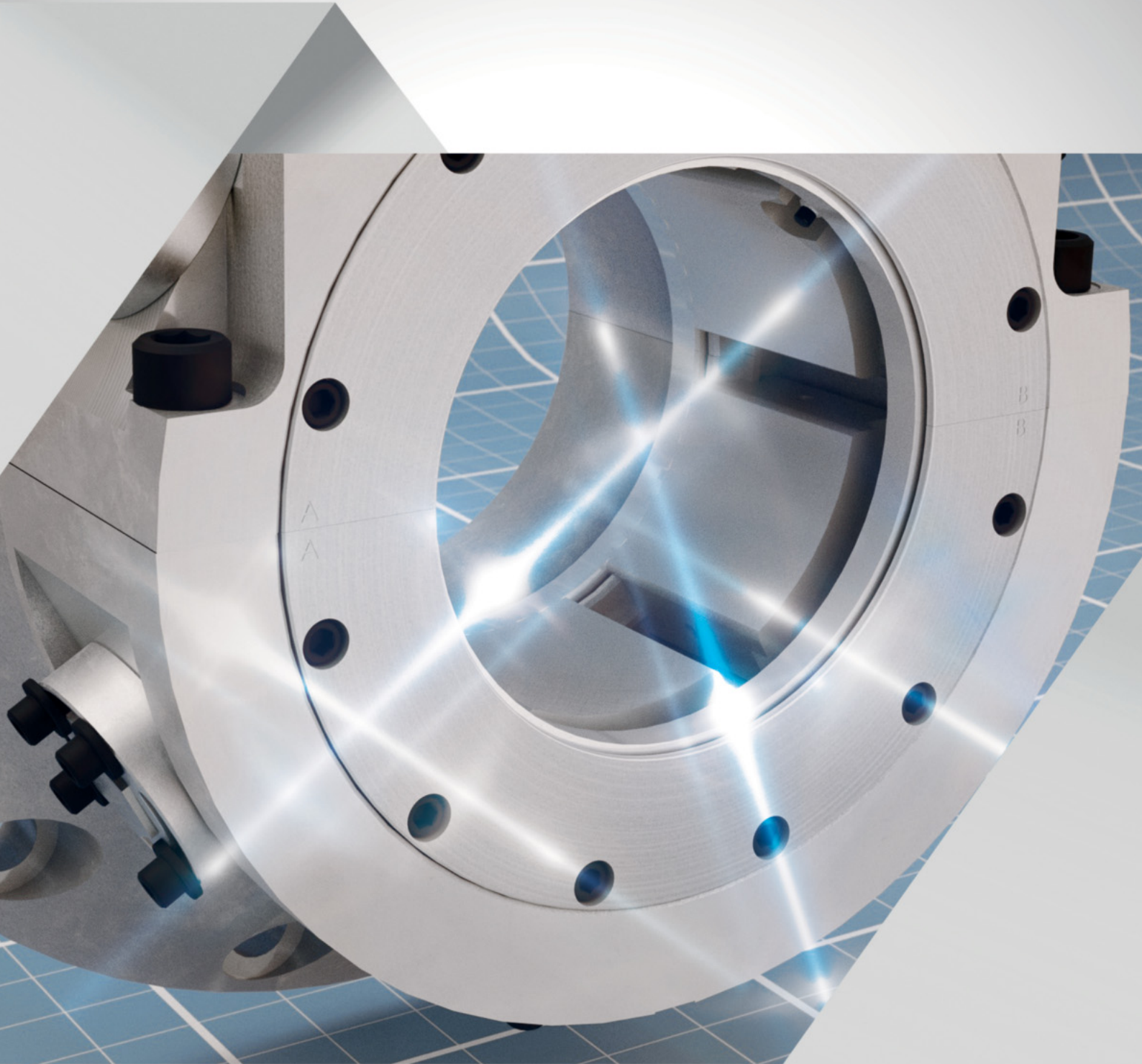


CABLES FOR 3D MEASUREMENT TECHNIQUE



www.sab-cable.com



Cables for 3D Measurement Technique

Content



- CATLine CAT 6 S
- CATLine CAT 6A S
- CATLine CAT 6 RT
- CATLine CAT 6A RT
- CATLine CAT 6A HT
- CATLine CAT 7A S
- CATLine CAT 7A RT
- CATLine CAT 5e DR
- CATLine CAT 6A DR
- CATLine CAT 7A DR

Industrial Ethernet Cables

	CAT 6 Gigabit Ethernet cable, suitable for cable tracks with UL recognition, CSA approval	3
	CAT 6A Gigabit Ethernet cable, suitable for cable tracks with UL recognition, CSA approval	3
	CAT 6 Gigabit Ethernet cable, suitable for cable tracks and robots with UL recognition, CSA approval	3
	CAT 6A Gigabit Ethernet cable, suitable for cable tracks and robots with UL recognition, CSA approval	3
	CAT 6A Gigabit Ethernet cable, high temperature resistant with UL recognition	4
	CAT 7A Gigabit Ethernet cable, suitable for cable tracks with UL recognition, CSA approval	5
	CAT 7A Gigabit Ethernet cable, suitable for robots with UL recognition, CSA approval	5
	reeling CAT 5e Industrial Ethernet cable	6
	reeling CAT 6A Gigabit Ethernet cable	6
	reeling CAT 7A Gigabit Ethernet cable	6



- USB 3.0 S
- USB 3.0 RT
- USB 3.0
- USB 3.0 M
- USB 3.0 cable with moulded connector
- USB 3.0 cable with moulded connector

USB 3.0 Cables

	USB 3.0 cable with UL recognition, continuously flexible, suitable for cable tracks ..	7
	USB 3.0 cable with UL recognition, continuously flexible, suitable for robots	7
	USB 3.0 cable with UL recognition, flexible	7
	flexible USB 3.0 cable especially for the application in medical technology	8
	USB 3.0 cable with moulded type A and Micro-B male connector	9
	USB 3.0 cable with moulded type A male connector and type A female connector ..	10



- USB 2.0
- USB 2.0 UL
- USB 2.0 FRNC
- USB 2.0 S
- USB 2.0 S UL/CSA
- USB 2.0 RT UL/CSA

USB 2.0 Cables

	flexible USB 2.0 cable	11
	flexible USB 2.0 cable with UL recognition	11
	halogen-free flexible USB 2.0 cable	11
	USB 2.0 cable, continuously flexible, suitable for cable tracks	12
	USB 2.0 cable with UL recognition, CSA approval, continuously flexible, suitable for cable tracks	12
	USB 2.0 cable with UL recognition, CSA approval, continuously flexible, suitable for robots	12



- Sensor **minus** 50
- Sensor **plus** 150
- Sensor **plus** 250

Sensor cables

	low temperature resistant FEP insulated sensor cable up to -50°C	13
	high temperature resistant FEP insulated sensor cable up to +150°C	14
	high temperature resistant PFA insulated sensor cable up to +250°C	15

Industrial Ethernet Cables



CATLine CAT 6 S / CAT 6A S Gigabit Ethernet cable, suitable for cable tracks

CATLine CAT 6 RT / CAT 6A RT Gigabit Ethernet cable, suitable for cable tracks, suitable for robots

80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for CATLine CAT 6 S 16774630:

SAB BRÜCKSKES · D-VIERSEN · CATLine Cat.6 S 4x2x26AWG 1677-4630 UL AWM Style 20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Construction:	CATLine CAT 6 S <i>suitable for cable tracks</i>	CATLine CAT 6A S <i>suitable for cable tracks</i>	CATLine CAT 6 RT <i>suitable for cable tracks/ suitable for robots</i>	CATLine CAT 6A RT <i>suitable for cable tracks/ suitable for robots</i>
Dimension:	4 x 2 x 26 AWG			
Conductor:	bare copper strands, fine wires			
Insulation:	special polymer			
Colour code:	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown			
Stranding:	cores twisted to pairs, pairs together			
Wrapping:	non-woven tape			
Screen:	alu foil and tinned copper braiding			
Wrapping:	non-woven tape			
Sheath material:	PUR			
Sheath colour:	green (similar RAL 6018)			

Technical data:	CATLine CAT 6 S <i>suitable for cable tracks</i>	CATLine CAT 6A S <i>suitable for cable tracks</i>	CATLine CAT 6 RT <i>suitable for cable tracks/ suitable for robots</i>	CATLine CAT 6A RT <i>suitable for cable tracks/ suitable for robots</i>
Item number:	1677-4630	1677-4631	1687-4630	1687-4631
Peak operating voltage:	max. 90 V			
Voltage UL/CSA:	300 V			
Testing voltage				
core/core:	2000 V			
core/screen:	2000 V			
Min. bending radius				
fixed laying:	5 x d			
flexible application:	10 x d			
continuously flexible:	15 x d			
Torsion angle:	---		up to ± 180°/m	
Temperature range VDE	UL/CSA: up to +80 °C			
fixed laying:	-40/+70 °C			
flexible application:	-40/+70 °C			
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1			
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 UL Horizontal Flame Test FT2			
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2			
Characteristic impedance (100 MHz):	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-5-2 / CAT 6	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-5-2 / CAT 6	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A
Flexibility:	very good			
UL Style:	20549			
Application:	suitable for EtherCAT and EtherNET/IP applications			
Absence of harmful substances:	acc. to RoHS directive of the European Union			

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
16774630	CATLine CAT 6 S	4 x 2 x 26 AWG	1,05	7,1	32,0	57
16774631	CATLine CAT 6A S	4 x 2 x 26 AWG	1,05	7,1	32,0	57
16874630	CATLine CAT 6 RT	4 x 2 x 26 AWG	1,05	7,1	32,0	57
16874631	CATLine CAT 6A RT	4 x 2 x 26 AWG	1,05	7,1	32,0	57

Other dimensions and colours are possible on request.

**+90°C
on request!**

Also possible
as harnessed cable
with M12 or RJ 45 plug!

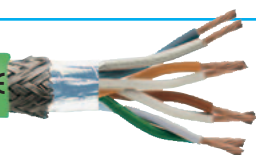




CATLine CAT 6A HT

Gigabit Ethernet cable – high temperature resistant

6AWG 1631-4631 AWM Style 21618 150°C 600V CE



Marking for CATLine CAT 6A HT 16314631:

SAB BRÜCKSKES · D-VIERSEN · Cat.6A HT 4x2x26AWG 1631-4631 AWM Style 21618 150°C 600V CE

Construction:

Conductor:	bare copper strands, fine wires
Insulation:	FEP
Colour code:	white/blue, white/orange, white/green, white/brown
Stranding:	twisted to pairs
Wrapping:	PETP foil
Screen:	alu foil and tinned copper braiding
Sheath material:	FEP
Sheath colour:	green (similar RAL 6018)

Outstanding features:



- high temperature resistant
- low temperature resistant
- flame retardant and self-extinguishing
- oil- and chemical resistant
- UL recognized

Technical data:

Peak operating voltage:	max. 90 V
Voltage UL:	600 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
<i>fixed laying:</i>	5 x d
<i>flexible application:</i>	10 x d
Temperature range	UL: up to +150 °C
<i>fixed laying:</i>	-90/+180 °C
<i>flexible application:</i>	-55/+180 °C
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW1
Oil resistance:	very good
Chemical resistance:	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds
Characteristic impedance:	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 (CAT 6A)
UL Style:	21618
Application:	suitable for EtherCAT and EtherNET/IP applications
Absence of harmful substances:	acc. to RoHS directive of the European Union

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
16314631	CATLine CAT 6A HT	4 x 2 x 26 AWG	1,05	5,7	30,0	52

Other dimensions and colours are possible on request.

Also possible as harnessed cable with M12 or RJ 45 plug!



Industrial Ethernet Cables



CATLine CAT 7A S Gigabit Ethernet cable, suitable for cable tracks with UL recognition, CSA approval

CATLine CAT 7A RT Gigabit Ethernet cable, suitable for robots with UL recognition, CSA approval

20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Marking for CATLine CAT 7A S 17774631:

SAB BRÜCKSKES · D-VIERSEN · CATLine Cat. 7A S 4x2x26AWG 1777-4631 UL AWM Style 20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



Construction:	CATLine CAT 7A S <i>suitable for cable tracks</i>	CATLine CAT 7A RT <i>suitable for robots</i>
Dimension:	4 x 2 x 26 AWG, 4 x 2 x 24 AWG	
Conductor:	bare copper strands, fine wires	
Insulation:	special polymer	
Colour code:	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown	
Stranding:	cores twisted to pairs, pairs screened with foil, pairs together	
Screen:	aluminized non-woven tape and tinned copper braiding	
Wrapping:	non-woven tape	
Sheath material:	PUR	
Sheath colour:	green (similar RAL 6018)	

Technical data:	CATLine CAT 7A S <i>suitable for cable tracks</i>	CATLine CAT 7A RT <i>suitable for robots</i>
Item number:	1777-4631, 1777-4431	1787-4631, 1787-4431
Peak operating voltage:	max. 90 V	
Voltage UL/CSA:	300 V	
Testing voltage core/core: core/screen:	2000 V 2000 V	
Min. bending radius fixed laying: flexible application: continuously flexible:	5 x d 10 x d 15 x d	5 x d 10 x d
Torsion angle:	up to ± 180°/m	
Temperature range VDE fixed laying: flexible application:	UL/CSA: up to +80 °C -40/+70 °C -40/+70 °C	
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1	
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 UL Horizontal Flame Test FT2	
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2	
Characteristic impedance (100 MHz):	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-9-2 + VDE 0819-9-2 / CAT 7A	
Flexibility:	very good	
UL Style:	20549	
Application:	suitable for EtherCAT and EtherNET/IP applications	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km
17774631	CATLine CAT 7A S	4 x 2 x 26 AWG	1,50	8,5	38,5	81
17774431	CATLine CAT 7A S	4 x 2 x 24 AWG	1,60	10,4	46,6	101
17874631	CATLine CAT 7A RT	4 x 2 x 26 AWG	1,50	8,9	38,5	83
17874431	CATLine CAT 7A RT	4 x 2 x 24 AWG	1,60	9,3	44,0	98

Other dimensions and colours are possible on request.

**+90°C
on request!**

Also possible
as harnessed cable
with M12 or RJ 45 plug!



Industrial Ethernet Cables

CATLine CAT 5e DR reeling CAT 5e Industrial Ethernet cable

CATLine CAT 6A DR reeling CAT 6A Gigabit Ethernet cable

CATLine CAT 7A DR reeling CAT 7A Gigabit Ethernet cable



Marking for CATLine CAT 7A DR 17394651:

SAB BRÜCKSKES · D-VIERSEN · CATLine Cat.7A DR 4x2x26AWG 1739-4651 CE

Construction:	CATLine CAT 5e DR <i>reeling Ethernet cable</i>	CATLine CAT 6A DR <i>reeling Ethernet cable</i>	CATLine CAT 7A DR <i>reeling Ethernet cable</i>
Dimension:	4 x 2 x 26 AWG		
Conductor:	bare copper strands, fine wires		
Insulation:	special polymer		
Colour code:	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown		
Stranding:	cores twisted to pairs, pairs together	cores twisted to pairs, pairs screened with foil, pairs together	
Wrapping:	non-woven tape		---
Screen:	alu foil and tinned copper braiding		aluminized non-woven tape and tinned copper braiding
Wrapping:	non-woven tape		
Sheath material:	PUR / supporting braid / PUR		
Sheath colour:	black (RAL 9005)		

Technical data:	CATLine CAT 5e DR <i>reeling Ethernet cable</i>	CATLine CAT 6A DR <i>reeling Ethernet cable</i>	CATLine CAT 7A DR <i>reeling Ethernet cable</i>
Item number:	1539-4651	1639-4651	1739-4651
Peak operating voltage:	max. 90 V		
Testing voltage core/core: core/screen:	750 V 750 V		
Min. bending radius	for laying and installation (fixed laying): for repeated winding action (flexible application): guided on pulleys (flexible application):		5 x d 10 x d 12 x d
Temperature range VDE fixed laying: flexible application:	-50/+90 °C -40/+90 °C		
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1		
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2		
Characteristic impedance (100 MHz):	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-2-2 / CAT 5	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-10-2 / CAT 6A	100Ω ± 10Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-9-2 / CAT 7A
Weather resistance:	very good		
Application:	suitable for EtherCAT and EtherNET/IP applications		
Absence of harmful substances:	acc. to RoHS directive of the European Union		

item no.	type	dimension	max. core-ø mm	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈kg/km	tensile strength max. N
15394651	CATLine CAT 5e DR	4 x 2 x 26 AWG	1,05	8,5	32,0	79	200
16394651	CATLine CAT 6A DR	4 x 2 x 26 AWG	1,05	8,5	32,0	81	200
17394651	CATLine CAT 7A DR	4 x 2 x 26 AWG	1,60	10,5	38,5	117	200

Other dimensions and colours are possible on request.

Also possible as harnessed cable with M12 or RJ 45 plug!

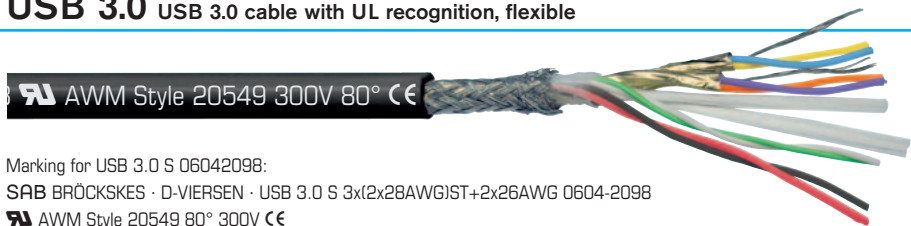


USB 3.0 Cables

USB 3.0 S USB 3.0 cable with UL recognition, continuously flexible, suitable for cable tracks

USB 3.0 RT USB 3.0 cable with UL recognition, continuously flexible, suitable for robots

USB 3.0 USB 3.0 cable with UL recognition, flexible



Marking for USB 3.0 S 06042098:

SAB BRÜCKSKES · D-VIERSEN · USB 3.0 S 3x(2x28AWG)ST+2x26AWG 0604-2098

AWM Style 20549 80° 300V CE

Construction:	USB 3.0 S <i>suitable for cable tracks</i>	USB 3.0 RT <i>suitable for robots</i>	USB 3.0 <i>flexible</i>
Dimension:	3 x (2 x 28 AWG)ST + 2 x 26 AWG	3 x (2 x 28 AWG)ST + 2 x 26 AWG, 3 x (2 x 26 AWG)ST + 2 x 24 AWG	2 x (2 x 28 AWG)ST + 2 x 28 AWG + 2 x 26 AWG
Conductor:	silver-plated strands and tinned copper strands		
Insulation:	special polymer		
Colour code:	yellow, blue + orange, violet (USB 3.0), green, white (USB 2.0), red, black (power supply)		
Stranding:	twisted pairs and datapairs screened, all elements together		USB 3.0 twisted and screened pairs, USB 2.0 twisted pairs, all elements together
Wrapping:	non-woven tape	netting tape + non-woven tape	non-woven tape
Screen:	tinned copper braiding		
Wrapping:	non-woven tape		
Sheath material:	PUR		PVC
Sheath colour:	black (RAL 9005)		

Technical data:	USB 3.0 S <i>suitable for cable tracks</i>	USB 3.0 RT <i>suitable for robots</i>	USB 3.0 <i>flexible</i>
Item number:	0604-2098	0604-3098, 0604-3096	0603-0078
Peak operating voltage:	max. 350 V		
Voltage UL:	300 V		
Testing voltage core/core: core/screen:	2000 V 2000 V		
Min. bending radius fixed laying: flexible application: continuously flexible:	5 x d 10 x d 12 x d	5 x d 10 x d 15 x d	5 x d 10 x d
Torsion angle:	---	up to ±360°/m	---
Temperature range VDE fixed laying: flexible application:	UL: up to +80 °C -50/+90 °C -40/+90 °C		UL: up to +80 °C -30/+70 °C -5/+70 °C
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + EN 60332-1-2		
Oil resistance:	very good, TMPU acc. to EN 50363-10-2		very good - TM5 acc. to EN 50363-4-1
UL Style:	20549		21083
Absence of harmful substances:	acc. to RoHS directive of the European Union		

item no.	type	dimension	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance at 20°C max.Ω/km		
						28 AWG	26 AWG	24 AWG
06042098	USB 3.0 S	3 x (2 x 28 AWG)ST + 2 x 26 AWG	6,1	26,5	45	223	140	—
06043098	USB 3.0 RT	3 x (2 x 28 AWG)ST + 2 x 26 AWG	6,4	28,1	50	223	140	—
06043096	USB 3.0 RT	3 x (2 x 26 AWG)ST + 2 x 24 AWG	8,0	38,9	73	—	130	83,3
06030078	USB 3.0	2 x (2 x 28 AWG)ST + 2 x 28 AWG + 2 x 26 AWG	6,1	25,5	48	223	140	—

Other dimensions and colours are possible on request.

For transmission lengths more than 3 m, please contact us!

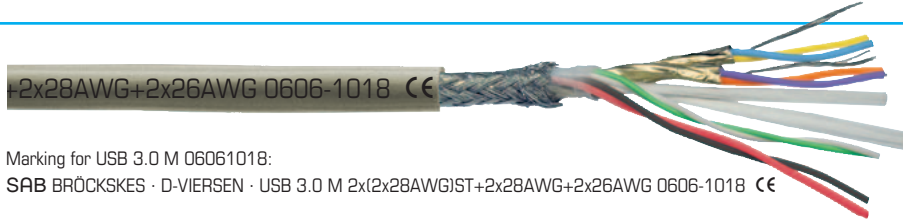
Also possible as harnessed cable with USB type A and USB type B plug!



USB 3.0 Cables

USB 3.0 M

USB 3.0 cable for the application in medical technology, flexible



Marking for USB 3.0 M 06061018:

SAB BRÜCKSKES · D-VIERSEN · USB 3.0 M 2x(2x28AWG)ST+2x28AWG+2x26AWG 0606-1018 CE

Construction:

Conductor:	28 AWG: silver-plated strands, fine wires 26 AWG: tinned copper strands, fine wires
Insulation:	FEP
Colour code:	28 AWG: yellow, blue + orange, violet (USB 3.0), green, white (USB 2.0), 26 AWG: red, black (power supply)
Stranding:	USB 3.0 twisted and screened pairs, USB 2.0 twisted pairs, all elements together
Drain wire:	bare copper strands, fine wires
Screen:	alu foil
Stranding:	all USB 3.0 elements together
Wrapping:	foil
Screen:	tinned copper braiding
Sheath material:	SABmed S
Sheath colour:	grey (RAL 7000)

Technical data:

Peak operating voltage:	max. 50 V
Testing voltage:	core/core 600 V core/screen 600 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
Temperature range	
fixed laying:	-40/+180 °C
flexible application:	-25/+180 °C
Impedance of data pairs:	nom. 90Ω
Absence of harmful substances:	acc. to RoHS directive of the European Union

Outstanding features:



- biocompatible sheath material
- biological harmlessness
acc. to EN ISO 10993-1,
cytotoxicity acc. to EN ISO 10993-5
- high temperature resistant
- high notch and tear resistance
- very good flexibility
- surface not adhesive

item no.	type	dimension	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance at 20°C max.Ω/km 28 AWG 26 AWG	
06061018	USB 3.0 M	2 x (2 x 28 AWG)ST + 2 x 28 AWG + 2 x 26 AWG	5,6	25,4	48	223	140

Other dimensions and colours are possible on request.



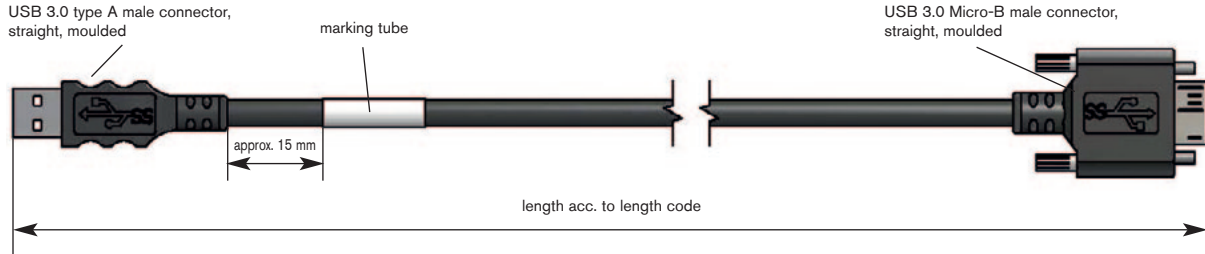
For transmission lengths more than 3 m, please contact us!

Also possible as harnessed cable with USB type A and USB type B plug!



USB 3.0 cable with moulded connector

USB 3.0 cable with moulded type A and Micro-B male connector



Application:

Connection cable PC – 3D camera



Cable characteristics:

- mechanically very rugged
- PUR cable suitable for cable tracks

Cable data:

Construction:	3x(2x30AWG)ST+2x24AWG
Insulation:	SABIX®
Outer sheath:	PUR
Outer diameter:	approx. 6,1 mm
Min. bending radius:	10 x d
Peak operating voltage:	max. 350 V

Configuration example:

item no.	length „L“ in cm
S0604-4004-00100	100
S0604-4004-00200	200
S0604-4004-00300	300
S0604-4004-00500	500

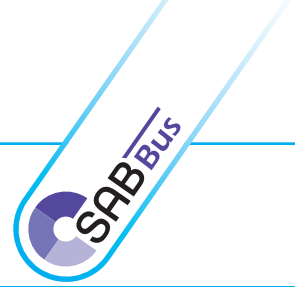
Connector:

side 1:	USB 3.0 type A male connector
side 2:	USB 3.0 type Micro-B male connector

SAB marking:

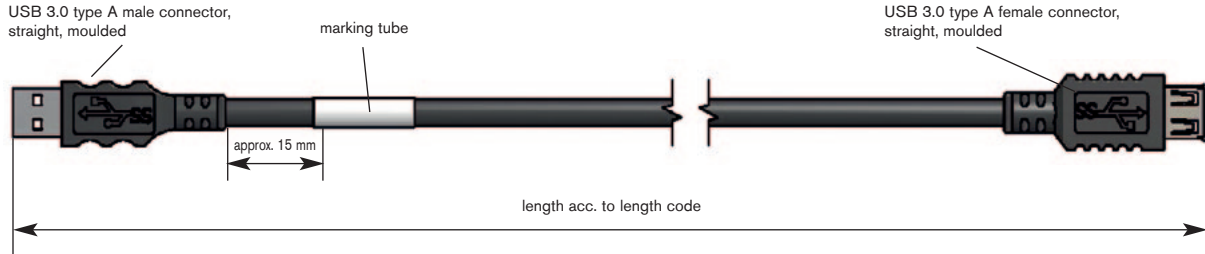
item number, order number, length

USB 3.0 Cables



USB 3.0 cable with moulded connector

USB 3.0 cable with moulded type A male connector and type A female connector



Application:

Extension cable



Cable characteristics:

- mechanically very rugged
- PUR cable suitable for cable tracks

Cable data:

Construction:	3x(2x30AWG)ST+2x24AWG
Insulation:	SABIX®
Outer sheath:	PUR
Outer diameter:	approx. 6,1 mm
Min. bending radius:	10 x d
Peak operating voltage:	max. 350 V

Configuration example:

item no.	length „L“ in cm
S0604-4005-00050	50
S0604-4005-00100	100
S0604-4005-00200	200
S0604-4005-00300	300
S0604-4005-00500	500

Connector:

side 1:	USB 3.0 type A male connector
side 2:	USB 3.0 type A female connector

SAB marking:

item number, order number, length

USB 2.0 Cables

USB 2.0 flexible USB 2.0 cable

USB 2.0 UL flexible USB 2.0 cable with UL recognition

USB 2.0 FRNC halogen-free flexible USB 2.0 cable



0,5mm² 0601-0222 AWM Style 2655 80°C 300V



Marking for USB 2.0 UL 06010222:

SAB BRÖCKSKES · D-VIERSEN · USB 2.0 Leitung · (2x0,22mm²)ST+2x0,5mm² 0601-0222 AWM Style 2655 80°C 300V



Construction:	USB 2.0 <i>flexible</i>	USB 2.0 UL <i>flexible</i>	USB 2.0 FRNC <i>flexible</i>
Dimension:		(2 x 0,22 mm ²) ST + 2 x 0,5 mm ²	
Conductor:		bare copper strands (0,50 mm ²), silver-plated strands (0,22 mm ²)	
Insulation:		SABIX®	
Colour code:		black, red (0,50 mm ²), white, green (0,22 mm ²)	
Stranding:		2 x 0,22 mm ² wrapped with alu foil, together with 0,5 mm ²	
Wrapping:		non-woven tape	
Screen:		tinned copper braiding	
Sheath material:		PVC	SABIX®
Sheath colour:		black (RAL 9005)	

Technical data:	USB 2.0 <i>flexible</i>	USB 2.0 UL <i>flexible</i>	USB 2.0 FRNC <i>flexible</i>
Item number:	0601-0122	0601-0222	0601-9001
Peak operating voltage:		max. 350 V	
Voltage UL:	---	300 V	---
Testing voltage			
core/core:	600 V	2000 V	1500 V
core/screen:	600 V	2000 V	1200 V
Min. bending radius		5 x d	
fixed laying:		10 x d	
flexible application:			
Temperature range VDE		UL: up to +80 °C	
fixed laying:	-30/+70 °C	-30/+70 °C	-40/+90 °C
flexible application:	-5/+70 °C	-5/+70 °C	-30/+90 °C
Halogen-free:		---	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:		---	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:		acc. to internal standard	
UL Style:	---	2655	---
Absence of harmful substances:		acc. to RoHS directive of the European Union	

item no.	type	dimension	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km
06010122	USB 2.0	(2 x 0,22 mm ²)ST + 2 x 0,50 mm ²	6,8	34,0	60
06010222	USB 2.0 UL	(2 x 0,22 mm ²)ST + 2 x 0,50 mm ²	7,0	34,0	64
06019001	USB 2.0 FRNC	(2 x 0,22 mm ²)ST + 2 x 0,50 mm ²	6,8	34,0	62

Other dimensions and colours are possible on request.

Also possible as harnessed cable with USB type A and USB type B plug!

CABLE ASSEMBLY POSSIBLE




USB 2.0 Cables



- USB 2.0 S** USB 2.0 cable, continuously flexible, suitable for cable tracks
- USB 2.0 S UL/CSA** USB 2.0 cable with UL recognition, CSA approval, continuously flexible, suitable for cable tracks
- USB 2.0 RT UL/CSA** USB 2.0 cable with UL recognition, CSA approval, continuously flexible, suitable for robots

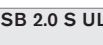
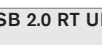


21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE 



Marking for USB 2.0 S UL/CSA 06011122:
 SAB BRÖCKSKES · D-VIERSEN · USB 2.0 Leitung · (2x0,22mm²)ST+2x0,5mm² 0601-1122  AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE

Construction:	 		
	USB 2.0 S <i>suitable for cable tracks</i>	USB 2.0 S UL/CSA <i>suitable for cable tracks</i>	USB 2.0 RT UL/CSA <i>suitable for robots</i>
Dimension:	(2 x 0,22 mm ²) ST + 2 x 0,5 mm ²		
Conductor:	bare copper strands (0,50 mm ²), silver-plated strands (0,22 mm ²)		
Insulation:	SABIX®		
Colour code:	black, red (0,50 mm ²), white, green (0,22 mm ²)		
Stranding:	2 x 0,22 mm ² wrapped with alu foil, together with 0,5 mm ²		
Wrapping:	non-woven tape	PTFE foil	
Screen:	tinned copper braiding	wrapping with tinned copper round wires	
Wrapping:	non-woven tape		
Sheath material:	PUR		
Sheath colour:	black (RAL 9005)		

Technical data:	 		
	USB 2.0 S <i>suitable for cable tracks</i>	USB 2.0 S UL/CSA <i>suitable for cable tracks</i>	USB 2.0 RT UL/CSA <i>suitable for robots</i>
Item number:	0601-1022	0601-1122	0601-2022
Peak operating voltage:	max. 350 V		
Voltage UL/CSA:	---	300 V	
Testing voltage			
core/core:	600 V	2000 V	
core/screen:	600 V	2000 V	
Min. bending radius			
fixed laying:	5 x d		5 x d
flexible application:	6 x d		7,5 x d
continuously flexible:	7,5 x d		10 x d
Torsion angle:	---		up to ±180°/m
Temperature range VDE			
fixed laying:	-50/+90 °C	UL/CSA: up to +80 °C	
flexible application:	-40/+90 °C	-50/+90 °C	
		-40/+90 °C	
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1		---
Oil resistance:	TMPU EN 50363-10-2 + VDE 0207-363-10-2		
UL Style:	---	21198	
Absence of harmful substances:	acc. to RoHS directive of the European Union		

item no.	type	dimension	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km
06011022	USB 2.0 S	(2 x 0,22 mm ²)ST + 2 x 0,50 mm ²	7,0	34,1	59
06011122	USB 2.0 S UL/CSA	(2 x 0,22 mm ²)ST + 2 x 0,50 mm ²	7,2	34,1	66
06012022	USB 2.0 RT UL/CSA	(2 x 0,22 mm ²)ST + 2 x 0,50 mm ²	7,0	34,3	64

Other dimensions and colours are possible on request.

Also possible as harnessed cable with USB type A and USB type B plug!



CABLE ASSEMBLY POSSIBLE



Sensor minus 50

low temperature resistant FEP insulated sensor cable up to -50°C



Sensor minus 50 4 x AWG 24/7



Marking for Sensor minus 50 38360424:

SAB BRÜCKSKES · D-VIERSEN · Sensor minus 50 4 x AWG 24/7 3836-0424

Application: Low temperature resistant sensor cable down to -50°C for measuring and testing technology. Supply cable for miniature sensors. Strain gauge supply cable with smallest bending radii. For indoor and outdoor use.

Construction:

Conductor:	tinned copper strands, silver-plated from AWG 32
Insulation:	FEP
Colour code:	with reference to DIN 47100
Wrapping:	foil
Screen:	tinned copper braiding, optical coverage ≥ 85%
Sheath material:	PUR 420 with mat surface
Sheath colour:	black (RAL 9005)

Technical Data:

Peak operating voltage:	max. 48 V
Testing voltage:	core/core 600 V core/screen 600 V
Min. bending radius	
<i>fixed laying:</i>	2 x d (one single bend)
<i>flexible application:</i>	10 x d
Temperature range cable	
<i>fixed laying*:</i>	-50/+125 °C
<i>flexible application*:</i>	-45/+125 °C
Temperature range conductor:	up to +180 °C (short time use up to +205 °C)
Low temperature resistance:	-50°C acc. to DIN EN 60811-506
Oil resistance:	very good - TMPU acc. to EN 50363-10-2
Fuel resistance:	good
Battery acid resistance:	good
UV resistance:	acc. to HD 605
Ozone resistance:	acc. to EN 50396
Saltwater resistance:	acc. to UL 1309
Absence of harmful substances:	acc. to RoHS directive of the European Union
	*+125 °C – up to 2500 hours

Outstanding features:



- highest flexibility even with low temperatures down to -45 °C
- absolutely weather resistant
- very easy installation due to anti-adhesive outer jacket - avoidance of stick-slip effect
- low capacity
- smallest bending radius
- easy harnessing
- small outer diameter

item no.	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
38360234	2 x AWG 34/7	2,2	5,7	8
38360334	3 x AWG 34/7	2,3	6,0	8
38360434	4 x AWG 34/7	2,4	6,0	9
38360634	6 x AWG 34/7	2,6	8,1	11
38360834	8 x AWG 34/7	2,8	10,2	14
38360232	2 x AWG 32/7	2,3	6,0	8
38360332	3 x AWG 32/7	2,3	6,3	9
38360432	4 x AWG 32/7	2,5	6,5	10
38360632	6 x AWG 32/7	2,8	9,0	13
38360832	8 x AWG 32/7	3,1	11,0	16
38360230	2 x AWG 30/7	2,4	6,4	9
38360330	3 x AWG 30/7	2,5	7,4	10
38360430	4 x AWG 30/7	2,6	9,1	12
38360630	6 x AWG 30/7	3,0	11,0	16
38360830	8 x AWG 30/7	3,2	12,9	19

item no.	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
38360228	2 x AWG 28/7	2,6	8,6	11
38360328	3 x AWG 28/7	2,7	9,8	13
38360428	4 x AWG 28/7	2,8	10,8	14
38360628	6 x AWG 28/7	3,1	14,3	18
38360828	8 x AWG 28/7	3,8	18,1	25
38360226	2 x AWG 26/7	3,0	11,5	15
38360326	3 x AWG 26/7	3,1	12,7	17
38360426	4 x AWG 26/7	3,8	14,6	22
38360626	6 x AWG 26/7	3,9	19,1	28
38360826	8 x AWG 26/7	4,4	25,9	36
38360224	2 x AWG 24/7	3,2	12,8	17
38360324	3 x AWG 24/7	3,3	15,3	20
38360424	4 x AWG 24/7	3,8	18,7	26
38360624	6 x AWG 24/7	4,4	25,3	36
38360824	8 x AWG 24/7	5,0	32,0	46

Other dimensions and colours are possible on request.



Possible on request:

- random lengths or ready harnessed cable
- also available without copper braiding



Sensor plus 150

high temperature resistant FEP insulated sensor cable up to +150°C



Marking for Sensor plus 150 38370424:

SAB BRÖCKSKES · D-VIERSEN · Sensor plus 150 4 x AWG 24/7 3837-0424

Application: High temperature resistant sensor cable up to max. +150°C for measuring and testing technology. Supply cable for miniature sensors. Strain gauge supply cable for smallest bending radii. Connecting cable for modular technology.

Construction:

Conductor:	tinned copper strands, silver-plated from AWG 32
Insulation:	FEP
Colour code:	with reference to DIN 47100
Wrapping:	foil
Screen:	tinned copper braiding, optical coverage ≥ 85%
Sheath material:	PUR 490 with smooth surface
Sheath colour:	black (RAL 9005)

Technical Data:

Peak operating voltage:	max. 48 V
Testing voltage:	core/core 600 V core/screen 600 V
Min. bending radius	
fixed laying:	2 x d (one single bend)
flexible application:	10 x d
Temperature range cable	
fixed laying*:	-50/+150 °C
flexible application*:	-40/+150 °C
Temperature range conductor:	up to +180 °C (short time use up to +205 °C)
Oil resistance:	very good - TMPU acc. to EN 50363-10-2
Fuel resistance:	good
Absence of harmful substances:	acc. to RoHS directive of the European Union
	*+150 °C – up to 3000 hours

Outstanding features:



- Temperature resistance up to +150 °C (up to 3000 hours)
- high flexibility and high abrasion resistance
- high robustness
- low capacity
- smallest bending radius
- easy harnessing
- small outer diameter

item no.	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
38370234	2 x AWG 34/7	2,2	5,7	8
38370334	3 x AWG 34/7	2,3	6,0	8
38370434	4 x AWG 34/7	2,4	6,0	9
38370634	6 x AWG 34/7	2,6	8,1	11
38370834	8 x AWG 34/7	2,9	10,2	14
38370232	2 x AWG 32/7	2,3	6,0	8
38370332	3 x AWG 32/7	2,3	6,3	9
38370432	4 x AWG 32/7	2,5	6,5	10
38370632	6 x AWG 32/7	2,8	9,0	13
38370832	8 x AWG 32/7	3,1	11,0	16
38370230	2 x AWG 30/7	2,4	6,4	9
38370330	3 x AWG 30/7	2,5	7,4	10
38370430	4 x AWG 30/7	2,6	9,1	12
38370630	6 x AWG 30/7	2,9	10,9	15
38370830	8 x AWG 30/7	3,2	12,9	18

item no.	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
38370228	2 x AWG 28/7	2,6	8,6	11
38370328	3 x AWG 28/7	2,7	9,8	13
38370428	4 x AWG 28/7	2,8	10,8	14
38370628	6 x AWG 28/7	3,1	14,3	19
38370828	8 x AWG 28/7	3,8	18,1	25
38370226	2 x AWG 26/7	3,0	11,5	15
38370326	3 x AWG 26/7	3,1	12,7	17
38370426	4 x AWG 26/7	3,3	14,6	20
38370626	6 x AWG 26/7	3,9	19,1	28
38370826	8 x AWG 26/7	4,4	25,1	35
38370224	2 x AWG 24/7	3,2	12,8	17
38370324	3 x AWG 24/7	3,3	15,3	20
38370424	4 x AWG 24/7	3,8	18,7	26
38370624	6 x AWG 24/7	4,4	25,3	36
38370824	8 x AWG 24/7	4,8	31,8	45

Other dimensions and colours are possible on request.



Possible on request:

- random lengths or ready harnessed cable
- also available as HV thermo cable type K (1-channel and 4-channel)
- also available without copper braiding

Sensor Cables



Sensor plus 250

high temperature resistant PFA insulated sensor cable up to +250°C



Sensor plus 250 4 x AWG 32/7

Marking for Sensor plus 250 38390432:

SAB BRÜCKSKES · D-VIERSEN · Sensor plus 250 4 x AWG 32/7 3839-0432

Application: High temperature resistant sensor cable up to max. +250°C for measuring and testing technology. Supply cable for miniature sensors. Strain gauge supply cable for smallest bending radii. Connecting cable for modular technology.

Construction:

Conductor:	silver-plated copper strands
Insulation:	PFA
Colour code:	with reference to DIN 47100
Wrapping:	foil
Screen:	tinned copper braiding, optical coverage ≥ 85%
Sheath material:	PFA
Sheath colour:	black (RAL 9005)

Technical Data:

Peak operating voltage:	max. 48 V
Testing voltage:	core/core 600 V core/screen 600 V
Min. bending radius	
fixed laying:	2 x d (one single bend)
flexible application:	10 x d
Temperature range cable	
fixed laying:	-90/+250 °C
flexible application:	-55/+250 °C
Dielectric constant:	approx. 2,1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2
Oil resistance:	very good
Hydraulic oil resistance:	very good
Fuel resistance:	very good
Battery acid resistance:	very good
UV resistance:	very good
Ozone resistance:	very good
Saltwater resistance:	very good
Absence of harmful substances:	acc. to RoHS directive of the European Union

Outstanding features:



- Temperature resistance up to +250 °C
- low capacity
- absolutely weather resistant
- high abrasion resistance
- very good chemical resistance
- small outer diameter

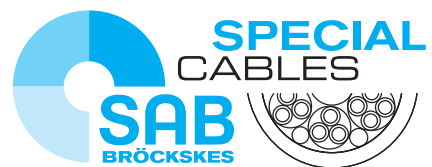
item no.	dimension	outer-ø ± 5% mm	copper figure kg/km	cable weight ≈ kg/km
38390234	2 x AWG 34/7	1,8	5,7	8
38390330	3 x AWG 30/7	2,1	8,7	11
38390432	4 x AWG 32/7	2,1	8,1	11
38390628	6 x AWG 28/7	2,7	16,0	20

Other dimensions and colours are possible on request.



Possible on request:

- random lengths
or ready harnessed cable
- also available without copper braiding



SAB Bröckskes GmbH & Co. KG

Grefrather Str. 204 - 212 b

41749 Viersen · GERMANY

Tel.: +49/2162/898-0

Fax: +49/2162/898-101

www.sab-cable.com

info@sab-cable.com