SSF-2251	10.17 - 13.72	76	50
SSF-2252	13.73 - 18.54	76	50
SSF-2253	18.55 - 23.37	76	50
SSF-2254	23.38 - 27.94	76	50
SSF-2255	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.