# HARNESSED
# ETHERNET CABLES

SPECIAL
CABLES
SAB
FRANCE
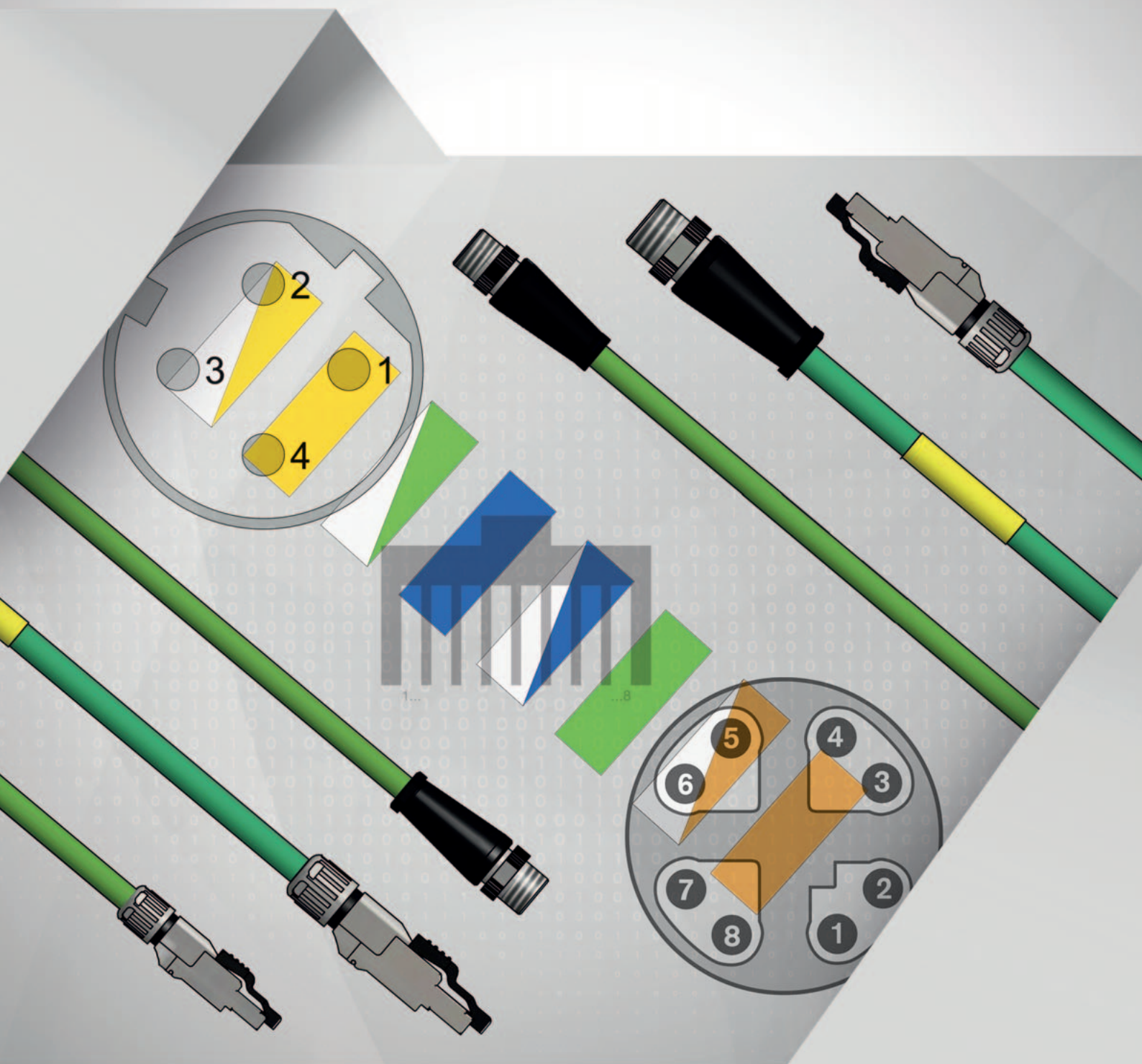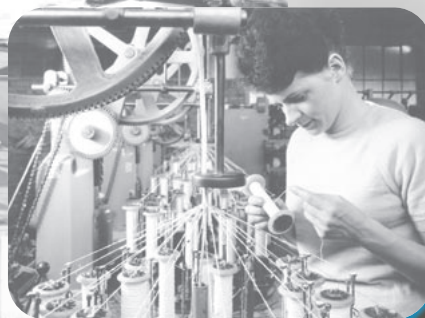
ENTREPRISE FAMILIALE
TRADITIONNELLE

DEPUIS 1947

# SAB BRÖCKSKES GMBH & CO. KG

## Family business in the third generation

3

75 years of experience in cable and wire manufacturing as well as in temperature measurement technology turned a one-man business into a company with more than 550 employees. We prove our strength every year with more than 1500 special products according to customers' requirements. Each product is a new challenge for our creative technical team. We at SAB see ourselves as a manufacturer and a service provider – in the sense of true partnership and the greatest possible customer orientation.

Today, the quality of our products is known and appreciated in more than 100 countries around the world. In all product ranges, we are certified according to DIN EN ISO 9001. Furthermore, we have implemented an environmental management system for our company according to DIN EN ISO 14001, an occupational health and safety management system according to NLF/ILO-OSH and DIN ISO 45001, and an energy management system according to DIN EN ISO 50001.

And also for the future, our slogan is: **"WE GO FORWARD!"**

| | |
|---|---|
| FOUNDED: | 1947 by Peter Bröckskes sen. an independent, medium-sized company. |
| CEO: | Peter Bröckskes and Sabine Bröckskes-Wetten |
| PLANT/LOCATION: | In Viersen (Lower Rhine) 110.000 m² company site. Own manufacturing from copper conductor to outer sheath. VDE approved burnchamber and laboratory within the company. |
| EMPLOYEES/WORKERS: | approx. 430 at the plant in Viersen, 550 worldwide |
| YEARLY SALES: | over 134 Mio. € worldwide |
| PRODUCTS: | Special Cables Measurement Technology Cable Harnessing |
| CERTIFICATES AND APPROVALS: | Quality management system acc. to DIN EN ISO 9001 for every manufacturing field Environmental management system acc. to DIN EN ISO 14001 Occupational health and safety management acc. to NLF/ILO-OSH and DIN ISO 45001 Energy management system acc. to DIN EN ISO 50001 |

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# ETHERNET CABLES

## CATLINE CAT 6A S - IE CONNECTION CABLE

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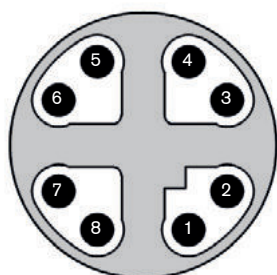**with moulded M12 male connector assembly at both sides**

**Application:** IE system cable for continuously flexible application, e.g. in cable tracks in industrial environment.
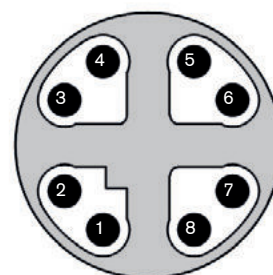
### Technical Data:

| | |
|---|---|
| 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, moulded with vibration seal |
| Connection side 2: | M12 X-coded, male connector, straight, moulded 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 |
| Screen: | alu foil and tinned copper braiding |
| Outer sheath: | 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 *flexible application:* *continuously flexible:* | 10 x d 15 x d |

| connection diagram/pin assignment | | | |
|---|---|---|---|
| side 1 | 1:1 | | side 2 |
| M12 connector | core | | 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 | | screen | housing |

| item no. with length code | |
|---|---|
| length | item no.: S1677-4020-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |
| 15,0 m | 0 1 5 0 0 |
| 20,0 m | 0 2 0 0 0 |
| 25,0 m | 0 2 5 0 0 |

## CATLINE CAT 6A S - IE CONNECTION CABLE

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

**Application:** IE system cable Cat. 6A for continuously flexible application, e.g. in cable tracks in industrial environment.

## 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 |
| Screen: | alu foil and tinned copper braiding |
| Outer sheath: | 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 *flexible application:* *continuously flexible:* | 5 x d 15 x d |

| connection diagram/pin assignment | | | |
|---|---|---|---|
| side 1 | TIA 568-B | | side 2 |
| RJ45 | core | | 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 | screen | | housing |

| item no. with length code | |
|---|---|
| length | item no.: S1677-4026-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |
| 15,0 m | 0 1 5 0 0 |
| 20,0 m | 0 2 0 0 0 |
| 25,0 m | 0 2 5 0 0 |

## S PN 667 - PN CONNECTION CABLE

**Profinet cable, suitable for cable tracks, with mounted RJ45 connector at both sides**

**Application:** PN system cable Cat.5 for continuously flexible application, e.g. in cable tracks in industrial environment.

## 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 |
| Screen: | alu foil and tinned copper braiding |
| Outer sheath: | 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 *flexible application:* *continuously flexible:* | 5 x d 15 x d |

| connection diagram/pin assignment | | |
|---|---|---|
| side 1 | 1:1 | side 2 |
| RJ45 | core | 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 | screen | housing |

1... ...8

1... ...8

| item no. with length code | |
|---|---|
| length | item no.: S0667-4026-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |
| 15,0 m | 0 1 5 0 0 |
| 20,0 m | 0 2 0 0 0 |
| 25,0 m | 0 2 5 0 0 |

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## S PN 667 - PN CONNECTION CABLE

**Profinet cable, suitable for cable tracks type C, with moulded M12 connector at both sides**
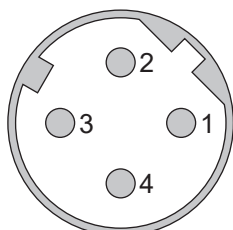
**Application:** PN system cable Cat.5 for continuously flexible application, e.g. in cable tracks in industrial environment.

### 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, moulded with vibration seal |
| **Connection side 2:** | M12 D-coded, straight, moulded 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 |
| **Screen:** | alu foil and tinned copper braiding |
| **Outer sheath:** | 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** *flexible application:* *continuously flexible:* | 5 x d 15 x d |

| connection diagram/pin assignment | | |
|---|---|---|
| side 1 | 1:1 | side 2 |
| M12 connector | core | M12 connector |
| pin 1 | yellow | pin 1 |
| pin 2 | white | pin 2 |
| pin 3 | orange | pin 3 |
| pin 4 | blue | pin 4 |
| housing | screen | housing |

| item no. with length code | |
|---|---|
| length | item no.: S0667-4002-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |
| 15,0 m | 0 1 5 0 0 |
| 20,0 m | 0 2 0 0 0 |
| 25,0 m | 0 2 5 0 0 |

## S PN 667 - PN CONNECTION CABLE

**Profinet cable, suitable for cable tracks,
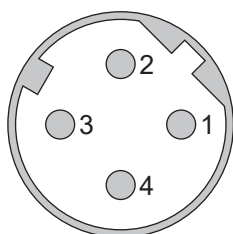with moulded M12 connector and mounted RJ45 connector**

**Application:** PN system cable Cat.5 for continuously flexible application, e.g. in cable tracks in industrial environment.

## 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, moulded 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 |
| **Screen:** | alu foil and tinned copper braiding |
| **Outer sheath:** | 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** *flexible application:* *continuously flexible:* | 5 x d 15 x d |

| connection diagram/pin assignment | | |
|---|---|---|
| side 1 | 1:1 | side 2 |
| M12 connector | core | 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 | screen | housing |

| item no. with length code | |
|---|---|
| length | item no.: S1667-4028-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |
| 15,0 m | 0 1 5 0 0 |
| 20,0 m | 0 2 0 0 0 |
| 25,0 m | 0 2 5 0 0 |

# ETHERNET CABLES

## CATLINE CAT. 6A S - IE CONNECTION CABLE

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

**Application:** IE system cable for continuously flexible application, e.g. in cable tracks in industrial environment.
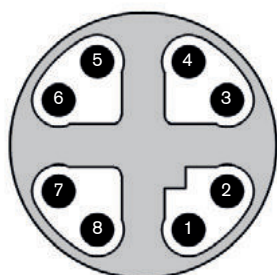
## Technical Data:

| | |
|---|---|
| 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, moulded 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 |
| Screen: | alu foil and tinned copper braiding |
| Outer sheath: | 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 *flexible application:* *continuously flexible:* | 5 x d 15 x d |

| connection diagram/pin assignment | | |
|---|---|---|
| side 1 | TIA 568-B | side 2 |
| M12 connector | core | 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 | screen | housing |

| item no. with length code | |
|---|---|
| length | item no.: S1677-4027-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |
| 15,0 m | 0 1 5 0 0 |
| 20,0 m | 0 2 0 0 0 |
| 25,0 m | 0 2 5 0 0 |

## CATLINE CAT. 6A S - IE CONNECTION CABLE

**Industrial Ethernet cable, suitable for cable tracks,
with mounted RJ45 connector and mounted RJ12 connector**



**Application:** Connection cable between PC and IP cameras.

## 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 |
| Screen: | alu foil and tinned copper braiding |
| Outer sheath: | 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 *flexible application:* *continuously flexible:* | 5 x d  15 x d |

| item no. with length code | |
|---|---|
| length | item no.: S1677-4044-_ _ _ _ _ |
| 0,5 m | 0 0 0 5 0 |
| 1,0 m | 0 0 1 0 0 |
| 2,0 m | 0 0 2 0 0 |
| 3,0 m | 0 0 3 0 0 |
| 5,0 m | 0 0 5 0 0 |
| 7,5 m | 0 0 7 5 0 |
| 10,0 m | 0 1 0 0 0 |

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## ETHERNET CABLE

**Helix cable with axial outlets and M12 D-coded male connectors**
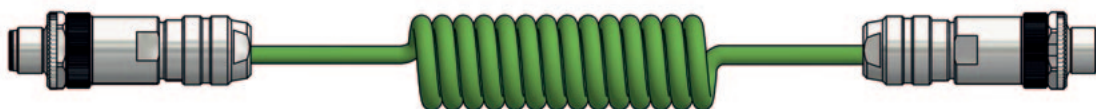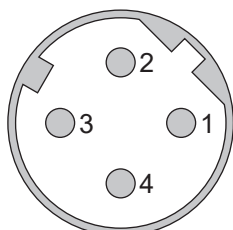


**Application:** Cat. 5 Profinet cable as helix cable for mobile use on machines and systems.

### 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® |
| **Screen:** | tinned copper braiding |
| **Outer sheath:** | PUR, green (similar RAL 6018) |
| **Outer diameter:** | approx. 6,1 mm |



| connection diagram/pin assignment | | |
|---|---|---|
| side 1 | 1:1 | side 2 |
| M12 connector | core | M12 connector |
| pin 1 | yellow | pin 1 |
| pin 2 | white | pin 2 |
| pin 3 | orange | pin 3 |
| pin 4 | blue | pin 4 |
| housing | screen | housing |



### Individual lengths and further plug combinations on request!

**SPECIAL CABLES**
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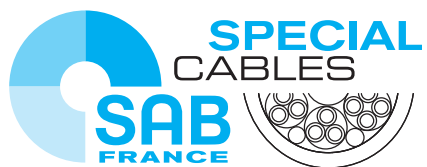
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