

New Product Bulletin

NP 204

Belden[®] New Generation[®] Waterdog[™] Cables

User-friendly Waterdog paired, multi-conductor and coaxial cables meet the water-resistant standards of UL 444, UL 13 and the TIA 455-82B Water Filtration Test and are offered with Belden's industry-leading 10-year Warranty.



Belden New Generation Waterdog Cables are Water and Moisture Resistant and UL Listed for a Range of Indoor/Outdoor and Direct Burial Installations Belden now offers a complete line of water-resistant/ direct burial cables called Waterdog. These cables allow building management systems to be connected seamlessly – indoors or out – above or below ground – from building to building or, for instance, from remote surveillance camera sites to indoor security monitors.

They are ideal for standard indoor/outdoor building management applications such as:

- Power limited fire alarm circuits
- Intercom systems
- · Audio and sound systems
- Access control systems
- CCTV surveillance systems
- CATV and distributed video systems
- Background music and white noise

Best-in-Class Constructions

Four constructions typify the Waterdog cable line:

 A single Beldfoil-shielded twisted pair with solid or stranded 22 AWG tinned copper conductors, PVC insulation and an inner water-blocking tape and drain wire plus 1-, 2- or 4-conductors, an overall water-blocking tape and PVC jacket with rip cord (Ratings: CM, FT1)

- Unshielded and shielded multi-conductor cables with tinned copper (stranded) conductors, PVC insulation, an overall water-blocking tape and PVC jacket with rip cord (Ratings: CM, CMG, FT4, PLTC-ER, FPL). These codes are UL Exposed Run (ER) compliant. According to NEC 2005 these cables may be run without conduit or metal cladding for more than 6 feet a use previously prohibited.
- Solid bare copper conductor RG-59 (20 AWG) and RG-6 (18 AWG) coaxial cables with foam polyolefin insulation, either a water-blocking tape over the braid shield, or a CoreGuard® grease flooded braid, and PVC jackets (Ratings: CM, FT1)
- Non-plenum composite cables (one coax plus a twisted pair in a Siamese configuration) – each component cable has a water-blocking tape.
 The coax has solid bare copper conductor, foam polyolefin insulation, bare copper braid shield and a PVC jacket; the pair has a stranded bare copper conductor, PVC insulation and jacket. (Ratings: CM, FT1)

Product Availability

Belden Waterdog cables are available from stock and are offered with Belden's industry-leading 10-year Warranty.



Waterdog™ Indoor/Outdoor Cables

Water-resistant, Shielded Twisted Pair plus Conductor(s) - NEC CM and CEC, CM, FT1

Description	Part	No. of Pairs	Stranding	Standard	Lengths	Stan Unit	dard Wt.	Insul Thick	ation iness	Jac Thick	ket iness	Nom 0.	
Describuon	No.	No. of Cond.	Stranuling	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm

22 AWG Solid or Stranded Tinned Copper Conductors • Beldfoil® Shield with Drain Wire and Inner Water-blocking tape (Pairs) Insulated Conductors as Indicated • Overall Water-blocking Tape

PVC Insulation and PVC	5521G1	1 STP	solid	500	152	13.0	5.9	.010	.254	.025	.64	.212	5.38
105°C	552101	+1C (3/c)	Soliu	1000	305	22.0	10.0	.010	.234	Jacket (Gray or	Color:	.212	0.30
Solid Conductor Inner Water-blocking tape over Beldfoil shield	5501G1	1 STP +1C (3/c)	7x30	500 1000	152 305	12.0 25.0	5.4 11.4	.010	.254	.025 Jacket (Gray or		.222	5.64
Shorting	5522G1	1 STP +2/C (4/c)	solid	1000	305	27.0	12.3	.010	.254	.025 Jacket (Gray or		.224	5.69
Rip Cord Drain Wire Overall Water-blocking tape	5502G1	1 STP +2/C (4/c)	7x30	500 1000	152 305	14.0 29.0	6.4 13.2	.010	.254	.025 Jacket (Gray or		.240	6.10
Stranded Conductor Inner Water-blocking tape over Beldfoil shield	5504G1	1 STP +4/C (6/c)	7x30	500 1000	152 305	18.5 37.0	8.4 16.8	.010	.254	.025 Jacket (Gray or		.268	6.81
Shorting	5524G1	1 STP +4C (6/c)	solid	1000	305	31.0	14.1	.010	.254	.025 Jacket (Blac		.244	6.20
Rip Cord Drain Wire Overall Water-blocking tape	5584G1	1 STP +2 PR (6/c)	solid	1000	305	36.0	16.3	.010	.254	.025 Jacket (Blac		.283	7.20
	5541P1	2 STP (4/c)	7x30	1000	305	38.0	17.3	.010	.254	.025 Jacket (Blac		.328	8.30

Waterdog™ Indoor/Outdoor Cables

Water-resistant Unshielded Multi-conductor — NEC CM and CEC CM FT1

Description	Part	AWG	Stranding	Standard	Lengths	Stan Unit	dard Wt.		ation cness	Jac Thick	ket ness	Nom O.	inal D.
Description	No.	and No. of Cond.		Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm
Stranded Tinned Copper Co	nducto	rs • Overa	II Water-blo	ocking Ta	pe								

PVC Insulation • 0	iray or	Black P	VC Jac	ket with	Rip Co	rd								
300V 105°C		5300U1	18/2	7x26	U-500 500	U-152 152	12.0 13.5	5.5 6.1	.010	.254	.025	.64	.207	5.26
Overall Water-blocking tape					U-1000 1000	U-305 305	22.0 24.0	10.0 10.9						

Print legend: Water-resistant Indoor / Outdoor / CM • Jacket sequentially marked at 2 ft. intervals All cables have a 10-year Warranty

Rip Cord

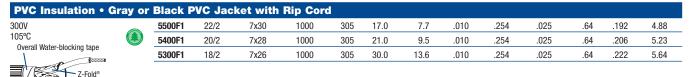


Waterdog™ Indoor/Outdoor Cables

Shielded Multi-conductor — NEC CM and CEC CM FT1

Description	Part	AWG and	Stranding	Standard	l Lengths	Stan Unit			ation (ness	Jac Thick	ket iness	Nom 0.	ninal D.
υσοστιμασίι	No.	No. of Cond.	Stranully	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm

Stranded Tinned Copper Conductors • Overall Beldfoil® Shield and Drain Wire • Overall Water-blocking Tape



Print legend: Water-resistant Indoor / Outdoor / CM • Jacket sequentially marked at 2 ft. intervals

Waterdog PLTC and FPL Indoor/Outdoor Cables

Water-resistant Unshielded Multi-conductor - NEC CMG, FPL, PLTC-ER and CEC CMG FT4

Description	Part	AWG and	Stranding	Standard	Lengths	Stan Unit	dard Wt.	Insul Thick	ation cness		ket (ness	Nom 0.	ninal D.
Description	No.	No. of Cond.	Juanung	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm

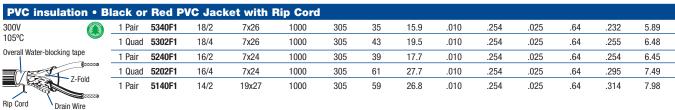
Stranded Tinned Copper Conductors • Overall Water-blocking Tape



Waterdog PLTC and FPL Indoor/Outdoor Cables
Water-resistant Shielded Multi-conductor – NEC CMG, FPL, PLTC-ER and CEC CMG FT4

Description	Part	AWG and	Stranding	Standard	Lengths	Stan Unit	dard Wt.		ation (ness		ket (ness	Nom O.	inal D.
Description	No.	No. of Cond.	Juanung	Ft.	m	Lbs.	kg	Inch	mm	Inch	mm	Inch	mm

Stranded Tinned Copper Conductors • Overall Beldfoil Shield and Drain Wire • Overall Water-blocking Tape



Print legend: Water- and Sunlight-resistant, Direct Burial, Indoor/Outdoor, PLTC-ER, FPL, CMG, FT4 • Jacket sequentially marked at 2 ft. intervals

All cables have a 10-year Warranty



Waterdog™ Indoor/Outdoor Cables

Water-resistant Coaxial and Coaxial Plus Twisted Pair - NEC CM and CEC CM FT1

Part No.	AWG	Stranding	Shield/Braid	Water-		ation nal OD	Nomi	nal OD	Standard	Lengths	Standa Wei	
Fait NO.	AWG	and Conductor	Coverage	Blocking	Inch	mm	Inch	mm	Ft.	mm	Lbs.	kg

CATV - Bare Copper Conductor • Aluminum Braid Plus 100% Foil Shield • Water-blocking Tape Over Braid or CoreGuard® Grease

Foam Polythylene 5339V5 CATV-RG-6/II	18	.040"	Duofoil	Tape	.180	4.57	.277	7.04	1000	305	31.0	14.1
CATV-RG-6/U Overall Water-blocki	ng tape	Solid BC	+ 60% AL Braid									
5339W5 CATV – RG-6/U	18	.040" Solid BC	Duofoil + 60% AL Braid	CoreGuard	.180	4.57	.270	6.86	1000 U1000 500 U500	305 U305 152 U152	30.0 30.0 15.0 15.0	13.6 13.6 6.8 6.8

CCTV— Bare Copper Conductor • Bare Copper Braid Shield • Water-blocking Tape Over Braid

nsulatior	ı • Black P	VC Jacket									
20	.032" Solid BC	95% BC Braid	Tape	.145	3.68	.244	6.2	1000	305	30.0	13.6
18	.040" Solid	95% BC	Tape	.180	4.57	.277	7.04	1000	305	38.0	17.2
tana	BC	Braid									
	20 18	20 .032" Solid BC 18 .040" Solid BC	Solid BC Braid BC 18 .040" 95% Solid BC BC BC BC Braid	20 .032" 95% Tape Solid BC Braid BC 18 .040" 95% Tape Solid BC BC Braid	20 .032" 95% Tape .145	20 .032" 95% Tape .145 3.68 Solid BC 18 .040" 95% Tape .180 4.57 Solid BC BC Braid	20 .032" 95% Tape .145 3.68 .244 Solid BC Braid BC 18 .040" 95% Tape .180 4.57 .277 Solid BC BC Braid	20 .032" 95% Tape .145 3.68 .244 6.2 Solid BC 18 .040" 95% Tape .180 4.57 .277 7.04 Solid BC BC Braid	20 .032" 95% Tape .145 3.68 .244 6.2 1000 Solid BC Tape .180 4.57 .277 7.04 1000 Solid BC BC Braid	20 .032" 95% Tape .145 3.68 .244 6.2 1000 305 Solid BC Braid BC .180 4.57 .277 7.04 1000 305 Solid BC BC Braid	20 .032" 95% Tape .145 3.68 .244 6.2 1000 305 30.0 Solid BC BC Tape .180 4.57 .277 7.04 1000 305 38.0 Solid BC BC Braid

CCTV/MATV - Bare Copper Conductor • Tinned Copper Braid Shield Plus 100% Foil Shield • Water-blocking Tape Over Braid or CoreGuard® Grease

Foam Polythylene 5439V5 CCTV/MATV – RG-59/U Overall Water-blocking	20	.032" Solid BC	Duobond II + 95% TC Braid	Таре	.145	3.68	.239	6.07	1000	305	29.0	13.2
5439W5 CCTV/MATV - RG-59/U	20	.032" Solid BC	Duobond + 95% TC Braid	CoreGuard	.145	3.68	.236	6.07	1000 U1000 500	305 U305 152	24.0 24.0 12.0	10.9 10.9 5.4

CCTV + Power — Coax: Solid Bare Copper Conductor • Foam PE Insulation • Bare Copper Braid Shield • Water-blocking Tape Over Braid Pair: Stranded Bare Copper • PVC Insulation • Overall Water-blocking Tape

Fair. Straitued Bare Cop	per • r vo	ilisulation • O	verall vvaler bloc	ming rape								
Black PVC Jackets	• Pair C	olor-coded	Black and Re	d								
5399X5 CCTV = RG-6/U	18(cx)	Solid BC	95% BC	Tape	.180	4.57	.279	7.10	1000	305	68.0	30.8
CCTV – RG-6/U	16(pr)	7/w BC	unshielded	Tape	.077	1.96	X .549	X 13.94				
5499X5	20(cx)	Solid BC	95% BC	Tape	.145	3.68	.249	6.32	1000	305	59.0	26.8
CCTV – RG-59/U	18(pr)	7/w BC	unshielded	Tape	.068	1.73	X .497	X 12.6				
Overall Water-block	ing tape											

BC= Bare Copper • PE = Polyethylene • TC = Tinned Copper
Print legend: Water-resistant Indoor / Outdoor / CM • Jacket sequentially marked at 2 ft. intervals

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