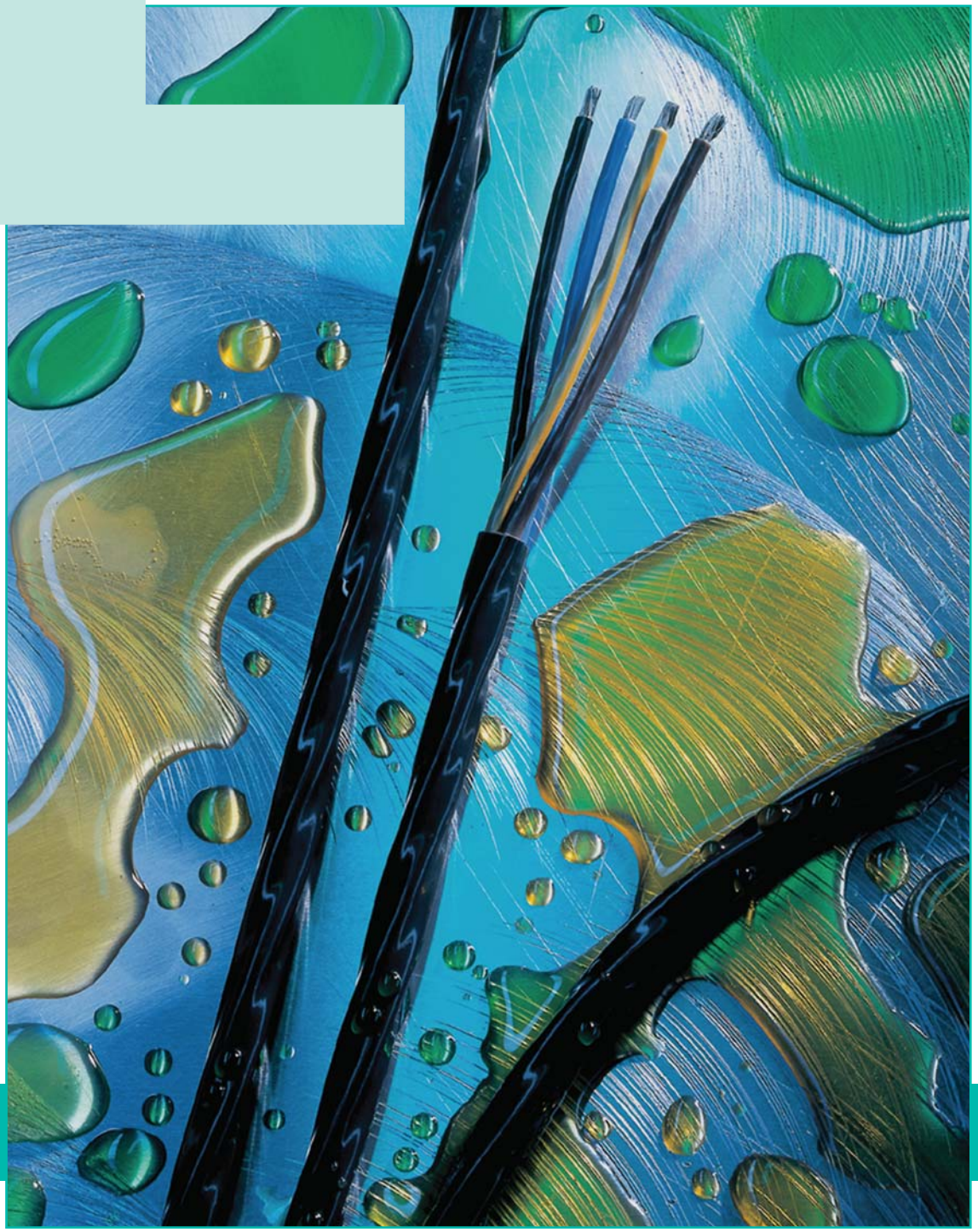
ETFE, FEP, PFA **Cables**



E-mail: info@sabcable.com

SAB North America

Web site: www.sabcable.com

Applications

Applications FEP cables

These cables are used for example in news technologies if high demands for resistance against chemicals and solvents must be fulfilled. Compared to ETFE, FEP has a 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 **TD 842 (ST) F** **TD 845 DS** **TD 846 DS TP**	Applications in high-frequency and broad-band techniques, coaxial and microwave techniques, high information velocity with exact information transmission at the same time, chemical industry, furnace construction, brick works, heating appliances

Selection index

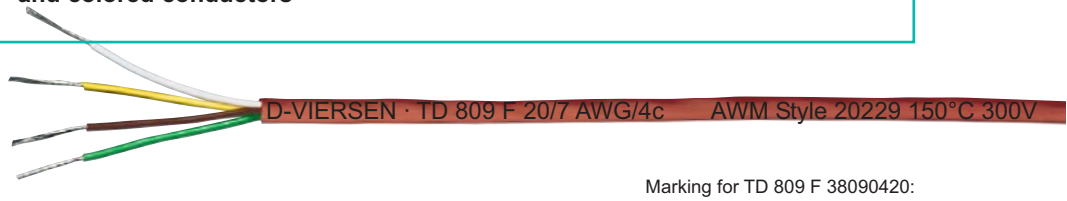
		cable type	TD 809 F	TD 842 (ST) F	TD 845 DS	TD 846 DS TP
Basic construction	Connection cable		x	x	x	
	Data cable					x
	Copper strands acc. to ASTM B 286		x	x	x	x
	Colour code acc. to US 4		x	x	x	
	Colour code acc. to US 5					x
	Screened				x	x
	Twisted pairs					x
Temperature range flexing*	+ 180 °C					
	– 90 °C					
Voltage	Voltage UL 300 V		x	x	x	x
	Peak operating voltage max. 900 V		x	x	x	x
	Testing voltage 2000 V		x	x	x	x
Standards	UL approved		x	x	x	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
Charac-teristics	Oil resistance acc. to UL standard 758		x	x	x	x
	Very good chemical resistance		x	x	x	x

Temperature range:
from
to

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

TD 809 F

FEP insulated connection cable with wider temperature range and colored conductors



Marking for TD 809 F 38090420:
BRÖCKSKES · D-VIERSEN · TD 809 F 20/7 AWG/4c AWM Style 20229 150°C 300V

TD 809 F is a UL approved 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, 6YI1 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page M/24
Stranding:	in layers
Wrapping:	PETP foil
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tanned

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **24/7 AWG**				
38092402	2	0.142	3.6	14
38092403	3	0.150	3.8	17
38092404	4	0.161	4.1	21
38092405	5	0.173	4.4	25
38092406	6	0.189	4.8	29
38092407	7	0.189	4.8	30
38092408	8	0.213	5.4	37
38092409	9	0.228	5.8	42
38092410	10	0.232	5.9	41
38092412	12	0.240	6.1	47
38092414	14	0.252	6.4	52
38092416	16	0.264	6.7	59
38092418	18	0.280	7.1	66
38092420	20	0.291	7.4	72
38092425	25	0.331	8.4	86
38092430	30	0.343	8.7	99
38092436	36	0.370	9.4	118
38092442	42	0.398	10.1	136

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **22/7 AWG**				
38092202	2	0.154	3.9	17
38092203	3	0.161	4.1	21
38092204	4	0.173	4.4	25
38092205	5	0.189	4.8	31
38092206	6	0.205	5.2	36
38092207	7	0.205	5.2	38
38092208	8	0.236	6.0	48
38092209	9	0.252	6.4	54
38092210	10	0.256	6.5	52
38092212	12	0.264	6.7	60
38092214	14	0.276	7.0	68
38092216	16	0.291	7.4	77
38092218	18	0.307	7.8	86
38092220	20	0.323	8.2	95
38092225	25	0.366	9.3	113
38092230	30	0.378	9.6	131
38092236	36	0.409	10.4	156
38092242	42	0.441	11.2	182

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **20/7 AWG**				
38092002	2	0.169	4.3	21
38092003	3	0.177	4.5	27
38092004	4	0.193	4.9	33
38092005	5	0.213	5.4	41
38092006	6	0.228	5.8	48
38092007	7	0.228	5.8	51
38092008	8	0.264	6.7	63
38092009	9	0.283	7.2	72
38092010	10	0.287	7.3	70
38092012	12	0.295	7.5	81
38092014	14	0.311	7.9	92
38092016	16	0.331	8.4	105
38092018	18	0.346	8.8	117
38092020	20	0.366	9.3	130
38092025	25	0.413	10.5	155
38092030	30	0.429	10.9	182
38092036	36	0.465	11.8	215
38092042	42	0.512	13.0	259

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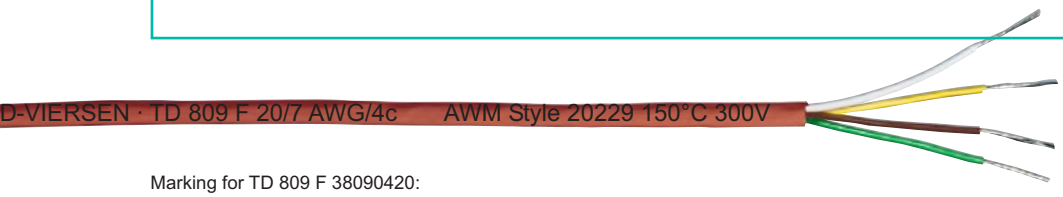
TD 809 F

FEP insulated connection cable with wider temperature range and colored conductors



Marking for TD 809 F 38090420:

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

TD 809 F is a UL approved 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, 6YI1 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page M/24
Stranding:	in layers
Wrapping:	PETP foil
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tanned

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **18/7 AWG**				
38091802	2	0.189	4.8	27
38091803	3	0.201	5.1	36
38091804	4	0.217	5.5	44
38091805	5	0.236	6.0	55
38091806	6	0.260	6.6	65
38091807	7	0.260	6.6	70
38091808	8	0.299	7.6	86
38091809	9	0.319	8.1	98
38091810	10	0.327	8.3	97
38091812	12	0.339	8.6	113
38091814	14	0.354	9.0	129
38091816	16	0.378	9.6	147
38091818	18	0.398	10.1	165
38091820	20	0.417	10.6	182
38091825	25	0.488	12.4	227
38091830	30	0.504	12.8	265
38091836	36	0.547	13.9	281
38091842	42	0.587	14.9	369

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **16/7 AWG**				
38091602	2	0.205	5.2	33
38091603	3	0.213	5.4	44
38091604	4	0.232	5.9	55
38091605	5	0.256	6.5	68
38091606	6	0.280	7.1	81
38091607	7	0.280	7.1	87
38091608	8	0.323	8.2	108
38091609	9	0.346	8.8	115
38091610	10	0.354	9.0	122
38091612	12	0.366	9.3	143
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
38091636	36	0.594	15.1	404
38091642	42	0.642	16.3	471

Other dimensions and colors are possible on request.

TD 842 (ST) F

FEP insulated connection cable with wider temperature range, colored conductors and electrostatic screen

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

TD 842 (ST) F is a UL approved 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, 6YI1 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page M/24
Stranding:	in layers
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu foil
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tanned

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

item no.	no. of conductors	nominal outer-ø inch	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

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **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
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

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **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

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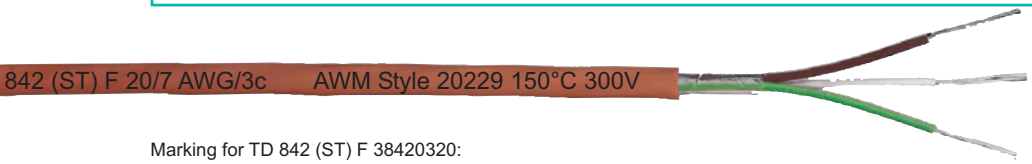
TD 842 (ST) F

FEP insulated connection cable with wider temperature range, colored conductors and electrostatic screen



Marking for TD 842 (ST) F 38420320:

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

TD 842 (ST) F is a UL approved 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, 6YI1 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page M/24
Stranding:	in layers
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu foil
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tanned

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

item no.	no. of conductors	nominal outer-ø inch	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
38421836	36	0.551	14.0	322
38421842	42	0.618	15.7	373

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **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
38421636	36	0.598	15.2	411
38421642	42	0.665	16.9	476

Other dimensions and colors are possible on request.

TD 845 DS

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

Marking for TD 845 DS 38450320:
BRÖCKSKES · D-VIERSEN · TD 845 DS 20/7 AWG/3c AWM Style 20229 150°C 300V

TD 845 DS is a UL approved foil shielded 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, 6YI1 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page M/24
Stranding:	in layers
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu/P/alu foil, coated on both sides
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tanned

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **24/7 AWG**				
38452402	2	0.173	4.4	23
38452403	3	0.185	4.7	27
38452404	4	0.197	5.0	32
38452405	5	0.209	5.3	36
38452406	6	0.224	5.7	41
38452408	8	0.252	6.4	52
38452410	10	0.264	6.7	54
38452412	12	0.276	7.0	61
38452414	14	0.287	7.3	68
38452415	15	0.287	7.3	71
38452416	16	0.303	7.7	75
38452418	18	0.315	8.0	82
38452420	20	0.327	8.3	89
38452425	25	0.354	9.0	103
38452430	30	0.378	9.6	119
38452436	36	0.394	10.0	135
38452442	42	0.445	11.3	162

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **22/7 AWG**				
38452202	2	0.185	4.7	27
38452203	3	0.197	5.0	32
38452204	4	0.213	5.4	38
38452205	5	0.228	5.8	44
38452206	6	0.244	6.2	51
38452208	8	0.280	7.1	65
38452210	10	0.287	7.3	68
38452212	12	0.299	7.6	76
38452214	14	0.315	8.0	86
38452216	16	0.331	8.4	96
38452218	18	0.346	8.8	106
38452220	20	0.362	9.2	115
38452225	25	0.390	9.9	132
38452230	30	0.425	10.8	162
38452236	36	0.449	11.4	184
38452242	42	0.504	12.8	219

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **20/7 AWG**				
38452002	2	0.201	5.1	33
38452003	3	0.217	5.5	41
38452004	4	0.232	5.9	48
38452005	5	0.252	6.4	57
38452006	6	0.272	6.9	65
38452008	8	0.303	7.7	83
38452010	10	0.319	8.1	89
38452012	12	0.335	8.5	100
38452014	14	0.354	9.0	114
38452016	16	0.370	9.4	126
38452018	18	0.390	9.9	141
38452020	20	0.406	10.3	153
38452025	25	0.445	11.3	185
38452030	30	0.492	12.5	225
38452036	36	0.508	12.9	255
38452042	42	0.567	14.4	297

Continued on next page

TD 845 DS

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

Marking for TD 845 DS 38450320:

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

TD 845 DS is a UL approved foil shielded 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, 6YI1 acc. to DIN VDE 0207 part 6
Color code:	acc. to color code US 4 see page M/24
Stranding:	in layers
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu/P/alu foil, coated on both sides
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207 part 6
Jacket color:	tannedO

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

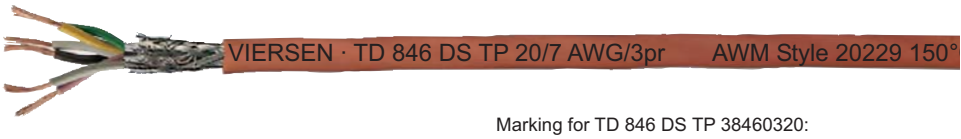
item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **18/7 AWG**				
38451802	2	0.224	5.7	43
38451803	3	0.240	6.1	53
38451804	4	0.260	6.6	64
38451805	5	0.280	7.1	75
38451806	6	0.303	7.7	87
38451808	8	0.343	8.7	111
38451810	10	0.362	9.2	119
38451812	12	0.378	9.6	137
38451814	14	0.398	10.1	155
38451816	16	0.429	10.9	182
38451818	18	0.449	11.4	200
38451820	20	0.469	11.9	221
38451825	25	0.520	13.2	265
38451830	30	0.555	14.1	307
38451836	36	0.579	14.7	356
38451842	42	0.654	16.6	422

item no.	no. of conductors	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **16/7 AWG**				
38451602	2	0.236	6.0	52
38451603	3	0.256	6.5	63
38451604	4	0.280	7.1	78
38451605	5	0.303	7.7	92
38451606	6	0.327	8.3	106
38451608	8	0.370	9.4	136
38451610	10	0.390	9.9	148
38451612	12	0.409	10.4	169
38451614	14	0.433	11.0	201
38451616	16	0.465	11.8	227
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
38451636	36	0.634	16.1	460
38451642	42	0.693	17.6	530

Other dimensions and colors are possible on request.

TD 846 DS TP

Paired, double shielded FEP insulated foil shielded and copper braiding data cable



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

TD 846 DS TP is a UL approved foil shielded 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, 6YI1 acc. to DIN VDE 0207-6
Color code:	acc. to color code US 5 see page M/24
Stranding:	pairwise, pairs totally twisted with special adjusted layering
Wrapping:	PETP foil
Drain wire:	tinned copper strands acc. to ASTM B 286
Wrapping:	alu/P/alu foil, coated on both sides
Screen:	tinned copper braiding
Slitting cord:	Kevlar-therad 1580 dtex under the jacket
Jacket material:	FEP, 6YM1 acc. to DIN VDE 0207-6
Jacket color:	tanned

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 *fixed installation:* *free movement:*	 5 x O.D. 10 x O.D.
Temperature range *static:* *flexing:*	**DIN VDE:** **UL:** up to +150 °C -90/+180 °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
Chem. resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Absence of harmful substances:	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page M/25

item no.	no. of pairs	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **24/7 AWG**				
38462402	2	0.240	6.1	34
38462403	3	0.268	6.8	42
38462404	4	0.307	7.8	50
38462405	5	0.327	8.3	60
38462406	6	0.339	8.6	67
38462407	7	0.354	9.0	78
38462410	10	0.406	10.3	92
38462414	14	0.480	12.2	128
38462418	18	0.516	13.1	157
38462425	25	0.594	15.1	204
► **22/7 AWG**				
38462202	2	0.256	6.5	44
38462203	3	0.291	7.4	51
38462204	4	0.331	8.4	62
38462205	5	0.358	9.1	75
38462206	6	0.370	9.4	85
38462207	7	0.386	9.8	97
38462210	10	0.449	11.4	118
38462214	14	0.543	13.8	171
38462218	18	0.587	14.9	209
38462225	25	0.657	16.7	264

item no.	no. of pairs	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **20/7 AWG**				
38462002	2	0.283	7.2	50
38462003	3	0.323	8.2	65
38462004	4	0.370	9.4	79
38462005	5	0.402	10.2	97
38462006	6	0.413	10.5	111
38462007	7	0.469	10.9	127
38462010	10	0.508	12.9	165
38462014	14	0.606	15.4	223
38462018	18	0.654	16.6	277
38462025	25	0.752	19.1	366
► **18/7 AWG**				
38461802	2	0.319	8.1	67
38461803	3	0.362	9.2	85
38461804	4	0.417	10.6	107
38461805	5	0.453	11.5	130
38461806	6	0.472	12.0	151
38461807	7	0.496	12.6	179
38461810	10	0.591	15.0	231
38461814	14	0.689	17.5	304
38461818	18	0.752	19.1	390
38461825	25	0.890	22.6	538

item no.	no. of pairs	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
► **16/19 AWG**				
38461602	2	0.339	8.6	80
38461603	3	0.386	9.8	105
38461604	4	0.449	11.4	131
38461605	5	0.500	12.7	167
38461606	6	0.512	13.0	195
38461607	7	0.551	14.0	229
38461610	10	0.661	16.8	288
38461614	14	0.760	19.3	391
38461618	18	0.819	20.8	489
38461625	25	0.969	24.6	671

Other dimensions and colors are possible on request.