

# BURNDY

## Compression



### TYPES YS-T AND YSP-T

#### HIGH-VOLTAGE HYLINKS™

#### UNINSULATED HIGH VOLTAGE COPPER COMPRESSION SPLICE

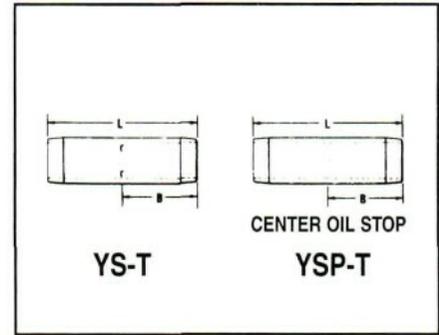
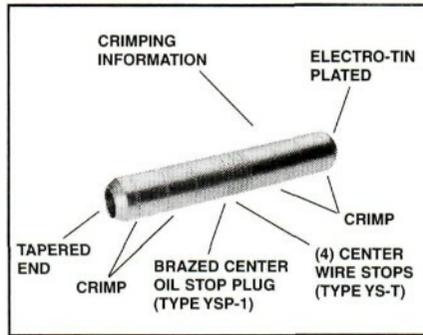
#### STANDARD BARREL - TAPERED ENDS

UL LISTED 90°C,  
600 VOLT TO 35 KV◆

Seamless types YS-T and YSP-T high conductivity copper electro-tin plated compression HYLINK™ high-voltage splices with standard barrel and tapered ends are ideally suited for higher voltage applications from 5KV through 35 KV.

Type YS-T splice connector has four center wire stops for proper conductor insertion.

Type YSP-T splice connector has a brazed in place center plug to prevent the passage of oil between two oil filled conductors or between conductors without oil and conductors with oil and acts as a center wire stop for proper conductor insertion.



#### Features and Benefits

- Tapered connector ends per EEI standard TD160.
  - ◇ Suitable for use on voltages 5KV through 35KV to aid in preventing corona emission and simplify taping thus lowering installed cost.
- Type YS-T four center wire stops.
  - ◇ Provides a center wire stop for proper conductor insertion.
- Type YSP-T has a center plug permanently brazed in place.
  - ◇ Prevents oil within oil-filled conductors from passing through the splice connector and provides a center strip for proper conductor insertion.



C-95

CATALOG NUMBER		CODE CONDUCTORS	DIMENSIONS		INSTALLATION TOOLING - NEST/INDENTOR ▲						
YS-T	YSP-T		B	L	Y34B Y34PR INDENTOR	Y35, Y39, Y750 Y34PR INDENTOR Y35P3 ADAPTOR	Y46 + *	DIE INDEX ▲	NO. OF INDENT	DIE NUMBER #OF CRIMPS PER END	WIRE STRIP LENGTH
YS6C-T	YSP6C-T	6 str.	.90	1.91	B6CD	U6CD-1	**	7	1	U5CRT (2)	15/16"
YS4C-T	YSP4C-T	4 str.	.88	1.90	B4CD	U4CD-1	**	8	1	U4CRT (2)	15/16"
YS2C-T	YSP2C-T	2 str.	.96	2.05	B2D	U2D-1	**	10	1	U2CRT (2)	1"
YS1C-T	YSP1C-T	1 str.	.96	2.05	B1D	U1D-1	**	11	1	U1CRT-1 (2)	1"
YS25-T	YSP25-T	1/0 str.	.97	2.06	B25D	U25D-1	**	12	1	U25RT (2)	1-3/32"
YS26-T	YSP26-T	2/0 str.	1.04	2.21	B26D	U26D-1	**	13	1	U26RT (2)	1-3/32"
YS28-T	YSP28-T	4/0 str.	1.14	2.39	B28D	U28D-1	**	15	1	U28RT (2)	1-3/16"
YS29-T	YSP29-T	250 kcmil	1.23	2.58	B29D	U29D-1	**	16	1	U29RT (2)	1-3/32"
YS30-T	—	300 kcmil	1.24	2.61	B30D	U30D-1	**	17	2	U30RT (4)	1-5/16"
YS31-T	YSP31-T	350 kcmil	1.33	2.79	B31D	U31D-1	**	18	2	U31RT (4)	1-3/5"
YS34-T	YSP34-T	500 kcmil	1.70	3.52	NO DIE NEEDED	U34D-1	**	20	2	U34RT (4)	1-3/4"
YS39-T	YSP39-T	750 kcmil	2.06	4.24	—	—	P39D P44PR	24	2	U39RT (4)	2-1/8"

\* Use adapter P-UADP-1 with "U" Dies in Y46 HYPRESS™.  
 Y46 HYPRESS™ uses the same nest indenter and adaptor as the Y35, Y39 & Y750, but with the P-UADP-1 adaptors.  
 ■ The maximum size for the Y35 is 400 kcmil.  
 ▲ See tooling section of this catalog for complete tool and die listings.  
 ◆ For applications greater than 2000 Volts consult cable manufacturer for voltage stress relief instructions.



## COMPRESSION CONNECTORS

Burndy's compression connectors are designed for reliable and controllable electrical connections. The complete installation is fully inspectable. They are high conductivity copper and operate cooler than the wire on which they are installed. The connectors withstand a wide range of electrical and environmental conditions, including current surges, temperatures, corrosion and vibrations, for a wide variety of applications. These features mean a consistently high quality connection at a low installed cost.

Copper compression connectors are manufactured from high-conductivity electrolytic copper. The connectors are normally tinned, lead-plated, or plated with proprietary Burndy brite finish to provide durable long-lasting corrosion resistance. The connector design has been matched to the cable size to provide the necessary physical strength requirements for reliable electrical performance.

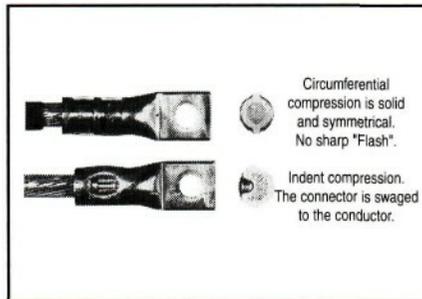
Aluminum compression connectors are manufactured from high conductivity, high purity wrought aluminum. They are designed with sufficient mass and are electro-tin plated to minimize corrosion due to galvanic action between dissimilar metals. The connector barrels are pre-filled with PENETROX, Burndy's oxide inhibiting compound.

PENETROX contains homogeneously suspended metallic particles which penetrate the wire's oxides to establish excellent continuity between the individual strands and the connector barrel for a low-resistance connection. PENETROX maintains an air-tight connection. Each barrel end is covered with a color-coded plastic dust cap which prevents foreign matter from entering the connector before it is used. The connector design has been engineered to match the cable size to provide the necessary physical strength requirements for reliable electrical performance.

## SELECTION AND USE

Copper compression connectors are recommended for use on copper conductors. Aluminum compression connectors are recommended for use on aluminum conductors. Dual-rated aluminum compression connectors may be used on both copper and aluminum conductors.

Two basic compression designs are available: Circumferential and indent.



After compression, virtually all the air is removed leaving a tight homogeneous mass of connector and conductor.

The circumferential crimp design is recommended for color coded connectors in low and high voltage applications. Die index number embossment provides an easy inspection where required to verify the use of the proper connector/die combination. It is also recommended for insulated connectors and for terminating flexible and welding cables.

The circumferential crimp design dies compress cable strands into polygonal shapes forming intimate contact with each other and the connector barrel. This compression forms a tight homogeneous mass with virtually no air pockets. The circumferential crimp provides an excellent electrical connection with high pull-out values. The circumferential crimp is ideal for high voltage applications leaving the connector barrel symmetrical, which is easier to insulate.

The indent type crimp can be used in virtually any application except polyvinylchloride (PVC) insulated terminals and splices. It is an excellent means of terminating flexible, extra flexible and welding cables. The indenter compresses the cable strands to form intimate contact with each other and the connector barrel. The result is an excellent electrical connection with high pull-out strength. Laboratory work testing curves established the proper depth and shape of indent for each type of connector and wire combination.

## TOOLING

Tooling systems are essential for proper installation of a compression connector. Since connectors and dies are designed as a unit for specific wire sizes, only the recommended tools and dies should be used. Most aluminum and copper HYLUG terminals and HYLINK splices are marked with a die index number and are color-coded to identify the correct installation die. Dies marked with the matching die index number and color can be used to install the connector.

Burndy tooling installs a wide range of connectors, is reliable, cost effective, and precision engineered for durable, long-lasting service and quality connections. The tools include small plier types, full cycle ratchet designs and hydraulically-powered HYPRESS heads and new Battery Actuated Tools. Some have permanent die grooves or adjustable dies, while others require a change of die sets or nest die for each connector size. Burndy's recommended tools achieve crimp performance consistent with UL and other industry standards. Since several tools are suitable for most connectors, the most economical and practical tool can be chosen for each application.

## INDUSTRY STANDARDS

Burndy's compression terminals, splices and tap connectors requiring third party testing and approval are listed by Underwriters' Laboratories, Inc. Many have also received CSA approval and are approved under MIL-T-7928 and other military standards. All conform to applicable sections of the National Electrical Code.

Burndy also offers connectors and splices which meet the (LOCA Seismec and Aging) requirements of IEEE standards 323, 383 and 344 for class 1E critical circuits for use in Nuclear Utility Applications. Certification to 10CFR50 and 10CFR21 available.

Detail catalog listings should be consulted to obtain the appropriate standards for each connector and splice.