

Aquaseal Water Resistant Cables

2005

When you think of Low-Voltage Indoor/Outdoor installations, one name jumps out of the water, **AQUASEAL Water Resistant Cables**.

West Penn Wire/CDT set the standard For indoor/outdoor fire-alarm installations in 1995. Since then **AQUASEAL Water Resistant Cables**, the industries original water resistant, water blocking low voltage cable, has become the recognized name for indoor/outdoor applications such as:

- Power-Limited Fire Alarm Circuits
- Intercom Systems
- Sound & Audio
- Background Music
- CCTV Systems
- CATV Systems

DO NOT LET AN INFERIOR PRODUCT RAIN ON YOUR PARADE. CHOOSE THE CABLE THAT EXCEEDS EXPECTATIONS WITH WATER BLOCKING PERFORMANCE!

CHOOSE THE CABLE THAT MEETS:
UL STANDARDS 444 & 13.
AND
TIA455-82B WATER INFILTRATION TEST



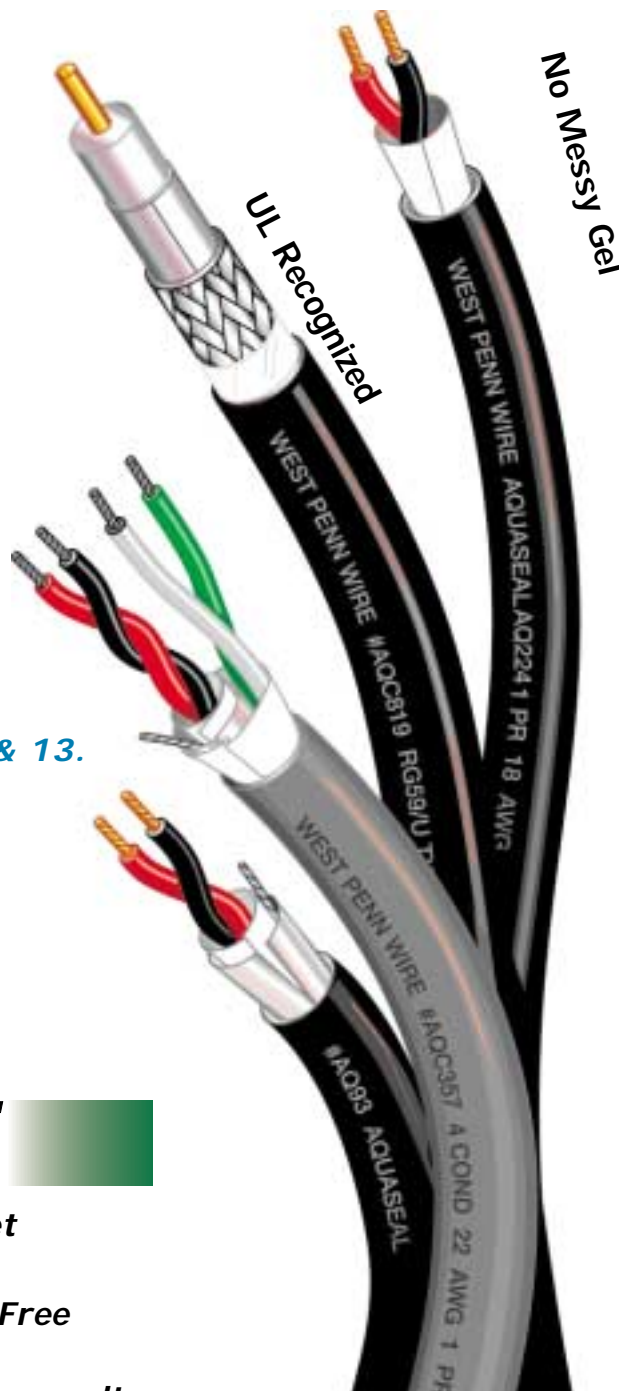
WEST PENN WIRE

2833 West Chestnut Street
Washington, Pa 15301

• **800-245-4964** Toll Free

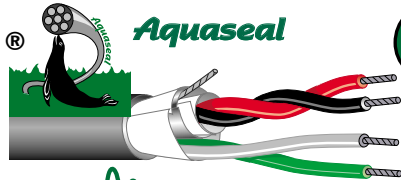
• 724-222-6420 fax

• info@westpenn-cdt.com • www.westpenn-cdt.com



Aquaseal Communication Cable

Combination/Shielded and Unshielded



DESCRIPTION

- ASTM tinned copper • PVC insulation
- Short overall twist lengths • PVC fillers as required • Polyester binders as required
- Shielded pair 100% coverage of aluminum polyester foil with TC drain wire
- Waterblocked construction • Overall sunlight and moisture resistant PVC jacket

RATING

- NEC Type CM or CL3
- (UL)- C(UL) Listed
- (ETL)us - c(ETL)us Listed
- Meets 300 volt requirements as specified in Article 800 and 725 of the NEC

APPLICATIONS

Materials suitable for outdoor use, and indoor trays, allows a variety of uses for:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power – Limited Control Circuits

SPECIAL NOTES

- Orange ripcord under jacket
- Upon request other cable constructions are available. Consult the West Penn Wire Engineering Department for complete details. Registered Trademark of WEST PENN WIRE®

Catalog No.	Number of Conductors and Cable Construction	AWG Size & Stranding Drain Wire	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nominal Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
AQC351	3 (2 Shielded) (1 Unshielded)	22 Solid 22 Solid Drain	.010	.25	.025	.64	.215	5.46	54	177	97	318
AQC352	3 (2 Shielded) (1 Unshielded)	22 (7x30) 24 Strd. Drain	.010	.25	.025	.64	.230	5.84	55	180	99	325
AQC355	4 (2 Shielded) (2 Unshielded)	22 Solid 22 Solid Drain	.010	.25	.025	.64	.220	5.59	54	177	97	318
AQC357	4 (2 Shielded) (2 Unshielded)	22 (7x30) 24 Strd. Drain	.010	.25	.025	.64	.235	5.97	55	180	99	325
AQC369	6 (2 Shielded) (4 Unshielded)	22 Solid 22 Solid Drain	.010	.25	.025	.64	.240	6.10	54	177	97	318
AQC373	6 (2 Shielded) (4 Unshielded)	22 Solid 22 Solid Drain	.010	.25	.025	.64	.260	6.60	54	177	97	318
AQC359	4 (2 Shielded) (2 Unshielded)	20 (7x28) 22 (7x30)	.010	.25	.025	.64	.266	6.76	60	197	108	354
AQC358 NEW	3 (2 Shielded) (1 Unshielded)	20 (7x28) 22 (7x30)	.010	.25	.025	.64	.260	6.68	60	197	108	354

Standard spool size 1000 feet

*Capacitance between conductors.
**Capacitance between one conductor and the other connected to the shield.

COLOR CODE			
Catalog Number	AQC351, AQC352, AQC358 AQC355, AQC357, AQC359	AQC369	AQC373
Primary Color Code	SHIELDED: 1. Black, 2. Red UNSHIELDED: 3. White, 4. Green	1. Black, 2. Red, 3. White, 4. Green, 5. Brown, 6. Blue	SHIELDED PAIR: Black/Red UNSHIELDED PAIRS: Black/Green and Black/White
JACKET: Gray			

WEST PENN WIRE

Aquaseal Communication Cable

DESCRIPTION

- ASTM tinned copper • PVC insulation • Short overall twist lengths
- PVC fillers as required • Polyester binders as required • Shielded constructions contain 100% coverage of aluminum polyester foil with TC drain wire
- Waterblocked construction • Overall sunlight and moisture resistant PVC jacket

Shielded /Two & Multiple Conductor



SHIELDED												
Catalog No.	No. of Conductors	AWG Size & Stranding Nom. D.C.R. Drain Wire	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nominal Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
AQC290 NEW	1 Pair	22 Solid 17.5 Ω/M' 24 Strd. Drain	.010	.25	.025	.64	.200	5.12	54	177	97	318
AQC291	1 Pair	22 (7x30) 17.5 Ω/M' 24 Strd. Drain	.010	.25	.025	.64	.205	5.21	55	180	99	318
AQC3274 NEW	15 Conductor	22 (7x30) BC 17.5 Ω/M' 24 Strd. Drain	.010	.25	.025	.64	.361	9.17	55	180	99	318
AQC292	1 Pair	20 (7x28) 10.5 Ω/M' 22 Strd. Drain	.010	.25	.025	.64	.220	5.59	60	197	108	354
AQC293	1 Pair	18 (7x26) 6.2 Ω/M' 20 Strd. Drain	.010	.25	.025	.64	.235	5.97	68	223	122	400
AQC3186 NEW	6 Conductor	18 (7x26) BC 6.2 Ω/M' 20 Strd. Drain	.010	.25	.025	.64	.323	8.20	68	223	122	400
AQC3283 NEW	12 Conductor	18 (7x26) BC 6.2 Ω/M' 20 Strd. Drain	.010	.25	.025	.64	.410	10.4	68	223	122	400

RATING

- NEC Type CM or CL3
- (UL) - C(UL) Listed
- (ETL)us - c(ETL)us Listed
- Meets 300 volt requirements as specified in Article 800 and 725 of the NEC

APPLICATIONS

Materials suitable for outdoor use, and indoor trays, allows a variety of uses for:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power – Limited Control Circuits

SPECIAL NOTES

- Orange ripcord under jacket
 - Upon request other cable constructions are available. Consult the West Penn Wire Engineering Department for complete details.
- Registered Trademark of
® WEST PENN WIRE

Standard spool size 1000 feet

*Capacitance between conductors.

**Capacitance between one conductor and the other connected to the shield.

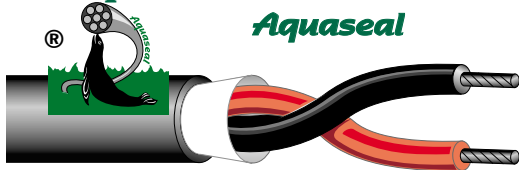
COLOR CODE		COLOR CODE	
Catalog No.	AQC291, AQC292, AQC293, AQC290		AQC3186, AQC3274, AQC3283
	1. Black, 2. Red		1. Black, 2. Red, 3. White, 4. Green, 5. Brown, 6. Blue, 7. Orange, 8. Yellow, 9. Purple, 10. Gray, 11. Pink, 12. Tan, *13. White/Black, 14. White/Red, 15. White/Green
JACKET: Gray		JACKET: Gray * Conductor 13 and above have <i>Perfect Strip</i>	

WEST PENN WIRE

Aquaseal Communication Cable

Multiple Conductor/ Unshielded

Aquaseal



DESCRIPTION

- ASTM bare copper • PVC insulation • Short overall twist lengths
- PVC fillers as required • Polyester binders as required • Unshielded
- Waterblocked construction • Overall sunlight and moisture resistant PVC jacket

RATING

- NEC Type CM or CL3
- (UL)- C(UL) Listed
- (ETL)us - c(ETL)us Listed
- Meets 300 volt requirements as specified in Article 800 and 725 of the NEC

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UNSHIELDED												
Catalog No.	No. of Conductor	AWG Size & Stranding Nom. D.C.R. Drain Wire	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nominal Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
AQC224	1 Pair	18 (7x26) Bare Copper 6.2 Ω/M'	.010	.25	.025	.64	.194	4.93	N/A Unshielded Cable			
AQC188 <i>NEW</i>	8 Conductor	18 (7x26) Bare Copper 6.2 Ω/M'	.010	.25	.025	.64	3.40	8.64	N/A Unshielded Cable			
AQC225 <i>NEW</i>	1 Pair	16 (19x29) Bare Copper 4.2 Ω/M'	.010	.25	.025	.64	.228	5.79	N/A Unshielded Cable			
AQC240	4 Cond.	22 Solid Bare Copper 17.5 Ω/M'	.010	.25	.025	.64	.194	4.95	N/A Unshielded Cable			

COLOR CODE

AQC224, AQC188, AQC225, AQC240

1. Black, 2. Red, 3. White, 4. Green, 5 Brown, 6. Blue,
7. Orange, 8. Yellow

Aquaseal Communication Cable

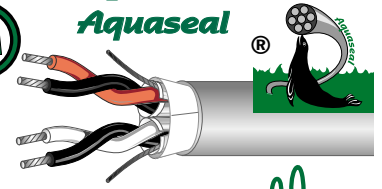
DESCRIPTION

- ASTM tinned copper • PVC insulation • Short overall twist lengths
- PVC fillers as required • Polyester binders as required • Each pair shielded
- 100% coverage of aluminum polyester foil with TC drain wire
- Waterblocked construction • Overall sunlight and moisture resistant PVC jacket

Each Pair Individually Shielded/ Multiple Pair Cable



Aquaseal



Stranded 22 Awg. Aquaseal Cables

Catalog No.	No. of Pairs	AWG Size & Stranding Nom. D.C.R. Drain Wire	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nominal Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft*	pf/m*
AQC430	2	22 (7x30) 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.380	9.65	55	180	99	325
AQC439	4	22 (7x30) 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.427	10.85	55	180	99	325
AQC432	6	22 (7x30) 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.520	13.21	55	180	99	325
AQC434	12	22 (7x30) 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.698	17.73	55	180	99	325

Solid 22 Awg. Aquaseal Cables

AQC420	2	22 Solid 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.365	9.27	55	180	99	325
AQC422	6	22 Solid 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.510	12.95	54	177	97	318
AQC424	12	22 Solid 17 Ω/M' 24 Strd. Drain	010	.25	.025	.64	.667	16.94	54	177	97	318

Pair No.	Paired Colors	Pair No.	Paired Colors
1	Black/Red-Red	7	Black/Orange-Orange
2	Black/White-White	8	Red/White-White
3	Black/Green-Green	9	Red/Green-Green
4	Black/Blue-Blue	10	Red/Blue-Blue
5	Black/Yellow-Yellow	11	Red/Yellow-Yellow
6	Black/Brown-Brown	12	Red/Brown-Brown

RATING

- NEC Type CM or CL3
- (UL)- C(UL) Listed
- (ETL)us - c(ETL)us Listed
- Meets 300 volt requirements as specified in Article 800 and 725 of the NEC

APPLICATIONS

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- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power – Limited Control Circuits

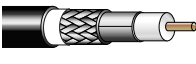



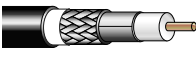





SPECIAL NOTES

- Orange ripcord under jacket
- Upon request other cable constructions are available. Consult the West Penn Wire Engineering Department for complete details. Registered Trademark of WEST PENN WIRE®

WEST PENN WIRE

Aquaseal Communication Cable

Coaxial Cables/PRO-VIDEO/ CCTV/ CATV

Catalog No.	Description	NEC Type	AWG Size Stranding Nom. D.C.R.	Insulation Nom. O.D.		Shield Type and % Coverage	Nom. Cable O.D.		Nominal Capacitance		Nom. V.P	Nom. Imp. Ω	Nom. Attenuation		
				inch	mm		inch	mm	pf/ft*	pf/m*			mhz	dB/100ft	dB/100m
AQC 819	 Aquaseal HDTV, DTV SDI- Serial Digital Digital Video Cable		20 Solid Bare Copper 10.0 Ω/M'	.142	3.61	Bifoil* 100% Tinned Copper Braid 95%	.242	6.15	16.2	53.1	83%	75	1	.28	.92
				Gas Injected PE ‡			Sunlight resistant PVC jacket Color: Black Connector: 75 Ω, 3 Piece BNC, #CN-BM73-2		10	.66			2.16		
AQC 815 NEW	 Aquaseal CCTV		20 Solid Bare Copper 10.0 Ω/M''	.142	3.61	Bare Copper Braid 95%	.242	6.15	16.2	53.1	82%	75	1	.30	.99
				Gas Injected PE ‡ With Tape Barrier			Sunlight resistant PVC jacket Color: Black Connector: 75 Ω, 3 Piece BNC, #CN-BM73-2		10	.68			2.23		
AQC 841	 Aquaseal **- DSC (Digital Satellite Cable) CATV		18 Solid Bare Copper 6.2 Ω/M''	.180	4.57	Bifoil* 100% Aluminum Braid 65%	.275	6.99	16.2	53.1	82%	75	5	.45	1.5
				Gas Injected PE ‡			Sunlight resistance PVC jacket Color: Black Connector: "F" Type CN-F56AQ		55	1.6			5.2		
AQC 806 NEW	 Aquaseal CCTV		18 Solid Bare Copper 6.2 Ω/M''	.180	4.57	Bare Copper Braid 95%	.280	7.11	16.2	53.1	82%	75	1	.24	.78
				Gas Injected PE ‡ With Tape Barrier			Sunlight resistance PVC jacket Color: Black		10	.52			1.71		
AQC 2806 NEW	 Aquaseal Lickity Split Design		18 Solid Bare Copper 6.2 Ω/M''	.180	4.57	Bare Copper Braid 95%	.280	7.11	16.2	53.1	82%	75	1	.24	.78
				Gas Injected PE ‡			Sunlight resistance PVC jacket Color: Black Note: This Cable contains 1 Coax Unit Plus 1 pair 16Awg Unshielded Aquaseal Cable		10	.52			1.71		



NOTES:

Standard spool size 1000 feet, spools are one piece, but length may vary ± 10%

‡ Gas injected foam polyethylene

* BiFoil is an aluminum polyester aluminum tape with 100% coverage

100% Sweep Tested up to 3GHz

Aquaseal Process Control Cable

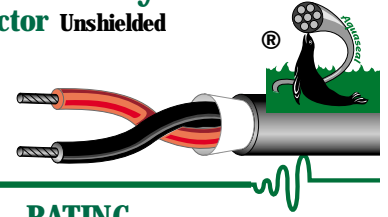
DESCRIPTION

- ASTM bare copper • PVC insulation with nylon • Twisted pair or cabled construction • Water blocked construction
- Overall sunlight and moisture resistant PVC jacket



Direct Burial

Power - Limited Tray Cable/300 Volt Multiple Conductor Unshielded Aquaseal



Catalog No.	No. of Cond.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nominal Capacitance	
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*
AQ224	1 Pair	18 (7x26) 6.2 Ω/M'	.015 PVC .005 Nylon	.38 .13	.035 .89	.270	6.86	25	82	
AQ244	4	18 (7x26) 6.2 Ω/M'	.015 PVC .005 Nylon	.38 .13	.040 1.02	.327	8.31	25	82	
AQ225	1 Pair	16 (7x24) 4.2 Ω/M'	.015 PVC .005 Nylon	.38 .13	.040 1.02	.295	7.49	28	92	
AQ245	4	16 (7x24) 4.2 Ω/M'	.015 PVC .005 Nylon	.38 .13	.040 1.02	.355	9.02	28	92	
AQ226	1 Pair	14 (19x27) 2.7 Ω/M'	.015 PVC .005 Nylon	.38 .13	.040 1.02	.310	7.87	32	105	
AQ246	4	14 (19x27) 2.7 Ω/M'	.015 PVC .005 Nylon	.38 .13	.040 1.02	.395	10.03	32	105	
AQ227	1 Pair	12 (19x25) 1.7 Ω/M'	.015 PVC .005 Nylon	.38 .13	.040 1.02	.340	8.64	36	118	

RATING

- NEC type FPL or PLTC
- (UL) or (ETL)us Listed
- Listed for Direct Burial
- Meets 300 volt requirement as specified in Article 725 and 760 of the NEC

APPLICATIONS

Materials suitable for outdoor use, and indoor trays, allows a variety of uses for:

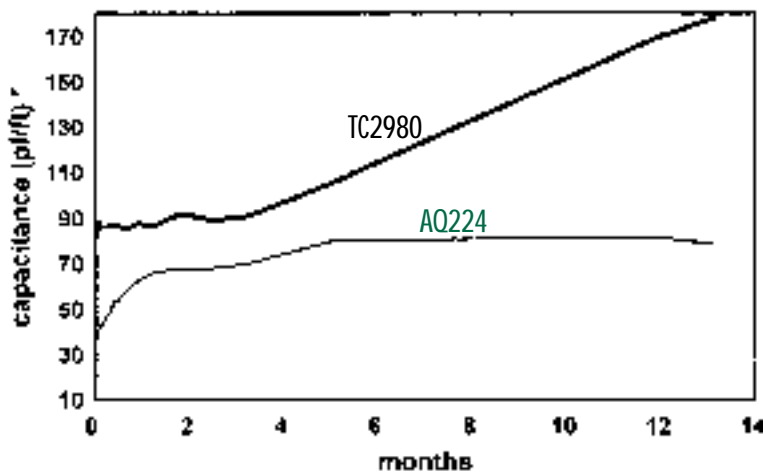
- Low Voltage Industrial Process Control Circuits
- Power – Limited Circuits
- Power – Limited Fire Alarm Circuits
- Power – Limited Tray Cable PLTC

SPECIAL NOTES:

- Upon request other cable constructions are available with this new rating. Consult the West Penn Wire Engineering Department for complete details.
- Orange ripcord under jacket Registered Trademark of WEST PENN WIRE®

*Capacitance between conductors.

Standard spool size 1000 feet



The above results were achieved by completely submersing a ten foot sample of each cable in water at room temperature. In order to depict a "worst case" installation scenario and provide the opportunity for maximum water penetration, each cable had a 1/2 inch x 1/4 inch section of the jacket removed at 1 foot intervals.

COLOR CODE

All Cables	1. Black, 2. Red, 3. Brown, 4. Blue
	JACKET: Black

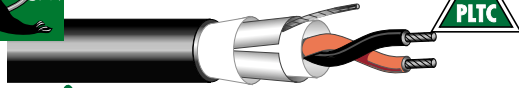
WEST PENN WIRE

Aquaseal Process Control Cable

300 Volt/Power-Limited Tray Cable

Shielded Multiple Conductor

Aquaseal®



Direct Burial

DESCRIPTION

- ASTM bare copper • PVC insulation with nylon • Twisted pair or cabled construction • Overall shield 100% coverage of aluminum polyester foil with strd. TC drain wire • Water blocked construction • Overall sunlight and moisture resistant PVC jacket

RATING

- NEC type FPL or PLTC
- (UL) or (ETL)us Listed
- Listed for Direct Burial
- Meets 300 volt requirement as specified in Article 725 and 760 of the NEC

APPLICATIONS

Materials suitable for outdoor use, and indoor trays, allows a variety of uses for:

- Low Voltage Industrial Process Control Circuits
- Power – Limited Circuits CL3
- Power – Limited Fire Alarm Circuits
- Power – Limited Tray Cable PLTC

SPECIAL NOTES:

Registered Trademark of WEST PENN WIRE

- Orange ripcord under jacket

Catalog No.	No. of Cond.	AWG Size & Stranding Nom. D.C.R.	Nom. Insulation Thickness		Nom. Jacket Thickness		Nom. O.D.		Nominal Capacitance			
			inch	mm	inch	mm	inch	mm	pf/ft*	pf/m*	pf/ft**	pf/m**
AQ293	1 Pair	18 (7x26) 6.2 Ω/M' 18 Strd. T.C. Drain	.015 PVC .005 Nylon	.38 .13	.040	1.02	.310	7.87	32	105	58	190
AQ3244	4	18 (7x26) 6.2 Ω/M' 18 Strd. T.C. Drain	.015 PVC .005 Nylon	.38 .13	.040	1.02	.371	9.42	32	105	58	190
AQ294	1 Pair	16 (7x24) 4.2 Ω/M' 18 Strd. T.C. Drain	.015 PVC .005 Nylon	.38 .13	.040	1.02	.328	8.33	37	121	67	220
AQ3245	4	16 (7x24) 4.2 Ω/M' 18 Strd. T.C. Drain	.015 PVC .005 Nylon	.38 .13	.050	1.27	.415	10.54	37	121	67	220
AQ295	1 Pair	14 (19x27) 2.7 Ω/M' 18 Strd. T.C. Drain	.015 PVC .005 Nylon	.38 .13	.040	1.02	.350	8.89	46	151	83	272
AQ296	1 Pair	12 (19x25) 1.7 Ω/M' 18 Strd. T.C. Drain	.015 PVC .005 Nylon	.38 .13	.040	1.02	.375	9.53	54	177	97	318

*Capacitance between conductors.

**Capacitance between one conductor and the other connected to the shield.

Standard pool size 1000 feet

Tech Tip:

- ✓ **Aquaseal**® cable provides extra protection from moisture in outdoor environments.



COLOR CODE

All Cables

1. Black, 2. Red, 3. Brown, 4. Blue

JACKET: Black

WEST PENN WIRE