



## ZTACSR/VR2® Vibration Resistant Cable



### Putting innovation on the line

**VR2® Conductor** – Southwire Company, LLC's twisted pair conductor design – provides vibration and galloping resistance without the schedule delays associated with bagging problems during installation. Now, Southwire's ZTACSR/VR2 conductor provides higher thermal resistance allowing for greater ampacity without having to increase conductor size.

#### Get the performance you expect, and more

- **Trusted performance** – same anti-galloping and Aeolian vibration-resistant characteristics as ACSR/VR2®
- **Thermally resistant Aluminum-Zirconium** – proven alloy historically used in other conductor applications
- **210°C continuous / 240°C emergency thermal rating** – highest operating temperatures in the industry for twisted pair conductors
- **Good conductivity** – 60% IACS
- **High temperature hardware** – uses the same high temperature hardware as ACSS conductor (sizes must be verified by hardware manufacturer)
- **Corrosion-resistant** – extended conductor life through use of a mischmetal steel core coating
- **Core options** – available in Standard, High-strength and HS285®
- **Size options** – 2 x #4 AWG – 2 x 1113 kcmil
- **Additional options** – trapezoidal-shaped wire (TW), non-specular (NS)

The people behind the power.™

 **Southwire®**

# Technical Specifications



## Construction

Southwire Company's ZTACSR/VR2® conductor is composed of two identical bare conductors twisted together. This varying profile disrupts the wind forces that cause conductor vibration, which helps to reduce galloping due to ice and wind. ZTACSR/VR2 is available with multiple conductor types, and in sizes up to 2 x 1113 kcmil.

## Applications

ZTACSR/VR2 conductor is designed for overhead applications subject to aeolian vibration and galloping due to ice and wind. ZTACSR/VR2 can be installed to the maximum allowable tension limits without the need for additional vibration protection.

## Find out more today

The ZTACSR/VR2 design is a patented Southwire exclusive. Call 1-800-444-1700 or visit [www.Southwire.com](http://www.Southwire.com) for more information.

## ZTACSR/ VR2® Vibration Resistant Cable

Ref. ACSR	Equivalent Size (AWG-kcmil)	Description		Stranding				Weight (lb/1000 ft)					Resistance Ω/1000 ft		Allowable Ampacity (amp)
		Type	Construction	Alum.	Steel	Outer Dimensions (in)	Equivalent Diameter (in)	Alum	Steel	Total	Rated Strength (lb)	DC@ 20°C	AC@ 210°C	Allowable Ampacity (amp)	
Waxwing/VR2	533.6	ZTACSR	2 x 266.8-18/1	18 x 0.1217	1 x 0.1217	0.609 x 1.218	0.997	497	78	576	13,900	0.0328	0.0554	1302	
Partridge/VR2	533.6	ZTACSR	2 x 266.8-26/7	26 x 0.1013	7 x 0.0788	0.642 x 1.284	1.051	500	231	731	23,200	0.0325	0.0548	1332	
Ostrich/VR2	600.0	ZTACSR	2 x 300-26/7	26 x 0.1074	7 x 0.0835	0.680 x 1.360	1.113	562	260	822	26,000	0.0289	0.0488	1438	
Merlin/VR2	672.8	ZTACSR	2 x 336.4-18/1	18 x 0.1367	1 x 0.1367	0.684 x 1.368	1.119	627	99	726	17,300	0.0260	0.0440	1517	
Linnet/VR2	672.8	ZTACSR	2 x 336.4-26/7	26 x 0.1137	7 x 0.0885	0.720 x 1.440	1.178	630	291	921	29,200	0.0258	0.0435	1551	
Oriole/VR2	672.8	ZTACSR	2 x 336.4-30/7	30 x 0.1059	7 x 0.1059	0.741 x 1.482	1.213	632	417	1050	36,000	0.0256	0.0432	1572	
Chickadee/VR2	795.0	ZTACSR	2 x 397.5-18/1	18 x 0.1486	1 x 0.1486	0.743 x 1.486	1.216	741	117	858	20,400	0.0220	0.0373	1693	
Brant/VR2	795.0	ZTACSR	2 x 397.5-24/7	24 x 0.1287	7 x 0.0858	0.772 x 1.544	1.263	745	274	1019	30,000	0.0219	0.0371	1719	
Ibis/VR2	795.0	ZTACSR	2 x 397.5-26/7	26 x 0.1236	7 x 0.0961	0.783 x 1.566	1.281	744	344	1088	34,000	0.0218	0.0369	1732	
Lark/VR2	795.0	ZTACSR	2 x 397.5-30/7	30 x 0.1151	7 x 0.1151	0.806 x 1.612	1.319	747	493	1240	42,600	0.0216	0.0366	1755	
Pelican/VR2	954.0	ZTACSR	2 x 477-18/1	18 x 0.1628	1 x 0.1628	0.814 x 1.628	1.332	890	140	1030	24,000	0.0183	0.0312	1908	
Flicker/VR2	954.0	ZTACSR	2 x 477-24/7	24 x 0.1410	7 x 0.0940	0.846 x 1.692	1.385	894	329	1223	35,600	0.0182	0.0310	1939	
Hawk/VR2	954.0	ZTACSR	2 x 477-26/7	26 x 0.1354	7 x 0.1053	0.858 x 1.716	1.404	893	413	1306	40,400	0.0182	0.0308	1953	
Hen/VR2	954.0	ZTACSR	2 x 477-30/7	30 x 0.1261	7 x 0.1261	0.883 x 1.766	1.445	896	592	1488	51,200	0.0180	0.0306	1980	
Osprey/VR2	1113.0	ZTACSR	2 x 556.5-18/1	18 x 0.1758	1 x 0.1758	0.879 x 1.758	1.439	1037	164	1201	28,000	0.0157	0.0268	2111	
Parakeet/VR2	1113.0	ZTACSR	2 x 556.5-24/7	24 x 0.1523	7 x 0.1015	0.914 x 1.828	1.496	1043	384	1427	41,400	0.0156	0.0267	2146	
Dove/VR2	1113.0	ZTACSR	2 x 556.5-26/7	26 x 0.1463	7 x 0.1138	0.927 x 1.854	1.517	1043	482	1525	47,200	0.0156	0.0265	2161	
Eagle/VR2	1113.0	ZTACSR	2 x 556.5-30/7	30 x 0.1362	7 x 0.1362	0.953 x 1.906	1.560	1046	690	1736	59,200	0.0155	0.0263	2191	
Peacock/VR2	1210.0	ZTACSR	2 x 605-24/7	24 x 0.1588	7 x 0.1059	0.953 x 1.906	1.560	1134	417	1552	44,600	0.0144	0.0246	2266	
Squab/VR2	1210.0	ZTACSR	2 x 605-26/7	26 x 0.1525	7 x 0.1186	0.966 x 1.932	1.581	1133	524	1657	51,200	0.0143	0.0244	2282	
Wood Duck/VR2	1210.0	ZTACSR	2 x 605-30/7	30 x 0.1420	7 x 0.1420	0.994 x 1.988	1.627	1136	751	1887	63,400	0.0142	0.0242	2314	
Teal/VR2	1210.0	ZTACSR	2 x 605-30/19	30 x 0.1420	19 x 0.0852	0.994 x 1.988	1.627	1136	735	1871	63,000	0.0142	0.0243	2313	
Swift/VR2	1272.0	ZTACSR	2 x 636-36/1	36 x 0.1329	1 x 0.1329	0.930 x 1.860	1.522	1186	94	1279	26,800	0.0138	0.0237	2289	
Rook/VR2	1272.0	ZTACSR	2 x 636-24/7	24 x 0.1628	7 x 0.1085	0.977 x 1.954	1.599	1192	438	1630	46,800	0.0137	0.0234	2341	
Grosbeak/VR2	1272.0	ZTACSR	2 x 636-26/7	26 x 0.1564	7 x 0.1216	0.991 x 1.982	1.622	1192	550	1742	53,400	0.0136	0.0233	2359	
Scoter/VR2	1272.0	ZTACSR	2 x 636-30/7	30 x 0.1456	7 x 0.1456	1.019 x 2.038	1.668	1195	789	1984	66,600	0.0135	0.0231	2391	
Egret/VR2	1272.0	ZTACSR	2 x 636-30/19	30 x 0.1456	19 x 0.0874	1.019 x 2.038	1.668	1195	773	1968	66,400	0.0135	0.0231	2390	
Flamingo/VR2	1333.2	ZTACSR	2 x 666.6-24/7	24 x 0.1667	7 x 0.1111	1.000 x 2.000	1.637	1250	459	1709	49,200	0.0131	0.0224	2414	
Gannet/VR2	1333.2	ZTACSR	2 x 666.6-26/7	26 x 0.1601	7 x 0.1245	1.014 x 2.028	1.660	1249	577	1826	56,000	0.0130	0.0223	2432	
Stilt/VR2	1431.0	ZTACSR	2 x 715.5-24/7	24 x 0.1727	7 x 0.1151	1.036 x 2.072	1.696	1342	493	1835	52,800	0.0122	0.0209	2528	
Starling/VR2	1431.0	ZTACSR	2 x 715.5-26/7	26 x 0.1659	7 x 0.1290	1.051 x 2.102	1.720	1341	620	1961	60,000	0.0121	0.0208	2547	
Redwing/VR2	1431.0	ZTACSR	2 x 715.5-30/19	30 x 0.1544	19 x 0.0926	1.081 x 2.162	1.769	1344	868	2212	73,400	0.0120	0.0206	2581	
Coot/VR2	1590.0	ZTACSR	2 x 795-36/1	36 x 0.1486	1 x 0.1486	1.040 x 2.080	1.702	1483	117	1600	33,400	0.0110	0.0191	2644	
Tern/VR2	1590.0	ZTACSR	2 x 795-45/7	45 x 0.1329	7 x 0.0886	1.063 x 2.126	1.740	1490	292	1782	44,000	0.0110	0.0193	2655	
Condor/VR2	1590.0	ZTACSR	2 x 795-54/7	54 x 0.1213	7 x 0.1213	1.092 x 2.184	1.787	1489	548	2037	59,000	0.0109	0.0196	2661	
Drake/VR2	1590.0	ZTACSR	2 x 795-26/7	26 x 0.1749	7 x 0.1360	1.107 x 2.214	1.812	1491	688	2179	66,800	0.0109	0.0188	2726	
Mallard/VR2	1590.0	ZTACSR	2 x 795-30/19	30 x 0.1628	19 x 0.0977	1.140 x 2.280	1.866	1494	966	2460	81,000	0.0108	0.0186	2765	
Ruddy/VR2	1800.0	ZTACSR	2 x 900-45/7	45 x 0.1414	7 x 0.0943	1.131 x 2.262	1.851	1686	331	2017	49,400	0.0097	0.0171	2875	
Canary/VR2	1800.0	ZTACSR	2 x 900-54/7	54 x 0.1291	7 x 0.1291	1.162 x 2.324	1.902	1687	620	2307	66,200	0.0097	0.0174	2883	
Rail/VR2	1908.0	ZTACSR	2 x 954-45/7	45 x 0.1456	7 x 0.0971	1.165 x 2.330	1.907	1788	351	2139	52,400	0.0092	0.0162	2985	
Cardinal/VR2	1908.0	ZTACSR	2 x 954-54/7	54 x 0.1329	7 x 0.1329	1.196 x 2.392	1.957	1787	657	2445	70,200	0.0091	0.0165	3006	
Ortolan/VR2	2067.0	ZTACSR	2 x 1033.5-45/7	45 x 0.1515	7 x 0.1010	1.212 x 2.424	1.984	1936	380	2315	56,800	0.0085	0.0151	3140	
Curlew/VR2	2067.0	ZTACSR	2 x 1033.5-54/7	54 x 0.1383	7 x 0.1383	1.245 x 2.490	2.038	1936	712	2648	76,000	0.0084	0.0153	3150	
Bluejay/VR2	2226.0	ZTACSR	2 x 1113.5-45/7	45 x 0.1573	7 x 0.1049	1.258 x 2.516	2.059	2087	409	2496	60,400	0.0079	0.0141	3289	
Finch/VR2	2226.0	ZTACSR	2 x 1113.5-54/19	54 x 0.1436	19 x 0.0861	1.292 x 2.584	2.115	2097	752	2849	80,800	0.0079	0.0143	3293	

+ Ampacity calculated assuming: ambient 40°C, conductor 210°C, wind 2 ft/sec., sun.

Additional sizes and specifications available in the Product Catalog on [southwire.com](http://southwire.com)