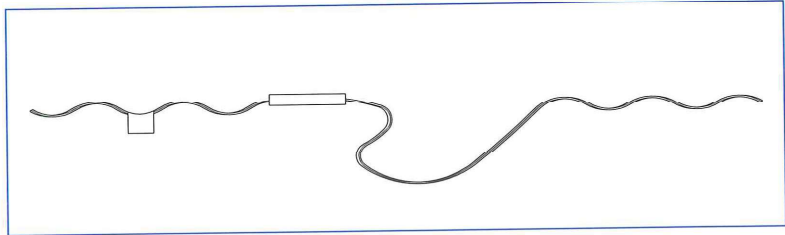


SUSPENSION AND SUPPORT

PREFORMED™ Distribution Tie



Application

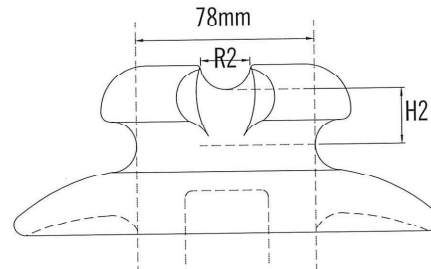
The PREFORMED™ Distribution Tie is intended to secure bare or jacketed distribution conductors in the top groove of vertically mounted insulators. They provide an improved method of securing conductors compared to clamp top insulators or handmade binds.

PREFORMED™ Distribution Ties with pad are recommended for use with bare conductors. They provide superior abrasion protection for the conductor under all types of motion, including aeolian vibration, galloping and sway.

The pad component is recommended because it surrounds the conductor with a resilient cushion which eliminates abrasion at the conductor-insulator interface.

Pads are not required with jacketed conductors.

The fittings listed in the data sheets are designed to fit insulators with Dimension R2 of 14-41mm, dimension H2 of 14-22mm and neck diameter of 78mm plus or minus 3mm, within the conductor ranges shown. For insulators outside this category and for other conductor sizes, the dimension shown in the diagram should be supplied, together with manufacturers drawing, if possible and conductor data.



On vertically mounted insulators, Distribution Ties are recommended for line angles up to 10 degrees. Larger angles can be obtained under certain conditions. For recommendations please contact our sales office at Andover.

The Distribution Tie has a slip load exceeding 318kg in unbalanced load conditions. The maximum holding strength is usually sufficient to contain a broken conductor to a single span. Distribution ties are designed however to relieve the load before severe damage occurs to the pole's structural components.

The Distribution Tie is designed to permit controlled movement of unbroken conductor, reducing cantilever loading at the base of the insulator. The resilience of the Tie permits it to then restore itself.

PREFORMED™ Distribution ties maximise the vibration fatigue life of the conductor to the extent that its original endurance is not reduced by abrasion. However, on lines subject to long periods of vibration that might approach the fatigue life of the conductor, cause inner wire fretting or scoring of the insulator glaze, the use of Spiral Vibration Dampers is recommended.

The RIV characteristics of Distribution Ties are equivalent to those of well made handbinds when originally installed. During service life the precontoured Tie assures continued fit which would have better RIV than a loosened tie wire.

Tapping over the applied legs of Distribution Ties is not recommended. Taps can be made on the conductor beyond the ends of the legs.

Refer to section Groove Formed/Side Tie and Angle Tie for securing conductor to side groove of insulator and for line angles of up to 30 degrees.

Refer to section Spool Tie for securing conductor to spool/bobbin insulators in low voltage construction.

Construction

PREFORMED™ Distribution Ties are made of material compatible with the strand to which they are applied. For bare conductors, each tie is supplied with a neoprene tie pad that is detached and applied over the conductor centred in the top groove of the insulator. For jacketed conductors a tie pad is not required.

Lay Direction

Lay direction must be the same as that of the outer stranding of the conductor to which it is applied.

Product Referencing and Ordering

Contact PLP (GB) Ltd with the following information:-

- Quantity
- Catalogue number
- Product name
- Insulator reference and dimensions (see insulator recommendations)
- Strand: Material
Diameter
Lay direction

3-4-5/2

CATALOGUE NUMBER	CONDUCTOR DIAMETER mm		COLOUR CODE	APPROX WEIGHT KGS PER 100
	MIN	MAX		
DT5070714	4.82	5.48	BLUE	5
DT5070716	5.49	6.21	BROWN	5
DT5070718	6.22	7.05	ORANGE	6
DT5070720	7.06	8.02	PURPLE	7
DT5070722	8.03	9.08	RED	9
DT5070724	9.09	10.30	YELLOW	9
DT5070726	10.31	11.67	BLUE	9
DT5070728	11.68	13.22	ORANGE	11
DT5070730	13.23	14.95	RED	11
DT5070732	14.96	16.96	PURPLE	12
DT5070734	16.97	19.19	BROWN	15
DT5070736	19.20	21.73	RED	15
DT5070738	21.74	24.60	BLUE	17
DT5070740	24.61	27.85	GREEN	18
DT5070742	27.86	31.51	YELLOW	19

For use on Aluminium Based Conductors

SUSPENSION AND SUPPORT

PREFORMED™ Distribution Tie-Copper Based Conductors

CATALOGUE No.	CONDUCTOR DIAMETER mm		COLOUR CODE	APPROX WEIGHT KGS PER 100
	MIN	MAX		
DT5670714	4.82	5.48	BLUE	6
DT5670716	5.49	6.21	BROWN	6
DT5670718	6.22	7.05	ORANGE	8
DT5670720	7.06	8.02	PURPLE	8
DT5670722	8.03	9.08	RED	11
DT5670724	9.09	10.30	YELLOW	11
DT5670726	10.31	11.67	BLUE	12
DT5670728	11.68	13.22	ORANGE	13
DT5670730	13.23	14.95	RED	14
DT5670732	14.96	16.96	PURPLE	14
DT5670734	16.97	19.19	BROWN	18
DT5670736	19.20	21.73	RED	18
DT5670738	21.74	24.60	BLUE	20
DT5670740	24.61	27.85	GREEN	21
DT5670742	27.86	31.51	YELLOW	22

For use on Copper Based Conductors

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