

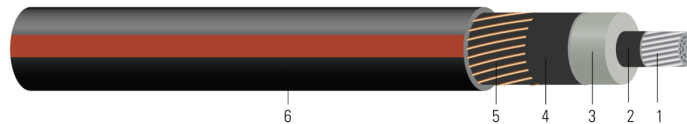
35kV AL 100% TRXLPE Concentric Neutral Primary UD HI-DRI-PLUS® Renewable (Solar or Wind)

Specifications

* UL 1072: Medium-Voltage Power Cables

* ICEA S-94-649: Standard for Concentric Neutral Cables Rated 5 - 46kV

* AEIC CS-8: Specification for extruded dielectric shielded power cables rated for 5 through 46kV



Cable image is for reference only and does not depict actual cable construction

Construction

- 1) Conductor: Moisture Blocked 1350 H16/H26 Aluminum, Class B Compressed or Compressed Unilay Stranded
- 2) Strand Shield: Semi-conducting Crosslinked Polyethylene
- 3) Insulation: 345 Mils Tree Retardant Crosslinked Polyethylene (TRXLPE), 100% insulation level
- 4) Insulation Shield: Strippable Semi-conducting Crosslinked Polyethylene
- 5) Concentric Neutral: Annealed Copper Wires Helically Applied One-Sixth Concentric Neutral
- 6) Overall Jacket & Water Block: HI-DRI-PLUS® Water Swellable Powder; Black Crosslinked Polyethylene (XLPE) with Red Extruded Stripes

Applications and Features

*Predominately used for renewable projects with wind or solar applications.

*Suitable for use in wet or dry locations, direct burial, underground ducts, and exposure to direct sunlight.

*To be used at conductor temperature not to exceed 105°C normal operation.

*UL listed MV-105.

*Under short circuit conditions, the maximum allowable shield temperature for crosslinked jackets is 350°C as opposed to only 200°C for a PE type of jacket. The higher temperature allows for more fault current capacity, thus reducing the amount of copper required in the neutral design.

*Not recommended for use above 90°C in wind farm applications

Print Legend

{SQFTG} SOUTHWIRE(R) HI-DRI-PLUS(R) (UL) XXX {AWG/KCMIL} AL
345 MILS TRXLPE TYPE MV-105 35KV 100% INSUL LEVEL -- (NESC)
-- SOUTHWIRE {MMM} {YYYY} NON-CONDUCTING JACKET

Stock Code	Conductor Size	Conductor Diam	Insulation Diam	Insulation Shield Diam	Concentric Neutral	Concentric Neutral Level*	Jacket Thickness	Approx. Overall OD	Approx. Weight	Shld Shr 30 Cycles	Min Bend Radius	Max Pull Tension
-	Kcmil	inches	inches	inches	num x AWG	-	mils	inches	Lbs. /1,000' amps		inches	Lbs.
626306	4/0	0.498	1.218	1.328	12x14	1/2	50	1.556	1062	5998	12.4	1269
626328	500	0.789	1.519	1.629	12x12	1/3	80	1.945	1764	9530	15.6	3000
626336	750	0.968	1.708	1.848	14x14	1/6	80	2.130	2107	6998	17.0	4500
626346	1000	1.117	1.857	1.997	12x12	1/6	80	2.313	2589	9530	18.5	6000
626351	1250	1.250	2.000	2.140	15x12	1/6	80	2.456	2997	11912	19.6	7500

* Dimensions are nominal and subject to normal manufacturing tolerances.

* Sample print legend, actual may vary.

*The neutral levels shown on this spec document are the "Equivalent Neutral Rating" of a thermoplastic LLDPE jacketed MV-90 counterpart with an equal short circuit ampacity.

Cust. Spec Approval: _____

Drn/Chk By:	MW	Req By:	NP	1/3/2024
Ticket #:	63482	Drw #:	MW12232	Rev: 2

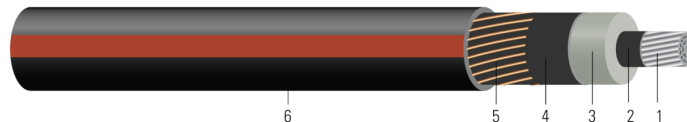
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-- SOUTHWIRE {MMM} {YYYY} NON-CONDUCTING JACKET

Stock Code	Conductor Size	DC Resistance @ 25°C	AC Resistance @ 90°C	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Charging Current	Dielectric Loss	**Zero Sequence Impedance	**Positive Sequence Impedance	*Allowable Ampacity Duct 90°C	*Allowable Ampacity DB 90°C
-	AWG/Kcmil	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	mA/1000ft	W/1000ft	Ω/1000ft	Ω/1000ft	Amps	Amps
626306	4/0	0.084	0.105	0.057	0.048	355	2.15	0.342+j0.117	0.113+j0.048	234	275
626328	500	0.035	0.046	0.041	0.042	490	2.97	0.210+j0.066	0.049+j0.042	381	442
626336	750	0.024	0.033	0.035	0.040	574	3.27	0.246+j0.097	0.034+j0.040	467	542
626346	1000	0.018	0.026	0.032	0.038	639	3.88	0.193+j0.067	0.026+j0.038	544	631
626351	1250	0.014	0.023	0.029	0.037	702	4.25	0.160+j0.051	0.021+j0.037	624	697

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* Sample print legend, actual may vary.

*Ampacities calculated in CYMCAP with the following conditions based on ICEA P-117-734 Figure 1 (single circuit trefoil direct buried) and Figure 7 (single circuit trefoil conduit): 25°C ambient temperature, 90 earth RHO, 36" burial depth, 90°C maximum conductor operating temperature. Assumed 6" conduit except 8" for 1250 kcmil cable.
**Impedances calculated in CYMCAP with the same conditions as above (single circuit trefoil direct buried, three-phases), shields bonded at both ends.

Cust. Spec Approval: _____

Drn/Chk By:	MW	Req By:	NP	1/3/2024
Ticket #:	63482	Drw #:	MW12315	Rev: 2