

# Cables for robots



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## Robot cables

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## DIN EN ISO 9001

More than 60 years of experience in temperature measurement and control technique as well as in cable production have made a one man business a company with nearly 500 staff members. Our strength is not only the production of standard products but also the development and manufacturing of special products acc. to customers' specifications. Every year we manufacture more than 1500 special products on our customer's request. Every single product is a challenge for our technical team.

We at SAB Bröckskes see ourselves as manufacturer and service provider - in the sense of real partnership and customer oriented work. The quality of our products is known in more than 40 countries of the world. Our customers have tested our products intensively and confirm that they have a longer service life than others. In all product ranges we are certified acc. to ISO 9001:2008. Besides we established an environmental management system for our company acc. to ISO 14001:2004, an occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007 as well as an energy management system acc. to DIN EN 16001:2009. And our future slogan is: **We go forward!**

### founded:

- 1947 by Peter Bröckskes sen.
- an independent, middle sized company

### CEO:

- Peter Bröckskes

### plant/location:

- in Viersen (lower Rhine) 110.000 m<sup>2</sup> company site
- manufacturing from copper conductor to outer sheath,
- own VDE proofed burnchamber and laboratory

### employees/workers:

- approx. 420 at the plant in Viersen, 500 worldwide

### yearly sales:

- approx. 95 Mio. € worldwide

### products:

- Special Cables
- Temperature Measurement
- Cable Harnessing

### certificates and approvals:

- quality management system acc. to ISO 9001:2008 for every manufacturing field
- environmental management system acc. to ISO 14001:2004
- occupational health and safety management acc. to NLF/ILO-OSH 2001 and OHSAS 18001:2007
- energy management system acc. to DIN EN 16001:2009



**MIL, VDE, HAR, IEC, GL, DNV, BV, KR,  
ABS, NK, RINA, LR, CE**

**Automotive Industry**  
 VW Ford  
 Daimler  
 Audi Opel  
 BMW

**Robotics industry**  
 KUKA  
 ABB Cloos  
 Motoman  
 Reis b & m

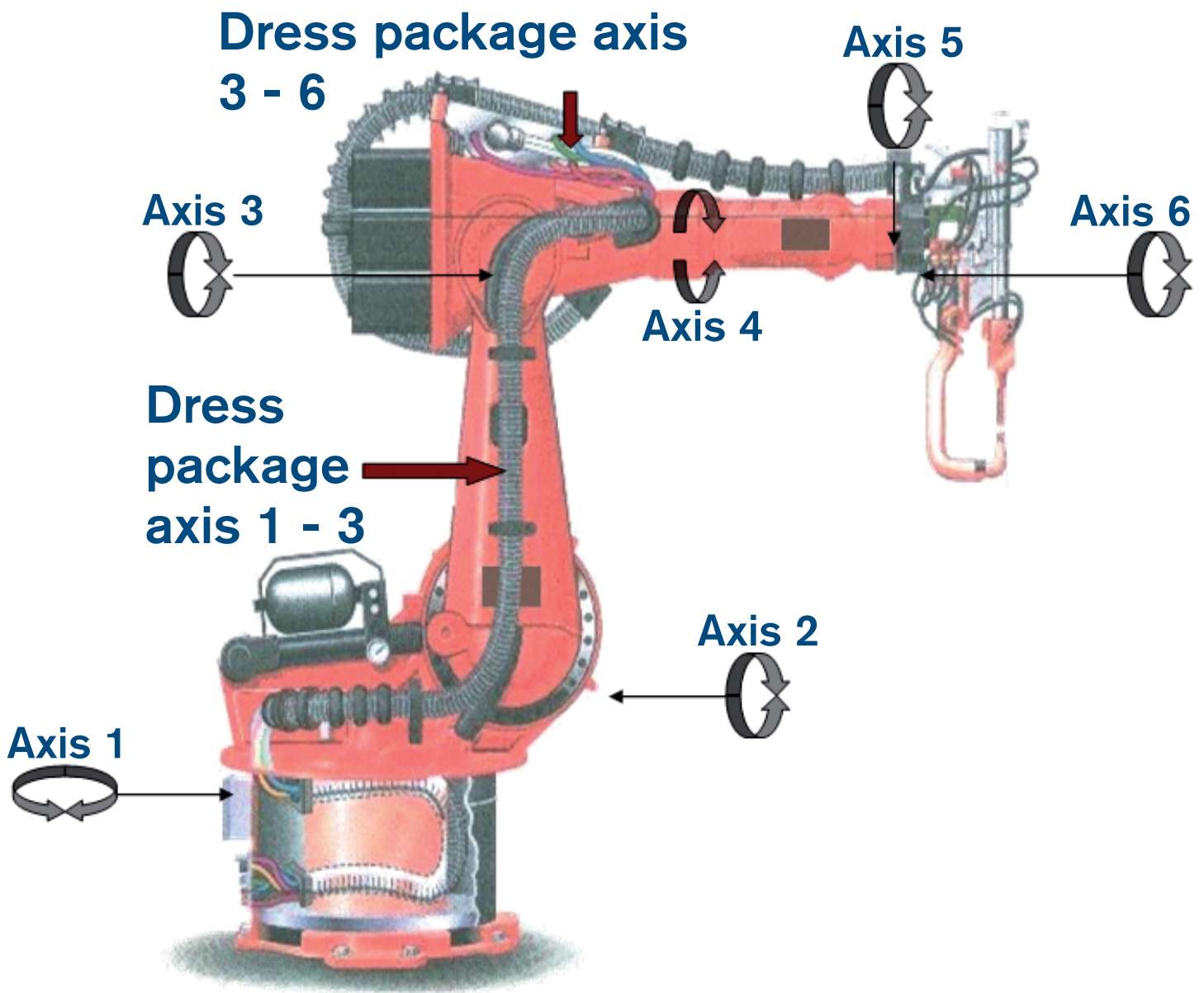
**Automation Technology**  
 Dürr Schuler  
 Liebherr  
 ThyssenKrupp  
 Felsomat EMAG

**Drive Technology**  
 Lenze  
 Ferrocontrol  
 Stöber Moeller  
 ELAU

**Supplier Numbers**

AUDI	1917/0
BMW	609 213-10
Daimler	102 218 10
Ford	DJM5A
Opel	1 950 428
Porsche	11 901
VW	1917-0
VW Mexico	600 200 57 70

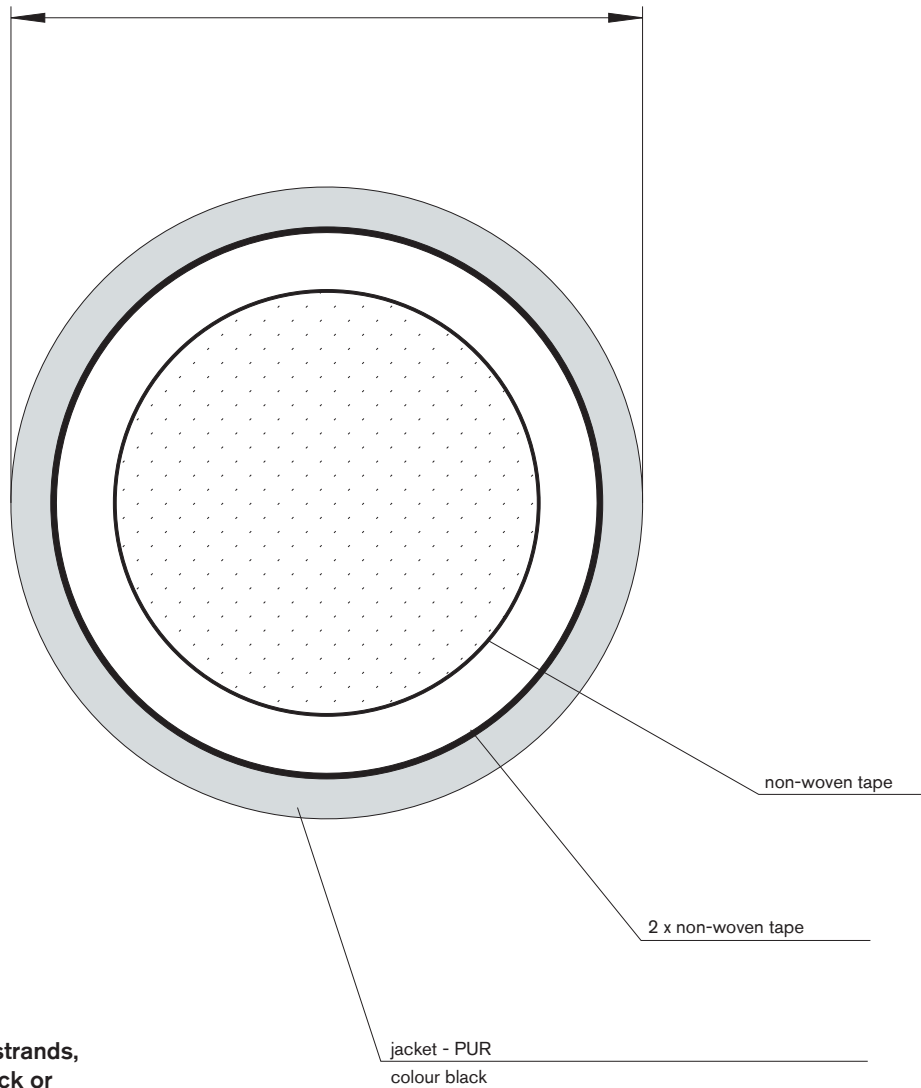
**D-U-N-S® number**  
 315 499 111  
 worldwide



## Cables for dress package

SAB Item no.: 0774-9084	3 x 25,0 mm <sup>2</sup>
SAB Item no.: 0737-9005 + 0664-9001	5 x 1,5 mm <sup>2</sup> + 2 x POF
SAB Item no.: 0764-9086	7 x 1,0 mm <sup>2</sup> + (2 x 0,5 mm <sup>2</sup> )
SAB Item no.: 0764-9065	23 x 1,0 mm <sup>2</sup> + (2 x 1,0 mm <sup>2</sup> ) D

- Item no.: 0761-9052 1 x 25,0 mm<sup>2</sup> black = approx. Ø 11.1 mm
- Item no.: 0761-9050 1 x 25,0 mm<sup>2</sup> green/yellow = approx. Ø 11.1 mm
- Item no.: 0761-9048 1 x 35,0 mm<sup>2</sup> black = approx. Ø 13.3 mm
- Item no.: 0761-9054 1 x 50,0 mm<sup>2</sup> black = approx. Ø 15.8 mm



strand; bare copper strands,  
insulation PUR in black or  
green/yellow

## Technical Data

Operating voltage:	750 V (DC)
Testing voltage:	2000 V (AC)
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
Min. bending radius:	7,5 x outer diameter
Halogen-free:	acc. to DIN VDE 0472 part 815 and IEC 60754-1
Absence of harmful substances:	acc. to RoHS directive of the European Union

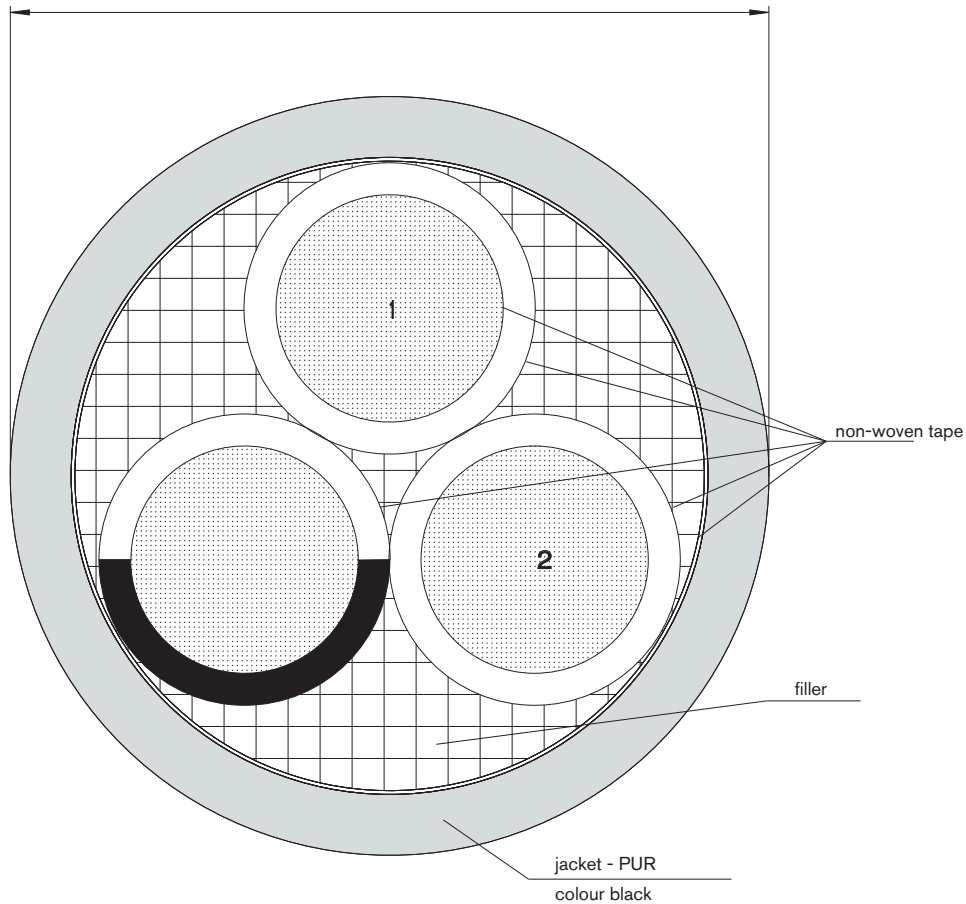
Further technical information on request

Item no: 0774-9111 3 x 16,0 mm<sup>2</sup> = approx. Ø 19.3 mm

Item no: 0774-9084 3 x 25,0 mm<sup>2</sup> = approx. Ø 23.3 mm

Item no: 0774-9085 3 x 35,0 mm<sup>2</sup> = approx. Ø 26.6 mm

Item no: 0774-9088 3 x 50,0 mm<sup>2</sup> = approx. Ø 30.8 mm



conductors; bare copper strands, insulation PUR in black  
with numbers 1 - 2 + green/yellow

## Technical Data

<b>Operating voltage:</b> 3 x 16 mm <sup>2</sup> 3 x 25 mm <sup>2</sup> , 3 x 35 mm <sup>2</sup> + 3 x 50 mm <sup>2</sup>	500 V (DC) 750 V (DC)
<b>Testing voltage:</b> 3 x 16 mm <sup>2</sup> 3 x 25 mm <sup>2</sup> , 3 x 35 mm <sup>2</sup> + 3 x 50 mm <sup>2</sup>	1500 V (AC) 2000 V (AC)
<b>Temperature range:</b> flexible application: fixed laying:	-40°C up to +90°C -50°C up to +90°C
<b>Min. bending radius:</b> static: continuously flexing:	5 x outer diameter 7,5 x outer diameter
<b>Halogen-free:</b>	acc. to DIN VDE 0472 part 815 and IEC 60754-1
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

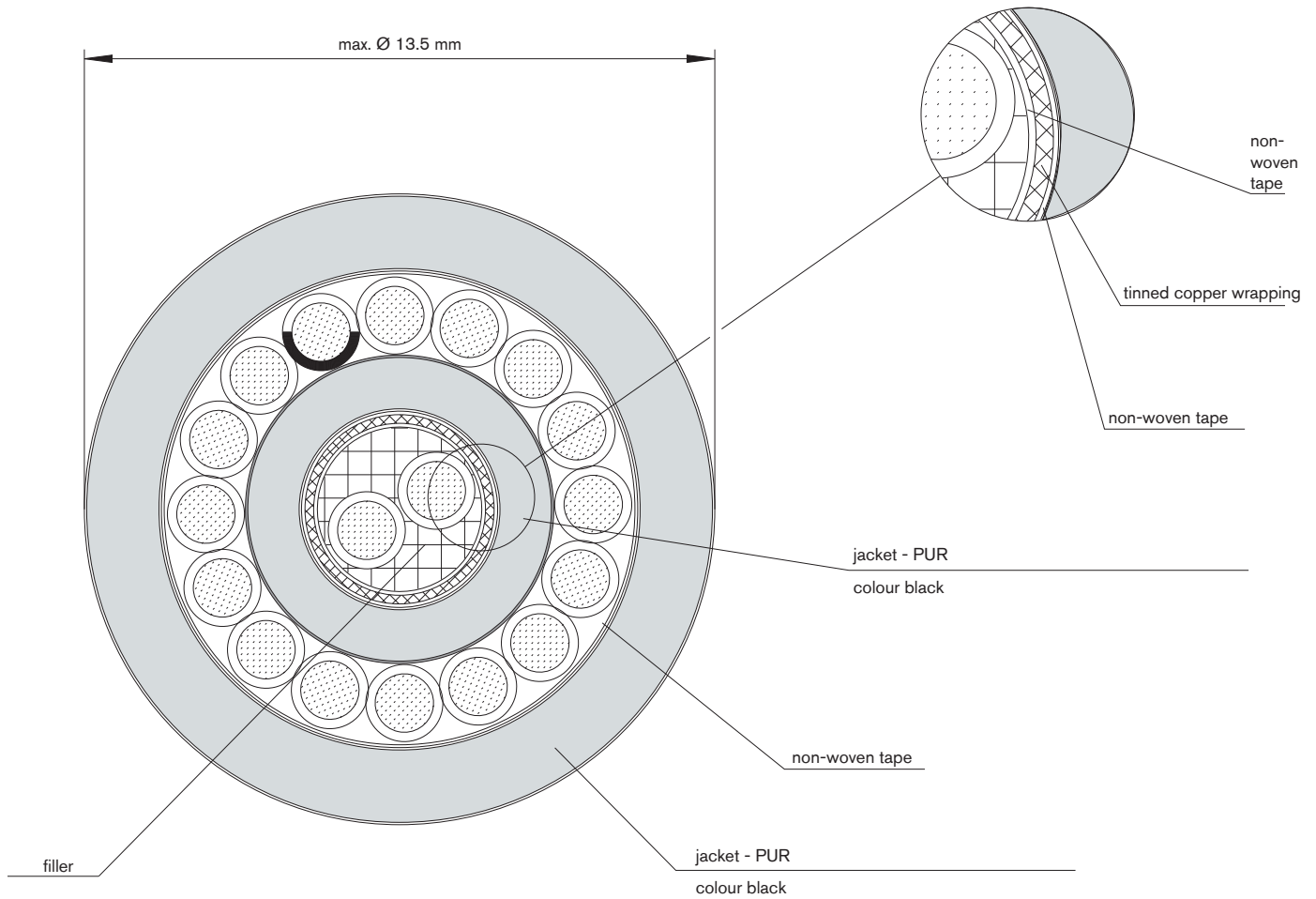


Sheath also possible  
in orange or yellow!

Further technical information on request

Item no.: 0764-9079

16 x 1,0 mm<sup>2</sup> + (2 x 1,0 mm<sup>2</sup>) D mm<sup>2</sup>



conductors 1,0 mm<sup>2</sup>; tinned copper strands,  
insulation TPE in black with numbers 1 - 17 + green/yellow

## Technical Data

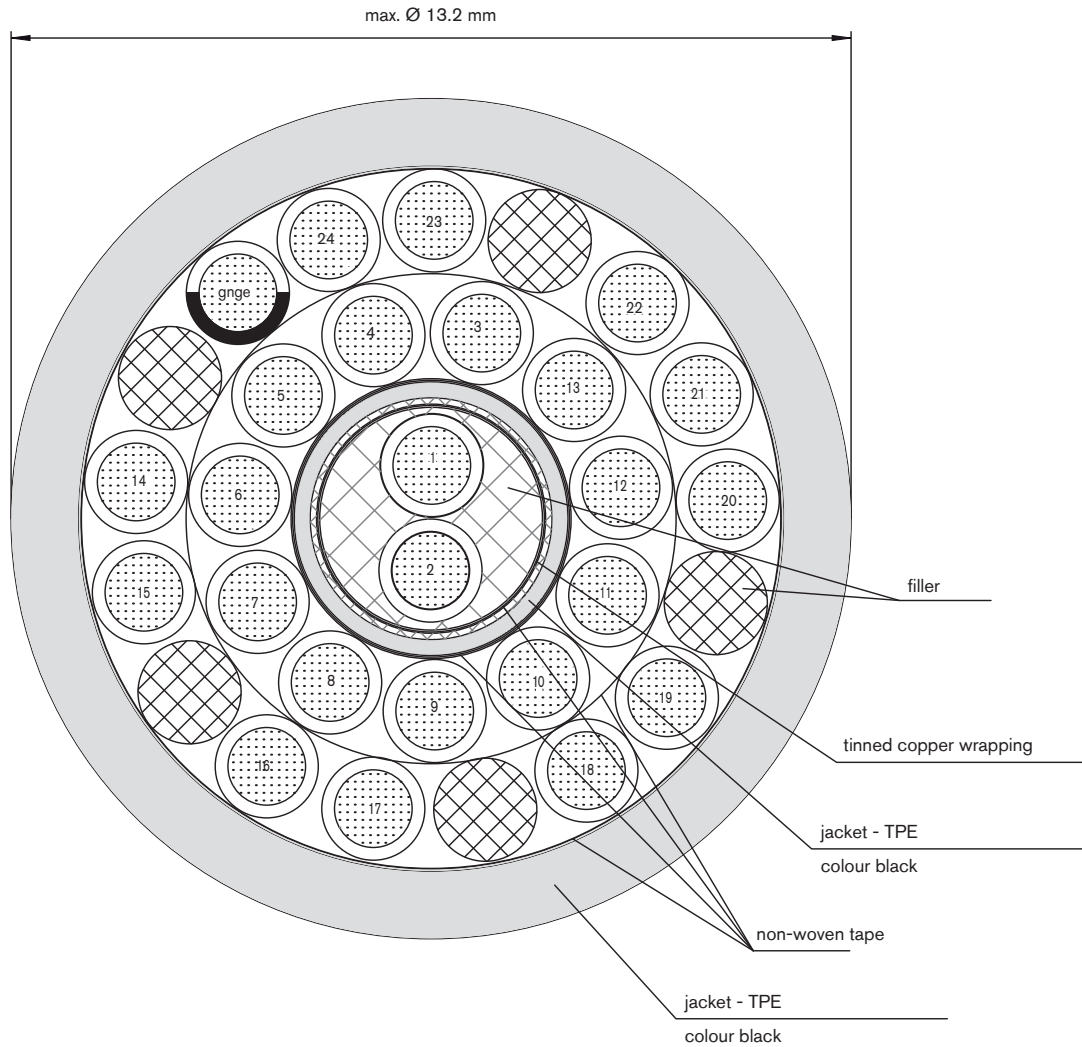
Peak operating voltage:	max. 350 V
Testing voltage:	cond./cond. 1500 V cond./screen 1000 V
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
Min. bending radius:	
flexing:	10 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request



Item no.: 0764-9065

23 x 1,0 mm<sup>2</sup> + (2 x 1,0 mm<sup>2</sup>) D



conductors 1,0 mm<sup>2</sup>; tinned copper strands,  
insulation TPE in white with numbers 1 - 24 + green/yellow

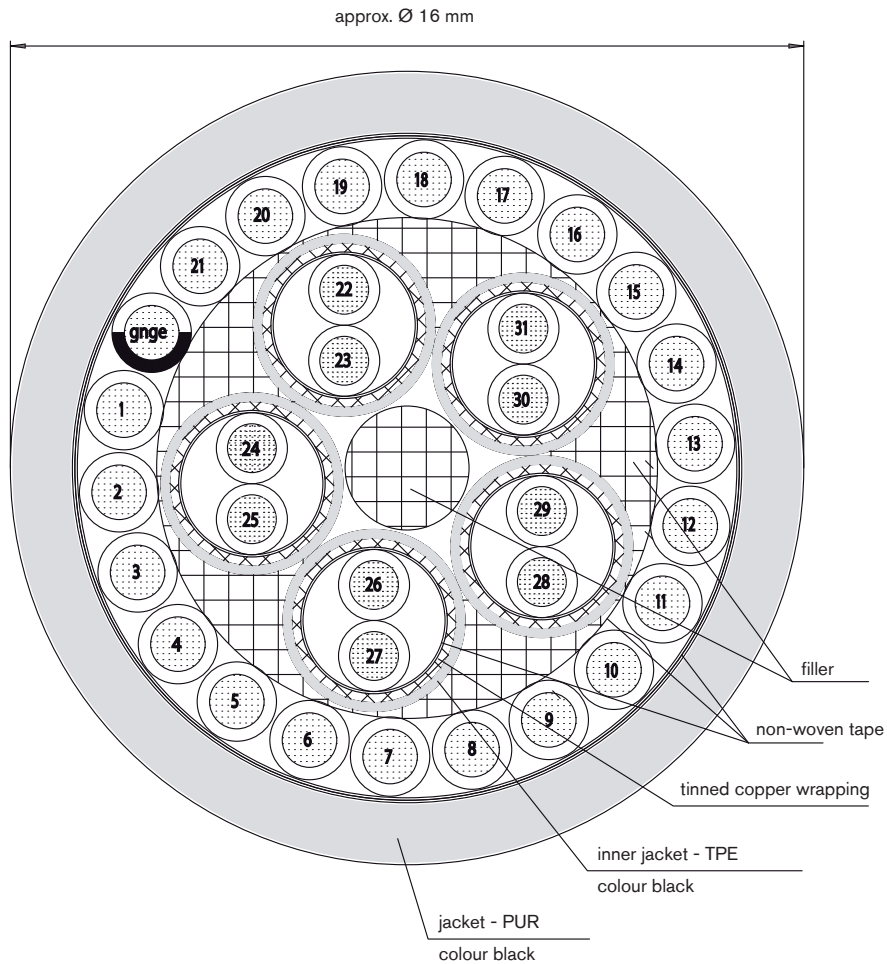
## Technical Data

Peak operating voltage:	max. 350 V
Testing voltage:	cond./cond. 1500 V cond./screen 1000 V
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
Min. bending radius:	
flexing:	10 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0796-9081

5 x (2 x 0,75 mm<sup>2</sup>)D + 22 x 0,75 mm<sup>2</sup>



conductors 0,75 mm<sup>2</sup>;

insulation TPE in white with numbers 1 - 31 + green/yellow

## Technical Data

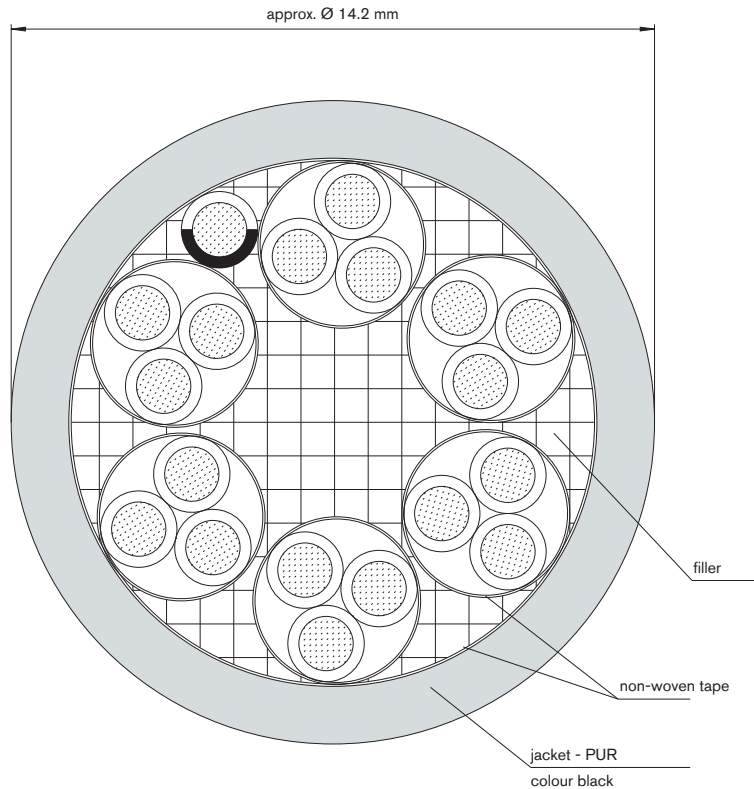
Nominal voltage:	VDE U <sub>0</sub> /U 300/500 V
Testing voltage:	cond./cond. 2000 V (AC) cond./screen 2000 V (AC)
Temperature range:	
flexible application:	-40°C up to +80°C
fixed laying:	-40°C up to +80°C
Min. bending radius:	
flexing:	10 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request

# PUR CONTROL CABLE

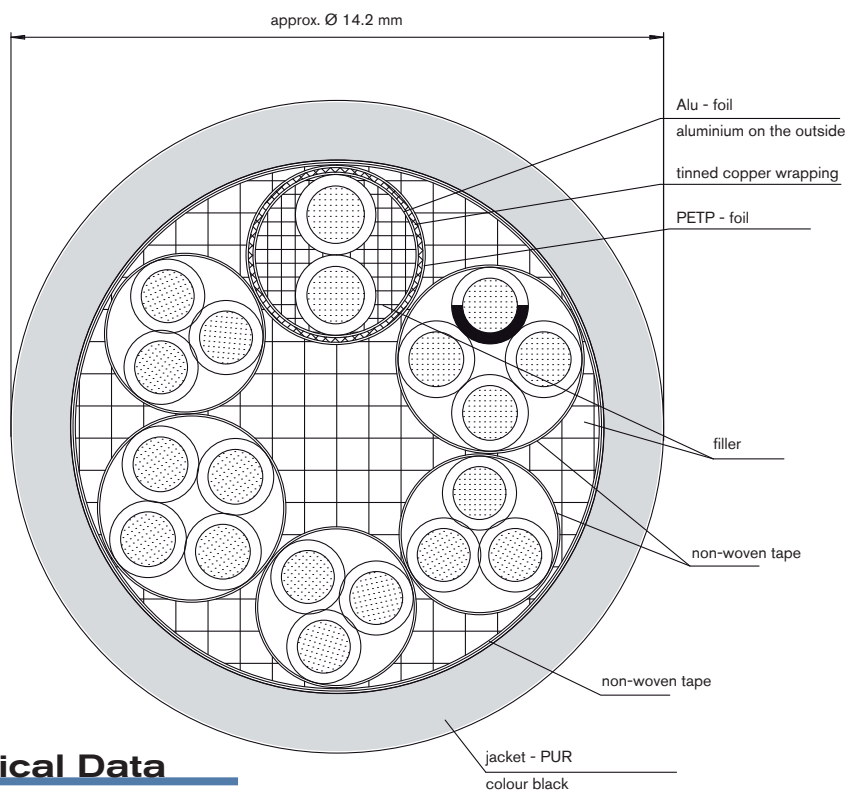
Item no.: 0760-9056

19 x 1,0 mm<sup>2</sup>



Item no.: 0760-9061

19 x 1,0 mm<sup>2</sup>



## Technical Data

<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	cond./cond. 1500 V
<b>Temperature range:</b>	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
<b>Min. bending radius:</b>	
flexing:	6 x outer diameter
static:	4 x outer diameter
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

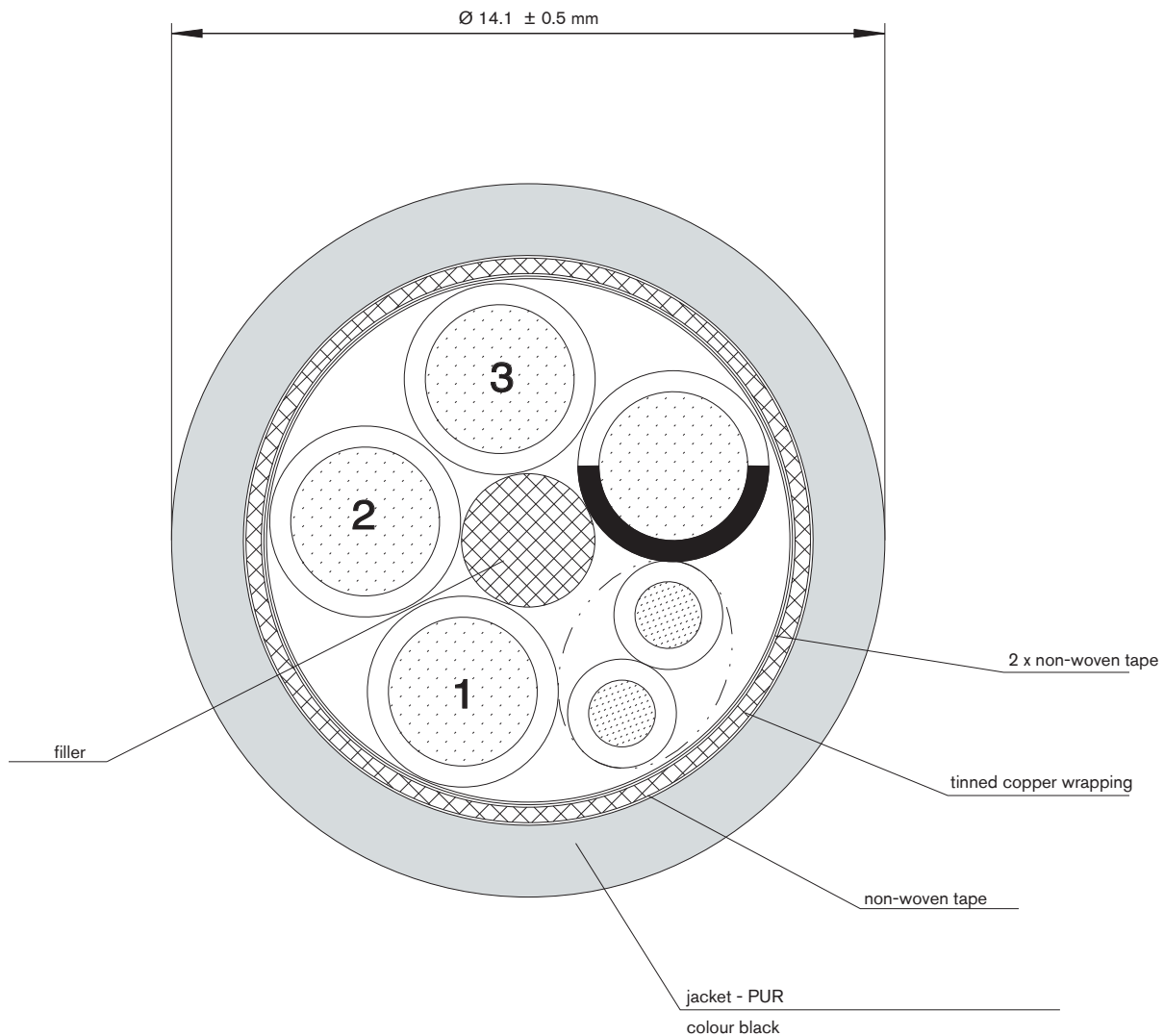
**Item no.: 0760-9056:**  
conductors 1,0 mm<sup>2</sup>; bare copper strands,  
insulation TPE in black, numbers 1 - 18 + green/yellow

**Item no.: 0760-9061:**  
conductors 1,0 mm<sup>2</sup>; bare copper strands,  
insulation TPE in black, numbers 1 - 18 + green/yellow

Further technical information on request

Item no.: 0779-xxxx

2 x 1,0 mm<sup>2</sup> + 4 x 4,0 mm<sup>2</sup>



conductors 1,0 mm<sup>2</sup>; bare copper strands, insulation TPE in red, blue

conductors 4,0 mm<sup>2</sup>; bare copper strands, insulation TPE in white  
with black numbers (s/w) 1 - 3 + green/yellow

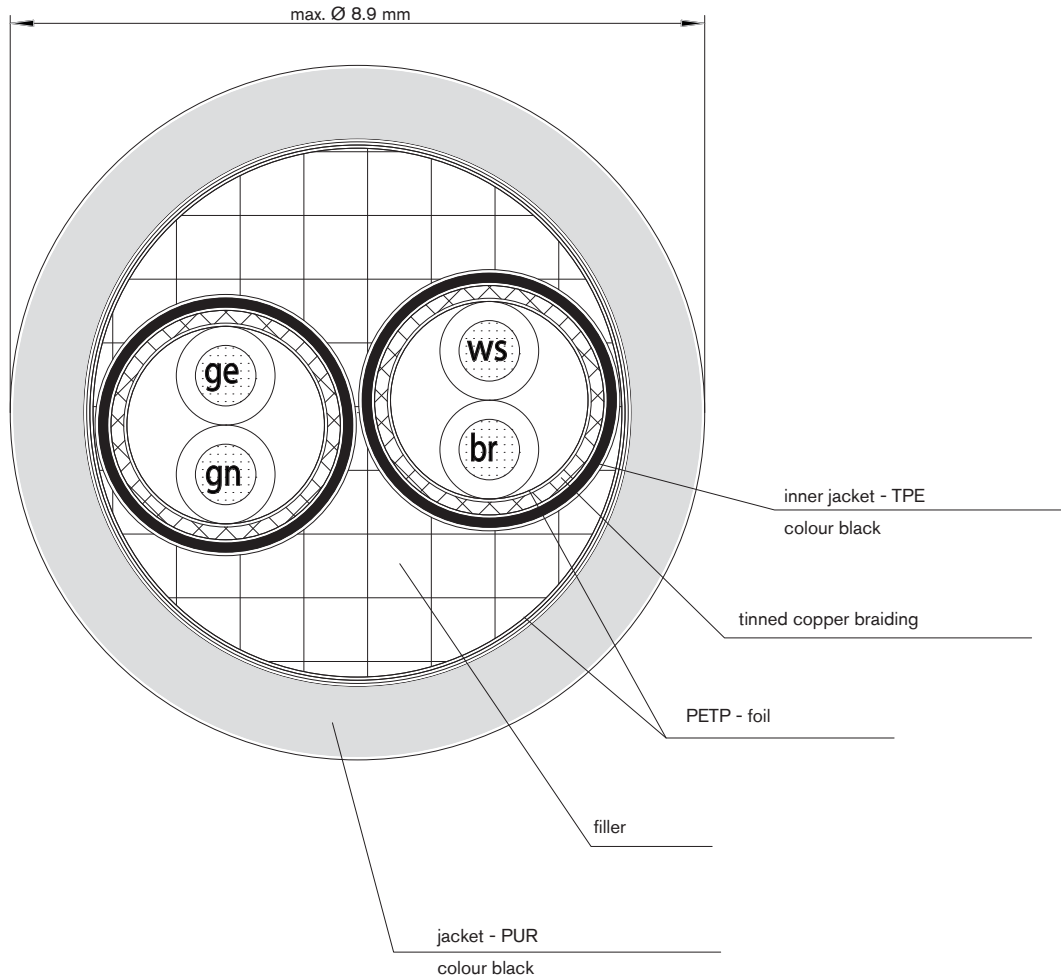
## Technical Data

Nominal voltage:	VDE U <sub>0</sub> /U 450/750 V
Voltage:	acc. to UL & CSA 600 V
Testing voltage:	cond./cond. 3000 V cond./screen 2000 V
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
acc. to UL:	up to +80°C
acc. to CSA:	up to +75°C
Min. bending radius:	7,5 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: L 0795-9035

(2 x 0,50 mm<sup>2</sup>) D + (2 x 0,50 mm<sup>2</sup>) D



conductors 0,50 mm<sup>2</sup>; bare copper strands, wires Ø 0,15 mm,  
insulation TPE, colour code DIN 47100

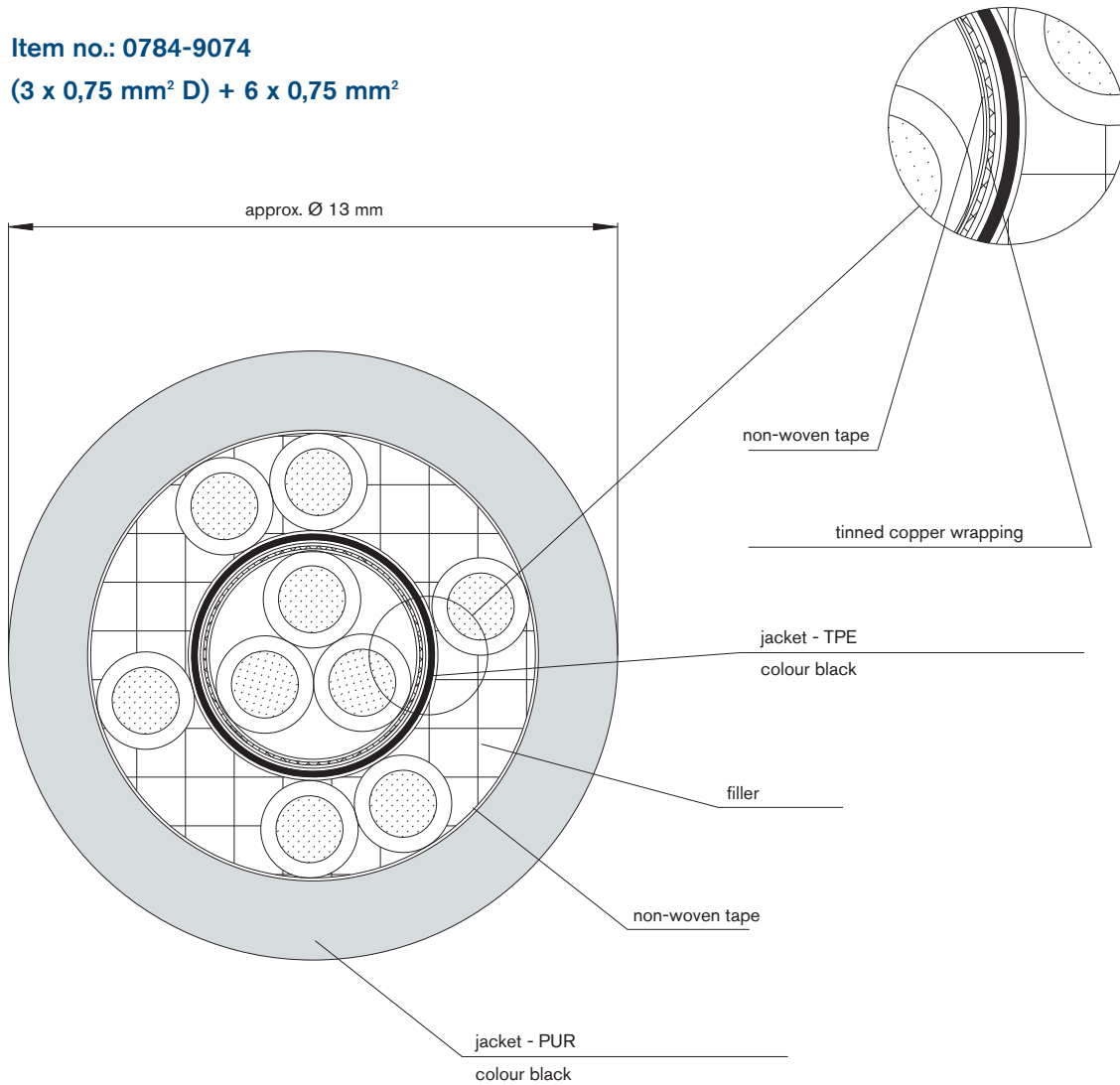
## Technical Data

<b>Operating voltage <math>U_{b \text{ max.}}</math>:</b>	600 V DC (conductor-conductor)
<b>AC testing voltage:</b>	core/core 2500 V DC core/screen 1250 V DC
<b>Temperature range:</b>	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
<b>Min. bending radius:</b>	
flexing:	5 x outer diameter
static:	10 x outer diameter
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0784-9074

(3 x 0,75 mm<sup>2</sup> D) + 6 x 0,75 mm<sup>2</sup>



conductors 0,75 mm<sup>2</sup>; tinned copper strands,  
insulation TPE in white with numbers 1 - 9

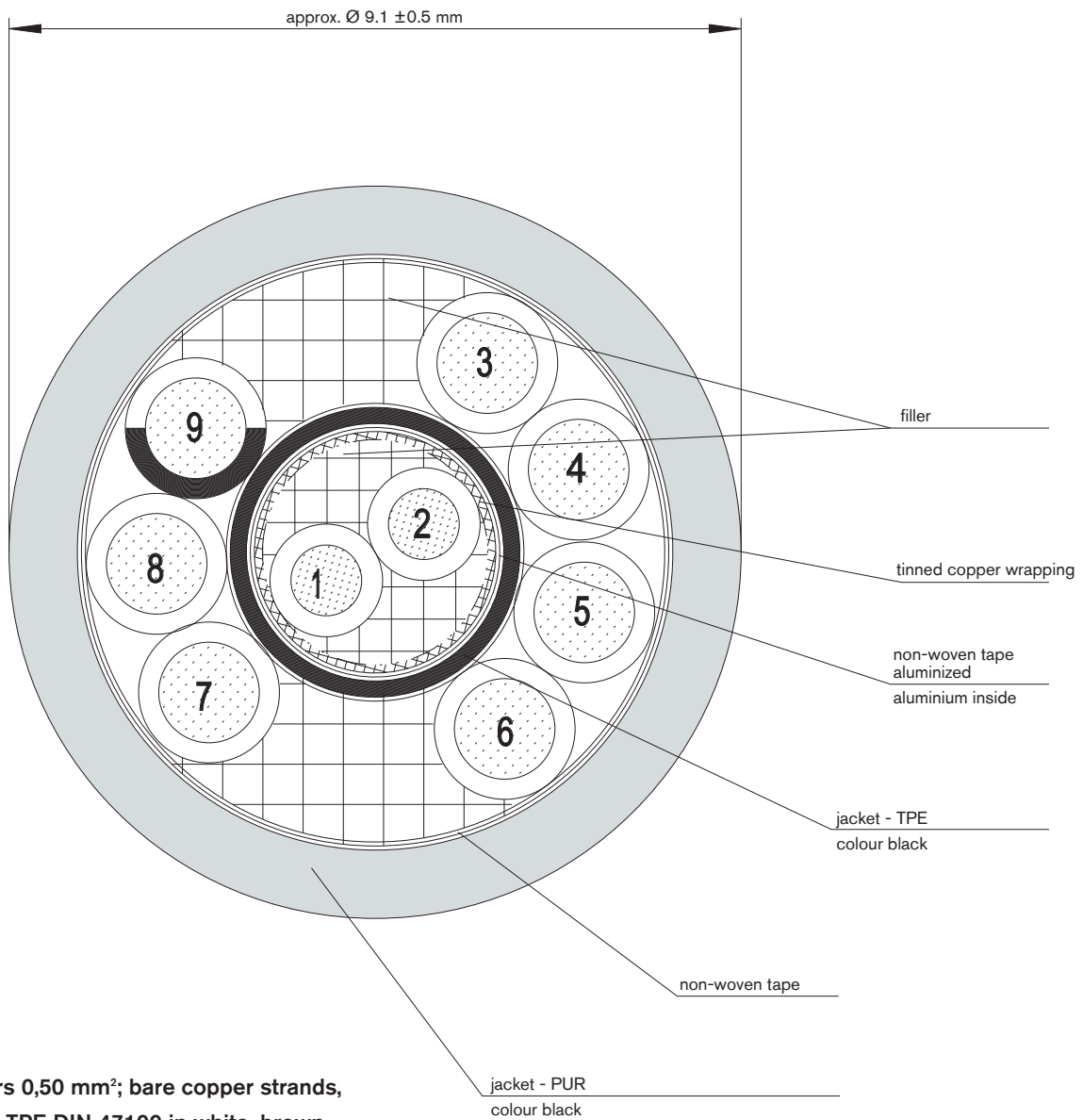
## Technical Data

<b>Peak operating voltage:</b>	max. 350 V
<b>Testing voltage:</b>	cond./cond. 1500 V cond./screen 1000 V
<b>Temperature range:</b>	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
<b>Min. bending radius:</b>	
continuously flexing:	12 x outer diameter
flexing:	7,5 x outer diameter
static:	5 x outer diameter
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0764-9086

(2 x 0,50 mm<sup>2</sup>) D + 7 x 1,0 mm<sup>2</sup>



conductors 0,50 mm<sup>2</sup>; bare copper strands,  
insulation TPE DIN 47100 in white, brown

conductors 1,0 mm<sup>2</sup>; bare copper strands,  
insulation TPE in black with numbers 1 - 6 + green/yellow

## Technical Data

Peak operating voltage:	max. 600 V
Testing voltage:	cond./cond. 3000 V cond./screen 2000 V
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
short-time use:	+125°C
Min. bending radius:	7,5 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

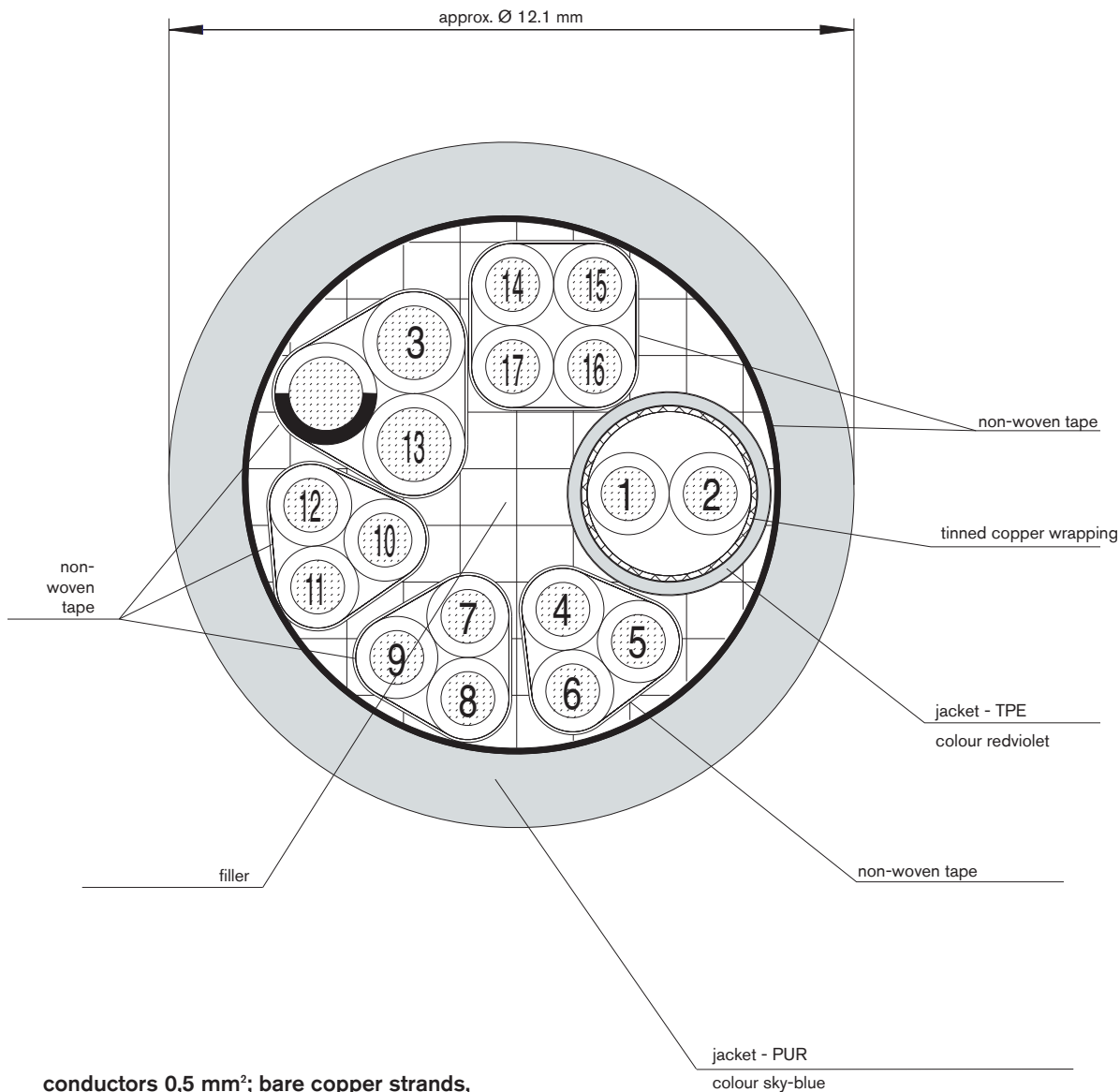
Further technical information on request

# PUR HYBRID CABLE (PNZ CABLE FOR WELDING CONTROL)



Item no.: 0399-0157

13 x 0,5 mm<sup>2</sup> + 3 x 1,0 mm<sup>2</sup> + (2 x 0,5 mm<sup>2</sup>) D



conductors 0,5 mm<sup>2</sup>; bare copper strands,  
insulation TPE in white with numbers 1 - 2, 4 - 12, 14 - 17

conductors 1,0 mm<sup>2</sup>; bare copper strands,  
insulation TPE in white with numbers 3, 13 + green/yellow

## Technical Data

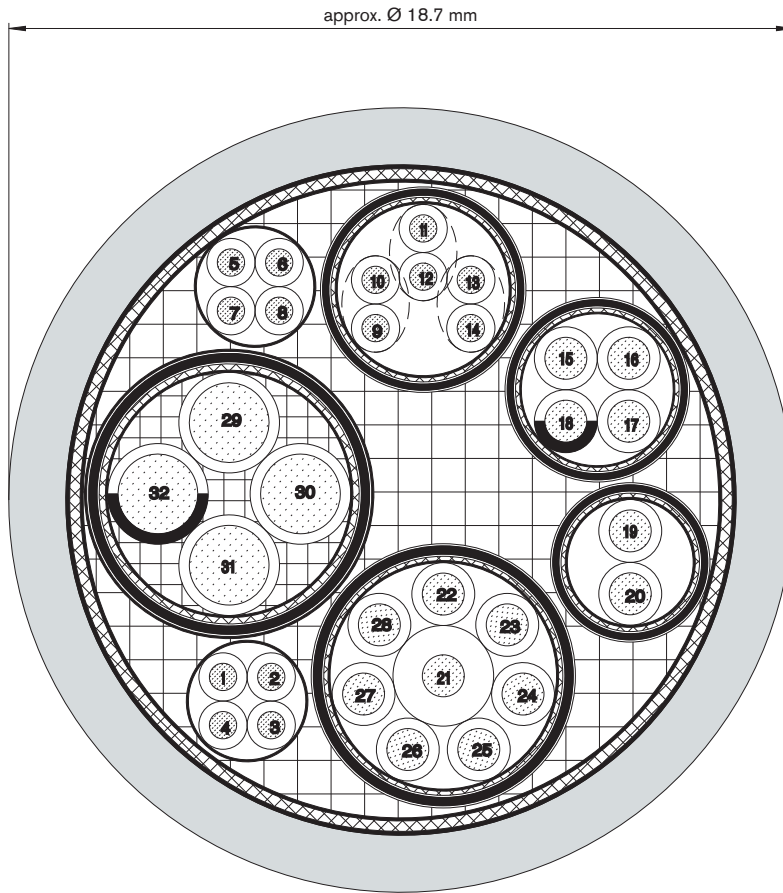
Peak operating voltage:	max. 500 V
Testing voltage:	cond./cond. 1500 V cond./screen 1000 V
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
Min. bending radius:	10 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request



32 conductors

Item no.: 0803-9081 (3 x 2 x 0,25 mm<sup>2</sup>) D + 2 x 4 x 0,25 mm<sup>2</sup> + (4 x 0,5 mm<sup>2</sup>) D + (2 x 0,5 mm<sup>2</sup>) D + (4 x 1,5 mm<sup>2</sup>) D + (8 x 0,5 mm<sup>2</sup>) D



Pos. 1 - 14 conductors 0,25 mm<sup>2</sup>; bare copper strands, DIN 47100 1-8, DIN 47100 1-6

Pos. 15 - 28 conductors 0,5 mm<sup>2</sup>; bare copper strands, in black conductors with numbers 1-3, 7-8, 10-16 and green/yellow

Pos. 29 - 32 conductors 1,5 mm<sup>2</sup>; bare copper strands, in black conductors with numbers 4-6 and green/yellow

## Technical Data

Nominal voltage U <sub>0</sub> /U:	300/500 V
Testing voltage:	cond./cond. 3000 V (DC) cond./screen 1500 V (DC) screen/screen 2000 V (DC)
Temperature range:	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
Min. bending radius for continuously flexible application:	10 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request



Also available as version  
with 31 conductors!

Item no. 0803-9123

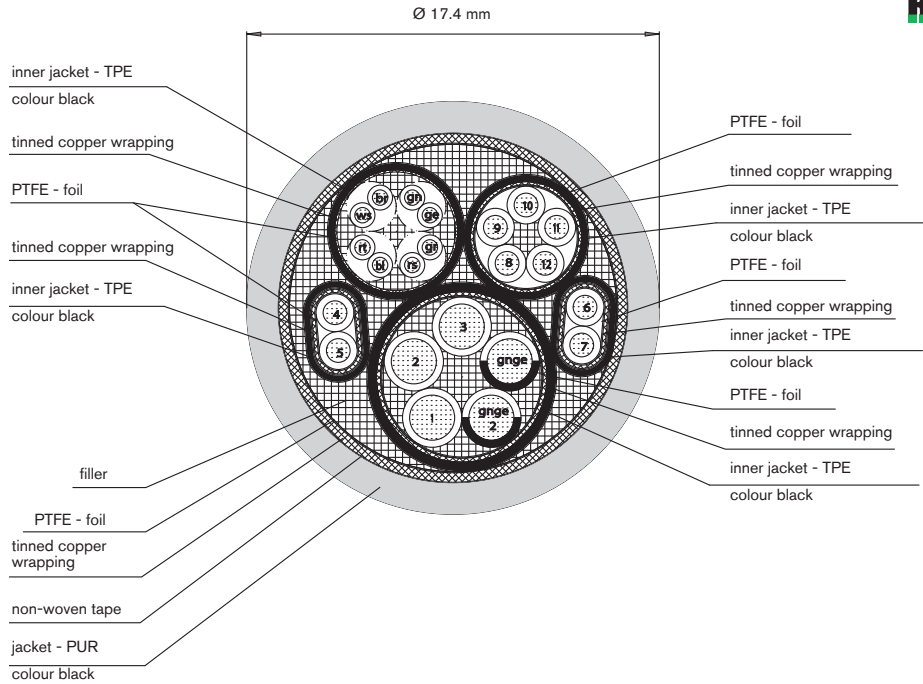
Dimension:

(3x2x0,25mm<sup>2</sup>)D + 2x4x0,25mm<sup>2</sup>  
+ (4x0,5mm<sup>2</sup>)D + 2x(2x0,5mm<sup>2</sup>)D  
+ (4x1,5mm<sup>2</sup>)D + (5x0,5mm<sup>2</sup>)D

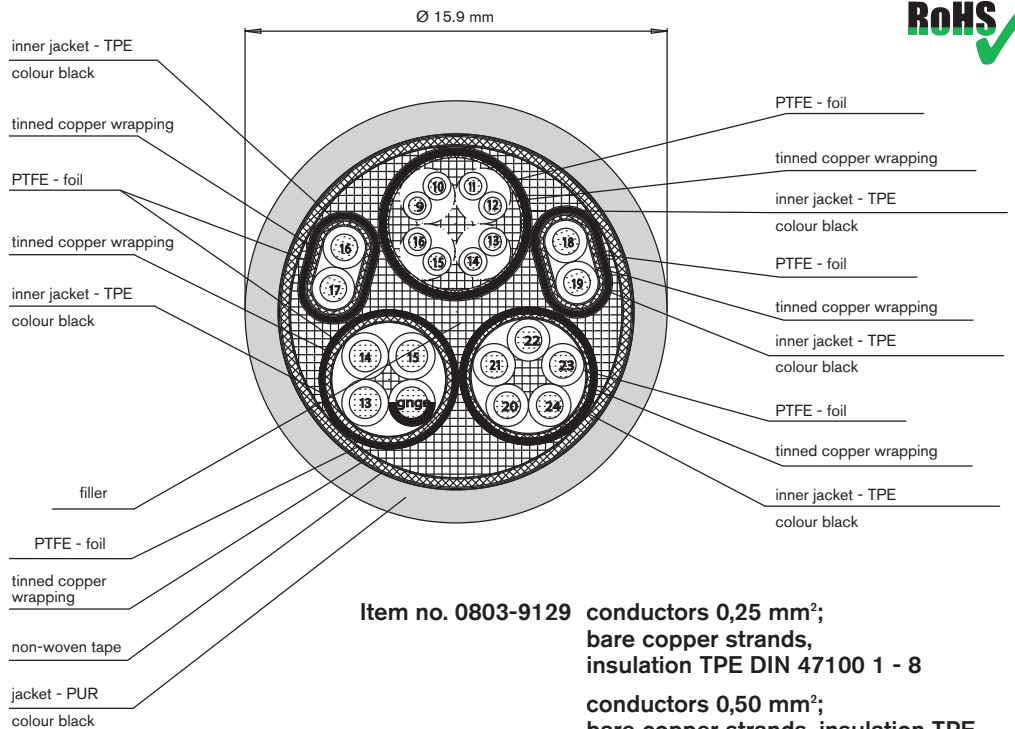
# PUR HYBRID CABLE (DIVIDED EMZ CABLE FOR WELDING CONTROL)



**Item no.: 0803-9129**  
**(4 x 2 x 0,25 mm<sup>2</sup>)D +**  
**2 x (2 x 0,50 mm<sup>2</sup>)D +**  
**(5 x 0,50 mm<sup>2</sup>)D +**  
**(5 x 1,50 mm<sup>2</sup>)D**



**Item no.: 0803-9130**  
**(4 x 2 x 0,25 mm<sup>2</sup>)D +**  
**2 x (2 x 0,50 mm<sup>2</sup>)D +**  
**(5 x 0,50 mm<sup>2</sup>)D +**  
**(5 x 0,75 mm<sup>2</sup>)D**



**Item no. 0803-9129** conductors 0,25 mm<sup>2</sup>;  
 bare copper strands,  
 insulation TPE DIN 47100 1 - 8

conductors 0,50 mm<sup>2</sup>;  
 bare copper strands, insulation TPE  
 in white with numbers 4 - 12

conductors 1,50 mm<sup>2</sup>;  
 bare copper strands, insulation TPE  
 in white with numbers 1 - 3  
 + green/yellow + green/yellow

**Item no. 0803-9130** conductors 0,25 mm<sup>2</sup>;  
 bare copper strands,  
 insulation TPE DIN 47100 9 - 16

conductors 0,50 mm<sup>2</sup>;  
 bare copper strands, insulation TPE  
 in white with numbers 16 - 24

conductors 1,50 mm<sup>2</sup>;  
 bare copper strands, insulation TPE  
 in white with numbers 13 - 35  
 + green/yellow

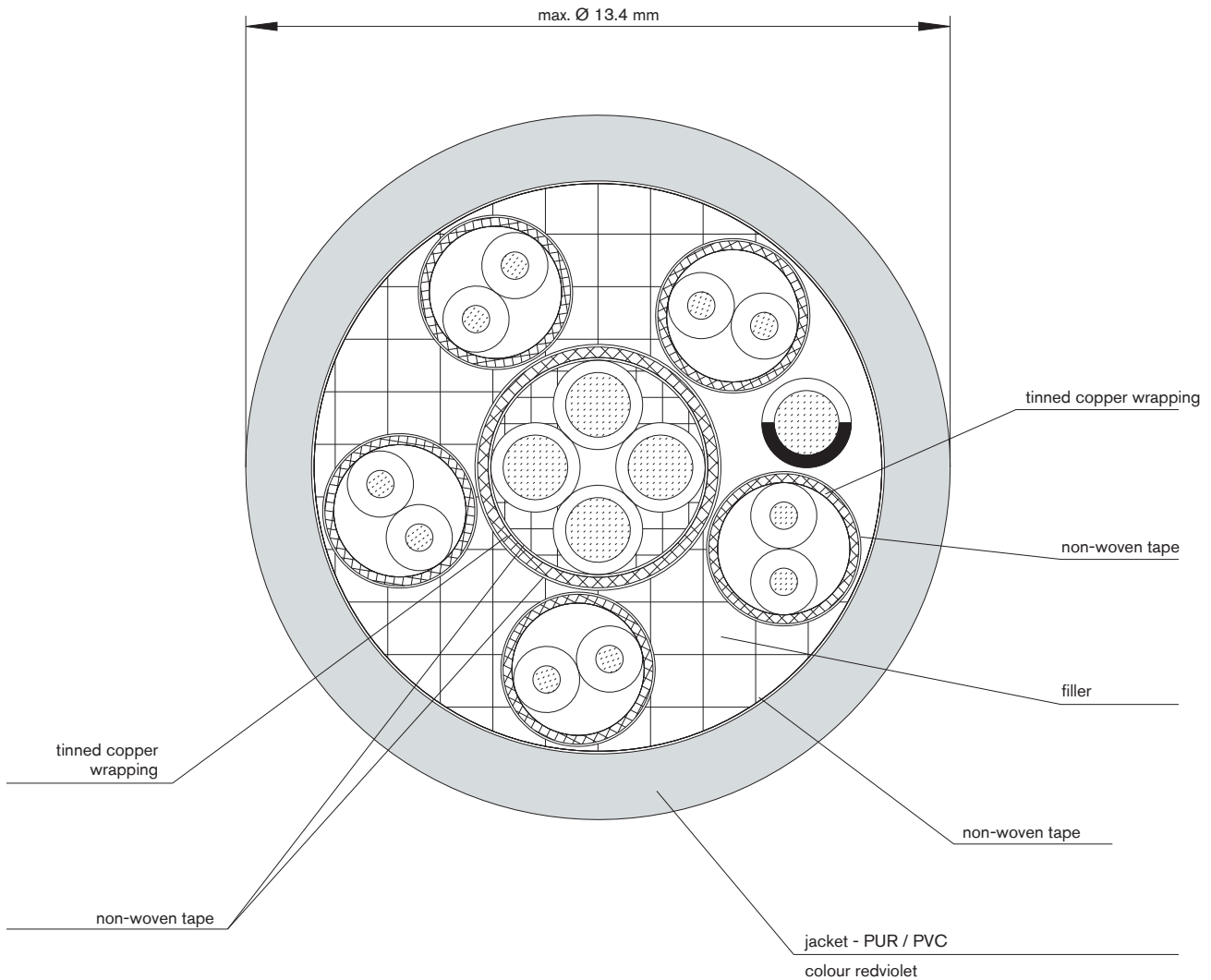
## Technical Data

<b>Peak operating voltage:</b>	max. 450 V (0,25 mm <sup>2</sup> ) max. 600 V (0,50 mm <sup>2</sup> + 1,50 mm <sup>2</sup> )
<b>AC testing voltage:</b>	cond./cond. 2500 V (0,25 mm <sup>2</sup> ) 3000 V (0,50 mm <sup>2</sup> + 1,50 mm <sup>2</sup> ) cond./screen 1500 V (0,25 mm <sup>2</sup> ) 2000 V (0,50 mm <sup>2</sup> + 1,50 mm <sup>2</sup> ) screen/screen 2000 V
<b>Temperature range:</b>	
flexible application:	-40°C up to +80°C
fixed laying:	-50°C up to +80°C
<b>Min. bending radius:</b>	
flexing:	10 x outer diameter
static:	5 x outer diameter
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0367-9048

4 x 1,0 mm<sup>2</sup> + 5 x 2 x 0,25 mm<sup>2</sup> + 1 x 1,0 mm<sup>2</sup>



conductors 0,25 mm<sup>2</sup>; bare copper strands,  
insulation special Polymer colour code DIN 47100 1 - 10

conductors 1,00 mm<sup>2</sup>; bare copper strands,  
insulation TPE in black, blue, red, brown, green/yellow

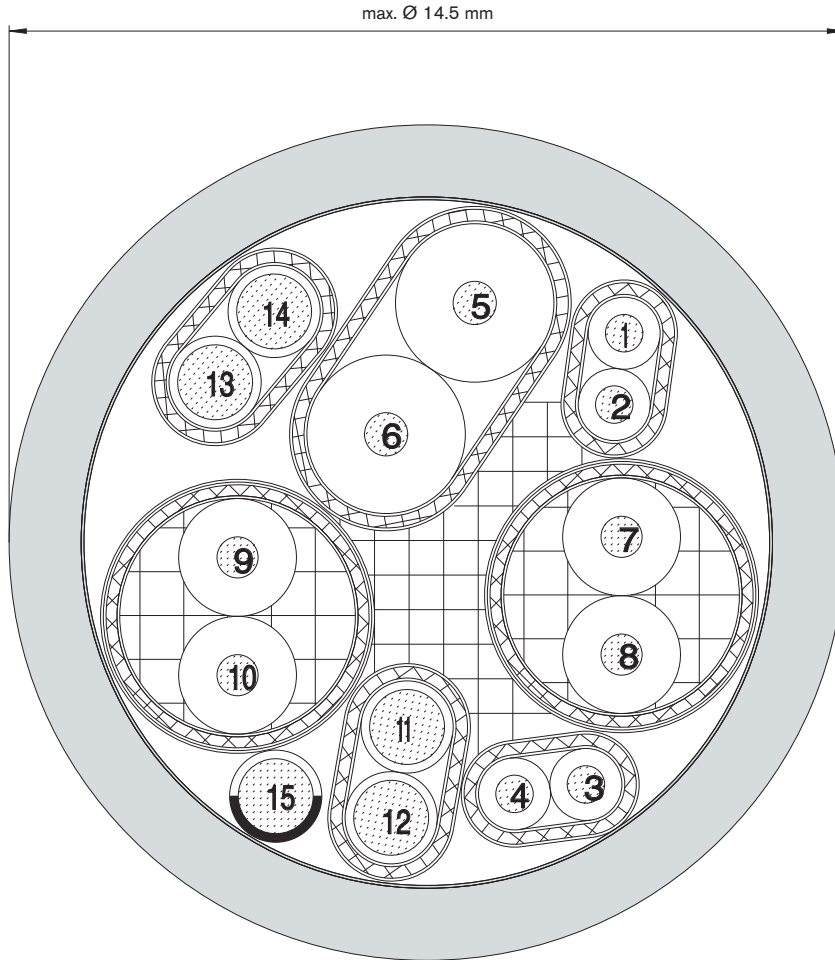
## Technical Data

Peak operating voltage:	max. 350 V
Testing voltage:	screen/screen 1700 V (AC) cond./screen 1000 V (AC) cond./cond. 2500 V (DC) cond./screen 1500 V (DC)
Temperature range: flexible application: fixed laying:	-40°C up to +70°C -40°C up to +70°C
Min. bending radius:	7,5 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request



Item no.: 0616-9028     $2 \times (2 \times 0,25 \text{ mm}^2) \text{ D} + 2 \times (2 \times 0,34 \text{ mm}^2) \text{ D} + 1,0 \text{ mm}^2 + (2 \times 0,34 \text{ mm}^2) \text{ D} + 2 \times (2 \times 1,0 \text{ mm}^2) \text{ D}$



Interbus-S	Pos. 1 - 4	conductors $0,25 \text{ mm}^2$ ; bare copper strands, in green, yellow, grey, pink
Profibus-DP	Pos. 5 - 6	conductors $0,34 \text{ mm}^2$ ; bare copper strands, in red, green
DeviceNet	Pos. 7 - 10	conductors $0,34 \text{ mm}^2$ ; bare copper strands, in blue + white, blue + red
	Pos. 11 - 15	conductors $1,0 \text{ mm}^2$ ; bar copper strands, in red + black, brown + blue, green/yellow

## Technical Data

Voltage:	UL 30 V
Temperature range:	
flexible application:	-40°C up to +80°C
fixed laying:	-40°C up to +80°C
Min. bending radius:	12 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union



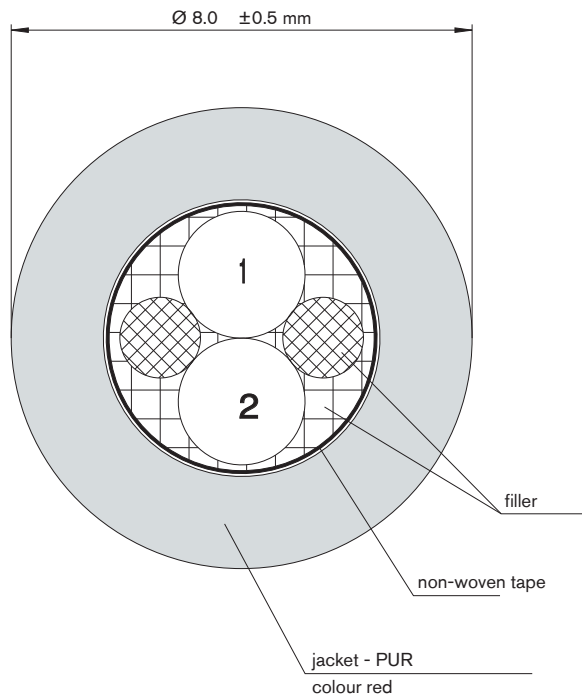
**Also available  
for fixed installation!**

Item no. 0616-9032

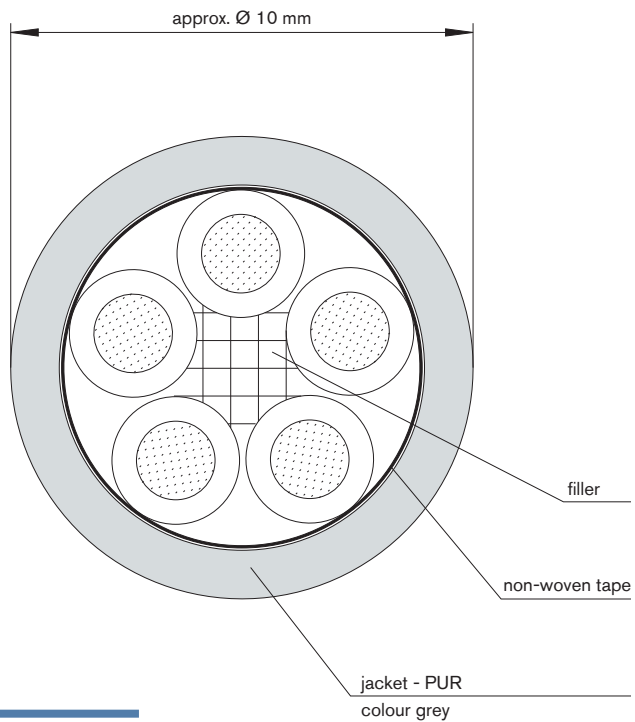
Further technical information on request

Item no.: 0664-9001 and 0737-9005  
 2 x POF and 5 x 1,5 mm<sup>2</sup>

Pos. 1 - 2 POF polymeric optical fibers in black and orange



conductors 1,5 mm<sup>2</sup>; bare copper strands, insulation special Polymer in black, with numbers 1 to 4 and one yellow with numbers 5 in black



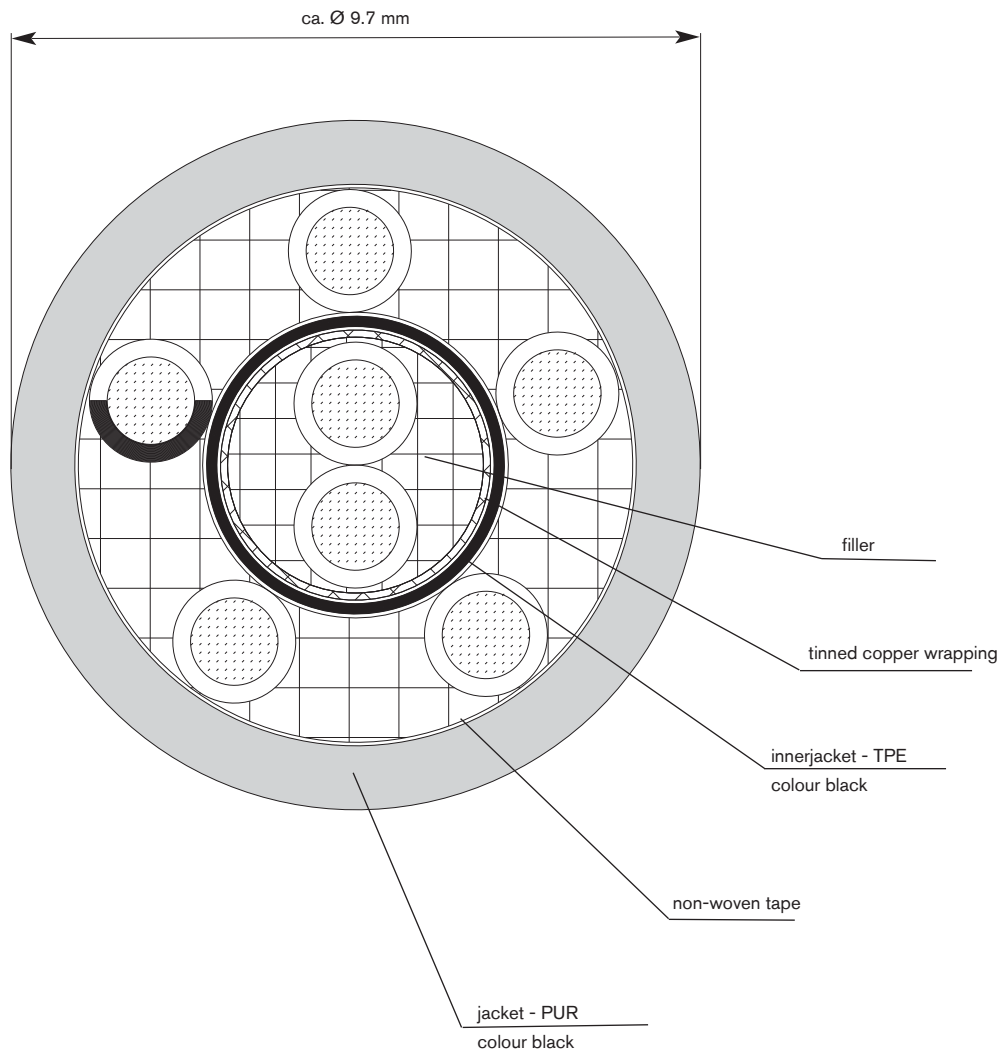
## Technical Data

	item no. 0664-9001	item no. 0737-9005
Nominal voltage:		DIN VDE Uo/U 300/500 V
Testing voltage:		2000 V
Temperature range:		
flexible application:	+ 5°C up to +50°C	-30°C up to +70°C
fixed laying:	-20°C up to +70°C	-30°C up to +70°C
Min. bending radius:	POF min. 30 mm	7,5 x outer diameter
Overall cable:	10 x outer diameter	
Absence of harmful substances:	acc. to RoHS directive of the European Union	

Further technical information on request

Item no.: 0760-9057

(2 x 1,0 mm<sup>2</sup>) D + 5 x 1,0 mm<sup>2</sup>



conductors 1.0 mm<sup>2</sup>; bare copper,  
insulation TPE in black with numbers 1 - 6 + green/yellow

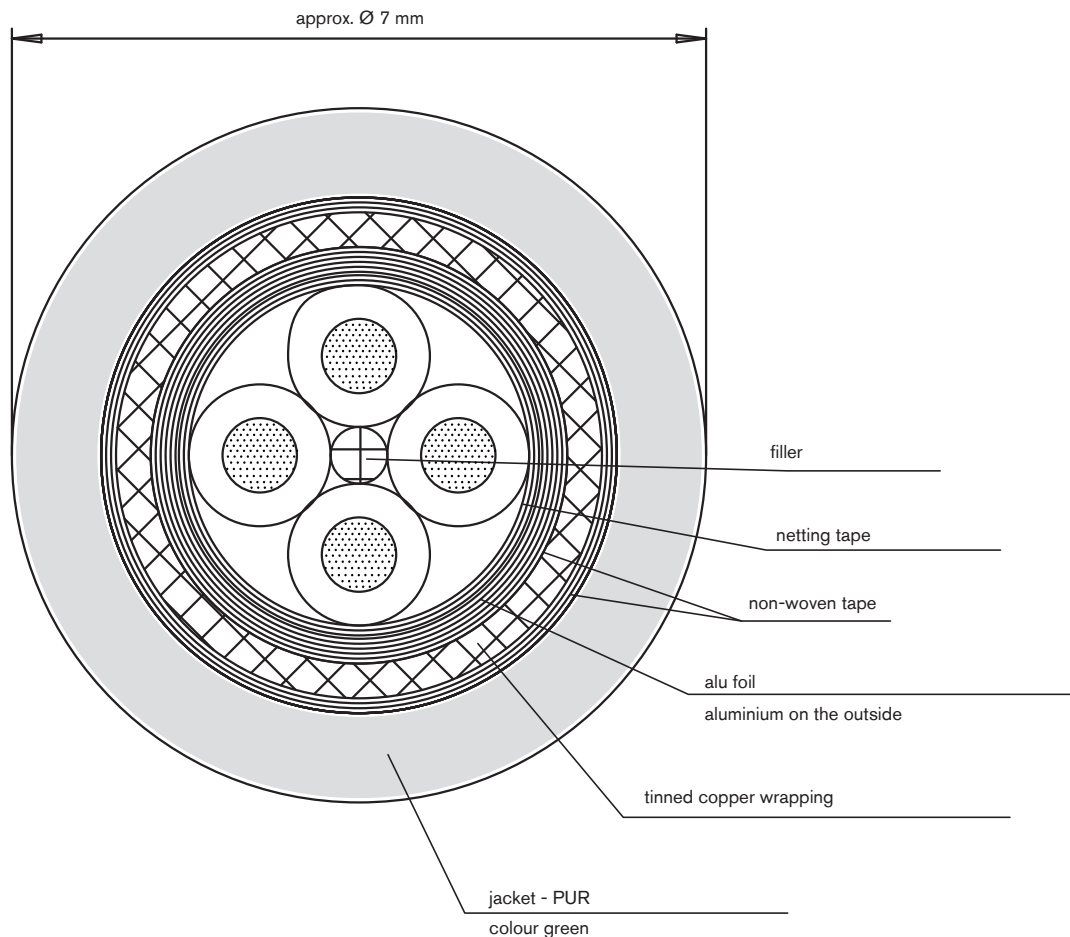
## Technical Data

Peak operating voltage:	max. 350 V
Testing voltage:	conductor/conductor 1500 V conductor/conductor 1200 V
Temperature range :	
flexing:	-40°C up to +90°C
static:	-50°C up to +90°C
Min. bending radius:	
flexing:	10 x outer diameter
static:	5 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0668-9001

2 x 2 x AWG 22



conductors AWG 22; tinned copper strands,  
insulation PE in white, blue, orange, yellow

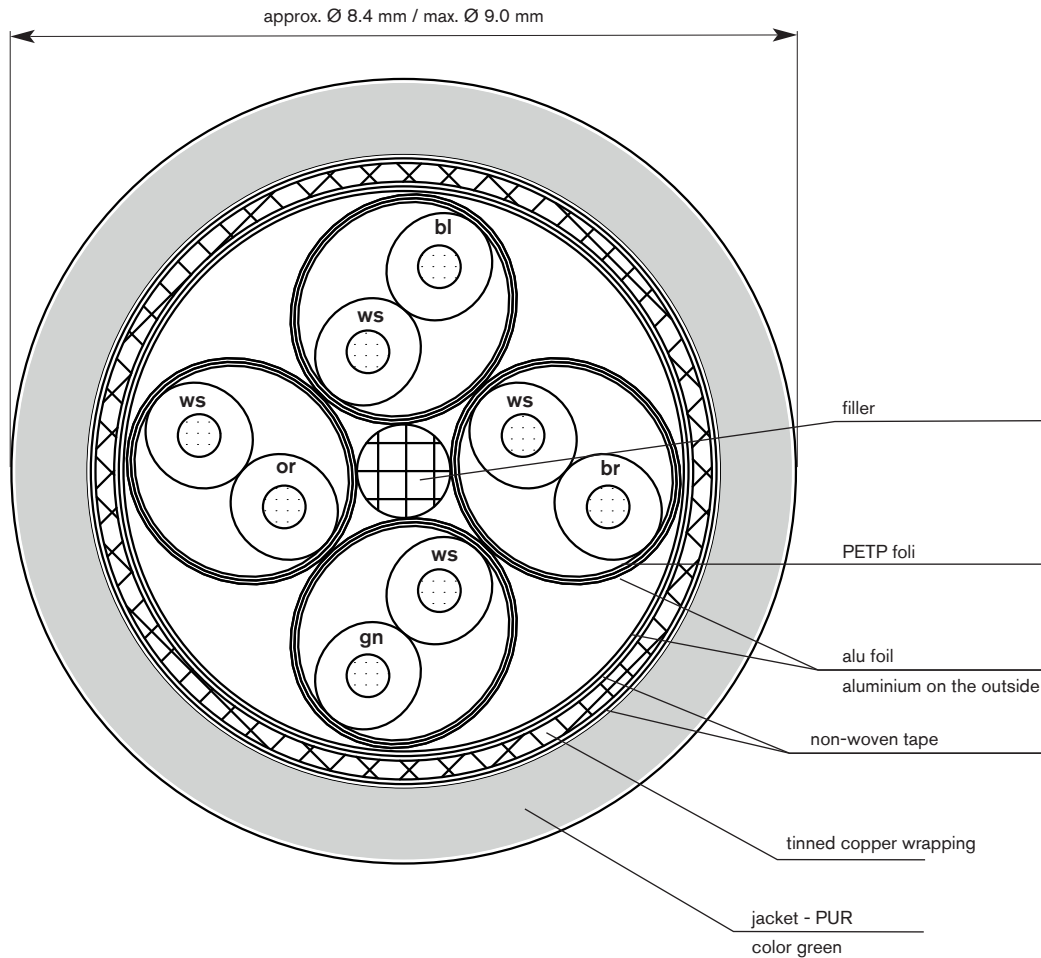
## Technical Data

Peak operating voltage:	max. 350 V
Testing voltage:	cond./cond. 1500 V cond./screen 1200 V
Temperature range:	
flexible application:	-30°C up to +90°C
fixed laying:	-40°C up to +90°C
Min. bending radius:	
flexing:	10 x outer diameter
static:	5 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0694-2604

4 x 2 x 26 AWG



conductors 4 x 2 x 26 AWG tinned copper strands  
insulation PEP in white with numbers 1 - 4, bl, or, gr, br

## Technical Data

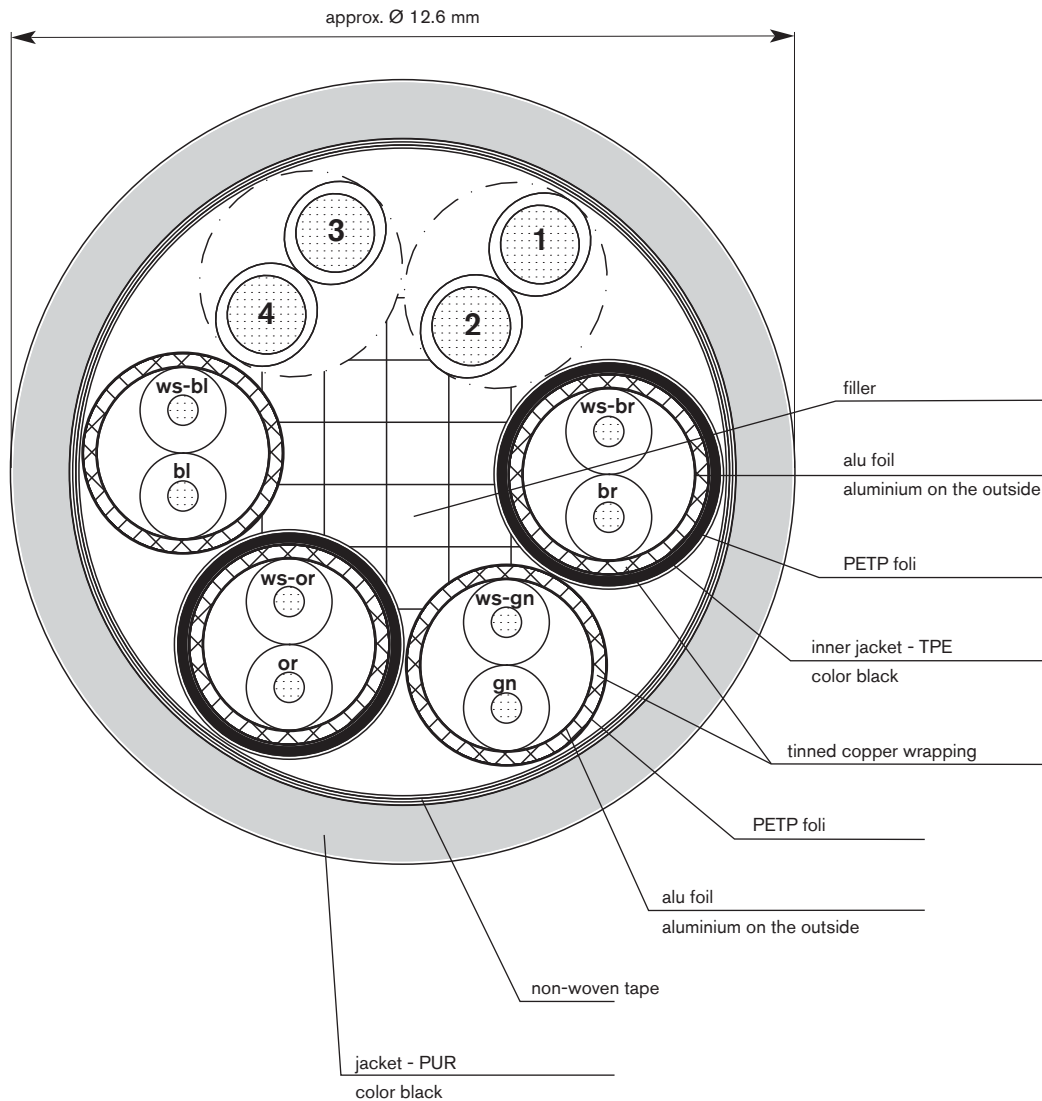
Peak operating voltage:	max. 350 V
Voltage UL/CSA:	300 V
Testing voltage:	cond./cond. 1500 V cond./screen 1200 V
Temperature range:	
flexible application:	-30°C up to +70°C
fixed laying:	-40°C up to +70°C
Min. bending radius:	
flexing:	10 x outer diameter
static:	5 x outer diameter
Absence of harmful substances:	acc. to RoHS directive of the European Union

Further technical information on request



Item no.: 0694-9001

4 x 2 x 26 AWG + 4 x 1,0 mm<sup>2</sup>



conductors 4 x 2 x 26 AWG + 4 x 1,0 mm<sup>2</sup>: tinned copper strands

insulation 4 x 1,0 mm<sup>2</sup>: TPE in black with numbers 1 - 4

insulation conductors 4 x 2 x 26 AWG: FEP, ws-bl/bl, ws-or/or, ws-gr/gr, ws-br/br

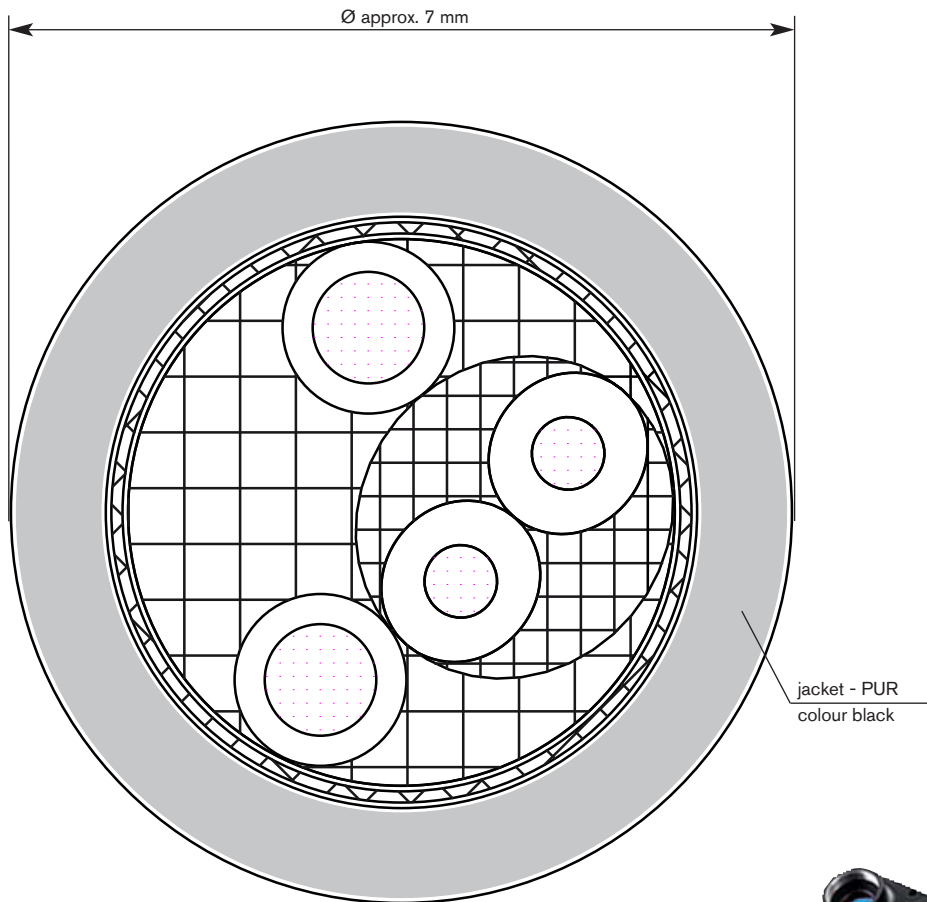
## Technical Data

<b>Peak operating voltage:</b>	AWG 26: max. 350 V
<b>Nominal voltage:</b>	1,0 mm <sup>2</sup> : 300/500 V
<b>Testing voltage:</b>	cond./cond. 1500 V (AWG 26) 2000 V (1,0 mm <sup>2</sup> ) cond./screen 1200 V (AWG 26)
<b>Temperature range:</b>	
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
<b>Min. bending radius:</b>	
flexing:	10 x outer diameter
static:	5 x outer diameter
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

Further technical information on request

Item no.: 0601-2022

(2 x 0,22 mm<sup>2</sup>) ST + 2 x 0,50 mm<sup>2</sup>



conductors (2 x 0,22 mm<sup>2</sup>) ST: silver-plated strands, insulation SABIX<sup>®</sup>, ws, gr  
conductors 2 x 0,50 mm<sup>2</sup>: bare copper strands, insulation SABIX<sup>®</sup>, sw, rt



Technical Data	
Peak operating voltage:	max. 350 V
Voltage UL:	300 V
Testing voltage:	cond./cond. 2000 V cond./screen 2000 V
Temperature range:	UL: up to +80°C
flexible application:	-40°C up to +90°C
fixed laying:	-50°C up to +90°C
Min. bending radius:	
flexing:	7,5 x outer diameter
static:	5 x outer diameter
continuously flexible:	10 x outer diameter
Torsion angle:	up to ± 180°/m
Absence of harmful substances:	acc. to RoHS directive of the European Union

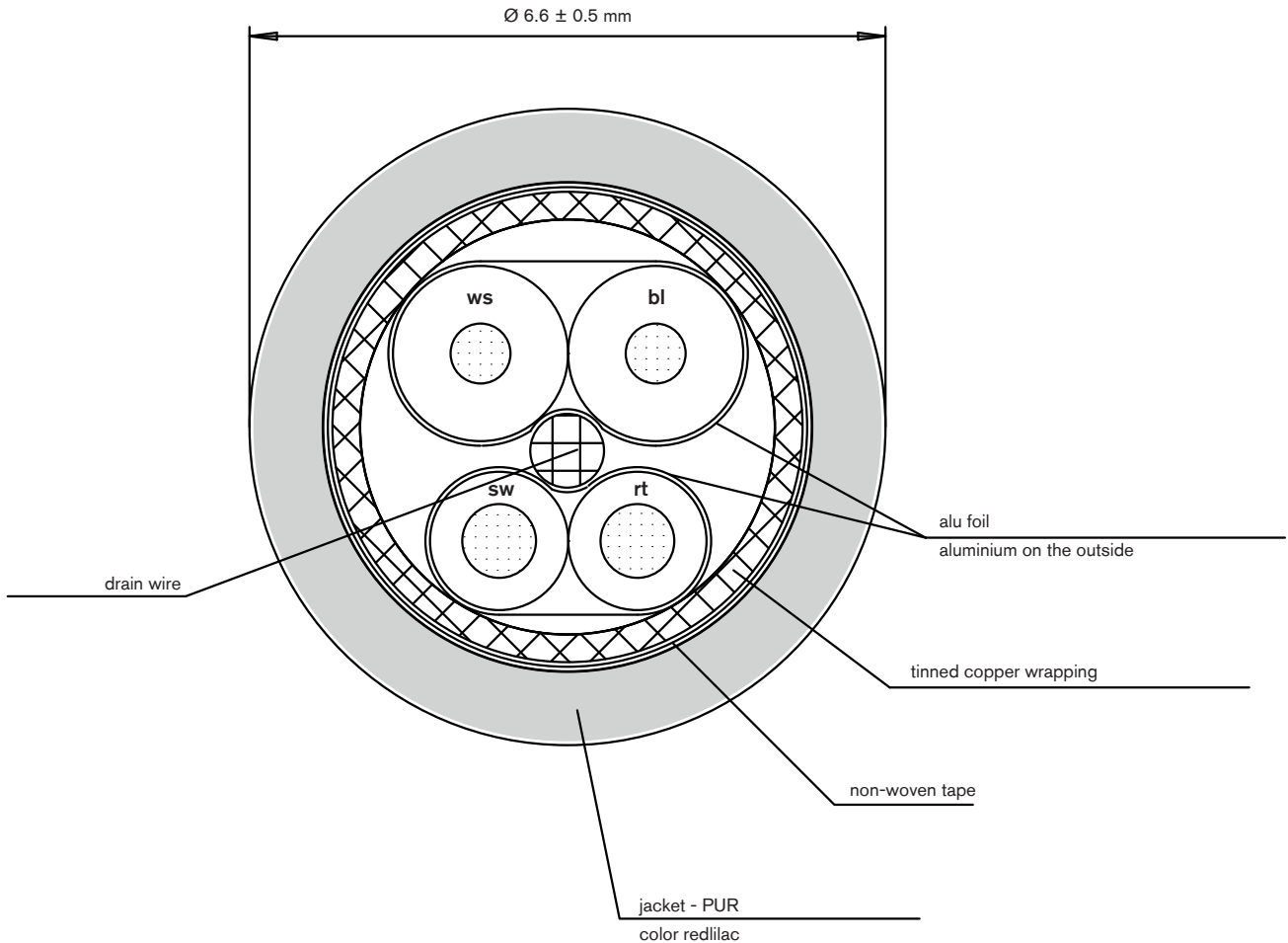


transmission length  
up to 10m!

Further technical information on request

Item no.: 0658-9007

2 x 0,24 mm<sup>2</sup> + 2 x 0,38 mm<sup>2</sup>



conductors 2 x 0,24 mm<sup>2</sup>: tinned copper strands, insulation Foam-Skin, ws, bl  
conductors 2 x 0,50 mm<sup>2</sup>: tinned copper strands, insulation SABIX®, sw, rt

## Technical Data

Peak operating voltage:	max. 350 V
Voltage UL:	300 V
Testing voltage:	cond./cond. 2000 V cond./screen 1200 V
Temperature range:	UL: up to +80°C
flexible application:	-30°C up to +80°C
fixed laying:	-40°C up to +80°C
Min. bending radius:	
flexing:	15 x outer diameter
static:	7,5 x outer diameter
Torsion angle:	up to ± 180°/m
Characteristic impedance at 1 MHz:	120 Ω ± 10%
Absence of harmful substances:	acc. to RoHS directive of the European Union



highly flexible  
DeviceNet™ cable,  
suitable for robots  
with overall copper screen  
and UL recognition

Further technical information on request



## FLEXIBLE CABLES

- Halogen-free cables ■ Cable track cables
- Servo motor cables ■ ETFE, FEP, PFA cables
  - Bus cables ■ Torsion cables
- Hybrid and special cables ■ Control and connection cables
  - Data cables ■ Besilen® (Silicone) cables
- Compensating and extension cables ■ Tray cables

## TEMPERATURE MEASUREMENT

- Protecting armatures and gauge slides
- Mineral insulated thermocouples and Mineral insulated resistance thermometers
- Temperature measurement in plastic processing industry/Hot runner technique
  - Diesel thermocouples ■ Probe with stainless steel sleeve
  - Temperature measurement in test vehicles
    - Measurement techniques

## CABLE HARNESSING

- Harnessed cables acc. to customer's specification
  - Harnessed cable track cables
  - Helix cables ■ Cable harnesses
- Harnessed motor and transmission cables for Siemens and Indramat drives