ASSEMBLIES
ETHERNET CABLES

SAB CATLine

SAB Bus

SPECIAL CABLES

SAB
North America

SAB North America

About Us

SAB North America is a focused supplier for the automation, aerospace, medical, high temperature, and robotics industries, providing cable and thermocouple solutions that meet, exceed, and set new standards in the flexible cable market. In addition to flexible cable products, we offer an extensive inventory of high-quality cable accessories, including cord grips, grounding glands and other accessories that complement our flexible control and automation cables.

Whatever the need may be, look to SAB North America for Special Cables that can, for example, help minimize maintenance costs and increase productivity, reduce downtime, and solve specific problems. Here is a small sample of some of the challenges that Special Cables from SAB North America can help address:

- Hybrid designs for multiple functions
- Harsh environments
- Difficult applications
- Industry-specific requirements

Preassembled patch cables for industrial Ethernet applications are suitable for easy and time saving connections on site for highly flexible applications including automation and robotics. SAB Bröckskes can mount or mold RJ45/M12 connectors with our industrial ethernet cable product range. Features of the SAB CATLine cable range include resistance to UV and ozone, oil, grease, aggressive chemicals, and detergents. These assemblies can be used in cable tracks, robots, and reeling applications. These cordsets can be customized by choosing plug types, specific marking, and colors.

Whether you're a valued distribution partner, a manufacturer, an automation house, an integrator, or a contractor, rest assured that our cables are reliable to maximize production efficiencies. SAB brings world class performance & 75 years of ingenuity to the table.

SAB's level of speed and service as a supplier is unmatched. SAB lives up to its name in not only flexible cable but also flexible manufacturing.

SAB Advantage...We make it Easy

- Engineering & technical assistance
- Cut to length with no cut charges
- Prepaid freight within US for orders over $2,500
- Specialty cable designs (1500 ft minimum)

- No minimum on orders from stock
- Free drop shipments (no surcharges)
- 24-hour shipments from stock
- Cord Grips for securing and grounding cables

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Product Range

Production possibilities

Flexible cables and wires "Made in Germany"

As a leading manufacturer we develop and produce cables for industrial purposes.
Our wide range of materials offer a lot of possibilities for your individual product requirement.
The following survey shows an extract of our production possibilities:

Conductor Materials:

- ✓ bare copper
- ✓ tinned copper
- ✓ silver plated copper
- ✓ nickel plated copper
- ✓ nickel
- ✓ nickel pure
- ✓ compensating cable alloys

Insulation and Jacketing Materials:

- ✓ PVC
- ✓ Polyethylene
- ✓ Polypropylene
- ✓ Polyurethane
- ✓ TPE
- ✓ SABIX® (zero halogen)
- ✓ Besilen® - Silicone
- ✓ FEP, ETFE, PFA, PTFE
- ✓ PI foil
- ✓ Fiberglass

Temperature Ranges:

Thermoplastic Elastomers
- ✓ -50°C up to +145°C

SABIX®
- ✓ -50°C up to +220°C

Besilen® - Silicone
- ✓ -40°C up to +220°C

FEP, ETFE, PFA
- ✓ -90°C up to +260°C

Fiberglass
- ✓ up to +600°C

Conductors:

- ✓ cross sections 0.055 - 300 mm²
- ✓ unshielded and shielded over 100 conductors
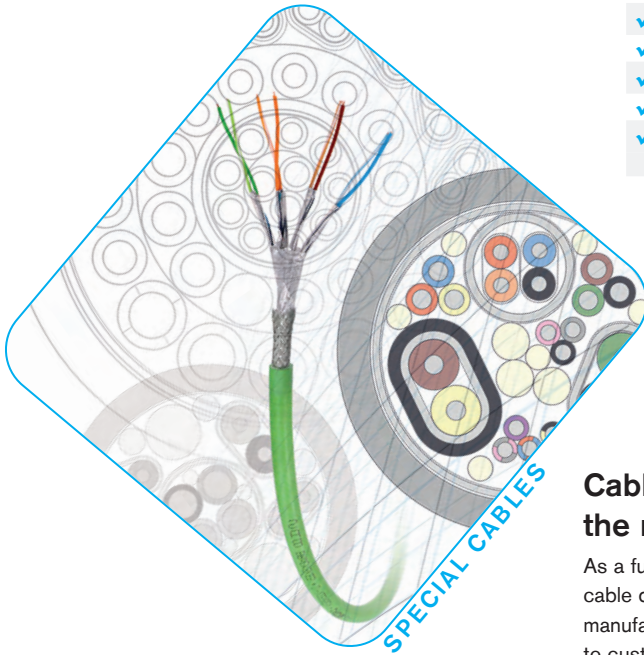
Cable assemblies directly from the manufacturer SAB:

As a full service partner, we are able to offer cable design and production as well as the manufacturing of cable assemblies according to customer´s request. Please trust on our experience for decades in the treatment of cables and connectors.

- ✓ cable assemblies according to customer´s demands
- ✓ complete cable assemblies
- ✓ UL certified assemblies
- ✓ helix cables
- ✓ HV measuring assemblies
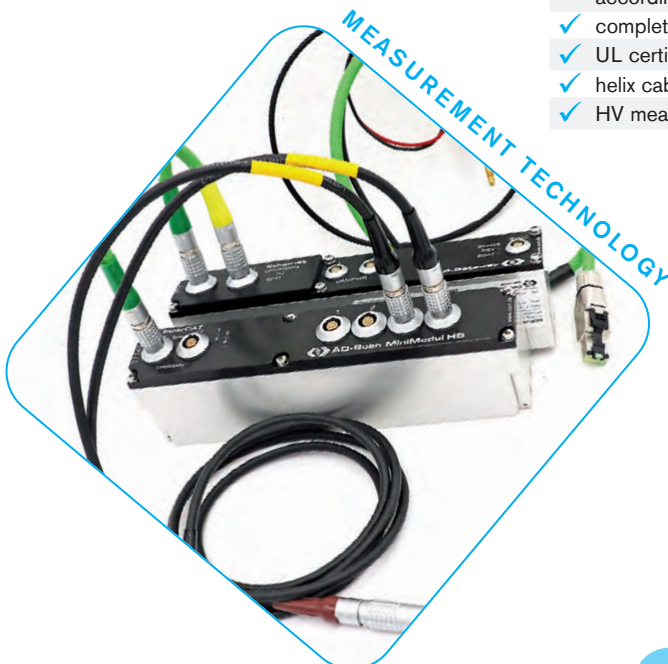
Measuring technology for industrial applications

Manufacturer of temperature sensors for industrial applications with 75 years of experience!

- ✓ mineral insulated thermocouples
- ✓ mineral insulated resistance thermometers
- ✓ temperature sensors
- ✓ mobile high voltage measuring technology
- ✓ temperature sensors for vehicle testing

SPECIAL CABLES

CABLE ASSEMBLIES

MEASUREMENT TECHNOLOGY

SPECIAL CABLES SAB North America

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Ethernet Cable Assemblies

CATLine CAT 6A S - IE connection cable

**Industrial Ethernet cable, suitable for cable tracks,
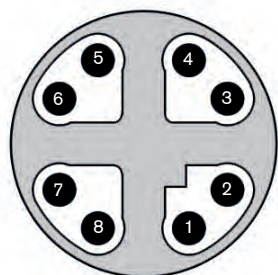with molded M12 male connector assembly at both sides**

Application: Industrial Ethernet connection cable for continuous flex applications in cable track.
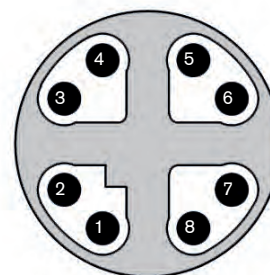
Technical Data:

Temperature range:	-40°C to +70°C
Voltage:	48 V
Protection class:	IP67 in stretched condition
Connection side 1:	M12 X-coded, male connector, straight, molded with vibration seal
Connection side 2:	M12 X-coded, male connector, straight, molded with vibration seal
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

SAB item no.:	L1677-4631
Dimension:	4 x 2 x 26 AWG
Conductor:	bare copper strands, fine wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	approx. 7.1 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:* *continuously flexible:*	10 x O.D. 15 x O.D.

connection diagram

side 1	1:1			side 2
M12 connector		conductor		M12 connector
pin 1		white-orange		pin 1
pin 2		orange		pin 2
pin 3		white-green		pin 3
pin 4		green		pin 4
pin 5		white-brown		pin 5
pin 6		brown		pin 6
pin 7		white-blue		pin 7
pin 8		blue		pin 8
housing		shield		housing

item no. with length code

length	item no.:
0.5 m	S1677-4020-00050
1.0 m	S1677-4020-00100
2.0 m	S1677-4020-00200
3.0 m	S1677-4020-00300
5.0 m	S1677-4020-00500
7.5 m	S1677-4020-00750
10.0 m	S1677-4020-01000
15.0 m	S1677-4020-01500
20.0 m	S1677-4020-02000
25.0 m	S1677-4020-02500

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Ethernet Cable Assemblies

CATLine CAT 6A S - IE connection cable

Industrial Ethernet cable, suitable for cable tracks, with mounted RJ45 connector at both sides

Application: CAT 6A Industrial Ethernet connection cable for continuous flex applications in cable track.

Technical Data:

Temperature range:	-40°C to +70°C
Voltage:	50 V
Protection class:	IP20
Connection side 1:	RJ45 connector, mounted, CAT. 6A, 8-pole with cable gland
Connection side 2:	RJ45 connector, mounted, CAT. 6A, 8-pole with cable gland
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

SAB item no.:	L1677-4631
Dimension:	4 x 2 x 26 AWG
Conductor:	bare copper strands, fine wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	approx. 7.1 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:* *continuously flexible:*	5 x O.D. 15 x O.D.

connection diagram		
side 1	TIA 568-B	side 2
RJ45	conductor	RJ45
pin 1	white-orange	pin 1
pin 2	orange	pin 2
pin 3	white-green	pin 3
pin 4	blue	pin 4
pin 5	white-blue	pin 5
pin 6	green	pin 6
pin 7	white-brown	pin 7
pin 8	brown	pin 8
housing	shield	housing

1... ...8

1... ...8

item no. with length code	
length	**item no.:**
0.5 m	S1677-4026-00050
1.0 m	S1677-4026-00100
2.0 m	S1677-4026-00200
3.0 m	S1677-4026-00300
5.0 m	S1677-4026-00500
7.5 m	S1677-4026-00750
10.0 m	S1677-4026-01000
15.0 m	S1677-4026-01500
20.0 m	S1677-4026-02000
25.0 m	S1677-4026-02500

Ethernet Cable Assemblies

S PN 667 - PN connection cable
Profinet cable, suitable for cable tracks, with mounted RJ45 connector at both sides

Application: CAT 5 Profinet connection cable for continuous flex applications in cable track.

Technical Data:

Temperature range:	-40°C to +70°C
Voltage:	50 V
Protection class:	IP20
Connection side 1:	RJ45 connector, mounted
Connection side 2:	RJ45 connector, mounted
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

SAB item no.:	L0667-2202
Dimension:	2 x 2 x 22 AWG
Conductor:	bare copper strands, 7 wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	6.5 mm ± 0.2 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:* *continuously flexible:*	5 x O.D. 15 x O.D.

connection diagram		
side 1	1:1	side 2
RJ45	conductor	RJ45
pin 1	yellow	pin 1
pin 2	white	pin 2
pin 3	orange	pin 3
pin 4		pin 4
pin 5		pin 5
pin 6	blue	pin 6
pin 7		pin 7
pin 8		pin 8
housing	shield	housing

1... ...8

1... ...8
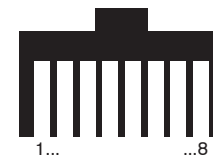
item no. with length code	
length	**item no.:**
0.5 m	S0667-4026-00050
1.0 m	S0667-4026-00100
2.0 m	S0667-4026-00200
3.0 m	S0667-4026-00300
5.0 m	S0667-4026-00500
7.5 m	S0667-4026-00750
10.0 m	S0667-4026-01000
15.0 m	S0667-4026-01500
20.0 m	S0667-4026-02000
25.0 m	S0667-4026-02500

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Ethernet Cable Assemblies

S PN 667 - PN connection cable

Profinet cable, suitable for cable tracks type C, with molded M12 connector at both sides
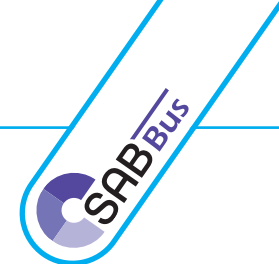
Application: CAT 5 Profinet connection cable for continuous flex applications in cable track.

Technical Data:

Temperature range:	-40°C to +70°C
Voltage:	25 V
Protection class:	IP67 in stretched condition
Connection side 1:	M12 D-coded, straight, molded with vibration seal
Connection side 2:	M12 D-coded, straight, molded with vibration seal
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

SAB item no.:	L0667-2202
Dimension:	2 x 2 x 22 AWG
Conductor:	bare copper strands, 7 wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	6.5 mm ± 0.2 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:*	5 x O.D.
continuously flexible:	15 x O.D.

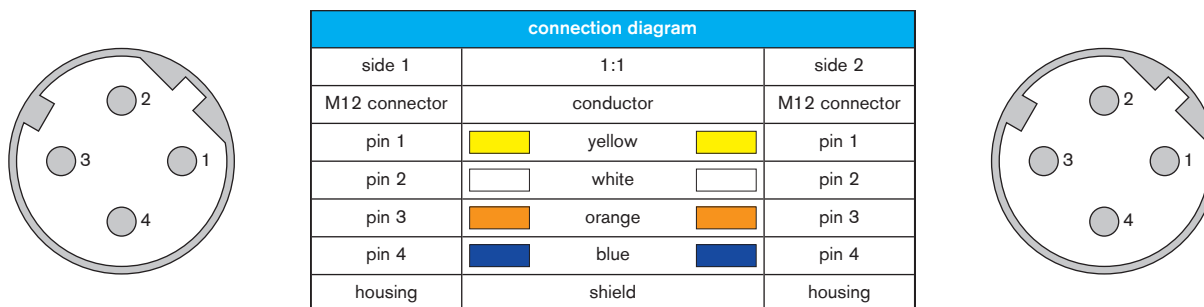| connection diagram		
side 1	1:1	side 2
M12 connector	conductor	M12 connector
pin 1	yellow	pin 1
pin 2	white	pin 2
pin 3	orange	pin 3
pin 4	blue	pin 4
housing	shield	housing

item no. with length code	
length	**item no.:**
0.5 m	S0667-4002-00050
1.0 m	S0667-4002-00100
20 m	S0667-4002-00200
3.0 m	S0667-4002-00300
5.0 m	S0667-4002-00500
7.5 m	S0667-4002-00750
10.0 m	S0667-4002-01000
15.0 m	S0667-4002-01500
20.0 m	S0667-4002-02000
25.0 m	S0667-4002-02500

Ethernet Cable Assemblies

S PN 667 - PN connection cable
Profinet cable, suitable for cable tracks,
with molded M12 connector and mounted RJ45 connector

Application: CAT 5 Profinet connection cable for continuous flex applications in cable track.

Technical Data:

Temperature range:	-40°C to +70°C
Voltage:	50 V
Protection class:	IP67 (M12, in stretched condition), IP20 (RJ45)
Connection side 1:	M12 D-coded, straight, molded with vibration seal
Connection side 2:	RJ45 connector, mounted
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

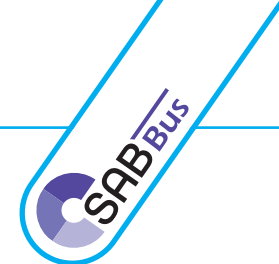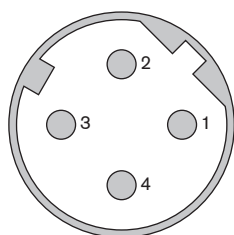|	
SAB item no.:	L0667-2202
Dimension:	2 x 2 x 22 AWG
Conductor:	bare copper strands, 7 wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	6.5 mm ± 0.2 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:* *continuously flexible:*	5 x O.D. 15 x O.D.

connection diagram

side 1	1:1			side 2
M12 connector	conductor			RJ45
pin 1		yellow		pin 1
pin 2		white		pin 2
pin 3		orange		pin 3
				pin 4
				pin 5
pin 4		blue		pin 6
				pin 7
				pin 8
housing		shield		housing

1...   ...8

item no. with length code

length	item no.:
0.5 m	S1667-4028-00050
1.0 m	S1667-4028-00100
2.0 m	S1667-4028-00200
3.0 m	S1667-4028-00300
5.0 m	S1667-4028-00500
7.5 m	S1667-4028-00750
10.0 m	S1667-4028-01000
15.0 m	S1667-4028-01500
20.0 m	S1667-4028-02000
25.0 m	S1667-4028-02500

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Ethernet Cable Assemblies

CATLine CAT 6A S - IE connection cable

**Industrial Ethernet cable, suitable for cable tracks,
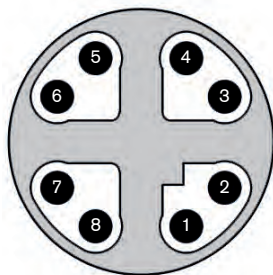with molded M12 connector and mounted RJ45 connector**

Application: CAT 6AS Industrial Ethernet connection cable for continuous flex applications in cable track.

Technical Data:

Temperature range:	-40°C to +70°C
Voltage:	48 V
Protection class:	IP67 (M12, in stretched condition), IP20 (RJ45)
Connection side 1:	M12 X-coded, male connector, straight, molded with vibration seal
Connection side 2:	RJ45 connector, mounted, Cat. 6A, 8-pole with cable gland
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

SAB item no.:	L1677-4631
Dimension:	4 x 2 x 26 AWG
Conductor:	bare copper strands, fine wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	approx. 7.1 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:* *continuously flexible:*	5 x O.D. 15 x O.D.

connection diagram			
side 1	TIA 568-B		side 2
M12 connector	conductor		M12 connector
pin 1		white-orange	pin 1
pin 2		orange	pin 2
pin 3		white-green	pin 3
pin 4		green	pin 4
pin 5		white-brown	pin 5
pin 6		brown	pin 6
pin 7		white-blue	pin 7
pin 8		blue	pin 8
housing		shield	housing

1...   ...8

item no. with length code	
length	**item no.:**
0.5 m	S1677-4027-00050
1.0 m	S1677-4027-00100
2.0 m	S1677-4027-00200
3.0 m	S1677-4027-00300
5.0 m	S1677-4027-00500
7.5 m	S1677-4027-00750
10.0 m	S1677-4027-01000
15.0 m	S1677-4027-01500
20.0 m	S1677-4027-02000
25.0 m	S1677-4027-02500

SPECIAL CABLES
SAB North America

Ethernet Cable Assemblies

CATLine CAT 6A S - IE connection cable
Industrial Ethernet cable, suitable for cable tracks,
with mounted RJ45 connector and mounted RJ12 connector

Application: CAT 6AS Industrial Ethernet connection cable between PC's and IP cameras, suitable for cable tracks.

Technical Data:

|	
Temperature range:	-20°C to +70°C
Connection side 1:	RJ45 connector, mounted, Cat. 6A, 8-pole with cable gland
Connection side 2:	RJ12 connector, mounted
Marking:	yellow marking tube with marking: item number - order number - length - certification mark

Cable characteristics:

SAB item no.:	L1677-4631
Dimension:	4 x 2 x 26 AWG
Conductor:	bare copper strands, fine wires
Insulation:	special polymer
Shielding:	alu foil and tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	approx. 7.1 mm
Approvals:	UL/CSA
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Min. bending radius *free movement:* *continuously flexible:*	5 x O.D. 15 x O.D.

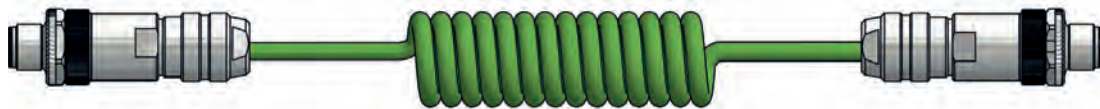| item no. with length code	
length	**item no.:**
0.5 m	S1677-4044-00050
1.0 m	S1677-4044-00100
2.0 m	S1677-4044-00200
3.0 m	S1677-4044-00300
5.0 m	S1677-4044-00500
7.5 m	S1677-4044-00750
10.0 m	S1677-4044-01000

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Ethernet Cable Assemblies
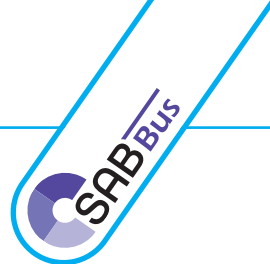
Ethernet cable
Helix cable with axial outlets and M12 D-coded male connectors

Application: CAT 5 Profinet cable spiral cable for mobile use on machines and systems.

Technical Data:

Temperature range:	-30°C to +80°C
Voltage:	max. 113 V
Connection side 1:	M12 D-coded
Connection side 2:	M12 D-coded
Marking:	yellow marking tube with marking: item number - order number - length - certification mark, with customer identification on request!

Cable characteristics:

SAB item no.:	L0616-9066
Dimension:	2 x 2 x 26 AWG
Conductor:	bare copper strands, fine wires
Insulation:	SABIX®
Shielding:	tinned copper braiding
Outer jacket:	PUR, green (similar RAL 6018)
Outer diameter:	approx. 6.1 mm
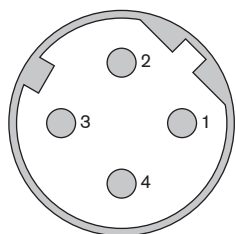
connection diagram		
side 1	1:1	side 2
M12 connector	conductor	M12 connector
pin 1	yellow	pin 1
pin 2	white	pin 2
pin 3	orange	pin 3
pin 4	blue	pin 4
housing	shield	housing
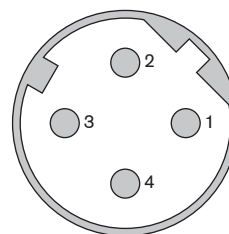
Individual lengths and further plug combinations on request!

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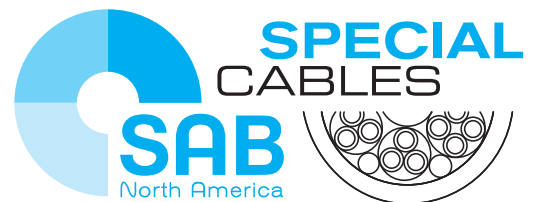
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