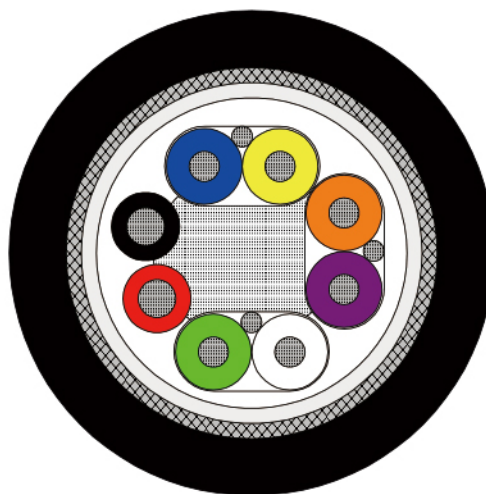


CABLE SPECIFICATION



item no.	L0604-3096
type	USB 3.0 RT
cross section	3x(2x26AWG)ST+2x24AWG

CONSTRUCTION

conductor	26 AWG: stranded silver-plated copper 24 AWG: stranded tinned copper
insulation	SABIX®
colour code	26 AWG: YE, BU, OG, VT, GN, WH 24 AWG: RD, BK
stranding	26 AWG: twisted pairs: YE/BU, OG/VT, GN/WH
screen	26 AWG: aluminium foil and stranded tinned drain wire
stranding	pairs and cores twisted in optimised layering, filler in the centre, wrapped with tapes
screen	braid of tinned copper wires, wrapped with tape
outer sheath	PUR, black, similar RAL 9005
imprint	BRÖCKSKES · D-VIERSEN · USB 3.0 RT 3x(2x26AWG)ST+ 2x24AWG 0604-3096 AWM Style 20549 80°C 300V CE <SAB identno.>

DIMENSIONS

outer Ø	approx. 8,0 mm
weight	approx. 73 kg/km
copper figure	38,9 kg/km
DC resistance at 20°C	26 AWG: max. 130 Ω/km 24 AWG: max. 83,3 Ω/km

CABLE SPECIFICATION

TECHNICAL DATA

operating voltage	VDE	max. 90 V
	UL	300 V
test voltage	core/core	2000 V
	core/screen	2000 V
temperature range	fixed laying	-50°C/+90°C
	flexible	-40°C/+90°C
	UL	up to +80°C
min. bend radius	static	5 x cable diameter
	flexible	10 x cable diameter
	continuous flexing	15 x cable diameter
torsion angle		± 360° / m
data transmission	pairs 26AWG suitable for data transmission acc. to USB3.0 standard up to 5 m	

issued	reviewed	date of issue	version
Lewandowsky	Giesen	12.11.2019	1


PRÜFBERICHT

(test Report)

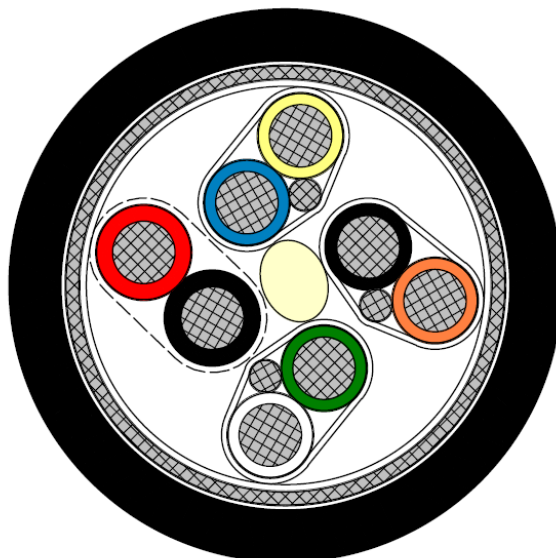
Probendaten / Sample data

Ausstellungsdatum / date of issue	01.12.2020		
Berichtsart / Report type	<input type="checkbox"/> Messbericht / Measurement report	<input type="checkbox"/> Werkstoffbericht / Material report	<input checked="" type="checkbox"/> Funktionsbericht / Function report
	Lieferant / supplier		
Hersteller / Manufacturer	SAB Bröckskes GmbH & Co. KG		
Artikelnummer / item no.	L0604-3096		
Betriebsauftragsnr. / lot no.	K264801		
Benennung / cable type	USB 3.0 RT		
Abmessung / dimensions	3x(2x26AWG)ST+2x24AWG		

Prüfdaten / Test data

Prüfeinrichtung / Test stand	07.00.5800	
	Torsionsprüfstand / torsion test bench	
Prüfparameter / test parameter		
Torsionswinkel / bend angle	±360	°/0,5m
Prüfzeit / Test rate	24	1/min
Überwachung / monitoring	Kurzschluss, Aderbruch	
Ergebnis / results	6.480.322	Zyklen / cycles
	Beendet ohne erkennbare Fehler / Test stopped with no visible faults	
 i.A. Jochen Schulte-Tickmann Abteilung Entwicklung / development department SAB Bröckskes GmbH & Co KG		

CABLE SPECIFICATION



item no.	L0604-9002
type	USB 3.0 RT
cross section	3x(2x26AWG)ST+2x20AWG

CONSTRUCTION

conductor	26 AWG: stranded silver-plated copper 20 AWG: stranded tinned copper
insulation	SABIX®
colour code	26 AWG: YE, BU, OG, VT, GN, WH 20 AWG: RD, BK
stranding	26 AWG: twisted pairs: YE/BU, OG/VT, GN/WH 20 AWG: twisted pair: RD/BK
screen	26 AWG: aluminium foil and stranded tinned drain wire
stranding	pairs twisted in optimised layering, filler in the centre, wrapped with tapes
screen	braid of tinned copper wires, wrapped with tape
outer sheath	PUR, black, similar RAL 9005
imprint	BRÖCKSKES · D-VIERSEN · USB 3.0 RT 3x(2x26AWG)ST+ 2x20AWG 0604-9002 AWM Style 20549 80°C 300V CE <SAB identno.>

DIMENSIONS

outer Ø	approx. 8,8 mm	
weight	approx. 91 kg/km	
copper figure	49,8 kg/km	
DC resistance at 20°C	26 AWG: max. 130 Ω/km	20 AWG: max. 35,2 Ω/km

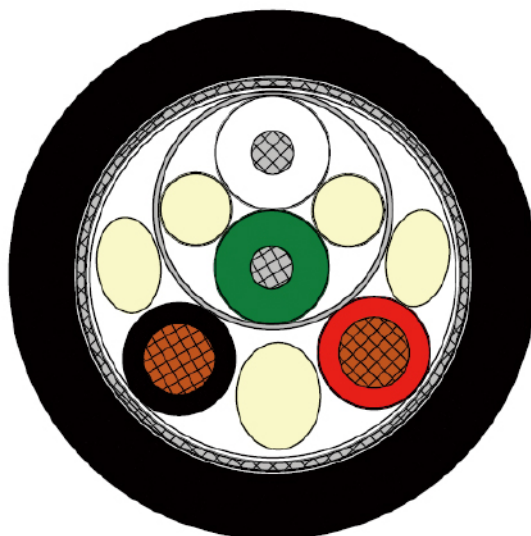
CABLE SPECIFICATION

TECHNICAL DATA

operating voltage	VDE	max. 350 V
	UL	300 V
test voltage	core/core	2000 V
	core/screen	2000 V
temperature range	fixed laying	-50°C/+90°C
	flexible	-40°C/+90°C
	UL	up to +80°C
min. bend radius	static	5 x cable diameter
	flexible	10 x cable diameter
	continuous flexing	15 x cable diameter
torsion angle		± 360° / m
data transmission	pairs 26AWG suitable for data transmission acc. to USB3.0 standard up to 5 m	

issued	reviewed	date of issue	version
Giesen	Reimann	25.11.2020	1

CABLE SPECIFICATION



item no.	L0601-2022
type	USB 2.0 Robot Cable (UL/CSA)
cross section	(2x0,22 mm ²)ST + 2 x 0,50 mm ²

CONSTRUCTION

conductor	0,22 mm ² : silver plated copper, finely stranded, 28 x 0,10 mmØ 0,50 mm ² : bare copper, finely stranded, 33 x 0,15 mmØ
insulation	SABIX®
colour code	0,22 mm ² : white, green 0,50 mm ² : red, black
stranding	0,22 mm ² : cores twisted as pairs, filler in interstices, overlapping wrapped with aluminium-foil
stranding	pairs and cores 0,50 mm ² twisted in especially adjusted layering, filler in interstices, overlapping wrapped with PTFE-foil
screen	tinned copper wrapping, 12x11x0,10 mmØ, opt. coverage > 80%, overlapping wrapped with tape
jacket	PUR in black, similar to RAL 9005
imprint	BRÖCKSKES · D-VIERSEN · USB 2.0 ROBOTERLEITUNG · (2x0,22 mm²)ST + 2x0,50 mm² 0601-2022 AWM Style 21198 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE <SAB identno.>

DIMENSIONS

outer Ø	approx.7,0 mm	
weight	approx. 64 kg/km	
copper figure	34,3 kg/km	
DC resistance at 20°C	0,22 mm ² : max. 90,9 Ω/km	0,50 mm ² : max. 39,0 Ω/km


CABLE SPECIFICATION

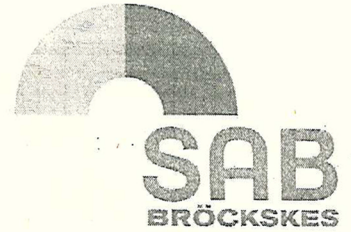
TECHNICAL DATA

voltage	DIN VDE	5 V	
	UL/CSA	300 V	
test voltage	core/core	2000 V	
	core/screen	2000 V	
temperature range	flexible application	DIN VDE -40°C/+90°C	UL/CSA up to +80°C
	fixed laying	-50°C/+90°C	up to +80°C
min. bend radius	fixed laying	5 x cable diameter	
	free movement	10 x cable diameter	
data transmission	fulfils the requirements for USB cables: characteristic impedance 90 Ω ± 15 %		
RoHS	Absence of harmful substances acc. to RoHS-Directive 2011/65/EU and Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU, as well as GefStoffV appendix IV - no.24		
REACH	This article does not contain SVHC (substances of very high concern) acc. to REACH Regulation (EC) No. 1907/2006		

issued	reviewed	date of issue	version
Sartison	Burg	28.11.2019	1

Date of issue
2019-07-22

Test Report		X	(3) Measuring report	(4) Material report	(5) Function report
Inspection result		Supplier SAB		(6) Report nr. 0601-2022	(7) Indication BA 248276
SAB Bröckskes GmbH & Co.KG		Customer (Orderer) JARGY Co. Ltd.		(8) Report nr.	(9) Indication Order confirmation
		sheet 1 from sheet 1			
Supplier		Customer (Orderer)			
(10/12) Code nr. / Designation Robot cable with UL/CSA (2x0,22mm ²)ST+2x0,50mm ²		(13/15) Code nr. / Designation			
(42) Pos.	(43) Characteristic / Designation value	(44) Actual value (Supplier)		(45) Actual value (Customer)	
1	conductor bare copper desired value 0,50 mm ² single wire diameter nom. 0,15 mm linear resistance (20°C) max. 34,6 Ω/km	comply			
2	insulation SABIX nominal wall thickness desired value 0,27 mm minimum wall thickness desired value min. 0,23 mm	ok 0,31 mm 0,24 mm			
3	conductor silver plated copper desired value 0,22mm ² single wire diameter nom. 0,1 mm linear resistance (20°C) max. 90,9 Ω/km	comply			
4	insulation SABIX nominal wall thickness desired value 0,48 mm minimum wall thickness desired value min. 0,38 mm	ok 0,53 mm 0,47 mm			
5	screen tinned copper wrapping	ok			
6	outer jacket PUR nominal wall thickness desired value 0,85 mm minimum wall thickness desired value min. 0,61 mm	ok 0,94 mm 0,88 mm			
7	testing voltage conductor/conductor 2000 V conductor/screen 2000 V	no breakdown no breakdown			
8	HF-measurements based on USB specification 2.0	released by quality inspection			
9					
(46) Remark (Supplier)					
(47) Remark (Customer)					
Supplier		Customer			
Date 22.07.2019		Date			
responsible's signature 		responsible's signature			



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Internet: www.sab-worldwide.com
 E-Mail: info@sab-broeckskes.de

Prüfbericht / test report

Viersen, 18.06.2018

Prüfeinrichtung / Test stand	07.00.8000	
	Schleppkette / cable track	
Artikelnr. / item no.	0601-1022	
BA Nr. / lot no.	217614	
Bezeichnung / cable type	USB 2.0 Cable	
Abmessung / dimensions	(2x0,22 mm ²)ST+(2x0,50 mm ²)	
Prüfparameter / test parameter		
Beschleunigung /acceleration	ca. 15	m/s ²
Geschwindigkeit/travel speed	max. 1,3	m/s
Verfahrweg/moved length	900	mm
Biegeradius/bend radius	6,9 x cable diam.	mm
Überwachung/surveillance		
Kurzschluss und Aderbruch/ short circuit and break	wöchentlich/weekly	
Mantelfehler/for jacket faults	täglich/daily	
Ergebnis / result	8.689.880	cycles
	stopped with no detectable faults	status

i.A. Jochen Schulte-Tickmann
 Abteilung Entwicklung / development department
 SAB Bröckskes GmbH&Co KG