

## TWIN-TIES



**Tie Pad:** For bare conductor a tubular elastomeric pad is supplied which must be placed under the conductor in the top groove of the insulator. The pad is not required with jacketed conductor.

**Centre Section:** Only the section applied to the conductor is helical, the remainder is cabled to ensure a snug firm fit on the insulator.

**Material Used:** TWIN-TIES are made of material compatible with the conductor to which they will be applied.

**Lay Direction:** The Lay Direction of the tie must be similar to that of the conductor.

### General Recommendations

TWIN-TIES are intended for use in securing conductors to the top groove of insulators, the neck configuration of which may not be suitable for WRAPLOCK® or DISTRIBUTION-TIES. The neck configuration is described in the next paragraph.

They provide an improved method of securing conductors when compared to hand-binding or insulator clamps. Protection is provided against conductor abrasion, as occurs with hand-binding, and they provide better RIV characteristics. The pad provides protection for the conductor against abrasion from the insulator.

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## TWIN-TIES

**Insulators:** TWIN-TIES will perform well on any vertically mounted insulator with a neck groove diameter exceeding 15 mm but is designed especially to cater for insulators with a shallow lip at the top of the groove, making them unsuitable for WRAPLOCK®-TIES. Typical insulators of this type are 1017 (Old Design) and 1018 (Old Design)

**Line Angles:** On vertically mounted insulators TWIN-TIES will accept an angle deviation up to 10°. Larger angles may be accommodated on after consultation with PLP.

TWIN-TIES will permit controlled movement of the conductor reducing load on the base of the insulator.

**Vibration Dampers:** TWIN-TIES provide, as do all PREFORMED™ products, protection against vibration fatigue, however on lines subject to severe vibration the use of Spiral Vibration Dampers is recommended.

**Tapping:** Taps should be applied on the conductor beyond the ends of the tie.

**Vertical Mounting:** On vertically-mounted pin insulators or bobbin type insulators, Side Ties should be used.

**Application:** Ensure that the correct size fitting is used and consult “Here's How with PREFORMED™” for application instructions. Always insure that the one part interlocks with the other part so that the colour marks are top and bottom respectively.

**Ordering:** State the conductor material, diameter, stranding and lay direction of the outer strands. Guessing nominal area can cause delivery of the wrong size fitting. Also quote insulator reference number and neck diameter.

TWIN-TIES can normally be supplied for any type or size of conductor up to 25mm diameter. Remember the initial parameters are conductor diameter plus 6 mm for the pad in deciding whether the top groove diameter is adequate.

NOTE: WHEN ORDERING TWIN-TIES IT IS MOST IMPORTANT THAT THE NECK DIAMETER AND INSULATOR TYPE ARE QUOTED.

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Telephone: 033 397 5800 • Facsimile: 033 387 7094  
Email: [plppmb@preformedsa.co.za](mailto:plppmb@preformedsa.co.za)  
Website: [www.preformedsa.co.za](http://www.preformedsa.co.za)

# Aluminium Alloy TWIN-TIES

Right Hand Lay Standard. Always quote Insulator type and neck diameter.

CATALOGUE NO.ATT	CONDUCTOR DIAMETER (mm)	COLOUR CODE	SETS PER PACK	APPROX PACK MASS(kg)
192 – 201	4.88 – 5.10	Blue	60	0.12
202 – 212	5.11 – 5.38	Green	60	0.12
213 – 223	5.39 – 5.66	White	60	0.12
224 – 235	5.67 – 5.97	Grey	60	0.12
236 – 247	5.98 – 6.27	Red	60	0.12
248 – 259	6.28 – 6.57	Orange	60	0.12
260 – 269	6.58 – 6.83	Green	60	0.12
270 – 280	6.84 – 7.11	Yellow	60	0.12
281 – 291	7.12 – 7.39	Blue	40	0.16
292 – 303	7.40 – 7.70	Red	40	0.16
304 – 314	7.71 – 7.97	Brown	40	0.16
315 – 327	7.98 – 8.30	Grey	40	0.16
328 – 340	8.31 – 8.63	Blue	40	0.16
341 – 353	8.64 – 8.97	Orange	40	0.16
354 – 367	8.98 – 9.32	Green	40	0.16
368 – 381	9.33 – 9.67	Brown	40	0.16
382 – 394	9.68 – 10.00	Grey	40	0.16
395 – 411	10.01 – 10.44	Yellow	40	0.16
412 – 437	10.45 – 11.10	Red	40	0.16
438 – 463	11.11 – 11.76	Blue	40	0.26
464 – 492	11.77 – 12.50	Green	40	0.26
493 – 522	12.51 – 13.27	Black	40	0.26
523 – 554	13.28 – 14.07	Grey	40	0.26
555 – 594	14.08 – 15.09	Brown	40	0.26

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595 – 630	15.10 – 16.00	Orange		
631 – 664	16.01 – 16.86	Brown		
665 – 705	16.87 – 17.91	Green		
706 – 747	17.92 – 18.97	White		
748 – 795	18.98 – 20.19	Black		
796 – 846	20.20 – 21.49	Brown		
847 – 900	21.50 – 22.86	Red		
901 – 958	22.87 – 24.33	Orange		
959 – 1018	24.34 – 25.86	White		
1019 – 1083	25.87 – 27.50	Black		
1084 – 1151	27.51 – 29.23	Yellow		
1152 – 1223	29.24 – 31.06	Brown		
1224 – 1240	31.07 – 31.50	Red		

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# Copper Alloy TWIN-TIES

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192 – 201	4.88 – 5.10	Red	60	0.35
202 – 212	5.11 – 5.38	Yellow	60	0.35
213 – 223	5.39 – 5.66	Green	60	0.35
224 – 235	5.67 – 5.97	Blue	60	0.35
236 – 247	5.98 – 6.27	White	60	0.35
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281 – 291	7.12 – 7.39	Orange	40	0.45
292 - 303	7.40 – 7.70	Yellow	40	0.45
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368 – 381	9.33 – 9.67	Black	40	0.45
382 – 394	9.68 – 10.00	Red	40	0.45
395 – 411	10.01 – 10.44	Orange	40	0.45
412 – 437	10.45 – 11.10	Green	40	0.45
438 – 463	11.11 – 11.76	Blue	40	0.45
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Telephone: 033 397 5800 • Facsimile: 033 387 7094

Email: [plppmb@preformedsa.co.za](mailto:plppmb@preformedsa.co.za)

Website: [www.preformedsa.co.za](http://www.preformedsa.co.za)