

Seaguard^{DS}
Cables and coaxials to naval standards

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Introduction

Habia Cable is a leading international manufacturer of specialist wire and cable, active in many navy programs around the world. Our expertise lies in the ability to study and understand customer requirements. Fire performance, small size and weight, electrical parameters, fluid and oil resistance, flexibility, abrasion resistance, strength and screening effectiveness are typical factors which are carefully considered when designing cables for naval systems. With our experience and knowledge we are able to design and manufacture cables which fulfill such complex requirements without compromise.

Our Seaguard^{DS} cable concept is consequently designed and manufactured to comply fully with the criteria set out in the UK Defence Standard 61-12 Part 9 and 61-12 Part 25 as well as other national navy standards. In this mini-guide you will find most of the screened and un-screened multicore and multipair cables as well as coaxial cables requested by the market. If you can't find the typical design you are looking for, please let us know and we will issue a design for you.

DSP 61-12 (Part 9)

Cables, Radio Frequency Including Limited Fire Hazard (LFH) Variants

DSP 61-12 (Part 18)

Equipment Wires, Limited Fire Hazard

DSP 61-12 (Part 25)

Cables, Electrical Limited Fire Hazard up to Conductor Size 10mm² Cross-Sectional-Area

DSP 61-12 (Part 31)

Sheaths, Limited Fire Hazard

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We are also able to meet specific customer requirements taking the various power and signal wires and incorporating them into custom-designed hybrid cables. Screening can also be applied as required, but the materials used are still tested and approved to DSP 61-12 (Part 18) and DSP 61-12 (Part 31) ensuring a cable that is generally in accordance with the requirements of DSP 61-12 (Part 25). Please contact your local sales office for more details.

DSP 61-12 Pt 9



DSP 61-12 Pt 18



DSP 61-12 Pt 25



DSP 61-12 Pt 31



Single core

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	

- Def Stan 61-12 Part 18

Construction

Conductor	Tin Plated Copper (TPC)	Insulation	Dual wall HFI 140
Shield	-	Sheath	-

Application

Designed for use in the Seaguard product range as a Def Stan 61-12 Part 18 approved wire, HFI 140 has since found use in applications including Habiatron and Railguard due to its excellent LSZH, FR and Rad Tol properties. D- items are fully released to the Def Stan while H- items are designed by Habia.

Description	Size		Conductor			Finished Wire			Electrical amps at 40°C	Order reference
	AWG	CSA mm ²	stranding	resistance Ω/km	wire Ø	core Ø	tolerance	weight g/m		
D-D 3001	30	0,05	1 x 0,25	383,50	0,25	0,65	+0,05 -0,10	0,9	3	430cc3001
D-D 3007	30	0,06	7 x 0,10	336,00	0,30	0,70	+0,05 -0,10	1,1	3	430cc3007
D-D 2807	28	0,09	7 x 0,12	259,00	0,38	0,78	+0,05 -0,10	1,5	4	430cc2807
D-D 2601	26	0,12	1 x 0,40	145,60	0,40	0,80	+0,05 -0,10	2,0	5	430cc2601
D-D 2619	26	0,15	19 x 0,10	141,50	0,48	0,88	+0,07 -0,08	2,9	5	430cc2619
D-D 2419	24	0,24	19 x 0,12	95,60	0,60	1,00	+0,05 -0,10	3,4	7	430cc2419
D-D 2301	23	0,28	1 x 0,60	64,00	0,60	1,00	+0,05 -0,10	3,9	7	430cc2301
D-D 2219	22	0,40	19 x 0,15	60,00	0,76	1,16	+0,04 -0,11	4,9	10	430cc2219
H-DM 0,5	-	0,50	16 x 0,20	40,10	0,88	1,28	±0,10	5,3	12	431cc0050
D-D 2019	20	0,60	19 x 0,20	33,20	0,96	1,36	+0,14 -0,06	7,5	14	430cc2019
D-D 1901	19	0,63	1 x 0,90	28,50	0,90	1,30	+0,05 -0,10	7,9	14	430cc1901
H-DM 0,75	-	0,75	24 x 0,20	26,70	1,05	1,45	+0,13 -0,07	7,7	16	431cc0075
D-D 1819	18	1,00	19 x 0,25	21,10	1,20	1,60	±0,05	10,4	19	430cc1819
H-DM 1,0	-	1,00	32 x 0,20	20,00	1,20	1,60	+0,15 -0,05	9,5	19	431cc0100
D-D 1619	16	1,20	19 x 0,30	14,50	1,42	1,82	+0,18 -0,02	16,5	23	430cc1619
H-DM 1,5	-	1,50	30 x 0,25	13,70	1,50	2,00	+0,12 -0,08	15,1	26	431cc0150
D-D 1437	14	2,00	37 x 0,25	10,90	1,75	2,25	±0,10	20,7	32	430cc1437
H-DM 2,5	-	2,50	50 x 0,25	8,21	1,95	2,45	±0,10	23,2	37	431cc0250
D-D 1237	12	2,60	37 x 0,30	7,60	2,10	2,60	±0,10	27,1	43	430cc1237
D-DM 4	-	4,00	56 x 0,30	5,09	2,48	3,20	±0,05	40,0	52	430cc0400
D-DM 6	-	6,00	84 x 0,30	3,39	2,92	4,00	±0,05	61,4	68	430cc0600
D-DM 10	-	10,00	80 x 0,40	1,95	3,93	5,10	±0,05	106,5	101	430cc1000

Available colours (replace 'cc' in the order reference)

00 Black 11 Brown 22 Red 33 Orange 44 Yellow 55 Green 66 Blue 77 Violet 88 Grey 99 White 29 Pink 89 Natural 45 Yel/Grn

Ref: SGDS_D_13 Created: CJV Approved: AE Date: 2013-09-12

Data indicates nominal values unless stated otherwise, is only valid for reference purposes at the time of publication and is subject to change without prior notice.

Coax

Flame retardant	IEC 60332-1-2 UL 1581 VVW-1
Smoke generation	IEC 61034-2
Toxicity	IEC 60754-2
Frequency range	Up to 2,5 GHz
Screening efficiency	-40dB (single braid) -70dB (double braid)
Velocity propagation	66%
• Def Stan 61-12 Part 9	

Construction (DSP 61-12 Pt 9/5: 7c1, 7c2 and 8d)

Conductor	Plain Copper (CU) Silver Plated Copper (SPC) Silver Plated High Strength Copper Alloy (HSA)	Dielectric	HFI 90
Shield	Braid of Copper (C)	Sheath	HFS 107 XL

Identification

Dielectric	Natural
Sheath	Black
Marking	NNN-NNNN DESCRIPTION XX-HC-YEAR (e.g. 891-9850 LFH/URM 43 SE-HC-2012) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture

Description	Construction						Electrical			MBR	Order reference
	conductor material	conductor Ø	dielectric Ø	shield (s) Ø	sheath (s) Ø	weight g/m	V rms	imp. Ω	cap. pF/m	static dynamic	(NSN)
LFH/URM 43 (50 Ohm coaxial)	CU (solid)	0,90	2,95	3,70	5,00	40	5200 21000	50	100	25 80	61989-198-50 (6145-99-891-9850)
LFH/URM 54 (75 Ohm triaxial)	CU (strands)	0,57	3,25	in 3,95 out 6,10	in 5,40 out 8,30	120	3600 14000	75	67	45 140	61989-198-57 (6145-99-891-9857)
LFH/URM 57 (75 Ohm coaxial)	CU (solid)	1,15	7,25	8,15	10,30	150	10500 42000	75	67	50 170	61989-198-66 (6145-99-891-9866)
LFH/URM 60 (75 Ohm coaxial)	CU (solid)	1,15	7,25	in 7,95 out 8,65	11,00	185	10500 42000	75	67	55 180	61989-198-68 (6145-99-891-9868)
LFH/URM 67 (50 Ohm coaxial)	CU (strands)	2,25	7,25	8,15	10,30	160	13000 40000	50	100	50 170	61989-198-61 (6145-99-891-9861)
LFH/URM 70 (75 Ohm coaxial)	CU (strands)	0,57	3,25	3,95	5,80	60	3600 14000	75	67	30 100	61989-198-52 (6145-99-891-9852)
LFH/URM 76 (50 Ohm coaxial)	CU (strands)	0,96	2,95	3,65	5,00	40	5200 21000	50	100	25 80	61989-198-49 (6145-99-891-9849)
LFH/URM 90 (75 Ohm coaxial)	CCS (solid)	0,60	3,70	4,40	6,00	60	5200 21000	75	67	30 100	61989-198-55 (6145-99-891-9855)
LFH/URM 112 (50 Ohm coaxial)	SPC (strands)	2,25	7,25	in 7,95 out 8,65	10,80	210	13000 40000	50	100	55 180	61989-198-63 (6145-99-891-9863)
LFH/URM 114 (75 Ohm triaxial)	CCS (solid)	0,57	3,70	in 4,40 out 6,00	in 5,30 out 8,20	115	5200 21000	75	67	40 130	61989-198-56 (6145-99-891-9856)
LFH/URM 115 (50 Ohm triaxial)	CU (solid)	0,90	2,95	in 3,60 out 5,30	in 4,60 out 7,20	85	5200 21000	50	100	35 120	61989-198-51 (6145-99-891-9851)
LFH/URM 117 (75 Ohm coaxial)	CU (strands)	0,64	3,70	4,40	6,00	60	5200 20000	75	67	30 100	61989-198-54 (6145-99-891-9854)

Electrical data (table)	Attenuation (dB/100m)						Power (W)					
	Frequency (MHz)						Frequency (MHz)					
	30	100	400	1000	2500	6000	30	100	400	1000	2500	6000
LFH/URM 43	8	14	29	47	77	-	1150	630	293	185	117	-
LFH/URM 54	8	14	29	47	77	-	984	539	270	160	101	-
LFH/URM 57	3	6	12	21	35	-	2324	1273	637	365	231	-
LFH/URM 60	3	6	12	21	35	-	3080	1687	844	382	242	-
LFH/URM 67	4	7	15	24	39	-	3644	1996	998	550	348	-
LFH/URM 70	8	14	29	47	77	-	1019	558	262	166	105	-
LFH/URM 76	8	15	31	50	81	-	1004	550	275	163	103	-
LFH/URM 90	6	11	23	37	60	-	1371	751	376	219	139	-
LFH/URM 112	4	7	15	24	39	-	3288	1801	901	413	261	-
LFH/URM 114	7	13	27	43	71	-	1294	709	355	206	130	-
LFH/URM 115	7	13	27	43	71	-	1092	598	299	176	111	-
LFH/URM 117	7	13	27	43	71	-	1161	636	318	188	119	-

Ref: SGDS_CC_04 Created: CJV Approved: AE Date: 2013-09-12
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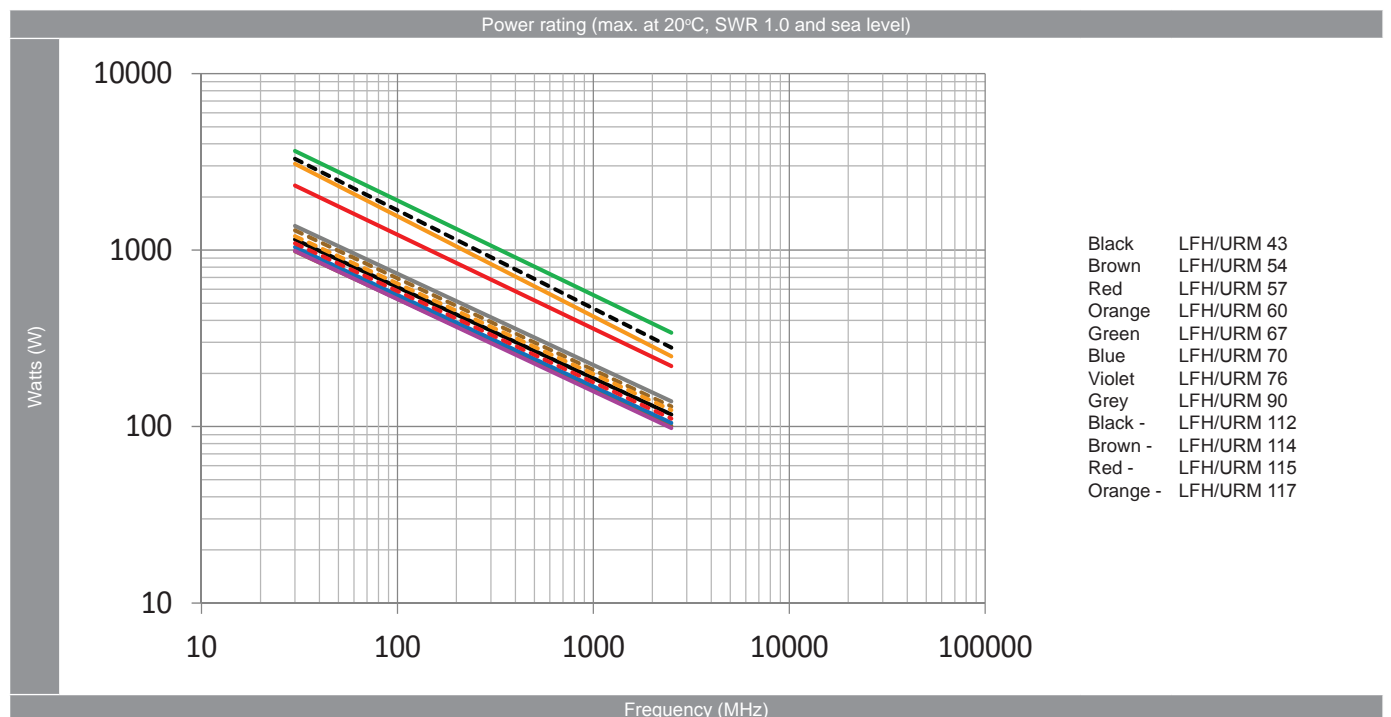
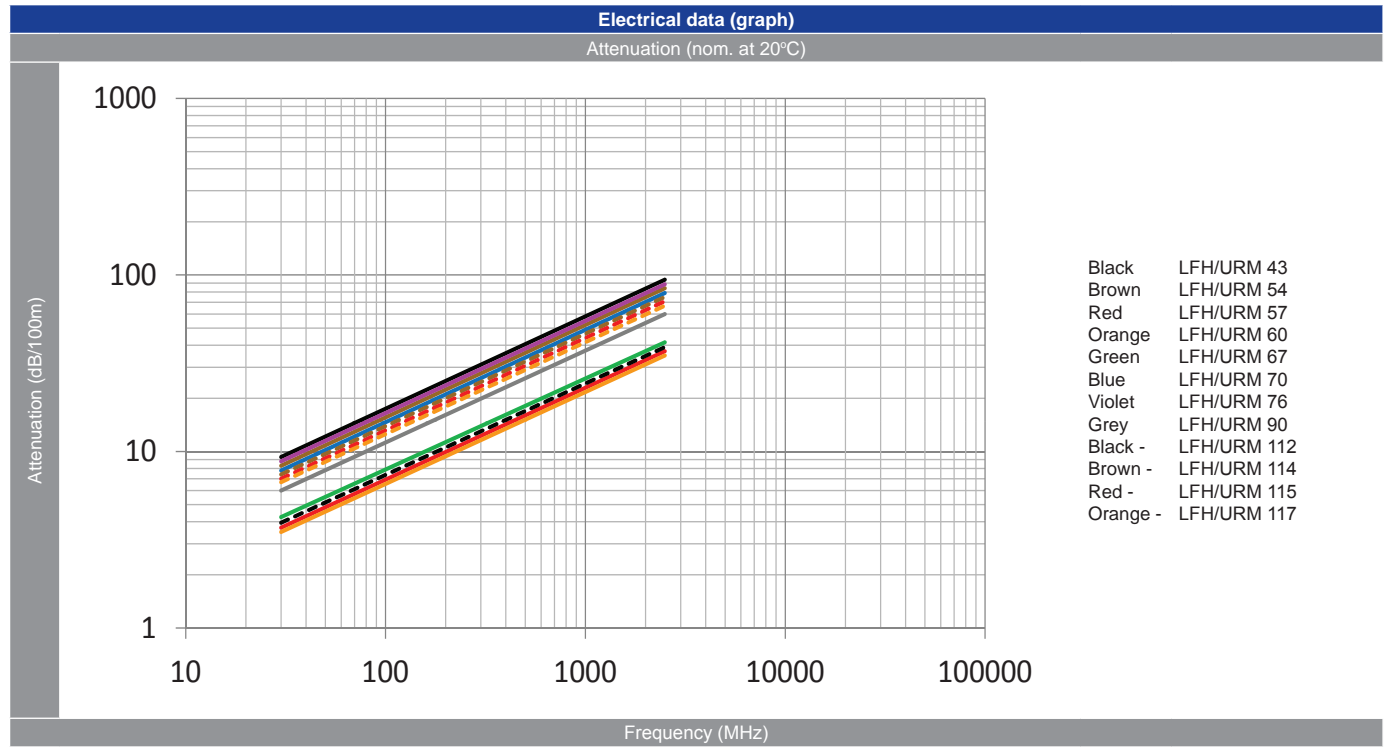
Mutually interchangeable cables

URM 106	RG 302 (M)
URM 108	RG 303 (M)
URM 109	RG 316 (M)
URM 110	RG 178 (M)

Application

Seaguard^{DS} LFH/URM Coaxial cables are designed, tested and approved to the UK Defence Standard 61-12 Part 9: Cables, Radio Frequency Including Limited Fire Hazard (LFH) Variants. In particular, Habia Cable has focussed on Group 7 (General purpose polyethylene dielectric, LFH sheath) and Group 8 (Close tolerance polyethylene dielectric, LFH sheath), Small and Medium sized coaxials to provide a Low Smoke Zero Halogen (LSZH) and flame retardant solution for our customers.

In addition to the cables listed here, it should also be noted that Def Stan 61-12 Part 9 includes a list of Mutually Interchangeable Cables. Please see list.



Multi core cables, unscreened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	

Construction (DSP 61-12 Pt 25: 4-9)

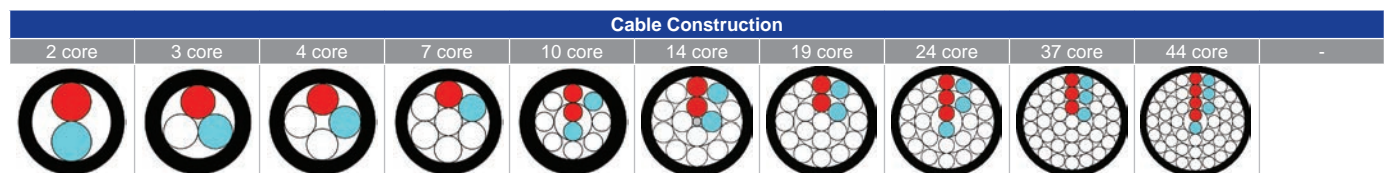
Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	-	Sheath	HFS 107 XL

Identification

Cores	1st in layer White 1: Red 2: Blue Remaining : White	All cores numbered (if 4 or more cores in cable)
Sheath	Black	

Marking DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN
(e.g. DSP 61/12 pt 25 D 2419 TX 2 SE-HC-2012-981-9293)
NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number
XX to be replaced with country of manufacture
YY to be replaced with year of manufacture

Description	Construction							Electrical amps at 40°C max	NSN 6145-99-	Order reference
	no. / size AWG	conductor Ø	insulation Ø	cabled Ø	shield (s) Ø	sheath (s) max Ø	weight max g/m			
D 2419 TX 2	2x 24	0,60	1,00	2,00	-	4,80	23	7,0	891-9293	61989-192-93
D 2019 TX 2	2x 20	0,96	1,36	2,80	-	5,70	34	13,3	891-9310	61989-193-10
D 1819 TX 2	2x 18	1,20	1,60	3,30	-	6,30	47	18,2	891-9893	61989-198-93
D 1619 TX 2	2x 16	1,42	1,82	3,80	-	6,80	58	21,6	892-0037	61989-200-37
D 1237 TX 2	2x 12	2,10	2,60	5,20	-	8,00	93	40,3	892-0042	61989-200-42
D 2419 TX 3	3x 24	0,60	1,00	2,16	-	5,05	28	6,5	891-9874	61989-198-74
D 2219 TX 3	3x 22	0,76	1,16	2,70	-	5,40	33	8,8	891-9880	61989-198-80
D 2019 TX 3	3x 20	0,96	1,36	3,02	-	6,00	45	12,3	891-9887	61989-198-87
D 1819 TX 3	3x 18	1,20	1,60	3,56	-	6,55	59	16,8	892-0029	61989-200-29
D 1619 TX 3	3x 16	1,42	1,82	4,10	-	7,10	75	20,0	892-0038	61989-200-38
D 1237 TX 3	3x 12	2,10	2,60	5,60	-	8,40	125	37,3	892-0043	61989-200-43
D 2419 TX 4	4x 24	0,60	1,00	2,40	-	5,20	33	5,9	891-9296	61989-192-96
D 2019 TX 4	4x 20	0,96	1,36	3,40	-	6,30	55	11,2	891-9313	61989-193-13
D 1819 TX 4	4x 18	1,20	1,60	3,99	-	7,00	72	15,3	892-0030	61989-200-30
D 2419 TX 7	7x 24	0,60	1,00	3,00	-	5,90	44	4,8	891-9875	61989-198-75
D 2219 TX 7	7x 22	0,76	1,16	3,70	-	6,45	55	6,5	891-9881	61989-198-81
D 2019 TX 7	7x 20	0,96	1,36	4,20	-	7,20	81	9,0	891-9888	61989-198-88
D 1819 TX 7	7x 18	1,20	1,60	4,95	-	7,95	110	12,4	892-0031	61989-200-31
D 1619 TX 7	7x 16	1,42	1,82	5,70	-	8,70	145	14,8	892-0039	61989-200-39
D 1237 TX 7	7x 12	2,10	2,60	7,80	-	10,70	260	27,6	892-0044	61989-200-44
D 1819 TX 10	10x 18	1,20	1,60	6,60	-	9,80	155	11,3	892-0032	61989-200-32
D 2419 TX 14	14x 24	0,60	1,00	4,42	-	7,40	73	3,9	891-9876	61989-198-76
D 2219 TX 14	14x 22	0,76	1,16	5,30	-	8,10	95	5,3	891-9882	61989-198-82
D 2019 TX 14	14x 20	0,96	1,36	6,19	-	9,40	150	7,3	891-9889	61989-198-89
D 1819 TX 14	14x 28	1,20	1,60	7,30	-	10,50	205	10,0	892-0033	61989-200-33
D 1619 TX 14	14x 16	1,42	1,82	8,40	-	11,80	275	12,0	892-0040	61989-200-40
D 1237 TX 14	14x 12	2,10	2,60	11,45	-	14,90	500	22,0	892-0045	61989-200-45
D 2219 TX 19	19x 22	0,76	1,16	6,00	-	8,75	125	4,8	891-9883	61989-198-83
D 2019 TX 19	19x 20	0,96	1,36	7,00	-	10,20	190	6,7	891-9890	61989-198-90
D 1819 TX 19	19x 18	1,20	1,60	8,25	-	11,70	265	9,1	892-0034	61989-200-34
D 2419 TX 24	24x 24	0,60	1,00	6,00	-	9,00	115	3,1	891-9877	61989-198-77
D 2219 TX 24	24x 22	0,76	1,16	7,20	-	10,10	155	4,3	891-9884	61989-198-84
D 2019 TX 24	24x 20	0,96	1,36	8,40	-	11,80	235	6,0	891-9891	61989-198-91
D 1819 TX 24	24x 18	1,20	1,60	9,90	-	13,50	335	8,2	892-0035	61989-200-35
D 1619 TX 24	24x 16	1,42	1,82	11,40	-	15,20	460	9,7	892-0041	61989-200-41
D 1237 TX 24	24x 12	2,10	2,60	15,60	-	19,20	830	18,2	892-0046	61989-200-46
D 2419 TX 37	37x 24	0,60	1,00	7,00	-	10,20	160	2,7	891-9878	61989-198-78
D 2219 TX 37	37x 22	0,76	1,16	8,30	-	11,50	215	3,7	891-9885	61989-198-85
D 2019 TX 37	37x 20	0,96	1,36	9,80	-	13,40	340	5,1	891-9892	61989-198-92
D 1819 TX 37	37x 18	1,20	1,60	11,55	-	15,40	500	7,0	892-0036	61989-200-36
D 2419 TX 44	44x 24	0,60	1,00	8,00	-	11,40	190	2,6	891-9879	61989-198-79
D 2219 TX 44	44x 22	0,76	1,16	9,50	-	12,80	280	3,5	891-9886	61989-198-86



Multi core cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	

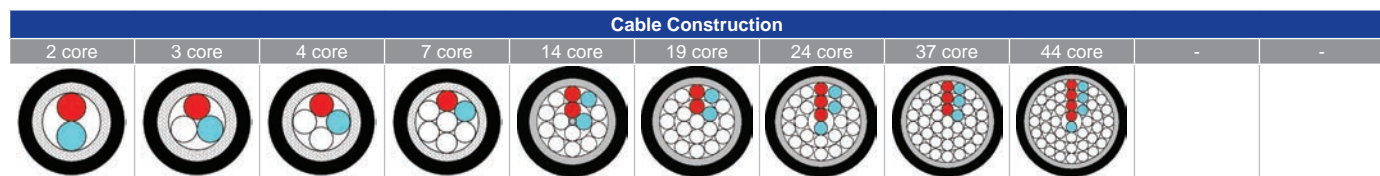
Construction (DSP 61-12 Pt 25/4: 10-13)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (TPC)	Sheath	HFS 107 XL

Identification

Cores	1st in layer White 1: Red 2: Blue Remaining : White	All cores numbered (if 4 or more cores in cable)
Sheath	Black	
Marking	DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN (e.g. DSP 61/12 pt 25 D 2419 STX 2 SE-HC-2012-981-9339) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture YY to be replaced with year of manufacture	

Description	Construction							Electrical	NSN	Order reference
	no. / size	conductor	insulation	cabled	shield (s)	sheath (s)	weight			
	AWG	Ø	Ø	Ø	Ø	max Ø	max g/m	amps at 40°C max	6145-99-	
D 2419 STX 2	2x 24	0,60	1,00	2,00	2,70	6,00	33	7,0	891-9339	61989-193-39
D 2219 STX 2	2x 22	0,76	1,16	2,32	3,00	6,30	50	9,5	892-0086	61989-200-86
D 2019 STX 2	2x 20	0,96	1,36	2,72	3,50	6,80	54	13,3	891-9361	61989-193-61
D 1819 STX 2	2x 18	1,20	1,60	3,20	4,00	7,30	90	18,2	892-0053	61989-200-53
D 2419 STX 3	3x 24	0,60	1,00	2,16	2,90	6,20	37	6,5	891-9341	61989-193-41
D 2219 STX 3	3x 22	0,76	1,16	2,50	3,18	6,50	57	8,8	892-0047	61989-200-47
D 2019 STX 3	3x 20	0,96	1,36	2,95	3,70	7,00	61	12,3	891-9363	61989-193-63
D 1819 STX 3	3x 18	1,20	1,60	3,45	4,36	7,65	105	16,8	892-0054	61989-200-54
D 2419 STX 4	4x 24	0,60	1,00	2,40	3,10	6,50	45	5,9	891-9343	61989-193-43
D 2019 STX 4	4x 20	0,96	1,36	3,30	4,10	7,40	73	11,2	891-9365	61989-193-65
D 2419 STX 7	7x 24	0,60	1,00	3,00	3,70	7,10	60	4,8	891-9345	61989-193-45
D 2219 STX 7	7x 22	0,76	1,16	3,50	4,25	7,55	98	6,5	892-0048	61989-200-48
D 2019 STX 7	7x 20	0,96	1,36	4,10	4,90	8,50	102	9,0	891-9367	61989-193-67
D 1819 STX 7	7x 18	1,20	1,60	4,80	5,75	9,25	170	12,4	892-0055	61989-200-55
D 2419 STX 14	14x 24	0,60	1,00	4,40	5,10	9,00	100	3,9	891-9347	61989-193-47
D 2219 STX 14	14x 22	0,76	1,16	5,10	5,88	9,40	160	5,3	892-0049	61989-200-49
D 2019 STX 14	14x 20	0,96	1,36	6,00	6,90	11,00	175	7,3	891-9369	61989-193-69
D 1819 STX 14	14x 18	1,20	1,60	7,05	8,09	12,00	280	10,0	892-0056	61989-200-56
D 2419 STX 19	19x 24	0,60	1,00	5,00	5,70	9,60	121	3,5	891-9349	61989-193-49
D 2219 STX 19	19x 22	0,76	1,16	5,80	6,55	10,10	190	4,8	892-0050	61989-200-50
D 2419 STX 24	24x 24	0,60	1,00	6,00	6,70	11,00	146	3,1	891-9351	61989-193-51
D 2219 STX 24	24x 22	0,76	1,16	6,95	7,70	11,40	220	4,3	892-0051	61989-200-51
D 1819 STX 24	24x 18	1,20	1,60	8,15	9,10	13,00	273	8,2	891-9371	61989-193-71
D 2219 STX 37	37x 22	0,76	1,16	8,15	8,85	12,80	295	3,7	892-0052	61989-200-52
D 2219 STX 44	44x 22	0,76	1,16	9,30	10,15	14,10	375	3,5	892-0087	61989-200-87



Ref: SGDS_MCS_04 Created: CJV Approved: AE Date: 2013-09-12
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Multi pair cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	

Construction (DSP 61-12 Pt 25: 14-15)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (T)	Sheath	HFS 107 XL







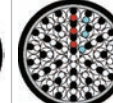
Identification

Pairs	1: Black / Red	2: Black / Blue	3+: Black / White	All cores numbered
Sheath	Black			

DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN
(e.g. DSP 61/12 pt 25 D 2419 STX 3x2 SE-HC-2012-892-0057)
NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number
XX to be replaced with country of manufacture
YY to be replaced with year of manufacture

Marking

Description	Construction							Electrical amps at 40°C max	NSN 6145-99-	Order reference
	no. / size AWG	conductor Ø	insulation Ø	cabled Ø	shield (s) Ø	sheath (s) max Ø	weight max g/m			
D 2219 STX 3x2	3 pair 22	0,76	1,16	4,50	5,02	8,30	110	6,9	892-0057	61989-200-57
D 1819 STX 3x2	3 pair 18	1,20	1,60	6,20	6,86	10,40	175	13,2	892-0064	61989-200-64
D 2219 STX 5x2	5 pair 22	0,76	1,16	5,60	6,08	9,60	145	5,5	892-0058	61989-200-58
D 1819 STX 5x2	5 pair 18	1,20	1,60	7,80	8,37	12,30	245	10,5	892-0065	61989-200-65
D 2219 STX 7x2	7 pair 22	0,76	1,16	6,20	6,67	10,20	170	5,1	892-0059	61989-200-59
D 1819 STX 7x2	7 pair 18	1,20	1,60	8,60	9,22	13,10	300	9,8	892-0066	61989-200-66
D 2219 STX 12x2	12 pair 22	0,76	1,16	8,10	8,92	12,60	255	4,3	892-0060	61989-200-60
D 1819 STX 12x2	12 pair 18	1,20	1,60	12,00	12,60	16,60	500	8,2	892-0067	61989-200-67
D 2219 STX 19x2	19 pair 22	0,76	1,16	10,40	10,73	14,60	375	3,8	892-0061	61989-200-61
D 1819 STX 19x2	19 pair 18	1,20	1,60	14,40	14,98	19,10	700	7,2	892-0068	61989-200-68
D 2219 STX 27x2	27 pair 22	0,76	1,16	12,80	12,99	17,00	490	3,5	892-0062	61989-200-62
D 1819 STX 27x2	27 pair 18	1,20	1,60	17,70	18,23	22,80	980	6,6	892-0069	61989-200-69
D 2219 STX 37x2	37 pair 22	0,76	1,16	13,70	14,64	18,80	640	6,0	892-0063	61989-200-63

Cable Construction									
3 pair	5 pair	7 pair	12 pair	19 pair	27 pair	37 pair	-	-	-
									

Ref: SGDS_MPS_03 Created: CJV Approved: AE Date: 2013-09-12
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D-STN 2 - TX (HFI 140 / HFS 107 XL)

600V
-30°C/+120°C

Multi pair cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	




Construction (DSP 61-12 Pt 25/4: 16-17)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (TPC)	Inner Sheath	HFI 147
		Outer Sheath	HFS 107 XL

Identification

Pairs	Red / Blue
Inner Sheath	Black All inner sheaths numbered
Sheath	Black
Marking	DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN (e.g. DSP 61/12 pt 25 D 2219 STN 2 - TX 3 SE-HC-2012-982-0070) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture YY to be replaced with year of manufacture

Description	Construction							Electrical	NSN	Order reference
	no. / size	conductor	insulation	cabled	shield (s)	sheath (s)	weight			
	AWG	Ø	Ø	Ø	Ø	max Ø	max g/m	amps at 40°C max	6145-99-	
D 2219 STN 2 - TX 3	3 pair 22	0,76	1,16	7,02	-	10,40	130	6,9	892-0070	61989-200-70
D 1819 STN 2 - TX 3	3 pair 18	1,20	1,60	9,18	-	13,00	210	13,2	892-0073	61989-200-73
D 2219 STN 2 - TX 5	5 pair 22	0,76	1,16	8,78	-	12,50	200	5,9	892-0071	61989-200-71
D 1819 STN 2 - TX 5	5 pair 18	1,20	1,60	11,48	-	15,40	320	11,3	892-0074	61989-200-74
D 2219 STN 2 - TX 7	7 pair 22	0,76	1,16	9,75	-	13,50	260	5,3	892-0072	61989-200-72
D 1819 STN 2 - TX 7	7 pair 18	1,20	1,60	12,75	-	16,90	420	10,0	892-0075	61989-200-75

Cable Construction										
3 pair	5 pair	7 pair	-	-	-	-	-	-	-	-
										

Ref: SGDS_MPIS_03 Created: CJV Approved: AE Date: 2013-09-12
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Multi pair cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	

Construction (DSP 61-12 Pt 25: 18)





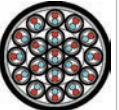
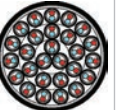
Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (T)	Inner Sheath	HFI 147
		Outer Sheath	HFS 107 XL

Identification

Pairs	Red / Blue
Inner Sheath	Black All inner sheaths numbered
Outer Sheath	Black

DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN
(e.g. DSP 61/12 pt 25 D 2219 STN 2 - STX 3 SE-HC-2012-892-0076)
NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number
XX to be replaced with country of manufacture
YY to be replaced with year of manufacture

Description	Construction							Electrical	NSN	Order reference
	no. / size	conductor	insulation	cabled	shield (s)	sheath (s)	weight			
	AWG	Ø	Ø	Ø	Ø	max Ø	max g/m	amps at 40°C max	6145-99-	
D 2219 STN 2 - STX 3	3 pair 22	0,76	1,16	6,40	7,95	11,60	220	6,9	892-0076	61989-200-76
D 2219 STN 2 - STX 5	5 pair 22	0,76	1,16	8,20	9,75	13,50	315	5,9	892-0077	61989-200-77
D 2219 STN 2 - STX 7	7 pair 22	0,76	1,16	8,90	10,70	14,70	400	5,3	892-0078	61989-200-78
D 2219 STN 2 - STX 12	12 pair 22	0,76	1,16	12,40	14,50	18,80	625	4,3	892-0079	61989-200-79
D 2219 STN 2 - STX 19	19 pair 22	0,76	1,16	15,20	17,70	22,60	975	3,7	892-0080	61989-200-80
D 2219 STN 2 - STX 27	27 pair 22	0,76	1,16	19,90	21,50	26,70	1330	3,4	892-0081	61989-200-81

Cable Construction										
3 pair	5 pair	7 pair	12 pair	19 pair	27 pair	-	-	-	-	-
										

Ref: SGDS_MPICS_03 Created: CJV Approved: AE Date: 2013-09-12
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D-STX x3 (HFI 140 / HFS 107 XL)

600V
-30°C/+120°C

Multi triple cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	





Construction (DSP 61-12 Pt 25/4: 19)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (TPC)	Sheath	HFS 107 XL

Identification

Triples	Red / Blue / White	All cores numbered
Sheath	Black	
DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN (e.g. DSP 61/12 pt 25 D 2219 STX 2x3 SE-HC-2012-982-0082) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture YY to be replaced with year of manufacture		
Marking		

Description	Construction							Electrical	NSN	Order reference
	no. / size	conductor	insulation	cabled	shield (s)	sheath (s)	weight			
	AWG	Ø	Ø	Ø	Ø	max Ø	max g/m	amps at 40°C max	6145-99-	
D 2219 STX 2x3	2 triple 22	0,76	1,16	5,00	5,86	9,20	120	5,1	892-0082	61989-200-82
D 2219 STX 3x3	3 triple 22	0,76	1,16	5,30	6,26	9,70	150	4,4	892-0083	61989-200-83
D 2219 STX 4x3	4 triple 22	0,76	1,16	6,00	7,07	10,40	180	4,0	892-0084	61989-200-84
D 2219 STX 7x3	7 triple 22	0,76	1,16	7,50	8,54	12,30	250	3,2	892-0085	61989-200-85

Cable Construction										
2 triple	3 triple	4 triple	7 triple	-	-	-	-	-	-	-
										

Ref: SGDS_MTCS_03 Created: CJV Approved: AE Date: 2013-09-12
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Multi core cables, unshielded

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	



Construction (DSP 61-12 Pt 25: 20-24)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	-	Sheath	HFS 107 XL

Identification

Cores	1: Brown 2: Blue 3: Green/Yellow
Sheath	Black
Marking	DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN (e.g. DSP 61/12 pt 25 D 1819 TX 2 SE-HC-2012-891-9410) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture YY to be replaced with year of manufacture

Description	Construction							Electrical amps at 40°C max	NSN 6145-99-	Order reference
	no. / size AWG	conductor Ø	insulation Ø	cabled Ø	shield (s) Ø	sheath (s) max Ø	weight max g/m			
D 1819 TX 2	2x 18	1,20	1,60	3,30	-	6,30	47	18,2	891-9410	61989-194-10
D 2019 TX 3	3x 20	0,96	1,36	3,02	-	6,00	45	12,3	891-9412	61989-194-12
D 1819 TX 3	3x 18	1,20	1,60	3,56	-	6,60	59	16,8	891-9414	61989-194-14
D 1619 TX 3	3x 16	1,42	1,82	4,10	-	7,10	75	20,0	891-9416	61989-194-16
D 1237 TX 3	3x 12	2,10	2,60	5,60	-	8,40	125	37,3	891-9418	61989-194-18

Cable Construction										
1 core	2 core	3 core	4 core	-	-	-	-	-	-	-
										

Ref: SGDS_PCU_03 Created: CJV Approved: AE Date: 2013-09-12
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D-STX (HFI 140 / HFS 107 XL)

600V
-30°C/+120°C

Multi core cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	


Construction (DSP 61-12 Pt 25/4: 25-27)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (TPC)	Sheath	HFS 107 XL

Identification

Cores	1: Brown 2: Blue 3: Green/Yellow
Sheath	Black
Marking	DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN (e.g. DSP 61/12 pt 25 D 1819 STX 3 SE-HC-2012-981-9420) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture YY to be replaced with year of manufacture

Description	Construction							Electrical amps at 40°C max	NSN 6145-99-	Order reference
	no. / size AWG	conductor Ø	insulation Ø	cabled Ø	shield (s) Ø	sheath (s) max Ø	weight max g/m			
D 1819 STX 3	3x 18	1,20	1,60	3,45	4,36	7,65	98	16,8	891-9420	61989-194-20
D 1619 STX 3	3x 16	1,42	1,82	3,90	4,80	8,20	105	20,0	891-9422	61989-194-22
D 1237 STX 3	3x 12	2,10	2,60	5,60	6,10	9,60	146	37,3	891-9424	61989-194-24

Cable Construction										
3 core	-	-	-	-	-	-	-	-	-	-
										

Ref: SGDS_PCS_03 Created: CJV Approved: AE Date: 2013-09-12
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Multi core cables, unscreened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	





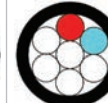

Construction (DSP 61-12 Pt 25: 28-31)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	-	Sheath	HFS 107 XL

Identification

Cores	1st in layer White 1: Red 2: Blue Remaining : White	All cores numbered (if 4 or more cores in cable)
Sheath	Black	
Marking	DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN (e.g. DSP 61/12 pt 25 DM 4 TX 1 SE-HC-2012-595-2332) NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number XX to be replaced with country of manufacture YY to be replaced with year of manufacture	

Description	Construction							Electrical amps at 40°C max	NSN 6145-99-	Order reference
	no. / size AWG	conductor Ø	insulation Ø	cabled Ø	shield (s) Ø	sheath (s) max Ø	weight max g/m			
DM 4 TX 1	1x 4	2,48	3,20	3,20	-	5,80	61	50,6	595-2332	61959-523-32
DM 6 TX 1	1x 6	2,92	4,00	4,00	-	6,60	88	66,2	595-2333	61959-523-33
DM 10 TX 1	1x 10	3,93	5,10	5,10	-	7,70	132	98,4	595-2334	61959-523-34
DM 4 TX 2	2x 4	2,48	3,20	6,40	-	9,20	128	48,0	595-2335	61959-523-35
DM 6 TX 2	2x 6	2,92	4,00	8,10	-	11,05	192	62,9	595-2340	61959-523-40
DM 10 TX 2	2x 10	3,93	5,10	10,30	-	13,50	301	93,5	595-2342	61959-523-42
DM 4 TX 3	3x 4	2,48	3,20	6,90	-	9,80	171	44,3	595-2336	61959-523-36
DM 6 TX 3	3x 6	2,92	4,00	8,60	-	11,65	256	58,2	595-2341	61959-523-41
DM 10 TX 3	3x 10	3,93	5,10	11,00	-	14,50	409	86,6	595-2343	61959-523-43
DM 4 TX 4	4x 4	2,48	3,20	7,80	-	10,75	220	40,5	595-2337	61959-523-37
DM 4 TX 7	7x 4	2,48	3,20	9,60	-	12,80	345	32,9	595-2338	61959-523-38
DM 4 TX 10	10x 4	2,48	3,20	12,80	-	16,20	501	29,8	595-2339	61959-523-39

Cable Construction										
1 core	2 core	3 core	4 core	7 core	10 core	-	-	-	-	-
										

Ref: SGDS_PCUL_03 Created: CJV Approved: AE Date: 2013-09-12
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DM-STX (HFI 140 / HFS 107 XL)

600V
-30°C/+120°C

Multi core cables, screened

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	
• Def Stan 61-12 Part 25	

Construction (DSP 61-12 Pt 25/4: 32-34)



Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (TPC)	Sheath	HFS 107 XL

Identification

Triples	1: Red 2: Blue 3: White
Sheath	Black

DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN
 (e.g. DSP 61/12 pt 25 DM 4 STX 2 SE-HC-2012-595-2344)
 NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number
 XX to be replaced with country of manufacture
 YY to be replaced with year of manufacture

Description	Construction							Electrical	NSN	Order reference
	no. / size	conductor	insulation	cabled	shield (s)	sheath (s)	weight			
	CSA	Ø	Ø	Ø	Ø	max Ø	max g/m	amps at 40°C max	6145-99-	
DM 4 STX 2	2x 4	2,48	3,20	6,40	7,00	10,30	168	48,0	595-2344	61959-523-44
DM 6 STX 2	2x 6	2,92	4,00	8,00	8,60	12,00	236	62,9	595-2346	61959-523-46
DM 10 STX 2	2x 10	3,93	5,10	10,20	10,90	14,20	347	93,5	595-2348	61959-523-48
DM 4 STX 3	3x 4	2,48	3,20	6,90	7,50	10,80	211	44,5	595-2345	61959-523-45
DM 6 STX 3	3x 6	2,92	4,00	8,60	9,20	12,55	301	58,2	595-2347	61959-523-47
DM 10 STX 3	3x 10	3,93	5,10	11,00	11,60	15,00	452	86,6	595-2349	61959-523-49

Cable Construction										
2 core	3 core	-	-	-	-	-	-	-	-	-
										

Ref: SGDS_PCSSL_03 Created: CJV Approved: AE Date: 2013-09-12
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Custom design cables

Voltage	600/1000V U ₀ /U
Test voltage	3 kV DC
Flame retardant	
Halogen free	
Low smoke generation	

Construction (DSP 61-12 Pt 25: 35-44)

Conductor	Tin Plated Copper (TPC)	Insulation	HFI 140
Shield	Braid of Tin Plated Copper (T)	Sheath	HFS 107 XL

Identification

Cores	1st in layer White 1: Red 2: Blue Remaining : White	All cores numbered (if 4 or more cores in cable)
Sheath	Black	

DSP 61/12 pt 25 DESCRIPTION XX-HC-YY-NNN-NNNN
(e.g. DSP 61/12 pt 25 D 1619 STX 2 SE-HC-2012-724-8843)
NNN-NNNN to be replaced with the last 7 digits of the Nato Stock Number
XX to be replaced with country of manufacture
YY to be replaced with year of manufacture

Description	Construction							Electrical amps at 40°C max	NSN 6145-99-	Order reference
	no. / size AWG	conductor Ø	insulation Ø	cabled Ø	shield (s) Ø	sheath (s) max Ø	weight max g/m			
D 1619 STX 2	2x 16	1,42	1,82	3,70	4,50	6,20	67	21,6	724-8843	61972-488-43
D 2019 SSTX 2	2x 20	0,96	1,36	3,30	3,40 4,00	5,20	52	18,2	724-8840	61972-488-40

Other designs are available for this part of the standard and will be incorporated on an on-going basis - should you require an item that is not included within this table, please contact one of our sales offices.