



Energy Division

Approved cable accessories
and components for marine
and offshore applications

 **Tyco Electronics**
Our commitment. Your advantage.

Under the established product brand name Raychem, Tyco Electronics offers a comprehensive range of cable accessories for almost all cable types. The most innovative utilities and industries around the world – including, mining, marine, and offshore – use our power cable accessories. Designed to withstand environmental extremes and high pollution levels over long operating lifetimes, they help maintain service reliability in both overhead and underground installations. We have developed specially formulated insulation materials that resist tracking and degradation caused by erosion, UV light and other environmental stresses.

Customer requirements

Intensive R&D in the field of advanced materials and constant improvement programmes help us to increase our responsiveness to customer requirements and to meet the demands of modern cable networks:

- Fewer components
- Simplified cable preparation
- Fast installation
- Safe for installer and environment
- Consistent approach for almost all cable types and voltage classes
- High reliability
- Qualification to international specifications, such as IEC, CENELEC, IEEE and GOST

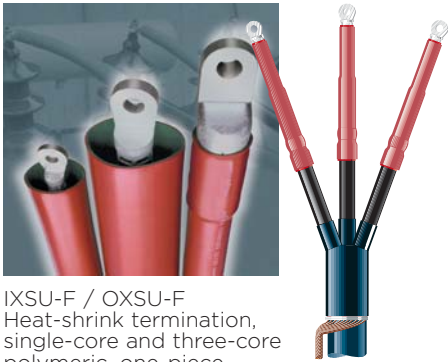
Product features

Product design and materials have been systematically improved over more than three decades. This has been achieved through intensive research in close co-operation with our customers to produce new materials for the electrical power industry. The result is a wide range of products with a unique combination of properties:

- Increased resistance to thermal ageing
- Insulation-thickness memory
- Shape memory
- Excellent resistance to surface electrical activity
- Improved UV performance
- Electrical stress control
- Void-free interfacial bonding
- Impermeability to cable oils
- Moisture blocking
- Improved flame resistance
- Elastomer technology
- Mechanical connecting systems



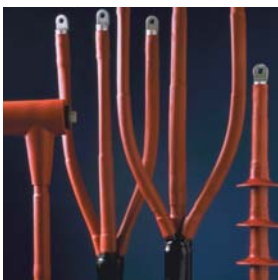
Terminations



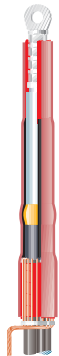
IXSU-F / OXSU-F
Heat-shrink termination,
single-core and three-core
polymeric, one-piece



TFTI / TFTO
Cold-shrink/push-on
termination, single-core
polymeric



EPKT & HVT-G / SG
Heat-shrink termination,
single-core and three-core
polymeric



Tubing



MWTM
Heat-shrink insulating and
sealing medium-wall tubing



WCSM
Heat-shrink insulating and
sealing heavy-wall tubing



FCSM
Heat-shrink flame retarded
heavy-wall flexible insulating
tubing



ZCSM
Heat-shrink halogen-free
and flame-retarded
insulating tubing for low
hazard areas

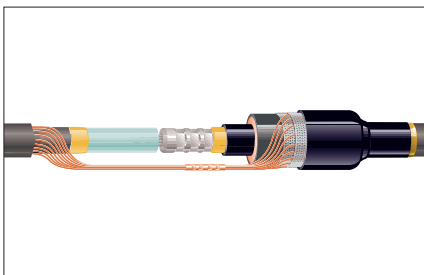


ATUM
Heat-shrink thin-wall
general-purpose insulating
and sealing tubing



XCSM
Heat-shrink medium-wall
general-purpose insulating
and sealing tubing

Joints



SXSU
Heat-shrink inline joint, single-core
polymeric



EPKE
Heat-shrink live end seal

Wraparounds



MRSM
Heat-shrink flexible cable jacket
repair sleeve



CRSM
Heat-shrink cable jacket
repair sleeve

Moulded parts



102L
Heat-shrink cable caps



302K, 402W, 502K
Heat-shrink cable breakouts



Approved products for marine and offshore applications

Product	PPR number	Classification company	Certificate number	Issued	Expiration date
MWTM & WCSM	1675	Det Norske Veritas	E-8039	4. Aug 06	31. Dec 10
FCSM	1672	Det Norske Veritas	E-8036	4. Aug 06	31. Dec 10
MRSM	1673	Det Norske Veritas	E-8037	4. Aug 06	31. Dec 10
ZCSM	1674	Det Norske Veritas	E-8038	4. Aug 06	31. Dec 10
EPKT-7 / EPKT-17	1676	Det Norske Veritas	E-8040	4. Aug 06	31. Dec 10
HVT-G/SG	1678	Det Norske Veritas	E-8042	4. Aug 06	31. Dec 10
TFTI / TFTO	1677	Det Norske Veritas	E-8041	4. Aug 06	31. Dec 10
I(O)XSU-F	1679	Det Norske Veritas	E-8043	4. Aug 06	31. Dec 10
IXSU-F33xy-KR01	2626	Det Norske Veritas	E-9434	30. June 09	30. June 13
MXSU, MXST, MXSW, SXSU, SXST, SXSXW	1487	Det Norske Veritas	E-9433	30. June 09	30. June 13
ATUM, MWTM, WCSM	1464	Germanischer Lloyd	65 673-73 HH	15. June 09	15. June 14
IXSU-F	1769	Germanischer Lloyd	20 437-04 HH	15. June 09	15. June 14
XCSM, CRSM, EPKE, & 102L, 302K, 402W, 502K	1507	Germanischer Lloyd	17 314-00 HH	10. Nov 06	10. Nov 11
TFTI / TFTO	2189	Registro Italiano Navale	No ELE204306CS/02	19. May 06	19. May 11
IXSU-F	2190	Registro Italiano Navale	No ELE204306CS/01	19. May 06	19. May 11
IXSU-F	1641	Lloyds Register of Shipping	02/200478(E1)	31. Oct 07	04. Sept 12
IXSU-F	2142	Russian Marine Register of Shipping	05.03378.011	30. Sept 05	30. Sept 10
IXSU-F	2402	Bureau Veritas	19969/A0 BV	8. Nov 07	8. Nov 12

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Energy Division - innovative and economical solutions for the electrical power industry: cable accessories, connectors & fittings, insulators & insulation, surge arresters, switching equipment, lighting controls, power measurement and control.

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