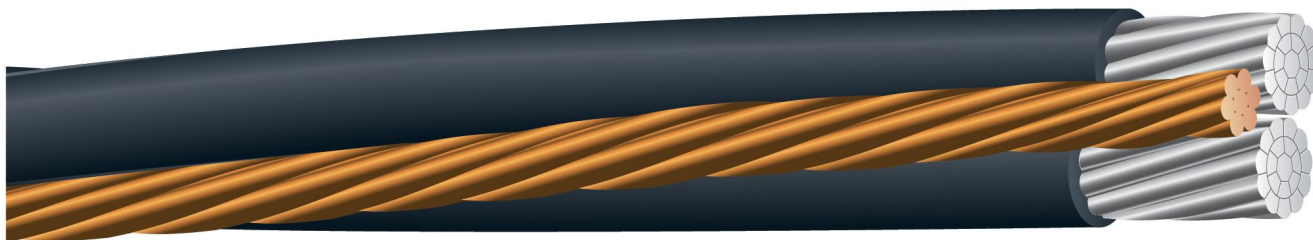


SquirrelShield™ Triplex Service Drop

Aluminum Conductors. Copper Neutral.
Polyethylene or Crosslinked Insulation.



APPLICATIONS

Used to supply power, usually from a pole-mounted transformer, to the user's service head in areas where squirrels are known to damage the bare neutral by chewing. Damage can result in complete loss of the neutral, known to cause voltage stability problems at the service. Used at a maximum voltage of 600 volts phase-to-phase, or 480 volts to ground, and at conductor temperatures not to exceed 75°C for polyethylene conductors (poly) or 90°C for crosslinked polyethylene (XLP) insulated conductors.

SPECIFICATIONS

Southwire's SquirrelShield™ Triplex service drop cable meets or exceeds the following ASTM specifications:

- B-1 Hard-Drawn Copper Wire.
- B-8 Concentric-Lay-Stranded Copper Conductors, Hard, Medium Hard, or Soft.
- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-231 Aluminum Conductors, Concentric-Lay-Stranded.
- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

Southwire's SquirrelShield™ Triplex service drop cable meets or exceeds all applicable requirements of ANSI/ICEA S-76-474 for polyethylene and cross-linked polyethylene insulated conductors and Southwire Raw Material Standard R010411 for stranded copper. It has been tested effective against gray squirrel chewing activity on the neutral messenger in laboratory tests at Genesis Laboratories, a licensed animal research facility registered with the USDA in compliance with the Animal Welfare Act. It has also proven effective in field trials in the state of South Carolina.

CONSTRUCTION

Conductors are concentrically stranded, compressed 1350-H19 aluminum, insulated with either polyethylene or XLP. Neutral messenger is a bare, hard-drawn concentrically stranded copper SCRAMessenger (Southwire Copper Rodent Adverse Messenger).

SquirrelShield Triplex Service Drop

Aluminum Phase Conductor			Copper Neutral-Messenger			Diameter (inches)		Approx. Weight (lb/kft)	Allowable Ampacities ¹	
Size (AWG)	Strand-ing	Insul. Thick. (mils)	Size (AWG)	Strand-ing	Rated Strength (lb)	Single Phase Cond.	Complete Cable		XLP	POLY
FULL NEUTRAL										
4	7	45	6	7	1228	.315	.68	196	115	90
2	7	45	4	7	1938	.373	.806	299	150	120
1/0	9	60	2	7	3050	.472	1.02	474	205	160
2/0	11	60	1	7	3801	.515	1.112	588	235	185
3/0	17	60	1/0	7	4752	.563	1.216	730	275	215
4/0	18	60	2/0	7	5926	.618	1.335	909	315	245
¹ Ampacity: Based on conductor temperature of 75°C for polyethylene insulated conductors, 90°C for XLP insulated conductors, ambient temperature of 40°C; 2 ft./sec. wind in sun.										
Aluminum Phase Conductor			Copper Neutral-Messenger 2			Diameter (inches)		Approx. Weight (lb/kft)	Allowable Ampacities ¹	
Size (AWG)	Strand-ing	Insul. Thick. (mils)	Size (AWG)	Strand-ing	Rated Strength (lb)	Single Phase Cond.	Complete Cable		XLP	POLY
REDUCED NEUTRAL										
2	7	45	6	7	1228	.373	.806	251	150	120
1/0	9	60	4	7	1938	.472	1.02	398	205	160
1/0	9	60	3	7	2432	.472	1.02	432	205	160
2/0	11	60	3	7	2432	.515	1.112	492	235	185
2/0	11	60	2	7	3050	.515	1.112	534	235	185
3/0	17	60	2	7	3050	.563	1.216	609	275	215
3/0	17	60	1	7	3801	.563	1.216	663	275	215
4/0	18	60	1	7	3801	.618	1.335	756	315	245
4/0	18	60	1/0	7	4752	.618	1.335	824	315	245
¹ Ampacity: Based on conductor temperature of 75°C for polyethylene insulated conductors, 90°C for XLP insulated conductors, ambient temperature of 40°C; 2 ft./sec. wind in sun. ² Proper neutral selection should consider the strength of the copper messenger and the maximum loading on the service.										