



GORE® Space Cables

Type SPL

Qualified according to ESCC 3901/019, GORE® Space Cables, Type SPL for Geostationary Earth Orbit (GEO) applications are extremely flexible and durable, making them easy to install in tight spaces. Their lightweight and small structure reduces the total launch mass of the spacecraft (Table 7).

PROGRAM HERITAGE

- Express MD1/MD2
- Globalstar
- MetOp
- XMM

TYPICAL APPLICATIONS

- DC power distribution
- Low-frequency signals
- Optical instruments

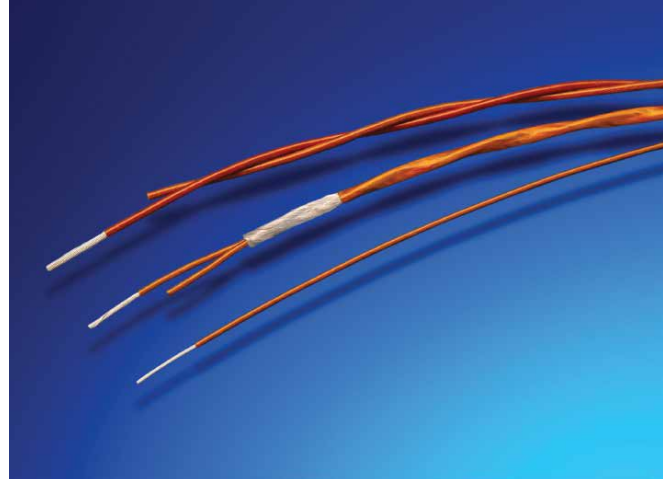


TABLE 7: CABLE PROPERTIES

PROPERTY	VALUE
Maximum Operating Voltage	600 V RMS
Conductor	Silver-plated copper or copper alloy, true concentric
Insulation	Double layer: Expanded PTFE + Polyimide
Outer Jacket	Polyimide
Temperature Range	-200°C to +200°C

ORDERING INFORMATION

GORE® Space Cables, Type SPL for GEO applications are available in the following variants in accordance with ISO 2635 (Table 8). Specify **ESCC3901019XXB** with the 'XX' being the appropriate variant number. For more information, contact a Gore representative or visit gore.com/cable-distributors for the list of distributors.

TABLE 8: CABLE VARIANTS

VARIANT NO.	SHIELDED	NO. OF CORES	WIRE SIZE ISO/ (AWG)	NO. OF STRANDS X DIAMETER (MM)	CONDUCTOR CHARACTERISTICS			SHIELD STRAND DIAMETER (MM)	CORE MAXIMUM DIAMETER (MM)	FINISHED WIRE OR CABLE CHARACTERISTICS	
					MAXIMUM DIAMETER (MM)	NOMINAL SECTION (MM ²)	MAXIMUM RESISTANCE (Ω/KM)			MAXIMUM DIAMETER (MM)	MAXIMUM WEIGHT (KG/KM)
01	No	1	-(30)	7 × 0.102	0.32	0.057	375.0	—	—	0.78	0.98
02	No	1	-(28)	7 × 0.127	0.47	0.090	253.0	—	—	0.87	1.40
03	No	1	001/(26)	19 × 0.100	0.57	0.150	157.0	—	—	0.96	1.90
04	No	1	002/(24)	19 × 0.120	0.58	0.250	111.0	—	—	1.13	2.60
05	No	1	004/(22)	19 × 0.150	0.76	0.400	58.0	—	—	1.25	3.90
06	No	1	006/(20)	19 × 0.200	0.99	0.600	32.0	—	—	1.48	6.40
07	No	1	012/(16)	19 × 0.300	1.49	1.200	14.0	—	—	1.98	13.00
08	No	1	030/(12)	37 × 0.320	2.18	3.000	7.0	—	—	2.73	27.00
09	No	2	-(30)	7 × 0.102	0.32	0.057	383.0	—	0.78	1.50	2.10
10	No	2	-(28)	7 × 0.127	0.47	0.090	258.0	—	0.87	1.70	2.80
11	No	2	001/(26)	19 × 0.100	0.57	0.150	170.0	—	0.96	1.90	3.80
12	No	2	002/(24)	19 × 0.120	0.58	0.250	120.0	—	1.13	2.30	5.20
13	No	2	004/(22)	19 × 0.150	0.76	0.400	63.0	—	1.25	2.50	8.20
14	No	2	006/(20)	19 × 0.200	0.99	0.600	35.0	—	1.48	3.00	13.50
15	No	2	012/(16)	19 × 0.300	1.49	1.200	15.0	—	1.98	4.00	27.00
16	No	2	030/(12)	37 × 0.320	2.18	3.000	7.5	—	2.73	5.50	55.00
17	No	3	-(30)	7 × 0.102	0.32	0.057	384.0	—	0.78	1.70	3.30
18	No	3	-(28)	7 × 0.127	0.47	0.090	259.0	—	0.87	1.90	4.50
19	No	3	001/(26)	19 × 0.100	0.57	0.150	171.0	—	0.96	2.10	6.20
20	No	3	002/(24)	19 × 0.120	0.58	0.250	121.0	—	1.13	2.50	8.30
21	No	3	004/(22)	19 × 0.150	0.76	0.400	64.0	—	1.25	2.70	12.70
22	No	3	006/(20)	19 × 0.200	0.99	0.600	37.0	—	1.48	3.20	20.60
23	No	3	012/(16)	19 × 0.300	1.49	1.200	15.0	—	1.98	4.30	43.00
24	No	3	030/(12)	37 × 0.320	2.18	3.000	7.5	—	2.73	5.90	88.00
25	No	4	-(30)	7 × 0.102	0.32	0.057	385.0	—	0.78	1.90	4.40
26	No	4	-(28)	7 × 0.127	0.47	0.090	260.0	—	0.87	2.10	6.00
27	No	4	001/(26)	19 × 0.100	0.57	0.150	171.0	—	0.96	2.30	8.20
28	No	4	002/(24)	19 × 0.120	0.58	0.250	122.0	—	1.13	2.70	11.00
29	No	4	004/(22)	19 × 0.150	0.76	0.400	64.0	—	1.25	3.00	16.90
30	No	4	006/(20)	19 × 0.200	0.99	0.600	37.0	—	1.48	3.60	27.30



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TABLE 8: CABLE VARIANTS FOR TYPE SPL (CONTINUED)

VARIANT NO.	SHIELDED	NO. OF CORES	WIRE SIZE ISO/ (AWG)	NO. OF STRANDS X DIAMETER (MM)	CONDUCTOR CHARACTERISTICS			SHIELD STRAND DIAMETER (MM)	CORE MAXIMUM DIAMETER (MM)	FINISHED WIRE OR CABLE CHARACTERISTICS	
					MAXIMUM DIAMETER (MM)	NOMINAL SECTION (MM ²)	MAXIMUM RESISTANCE (Ω/KM)			MAXIMUM DIAMETER (MM)	MAXIMUM WEIGHT (KG/KM)
31	No	4	012/(16)	19 × 0.300	1.49	1.200	16.0	—	1.98	4.80	57.00
32	No	4	030/(12)	37 × 0.320	2.18	3.000	7.9	—	2.73	6.50	118.00
33	No	5	—/(28)	7 × 0.127	0.47	0.090	260.0	—	0.87	2.40	7.80
34	No	5	001/(26)	19 × 0.100	0.57	0.150	172.0	—	0.96	2.60	10.70
35	No	5	002/(24)	19 × 0.120	0.58	0.250	123.0	—	1.13	3.10	14.30
36	No	5	004/(22)	19 × 0.150	0.76	0.400	64.0	—	1.25	3.40	21.80
37	No	5	006/(20)	19 × 0.200	0.99	0.600	37.0	—	1.48	4.00	35.00
38	No	6	—/(28)	7 × 0.127	0.47	0.090	261.0	—	0.87	2.60	9.60
39	No	6	001/(26)	19 × 0.100	0.57	0.150	172.0	—	0.96	2.90	13.10
40	No	6	002/(24)	19 × 0.120	0.58	0.250	124.0	—	1.13	3.40	17.60
41	No	6	004/(22)	19 × 0.150	0.76	0.400	65.0	—	1.25	3.70	26.60
42	No	6	006/(20)	19 × 0.200	0.99	0.600	38.0	—	1.48	4.40	48.20
43	No	7	—/(28)	7 × 0.127	0.47	0.090	261.0	—	0.87	2.60	10.50
44	No	7	001/(26)	19 × 0.100	0.57	0.150	172.0	—	0.96	2.90	14.40
45	No	7	002/(24)	19 × 0.120	0.58	0.250	124.0	—	1.13	3.40	19.30
46	No	7	004/(22)	19 × 0.150	0.76	0.400	65.0	—	1.25	3.70	29.60
47	No	7	006/(20)	19 × 0.200	0.99	0.600	38.0	—	1.48	4.40	47.80
48	Yes	1	—/(30)	7 × 0.102	0.32	0.057	375.0	0.063	0.78	1.10	2.60
49	Yes	1	—/(28)	7 × 0.127	0.47	0.090	253.0	0.079	0.87	1.20	3.30
50	Yes	1	001/(26)	19 × 0.100	0.57	0.150	157.0	0.079	0.96	1.30	4.10
51	Yes	1	002/(24)	19 × 0.120	0.58	0.250	111.0	0.079	1.13	1.50	4.80
52	Yes	1	004/(22)	19 × 0.150	0.76	0.400	58.0	0.079	1.25	1.60	6.30
53	Yes	1	006/(20)	19 × 0.200	0.99	0.600	32.0	0.079	1.48	1.90	9.10
54	Yes	1	012/(16)	19 × 0.300	1.49	1.200	14.0	0.079	1.98	2.40	16.80
55	Yes	1	030/(12)	37 × 0.320	2.18	3.000	7.0	0.079	2.73	3.10	31.70
56	Yes	2	—/(30)	7 × 0.102	0.32	0.057	383.0	0.063	0.78	1.90	5.10
57	Yes	2	—/(28)	7 × 0.127	0.47	0.090	258.0	0.079	0.87	2.10	6.10
58	Yes	2	001/(26)	19 × 0.100	0.57	0.150	170.0	0.079	0.96	2.30	7.70
59	Yes	2	002/(24)	19 × 0.120	0.58	0.250	120.0	0.079	1.13	2.70	9.50
60	Yes	2	004/(22)	19 × 0.150	0.76	0.400	63.0	0.079	1.25	2.90	13.40
61	Yes	2	006/(20)	19 × 0.200	0.99	0.600	35.0	0.079	1.48	3.30	19.60
62	Yes	2	012/(16)	19 × 0.300	1.49	1.200	15.0	0.079	1.98	4.30	35.00

TABLE 8: CABLE VARIANTS FOR TYPE SPL (CONTINUED)

VARIANT NO.	SHIELDED	NO. OF CORES	WIRE SIZE ISO/ (AWG)	NO. OF STRANDS X DIAMETER (MM)	CONDUCTOR CHARACTERISTICS			SHIELD STRAND DIAMETER (MM)	CORE MAXIMUM DIAMETER (MM)	FINISHED WIRE OR CABLE CHARACTERISTICS	
					MAXIMUM DIAMETER (MM)	NOMINAL SECTION (MM ²)	MAXIMUM RESISTANCE (Ω/KM)			MAXIMUM DIAMETER (MM)	MAXIMUM WEIGHT (KG/KM)
63	Yes	2	030/(12)	37 × 0.320	2.18	3.000	7.5	0.079	2.73	5.8	67.0
64	Yes	3	-(30)	7 × 0.102	0.32	0.057	385.0	0.063	0.78	2.0	6.1
65	Yes	3	-(28)	7 × 0.127	0.47	0.090	259.0	0.079	0.87	2.3	8.3
66	Yes	3	001/(26)	19 × 0.100	0.57	0.150	171.0	0.079	0.96	2.4	10.3
67	Yes	3	002/(24)	19 × 0.120	0.58	0.250	121.0	0.079	1.13	2.8	13.2
68	Yes	3	004/(22)	19 × 0.150	0.76	0.400	64.0	0.079	1.25	3.1	18.0
69	Yes	3	006/(20)	19 × 0.200	0.99	0.600	37.0	0.079	1.48	3.6	26.8
70	Yes	3	012/(16)	19 × 0.300	1.49	1.200	15.0	0.079	1.98	4.6	51.0
71	Yes	3	030/(12)	37 × 0.320	2.18	3.000	7.5	0.079	2.73	6.2	99.0
72	Yes	4	-(30)	7 × 0.102	0.32	0.057	386.0	0.063	0.78	2.2	7.6
73	Yes	4	-(28)	7 × 0.127	0.47	0.090	260.0	0.079	0.87	2.5	10.4
74	Yes	4	001/(26)	19 × 0.100	0.57	0.150	171.0	0.079	0.96	2.7	12.2
75	Yes	4	002/(24)	19 × 0.120	0.58	0.250	122.0	0.079	1.13	3.1	16.4
76	Yes	4	004/(22)	19 × 0.150	0.76	0.400	64.0	0.079	1.25	3.4	22.9
77	Yes	4	006/(20)	19 × 0.200	0.99	0.600	37.0	0.079	1.48	3.9	34.4
78	Yes	4	012/(16)	19 × 0.300	1.49	1.200	16.0	0.079	1.98	5.1	63.0
79	Yes	4	030/(12)	37 × 0.320	2.18	3.000	7.9	0.079	2.73	6.9	124
80	Yes	5	-(28)	7 × 0.127	0.47	0.090	260.0	0.079	0.87	2.7	12.5
81	Yes	5	001/(26)	19 × 0.100	0.57	0.150	172.0	0.079	0.96	2.9	15.8
82	Yes	5	002/(24)	19 × 0.120	0.58	0.250	123.0	0.079	1.13	3.4	20.4
83	Yes	5	004/(22)	19 × 0.150	0.76	0.400	64.0	0.079	1.25	3.7	28.4
84	Yes	5	006/(20)	19 × 0.200	0.99	0.600	37.0	0.079	1.48	4.4	43.0
85	Yes	6	-(28)	7 × 0.127	0.47	0.090	261.0	0.079	0.87	3.0	14.8
86	Yes	6	001/(26)	19 × 0.100	0.57	0.150	172.0	0.079	0.96	3.2	18.8
87	Yes	6	002/(24)	19 × 0.120	0.58	0.250	124.0	0.079	1.13	3.8	24.3
88	Yes	6	004/(22)	19 × 0.150	0.76	0.400	65.0	0.079	1.25	4.1	34.0
89	Yes	6	006/(20)	19 × 0.200	0.99	0.600	38.0	0.079	1.48	4.8	58.2
90	Yes	7	-(28)	7 × 0.127	0.47	0.090	261.0	0.079	0.87	3.0	15.7
91	Yes	7	001/(26)	19 × 0.100	0.57	0.150	172.0	0.079	0.96	3.2	20.1
92	Yes	7	002/(24)	19 × 0.120	0.58	0.250	124.0	0.079	1.13	3.8	26.0
93	Yes	7	004/(22)	19 × 0.150	0.76	0.400	65.0	0.079	1.25	4.1	37.0
94	Yes	7	006/(20)	19 × 0.200	0.99	0.600	38.0	0.079	1.48	4.8	57.0