

ETFE, FEP, PFA Cables



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Chapter

Item	Description	Page
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BlueLine - Connection Cables for Maritime Use acc. to GL, UL and cUL



BlueLine TA 180 C	Flexible FEP connection cables with overall tinned copper screen, GL, UL, cUL, CE	L 5
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Connection and Data Cables with Extended Temperature Range and UL Recognition

TD 809 F	FEP insulated connection cable with wider temperature range and colored conductors, UL, CE	L 6
TD 842 (ST) F	FEP insulated connection cable with wider temperature range, colored conductors and electrostatic screen, UL, CE	L 7
TD 845 DS	Double shielded FEP insulated connection cable with wider temperature range, colored conductors and tinned copper screen, UL, CE	L 8
TD 846 DS TP	Paired, double shielded FEP insulated foil shielded and tinned copper braiding data cable, UL, CE	L 9



: especially for use in shipbuilding industry

Applications

■ Applications FEP BlueLine cables for Shipbuilding

The development of the new BlueLine cable series has been advanced in co-operation with customers coming from the shipbuilding field. The new cables are available in high temperature and oil resistant types. All SAB BlueLine types are constructed with tinned copper strands in class 5 in order to offer advantages in corrosion resistance and flexibility. Due to the approval by Germanischer Lloyd, it also offers a "certain planning reliability for classification." These cables are suitable for adverse conditions in engine rooms. They are both oil and fuel resistant, have very good chemical resistances and excellent fire performance.

Exemplary applications:

BlueLine TA 180 C Ship engine rooms, control panels for ship diesel engines

■ Applications FEP cables

These cables are used, for example, in new technologies where high demands for resistance against chemicals and solvents must be fulfilled. Compared to ETFE, FEP has slightly better resistance. Further advantages are the excellent temperature resistance and flexibility at cold temperatures as well as the good electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics.

Exemplary applications:

TD 809 F Applications in high-frequency and broad-band technologies, coaxial and microwave
TD 842 (ST) F technologies, high information velocity with exact information transmission at the same
TD 845 DS time, chemical industry, furnace construction, brick works, heating appliances
TD 846 DS TP

Selection index

		cable type	BlueLine TA 180 C	TD 809 F	TD 842 (ST) F	TD 845 DS	TD 846 DS TP
Basic construction	Connection cable		x	x	x	x	
	Data cable					x	
	Tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5		x				
	Copper strands acc. to ASTM B 286			x	x	x	x
	Black conductors with consecutive numbers acc. to EN 50334		x				
	Color code acc. to US 4			x	x	x	
	Color code acc. to US 5						x
	Screened		x			x	x
Twisted pairs						x	
Temperature range static*	+ 180°C						
	- 55°C						
	- 90°C						
Voltage	Voltage UL 300 V			x	x	x	x
	Nominal voltage 300/500 V		x				
	Peak operating voltage max. 900 V			x	x	x	x
	Testing voltage 2000 V		x	x	x	x	x
Standards	UL recognized			x	x	x	x
	GL approved		x				
	Burning characteristics flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 and UL VW1			x	x	x	x
	Burning characteristics no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2		x				
Charac-teristics	Oil resistance acc. to UL standard 758			x	x	x	x
	Oil and fuel resistance		x				
	Very good chemical resistance			x	x	x	x

Temperature range:

from

to

*The temperature range for flexing is mentioned on the particular catalog page

ETFE, FEP, PFA CABLES

BlueLine TA 180 C Flexible FEP connection cables with overall tinned copper screen



150°C 600V cAWM I/II A/B 150°C 600V FT1 FT2

Marking for BlueLine TA 180 C 37530715: SAB BRÖCKSKES · D-VIERSEN

· BL TA 180 C 7 G 1.5 mm² - IEC 60332-3-22 300/500V DNV·GL AWM Style 21618 150°C 600V cAWM I/II A/B 150°C 600V FT1 FT2 CE

The BlueLine TA 180 C has been developed particularly for applications in areas with extreme environmental influences. This cable is suitable for adverse conditions in engine rooms, even under extreme ambient temperatures. It is both oil and fuel resistant and has very good chemical resistances. Besides an excellent fire performance as well as rugged construction, the BlueLine TA 180 C type performs with very high flexibility and extremely good handling during installation. The screened control cable with fluorine plastic insulation is designed for use at control panels for ship diesel engines.

Construction:

Conductor:	tinned copper strands acc. to IEC 60228, EN 60228, VDE 0295, class 5
Insulation:	FEP
Color code:	black conductors with consecutive numbers acc. to EN 50334, without green-yellow earth wire
Stranding:	in layers
Inner jacket:	Besilen®
Screen:	tinned copper braiding
Jacket material:	FEP
Jacket color:	black

Outstanding features:

- no flame propagation
- flame retardant and self-extinguishing
- good EMC characteristics*
- oil and fuel resistant
- good chemical resistance
- high cold and heat resistance
- approvals:
Det Norske Veritas - Germanischer Lloyd
UL/cUL recognized
EAC approval

* copper braiding should be connected circularly to optimize the EMC characteristics

Technical data:

Nominal voltage U₀/U:	DIN VDE: 300/500 V	
	UL/cUL: 600 V	
Testing voltage:	2000 V (AC)	
Min. bending radius		
<i>fixed laying</i>	5 x O. D.	
<i>flexible application:</i>	10 x O. D.	
Radiation resistance:	1 x 10 ⁷ cJ/kg	
Temperature range	DIN VDE	UL/cUL: up to +150°C
<i>fixed laying:</i>	-55/+180°C	
<i>flexible application:</i>	-55/+180°C	
Burning characteristics:	no flame propagation acc. to IEC 60332-3-22 + DIN EN 60332-3-22 cat. A. Flame retardant and self-extinguishing acc. to IEC 60332-1-2 + DIN EN 60332-1-2	
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds	
Oil and fuel resistance:	very good	
Flexibility:	good	
Zero halogen:	not fulfilled	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/29	

item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
▶ 19 AWG (≈ 23/32) • 0.75 mm ²				
37530207	2	0.224	5.7	42
37530307	3	0.236	6.0	46
37530407	4	0.244	6.2	54
37530507	5	0.280	7.1	67
37530607	6	0.303	7.7	78
37530707	7	0.303	7.7	81
37530807	8	0.350	8.9	102
37531207	12	0.402	10.2	136
37531607	16	0.449	11.4	175
37532007	20	0.504	12.8	224
▶ 18 AWG (≈ 30/32) • 1.00 mm ²				
37530210	2	0.232	5.9	43

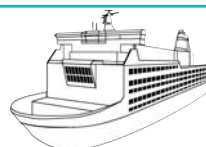
item no.	no. of conductors	nominal outer- inch	outer- mm	cable weight ≈ lbs/mft
▶ 16 AWG (≈ 27-29/30) • 1.50 mm ²				
37530215	2	0.260	6.6	54
37530315	3	0.272	6.9	65
37530515	5	0.323	8.2	97
37530615	6	0.354	9.0	115
37530715	7	0.354	9.0	122
37531215	12	0.472	12.0	208
▶ 15 AWG (≈ 38/30) • 2.00 mm ²				
37530220	2	0.295	7.5	72
37530320	3	0.319	8.1	87

Other dimensions and colors are possible on request.



Possible on request:

- Bare copper strands.
- Alternative color code and jacket color.



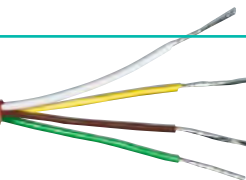
Especially for use in shipbuilding industry.

ETFE, FEP, PFA CABLES

RoHS

TD 809 F FEP insulated connection cable with wider temperature range and colored conductors

D-VIERSEN · TD 809 F 20/7 AWG/4c AWM Style 20229 150°C 300V CE



Marking for TD 809 F 38090420:

SAB BRÖCKSKES · D-VIERSEN · TD 809 F 20/7 AWG/4c AWM Style 20229 150°C 300V CE

TD 809 F is a UL recognized 300 V, 150°C multi-conductor US color coded FEP data cable which is suitable for various applications due to its thin construction as well as good chemical resistance. TD 809 F is a non-outgassing product which makes it possible to be applied in clean rooms as well as wherever a large temperature range exists.

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page O/27
Stranding:	in layers
Wrapping:	PETP foil
Rip cord:	Aramid-thread 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tan

Outstanding features:

- ▶ excellent resistance against chemicals and solvents
- ▶ excellent temperature resistance and flexibility at low temperatures
- ▶ excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics

Technical data:

Voltage:	UL: 300 V	
Peak operating voltage:	max. 900 V	
Testing voltage:	2000 V	
Min. bending radius		
<i>fixed installation:</i>	5 x O.D.	
<i>free movement:</i>	10 x O.D.	
Temperature range	DIN VDE:	UL: up to +150°C
<i>static:</i>	-90/+180°C	
<i>flexible:</i>	-55/+180°C	
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 and UL VW1	
Oil resistance:	acc. to UL standard 758, at 80°C after 80 days	
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds	
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/29	

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 24/7 AWG					▶ 22/7 AWG					▶ 18/7 AWG				
38092402	2	0.142	3.6	14	38092212	12	0.264	6.7	60	38091802	2	0.189	4.8	27
38092403	3	0.150	3.8	17	38092214	14	0.276	7.0	68	38091803	3	0.201	5.1	36
38092404	4	0.161	4.1	21	38092216	16	0.291	7.4	77	38091804	4	0.217	5.5	44
38092405	5	0.173	4.4	25	38092218	18	0.307	7.8	86	38091805	5	0.236	6.0	55
38092406	6	0.189	4.8	29	38092220	20	0.323	8.2	95	38091806	6	0.260	6.6	65
38092407	7	0.189	4.8	30	38092225	25	0.366	9.3	113	38091807	7	0.260	6.6	70
38092408	8	0.213	5.4	37	38092230	30	0.378	9.6	131	38091808	8	0.299	7.6	86
38092409	9	0.228	5.8	42	38092236	36	0.409	10.4	156	38091809	9	0.319	8.1	98
38092410	10	0.232	5.9	41	38092242	42	0.441	11.2	182	38091810	10	0.327	8.3	97
38092412	12	0.240	6.1	47	▶ 20/7 AWG					38091812	12	0.339	8.6	113
38092414	14	0.252	6.4	52	38092002	2	0.169	4.3	21	38091814	14	0.354	9.0	129
38092416	16	0.264	6.7	59	38092003	3	0.177	4.5	27	38091816	16	0.378	9.6	147
38092418	18	0.280	7.1	66	38092004	4	0.193	4.9	33	38091818	18	0.398	10.1	165
38092420	20	0.291	7.4	72	38092005	5	0.213	5.4	41	38091820	20	0.417	10.6	182
38092425	25	0.331	8.4	86	38092006	6	0.228	5.8	48	38091825	25	0.488	12.4	227
38092430	30	0.343	8.7	99	38092007	7	0.228	5.8	51	38091830	30	0.504	12.8	265
38092436	36	0.370	9.4	118	38092008	8	0.264	6.7	63	▶ 16/7 AWG				
38092442	42	0.398	10.1	136	38092009	9	0.283	7.2	72	38091602	2	0.205	5.2	33
▶ 22/7 AWG					38092010	10	0.287	7.3	70	38091603	3	0.213	5.4	44
38092202	2	0.154	3.9	17	38092012	12	0.295	7.5	81	38091604	4	0.232	5.9	55
38092203	3	0.161	4.1	21	38092014	14	0.311	7.9	92	38091605	5	0.256	6.5	68
38092204	4	0.173	4.4	25	38092016	16	0.331	8.4	105	38091606	6	0.280	7.1	81
38092205	5	0.189	4.8	31	38092018	18	0.346	8.8	117	38091607	7	0.280	7.1	87
38092206	6	0.205	5.2	36	38092020	20	0.366	9.3	130	38091608	8	0.323	8.2	108
38092207	7	0.205	5.2	38	38092025	25	0.413	10.5	155	38091609	9	0.346	8.8	115
38092208	8	0.236	6.0	48	38092030	30	0.429	10.9	182	38091610	10	0.354	9.0	122
38092209	9	0.252	6.4	54	38092036	36	0.465	11.8	215	38091612	12	0.366	9.3	143
38092210	10	0.256	6.5	52	38092042	42	0.512	13.0	259	38091614	14	0.386	9.8	163
										38091616	16	0.409	10.4	186
										38091618	18	0.433	11.0	209
										38091620	20	0.453	11.5	232
										38091625	25	0.528	13.4	288
										38091630	30	0.551	14.0	339

Other dimensions and colors are possible on request.

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Web site: www.sabcable.com

ETFE, FEP, PFA CABLES

TD 842 (ST) F FEP insulated connection cable with wider temperature range, colored conductors and electrostatic screen

RoHS



Marking for TD 842 (ST) F 38420320:
SAB BRÖCKSKES · D-VIERSEN · TD 842 (ST) F 20/7 AWG/3c AWM Style 20229 150°C 300V CE

TD 842 (ST) F is a UL recognized shielded 300 V, 150°C multi-conductor US color coded FEP data cable which is suitable for various applications due to its thin construction as well as good chemical resistance. TD 842 (ST) F is a non-outgassing product which makes it possible to be applied in clean rooms as well as wherever a large temperature range exists. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page O/27
Stranding:	in layers
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu foil
Rip cord:	Aramid-thread 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tan

Outstanding features:

- excellent resistance against chemicals and solvents
- excellent temperature resistance and flexibility at low temperatures
- excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics

Technical data:

Voltage:	UL: 300 V
Peak operating voltage:	max. 900 V
Testing voltage:	conductor/conductor 2000 V conductor/shield 600 V (ST)
Min. bending radius <i>fixed installation:</i> <i>free movement:</i>	5 x O.D. 10 x O.D.
Temperature range <i>static:</i> <i>flexible:</i>	DIN VDE: -90/+180°C UL: up to +150°C -55/+180°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 and UL VW1
Oil resistance:	acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/29

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 24/7 AWG				
38422402	2	0.146	3.7	16
38422403	3	0.154	3.9	19
38422404	4	0.177	4.5	25
38422405	5	0.193	4.9	29
38422406	6	0.205	5.2	33
38422408	8	0.232	5.9	42
38422410	10	0.244	6.2	44
38422412	12	0.256	6.5	50
38422414	14	0.268	6.8	57
38422416	16	0.283	7.2	64
38422418	18	0.295	7.5	70
38422420	20	0.307	7.8	77
38422425	25	0.335	8.5	89
38422430	30	0.358	9.1	104
38422436	36	0.374	9.5	119
38422442	42	0.417	10.6	138
▶ 22/7 AWG				
38422202	2	0.157	4.0	20
38422203	3	0.177	4.5	25
38422204	4	0.193	4.9	31
38422205	5	0.209	5.3	36
38422206	6	0.224	5.7	42
38422208	8	0.256	6.5	54
38422210	10	0.268	6.8	57
38422212	12	0.280	7.1	64

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 22/7 AWG				
38422214	14	0.295	7.5	74
38422216	16	0.311	7.9	82
38422218	18	0.327	8.3	92
38422220	20	0.343	8.7	101
38422225	25	0.370	9.4	117
38422230	30	0.398	10.1	138
38422236	36	0.413	10.5	159
38422242	42	0.465	11.8	184
▶ 20/7 AWG				
38422002	2	0.173	4.4	25
38422003	3	0.181	4.6	31
38422004	4	0.185	4.7	38
38422005	5	0.232	5.9	47
38422006	6	0.252	6.4	55
38422008	8	0.287	7.3	72
38422010	10	0.299	7.6	76
38422012	12	0.315	8.0	87
38422014	14	0.335	8.5	100
38422016	16	0.350	8.9	112
38422018	18	0.370	9.4	125
38422020	20	0.386	9.8	138
38422025	25	0.417	10.6	161
38422030	30	0.453	11.5	190
38422036	36	0.469	11.9	220
38422042	42	0.539	13.7	263

item no.	no. of conductors	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 18/7 AWG				
38421802	2	0.193	4.9	34
38421803	3	0.205	5.2	42
38421804	4	0.240	6.1	54
38421805	5	0.264	6.7	65
38421806	6	0.283	7.2	75
38421808	8	0.323	8.2	97
38421810	10	0.343	8.7	105
38421812	12	0.358	9.1	121
38421814	14	0.378	9.6	139
38421816	16	0.402	10.2	157
38421818	18	0.421	10.7	175
38421820	20	0.441	11.2	194
38421825	25	0.492	12.5	235
38421830	30	0.528	13.4	277
▶ 16/7 AWG				
38421602	2	0.209	5.3	42
38421603	3	0.217	5.5	52
38421604	4	0.260	6.6	67
38421605	5	0.283	7.2	80
38421606	6	0.307	7.8	94
38421608	8	0.354	9.0	123
38421610	10	0.370	9.4	133
38421612	12	0.390	9.9	153
38421614	14	0.413	10.5	177
38421616	16	0.433	11.0	199
38421618	18	0.457	11.6	222
38421620	20	0.492	12.5	253
38421625	25	0.535	13.6	298
38421630	30	0.579	14.7	353

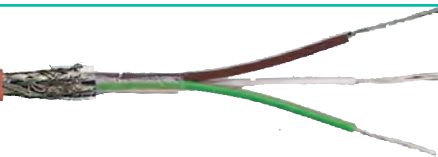
Other dimensions and colors are possible on request.

ETFE, FEP, PFA CABLES

RoHS

TD 845 DS Double shielded FEP insulated connection cable with wider temperature range, colored conductors and copper screen

5 DS 20/7 AWG/3c AWM Style 20229 150°C 300V CE



Marking for TD 845 DS 38450320:

SAB BRÖCKSKES · D-VIERSEN · TD 845 DS 20/7 AWG/3c AWM Style 20229 150°C 300V CE

TD 845 DS is a UL recognized foil and tinned copper braided 300 V, 150°C multi conductor US color coded FEP data cable which is suitable for various applications due to its thin construction as well as good chemical resistance. TD 845 DS is a non-outgassing product which makes it possible to be applied in clean rooms as well as wherever a large temperature range exists. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page O/27
Stranding:	in layers
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu/polyester/alu foil, coated on both sides
Screen:	tinned copper braiding
Rip cord:	Aramid-thread 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tan

Outstanding features:

- ▶ excellent resistance against chemicals and solvents
- ▶ excellent temperature resistance and flexibility at low temperatures
- ▶ excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics

Technical data:

Voltage:	UL: 300 V
Peak operating voltage:	max. 900 V
Testing voltage:	conductor/conductor 2000 V conductor/shield 1000 V conductor/shield 600 V (ST)
Min. bending radius <i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Temperature range <i>static:</i>	DIN VDE: -90/+180°C UL: up to +150°C
<i>flexible:</i>	-55/+180°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 and UL VW1
Oil resistance:	acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/29

item no.	no. of conductors	nominal outer- ϕ inch	nominal outer- ϕ mm	cable weight \approx lbs/mft	item no.	no. of conductors	nominal outer- ϕ inch	nominal outer- ϕ mm	cable weight \approx lbs/mft	item no.	no. of conductors	nominal outer- ϕ inch	nominal outer- ϕ mm	cable weight \approx lbs/mft
▶ 24/7 AWG					▶ 22/7 AWG					▶ 18/7 AWG				
38452402	2	0.173	4.4	23	38452214	14	0.315	8.0	86	38451802	2	0.224	5.7	43
38452403	3	0.185	4.7	27	38452216	16	0.331	8.4	96	38451803	3	0.240	6.1	53
38452404	4	0.197	5.0	32	38452218	18	0.346	8.8	106	38451804	4	0.260	6.6	64
38452405	5	0.209	5.3	36	38452220	20	0.362	9.2	115	38451805	5	0.280	7.1	75
38452406	6	0.224	5.7	41	38452225	25	0.390	9.9	132	38451806	6	0.303	7.7	87
38452408	8	0.252	6.4	52	38452230	30	0.425	10.8	162	38451808	8	0.343	8.7	111
38452410	10	0.264	6.7	54	38452236	36	0.449	11.4	184	38451810	10	0.362	9.2	119
38452412	12	0.276	7.0	61	38452242	42	0.504	12.8	219	38451812	12	0.378	9.6	137
38452414	14	0.287	7.3	68	▶ 20/7 AWG					38451814	14	0.398	10.1	155
38452415	15	0.287	7.3	71	38452002	2	0.201	5.1	33	38451816	16	0.429	10.9	182
38452416	16	0.303	7.7	75	38452003	3	0.217	5.5	41	38451818	18	0.449	11.4	200
38452418	18	0.315	8.0	82	38452004	4	0.232	5.9	48	38451820	20	0.469	11.9	221
38452420	20	0.327	8.3	89	38452005	5	0.252	6.4	57	38451825	25	0.520	13.2	265
38452425	25	0.354	9.0	103	38452006	6	0.272	6.9	65	38451830	30	0.555	14.1	307
38452430	30	0.378	9.6	119	38452008	8	0.303	7.7	83	▶ 16/7 AWG				
38452436	36	0.394	10.0	135	38452010	10	0.319	8.1	89	38451602	2	0.236	6.0	52
38452442	42	0.445	11.3	162	38452012	12	0.335	8.5	100	38451603	3	0.256	6.5	63
▶ 22/7 AWG					38452014	14	0.354	9.0	114	38451604	4	0.280	7.1	78
38452202	2	0.185	4.7	27	38452016	16	0.370	9.4	126	38451605	5	0.303	7.7	92
38452203	3	0.197	5.0	32	38452018	18	0.390	9.9	141	38451606	6	0.327	8.3	106
38452204	4	0.213	5.4	38	38452020	20	0.406	10.3	153	38451608	8	0.370	9.4	136
38452205	5	0.228	5.8	44	38452025	25	0.445	11.3	185	38451610	10	0.390	9.9	148
38452206	6	0.244	6.2	51	38452030	30	0.492	12.5	225	38451612	12	0.409	10.4	169
38452208	8	0.280	7.1	65	38452036	36	0.508	12.9	255	38451614	14	0.433	11.0	201
38452210	10	0.287	7.3	68	38452042	42	0.567	14.4	297	38451616	16	0.465	11.8	227
38452212	12	0.299	7.6	76						38451618	18	0.496	12.6	257
										38451620	20	0.520	13.2	284
										38451625	25	0.563	14.3	332
										38451630	30	0.606	15.4	387

Other dimensions and colors are possible on request.

E-mail: info@sabcable.com



Web site: www.sabcable.com

ETFE, FEP, PFA CABLES

TD 846 DS TP Paired, double shielded FEP insulated foil shielded and tinned copper braided data cable

RoHS



VIERSEN · TD 846 DS TP 20/7 AWG/3pr AWM Style 20229 150°C

Marking for TD 846 DS TP 38460320:
SAB BRÖCKSKES · D-VIERSEN · TD 846 DS TP 20/7 AWG/3pr AWM Style 20229 150°C 300V

TD 846 DS TP is a UL recognized foil and tinned copper braided 300 V, 150°C multi conductor US color coded FEP data cable which is suitable for various applications due to its thin construction as well as good chemical resistance. TD 845 DS TP is a non-outgassing product which makes it possible to be applied in clean rooms as well as wherever a large temperature range exists. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed.

Construction:

Conductor:	tinned copper strands acc. to ASTM B 286
Insulation:	FEP, 6Y11 acc. to DIN VDE 0207-6
Color code:	acc. to color code US 5 see page O/27
Stranding:	pairwise, pairs totally twisted with special adjusted layering
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu/polyester/alu foil, coated on both sides
Screen:	tinned copper braiding
Rip cord:	Aramid-thread 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207-6
Jacket color:	tan

Outstanding features:

- ▶ excellent resistance against chemicals and solvents
- ▶ excellent temperature resistance and flexibility at low temperatures
- ▶ excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics

Technical data:

Voltage:	UL: 300 V
Peak operating voltage:	max. 900 V
Testing voltage:	conductor/conductor 2000 V conductor/shield 1000 V conductor/shield 600 V (ST)
Min. bending radius <i>fixed installation:</i>	5 x O.D.
<i>free movement:</i>	10 x O.D.
Temperature range <i>static:</i>	DIN VDE: -90/+180°C
<i>flexible:</i>	UL: up to +150°C -55/+180°C
Burning characteristics:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2 and UL VW1
Oil resistance:	acc. to UL standard 758, at 80°C after 80 days
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/29

item no.	no. of pairs	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of pairs	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft	item no.	no. of pairs	nominal outer-ø inch	nominal outer-ø mm	cable weight ≈ lbs/mft
▶ 24/7 AWG					▶ 20/7 AWG					▶ 16/19 AWG				
38462402	2	0.240	6.1	34	38462002	2	0.283	7.2	50	38461602	2	0.339	8.6	80
38462403	3	0.268	6.8	42	38462003	3	0.323	8.2	65	38461603	3	0.386	9.8	105
38462404	4	0.307	7.8	50	38462004	4	0.370	9.4	79	38461604	4	0.449	11.4	131
38462405	5	0.327	8.3	60	38462005	5	0.402	10.2	97	38461605	5	0.500	12.7	167
38462406	6	0.339	8.6	67	38462006	6	0.413	10.5	111	38461606	6	0.512	13.0	195
38462407	7	0.354	9.0	78	38462007	7	0.469	10.9	127	38461607	7	0.551	14.0	229
38462410	10	0.406	10.3	92	38462010	10	0.508	12.9	165	38461610	10	0.661	16.8	288
38462414	14	0.480	12.2	128	38462014	14	0.606	15.4	223	38461614	14	0.760	19.3	391
38462418	18	0.516	13.1	157	38462018	18	0.654	16.6	277	38461618	18	0.819	20.8	489
38462425	25	0.594	15.1	204	38462025	25	0.752	19.1	366	38461625	25	0.969	24.6	671
▶ 22/7 AWG					▶ 18/7 AWG									
38462202	2	0.256	6.5	44	38461802	2	0.319	8.1	67					
38462203	3	0.291	7.4	51	38461803	3	0.362	9.2	85					
38462204	4	0.331	8.4	62	38461804	4	0.417	10.6	107					
38462205	5	0.358	9.1	75	38461805	5	0.453	11.5	130					
38462206	6	0.370	9.4	85	38461806	6	0.472	12.0	151					
38462207	7	0.386	9.8	97	38461807	7	0.496	12.6	179					
38462210	10	0.449	11.4	118	38461810	10	0.591	15.0	231					
38462214	14	0.543	13.8	171	38461814	14	0.689	17.5	304					
38462218	18	0.587	14.9	209	38461818	18	0.752	19.1	390					
38462225	25	0.657	16.7	264	38461825	25	0.890	22.6	538					

Other dimensions and colors are possible on request.