PTFE (Polytetrafluoroethylene) Equipment Wire & Cable

A synthetic fluoropolymer of tetrafluoroethylene, PTFE offers outstanding resistance to chemicals, oils and lubricants and temperature extremes, particularly suitable for use in severe environments.

Key Characteristics

» Operating temperature - 75°C to + 260°C
» 300 V to 1000 V Rating
» Available with Silver Plated or Nickel Plated Conductors
» Range of 11 standard colours and striped colour options for ease of identification
» Superior dielectrical properties
» Non flammable and non toxic
» Can be supplied with an etched surface finish to improve adhesion with 'potting' or encapsulation materials

Typical Applications

» Military Communications and Avionics
» Aerospace and Aircraft Wire Harnessing
» Automotive Sensor Systems
» OEM Appliance Wiring

Product Data PTFE BS 3G 210:1996

A range of PTFE Equipment wires, designed, manufactured and fully released to meet the requirements of the BS 3G 210 : 1996, specification for PTFE insulated equipment wires and cables.

Temperature Rating : - 75°C to + 190°C for Silver Plated Copper Conductors
- 75°C to + 260°C for Nickel Plated Copper Conductors

Nominal Conductor OD				Overall Diameter (mm)			
AWG	mm	mm^2	Conductor (stranding)	Type A Unshielded		Type AS Shielded	
				Min	Max	Min	Max
BS 3G 210 : 1996 Type A / Type AS (0.15mm nominal insulation) • 300V							
30	0.25	0.049	01/0.250	0.45	0.60		
28	0.32	0.080	01/0.320	0.52	0.67		
26	0.40	0.126	01/0.400	0.60	0.75		
32	0.24	0.035	07/0.080	0.44	0.59	0.89	1.04
30	0.30	0.055	07/0.100	0.50	0.65	0.95	1.10
28	0.36	0.079	07/0.120	0.56	0.71	1.01	1.16
26	0.45	0.124	07/0.150	0.65	0.80	1.10	1.25
24	0.60	0.220	07/0.200	0.80	0.95	1.25	1.40
26	0.50	0.149	19/0.100	0.70	0.85	1.15	1.30
24	0.60	0.215	19/0.120	0.80	0.95	1.25	1.40
22	0.75	0.336	19/0.150	0.95	1.10	1.40	1.55
20	1.00	0.597	19/0.200	1.20	1.35	1.65	1.80

PTFE Equipment Wire & Cable (Continued)

Nominal Conductor OD				Overall Diameter (mm)					
AWG	mm	mm^2	Conductor (stranding)	Type B Unshielded		Type BS Shielded		TypeBSMShieldedandJacketed	
				Min	Max	Min	Max	Min	Max
BS 3G 210 : 1996 Type B / Type BS / Type BSM (0.25mm nominal insulation) • 600V									
26	0.40	0.126	01/0.400	0.80	1.00				
22	0.60	0.283	01/0.600	1.00	1.20				
32	0.24	0.035	07/0.080	0.65	0.84	1.09	1.29	1.49	1.89
30	0.30	0.055	07/0.100	0.70	0.90	1.15	1.35	1.55	1.95
28	0.36	0.079	07/0.120	0.76	0.96	1.21	1.41	1.61	2.01
26	0.45	0.124	07/0.150	0.85	1.05	1.30	1.50	1.70	2.10
24	0.60	0.220	07/0.200	1.00	1.20	1.45	1.65	1.85	2.25
26	0.50	0.149	19/0.100	0.90	1.10	1.35	1.55	1.75	2.15
24	0.60	0.215	19/0.120	1.00	1.20	1.45	1.65	1.85	2.25
22	0.75	0.336	19/0.150	1.15	1.35	1.60	1.80	2.00	2.40
20	1.00	0.597	19/0.200	1.40	1.60	1.85	2.05	2.25	2.65
18	1.25	0.933	19/0.250	1.65	1.85	2.10	2.35	2.50	2.90

Nominal Conductor OD				Overall Diameter (mm)					
AWG	mm	mm^2	Conductor (stranding)	Type C Unshielded		Type CS Shielded		TypeCSMShieldedandJacketed	
				Min	Max	Min	Max	Min	Max
BS 3G 210 : 1996 Type C / Type CS / Type CSM (0.40mm nominal insulation) • 1000V									
19	0.90	0.636	01/0.900	1.56	1.82	2.01	2.27		
32	0.24	0.035	07/0.080	0.90	1.16	1.35	1.61	1.75	2.21
30	0.30	0.055	07/0.100	0.96	1.22	1.41	1.67	1.81	2.27
28	0.36	0.079	07/0.120	1.02	1.28	1.47	1.73	1.87	2.33
26	0.45	0.124	07/0.150	1.11	1.37	1.56	1.82	1.96	2.42
24	0.60	0.220	07/0.200	1.26	1.52	1.71	1.97	2.11	2.57
26	0.50	0.149	19/0.100	1.16	1.42	1.61	1.87	2.01	2.47
24	0.60	0.215	19/0.120	1.26	1.52	1.71	1.97	2.11	2.57
22	0.75	0.336	19/0.150	1.41	1.67	1.86	2.12	2.26	2.72
20	1.00	0.597	19/0.200	1.66	1.92	2.11	2.37	2.51	2.97
18	1.25	0.933	19/0.250	1.91	2.17	2.36	2.62	2.76	3.22
16	1.50	1.343	19/0.300	2.16	2.46	2.61	2.91	3.01	3.51
14	1.68	1.675	19/0.335	2.34	2.74	2.79	3.19	3.19	3.79
12	2.25	3.022	19/0.450	2.91	3.31	3.36	3.76	3.76	4.36
10	2.80	4.650	37/0.400	3.46	3.86	3.91	4.31	4.31	4.91

Product Data UL/CSA Approved Styles

A range of PTFE Equipment wires, designed, manufactured and fully released to meet the requirements of UL AWM & CSA styles, specifications for PTFE insulated equipment wires and cables.

Temperature Rating : - 75°C to + 150°C for UL Style 1164, 1198
- 75°C to + 200°C for UL Styles 1180, 1199

Nominal Conductor OD				Overall Diameter (mm)	
AWG	mm	mm^2	Conductor(stranding)	Min	Max
UL Style 1164 / UL Style 1180 (0.35mm nominal insulation) • Silver Plated Conductors • 300V					
32	0.24	0.034	07/0.079	0.90	0.94
30	0.30	0.055	07/0.102	0.96	1.00
28	0.38	0.089	07/0.127	1.04	1.08
26	0.48	0.141	07/0.160	1.14	1.18
24	0.60	0.220	07/0.203	1.26	1.30
22	0.80	0.336	19/0.160	1.46	1.50
20	1.00	0.597	19/0.203	1.66	1.70
18	1.25	0.933	19/0.254	1.91	1.95
16	1.43	1.230	19/0.287	2.09	2.13
14	1.81	1.946	19/0.361	2.47	2.51
12	2.25	3.020	19/0.454	2.91	2.95
10	2.80	4.650	37/0.404	3.46	3.50

Nominal Conductor OD				Overall Diameter (mm)	
AWG	mm	mm^2	Conductor(stranding)	Min	Max
UL Style 1199 (0.53mm nominal insulation) • Silver Plated Conductors • 600V					
32					
30	0.30	0.055	07/0.100	1.32	1.36
28	0.38	0.089	07/0.127	1.40	1.44
26	0.48	0.141	07/0.160	1.50	1.54
24	0.60	0.220	07/0.200	1.62	1.66
24	0.62	0.241	19/0.127	1.64	1.68
22	0.80	0.336	19/0.160	1.82	1.86
20	1.00	0.597	19/0.200	2.02	2.06
18	1.25	0.933	19/0.250	2.27	2.31
16	1.43	1.230	19/0.287	2.46	2.50
14	1.81	1.946	19/0.361	2.83	2.87
12	2.25	3.020	19/0.450	3.27	3.31
10	2.80	4.650	37/0.400	3.82	3.86

PTFE Equipment Wire & Cable (Continued)

Nominal Conductor OD				Overall Diameter (mm)	
AWG	mm	mm^2	Conductor(stranding)	Min	Max
UL Style 1198 (0.53mm nominal insulation)• Silver Plated Conductors • 600V					
32					
30	0.30	0.055	07/0.100	1.32	1.36
28	0.38	0.089	07/0.120	1.38	1.42
26	0.48	0.141	07/0.150	1.47	1.51
24	0.60	0.220	07/0.200	1.62	1.66
22	0.80	0.336	19/0.150	1.77	1.81
20	1.00	0.597	19/0.200	2.02	2.06
18	1.25	0.933	19/0.250	2.27	2.31
16	1.43	1.229	19/0.287	2.46	2.50
14	1.81	1.946	19/0.361	2.83	2.87
12	2.25	3.020	19/0.450	3.27	3.31
10	2.80	4.650	37/0.400	3.82	3.86

PTFE Wires can also be supplied to UL STYLES 1212, 1371, 1538, 1659, 1815 on request.