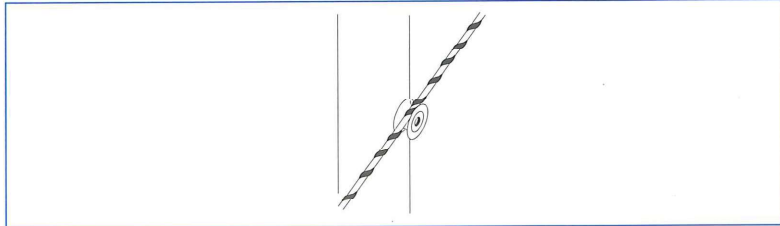


SUSPENSION AND SUPPORT

PREFORMED™ Spool Tie



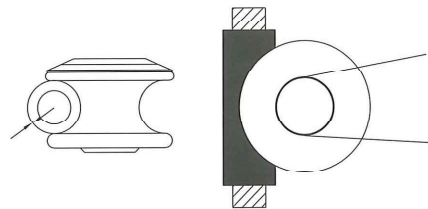
Application

The PREFORMED™ Spool Ties are intended to secure bare or jacketed conductors in the side groove of vertically and horizontally mounted spool/bobbin insulators used in low voltage distribution construction. They provide an improved method of securing conductors compared to handbinds.

Spool Ties with pad 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.

Spool Ties can be supplied to fit a wide range of insulators. The fittings listed in the data sheets are designed to fit spool/bobbin insulators with dimension R1 of 9.5mm and neck diameter d2 of 44.5mm plus or minus 3mm within the conductor ranges shown. For insulators outside this category and for other conductor sizes, the dimensions shown in the diagram should be supplied, together with a manufacturer's drawing if possible and conductor data.



The recommended maximum turning and sag angles are shown:-

	Vertically Mounted Spool	Horizontally Mounted Spool
Maximum Line Angle	20°	15°
Maximum Sag Angle	15°	20°

Larger angles can be accommodated under certain conditions. For recommendations, please contact our sales office at Andover.

Maximum holding strength is usually sufficient to contain the broken conductor to a single span. However, the Spool Tie is designed to relieve the load before severe damage occurs to the pole's structural components.

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

3-4-10/1

SUSPENSION AND SUPPORT

PREFORMED™ Spool Tie

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

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

Construction

PREFORMED™ Spool 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 side groove of the insulator. For jacketed conductors the 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
- Strand: Material
Diameter
Lay direction

3-4-10/2

SUSPENSION AND SUPPORT

PREFORMED™ Spool Tie-Aluminium Covered Steel

CATALOGUE No.	CONDUCTOR DIAMETER RANGE mm		COLOUR CODE	APPROX WEIGHT KGS PER 100
	MIN	MAX		
SPT5011001	4.83	5.05	BROWN	4.18
SPT5011002	5.06	5.28	ORANGE	4.18
SPT5011003	5.29	5.53	GREEN	4.18
SPT5011004	5.54	5.79	YELLOW	4.18
SPT5011005	5.80	6.04	PURPLE	4.18
SPT5011006	6.05	6.30	BLACK	4.18
SPT5011007	6.31	6.59	BLUE	5.28
SPT5011008	6.60	6.85	WHITE	5.28
SPT5011009	6.86	7.13	BLACK	5.28
SPT5011010	7.14	7.42	BROWN	5.28
SPT5011011	7.43	7.72	ORANGE	5.28
SPT5011012	7.73	8.00	GREEN	8.96
SPT5011013	8.01	8.33	YELLOW	8.96
SPT5011014	8.34	8.66	PURPLE	8.96
SPT5011015	8.67	8.99	BLACK	8.96
SPT5011016	9.00	9.34	BLUE	12.39
SPT5011017	9.35	9.70	WHITE	12.83
SPT5011018	9.71	10.01	RED	12.83

3-4-10/3

For use on Aluminium Based Conductors

The fittings listed are designed to fit spool/bobbin insulators with a groove radius of 9.5mm and a neck diameter of 44.5mm.

SUSPENSION AND SUPPORT

PREFORMED™ Spool Tie-Copper Covered Steel

CATALOGUE No.	CONDUCTOR DIAMETER RANGE mm		COLOUR CODE	APPROX WEIGHT KGS PER 100
	MIN	MAX		
SPT4011201	4.83	5.05	BROWN	44
SPT4011202	5.06	5.28	ORANGE	4
SPT4011203	5.29	5.53	GREEN	4
SPT4011204	5.54	5.79	YELLOW	4
SPT4011205	5.80	6.04	PURPLE	4
SPT4011206	6.05	6.30	BLACK	4
SPT4011207	6.31	6.59	BLUE	4
SPT4011208	6.60	6.85	WHITE	4
SPT4011209	6.86	7.13	BLACK	4
SPT4011210	7.14	7.42	BROWN	4
SPT4011211	7.43	7.72	ORANGE	4
SPT4011212	7.73	8.00	GREEN	10
SPT4011213	8.01	8.33	YELLOW	10
SPT4011214	8.34	8.66	PURPLE	10
SPT4011215	8.67	8.99	BLACK	10
SPT4011216	9.00	9.34	BLUE	13
SPT4011217	9.35	9.70	WHITE	13
SPT4011218	9.71	10.01	RED	13

3-4-10/4

For use on Copper Based Conductors

The fittings listed are designed to fit spool/bobbin insulators with a groove radius of 9.5mm and a neck diameter of 44.5mm.