MURR ELEKTRONIK

stay connected

CABLE RANGE

by Murrelektronik

- Sensor/Actuator Cables
  - unshielded
  - shielded
- Fieldbus Cables
- Accessories

STANDARD CABLE TYPES IN 3 COLORS

Any combination is possible! Contact us today for your individual quote...

| MURRELEKTRONIK'S CABLE RANGE

Murrelektronik has a wide variety of sensor and actuator cables on drums in lengths from 100 m to 500 m which are all available immediately. Murrelektronik's permanent and close collaboration with premium cable manufacturers benefit our customers so you get cables that are optimized for the sensor/actuator level at a great price-performance ratio. You can choose from different jacket materials, colors, cross sections and you will always get the right cable for your application.

You need a cable with UL/CSA approval? No problem! You will find many UL approved cables in our range. What's more, you will find field-wireable connectors for these cables in our general catalog, chapter 3.

Ordering system

Define your article number according to your components.
It's just 3 easy steps – here's an example:

1 Type of drum

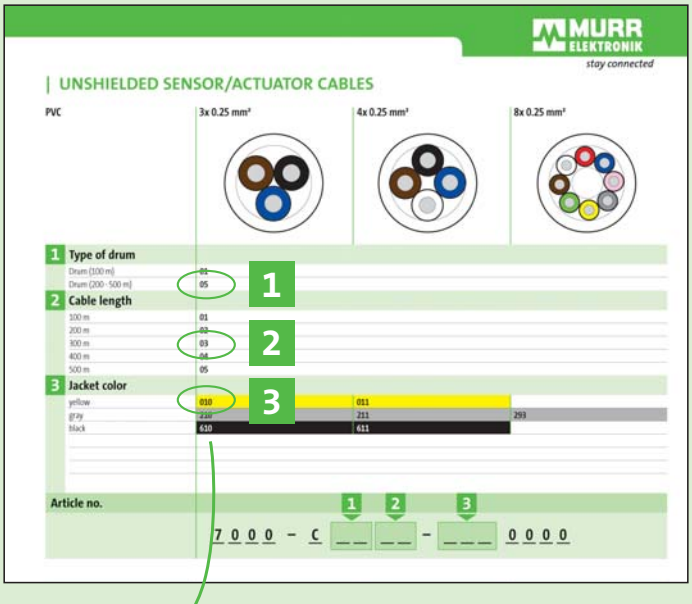
Choose a drum: **05**
- large drum (up to 500 m)

2 Cable length

Choose a cable length: **03**
- 300 m cable

3 Jacket color

Choose a jacket color: **010**
- yellow



Your article number

1	2		3		
7000	-	C	05	03	-	010	0000

| STANDARD CABLE TYPES

Murrelektronik has an extensive variety of cables for your application:

- **4 standardized cable types for your application solution** – you can definitely find the right cable!
- **3 cable colors (yellow, gray and black)** – individually designed to meet your requirements
- **Meets the highest quality requirements** – certified, application approved and successfully tested with many aggressive media (oil and lubricants)

FOR ORDINARY ENVIRONMENTS

Applications:
Suitable for medium mechanical demands like packaging machines, assembly and production lines.
Also ideal for limited-motion applications, which means they are suitable for open, non-recurring movements without tensile stress or mechanical feeds (not suitable for C-tracks).

Features:

- Outer jacket is easy to strip off
- High chemical resistance
- Limited resistance to oil and lubricants
- Limited resistance to abrasion

FOR RUGGED ENVIRONMENTS

Applications:
Flexible control line for higher mechanical demands inside or outside; used in handling and packaging machines, assembly lines as well as production lines.

Features:

- Outer jacket is easy to strip off
- High chemical resistance
- High resistance to temporary contact with oil and lubricants
- High resistance to abrasion
- UV resistant

C-track data:

Bending radius for flexible applications:	min. 10 x cable Ø
Movement speed:	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s^2)
Number of bending cycles:	> 2M

FOR DEMANDING AREAS

Applications:
Continually flexible control line for use in extremely demanding areas like machine tools, swivel tables and metal cutting. If the cable is installed properly, it is ideal for C-tracks.

Features:
- Suitable for C-tracks, halogen-, silicone- and PVC-free
- Highly resistant to oil, lubricants, coolants, many chemicals as well as other aggressive media
- Flame retardant acc. to VDE 0472
- Withstands high mechanical demands
- High resistance to abrasion
- Hydrolysis and UV-resistant
- Cable with UL and CSA approvals

C-track data:

Bending radius for flexible applications:	min. 10 x cable Ø
Movement speed:	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles:	> 5M
Torsion:	± 180 °/m

FOR EXTREME APPLICATIONS

Applications:
Continually flexible control line for extremely demanding areas like robotics, special welding robots, high-speed C-tracks, machine tools, assembly lines and metal cutting.

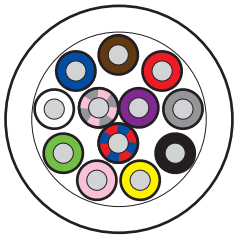
Features:
All the PUR qualities listed above, including:
- High temperature resistance
- Welding spark resistant
- Suitable for robots
- Cable with UL and CSA approvals

C-track and robot data:

Bending radius for flexible applications:	min. 10 x cable Ø
Movement speed:	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles:	> 10M
Torsion:	± 360 °/m

| UNSHIELDED SENSOR/ACTUATOR CABLES

PVC	12x 0.14 mm²



1	Type of drum	
	Drum (100 m)	**01**
	Drum (200 - 500 m)	**05**
2	**Cable length**	
	100 m	**01**
	200 m	**02**
	300 m	**03**
	400 m	**04**
	500 m	**05**
3	**Jacket color**	
	black	**702**

Article no.

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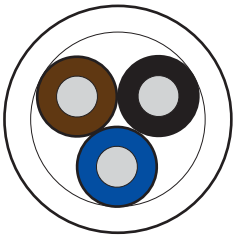
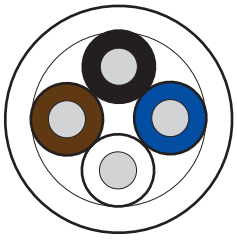
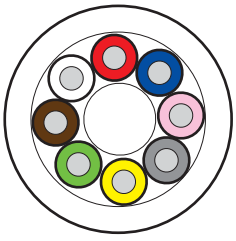
Technical Data	
Copper index	18.5 kg/km
Outer diameter	approx. 6.0 mm
Wire structure	0.14 mm² (Class 6)
Wire insulation	PVC
Outer jacket	PVC
Resistance	limited resistance to oil and high resistance to chemicals
Electrical data	
Nominal voltage	300 V
Test voltage	1500 V
Temperature range	
Fixed installation	-30...+70°C
Flexible installation	-5...+70°C
Bend radius	
Fixed installation	7.5x outer Ø
Flexible installation	10x outer Ø
C-track data	
Movement speed:	–
Number of bending cycles	–
Robot data	
Torsion	–
Approvals	
	CE compliant

| UNSHIELDED SENSOR/ACTUATOR CABLES

PVC	3x 0.25 mm²	4x 0.25 mm²	8x 0.25 mm²
			

1 Type of drum

Drum (100 m)	**01**
Drum (200 - 500 m)	**05**

2 Cable length

100 m	**01**
200 m	**02**
300 m	**03**
400 m	**04**
500 m	**05**

3 Jacket color

yellow	**010**	**011**	
gray	**210**	**211**	**293**
black	**610**	**611**	

Article no.

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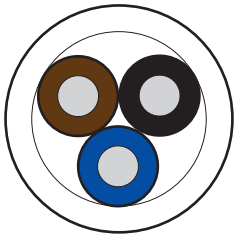
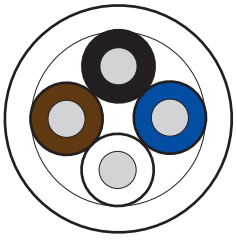
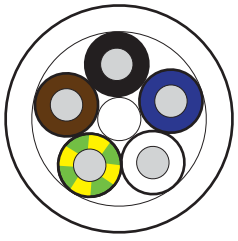
Technical Data			
Copper index	7.9 kg/km	10.6 kg/km	21.1 kg/km
Outer diameter	approx. 4.4 mm	approx. 4.7 mm	approx. 6.0 mm
Wire structure	0.25 mm² (Class 6)		
Wire insulation	PVC		
Outer jacket	PVC		
Resistance	limited resistance to oil and high resistance to chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2000 V		
Temperature range			
Fixed installation	-30...+70°C		
Flexible installation	-5...+70°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed:	–		
Number of bending cycles	–		
Robot data			
Torsion	–		
Approvals			
	CE compliant UL (AWM Style 2464), CSA		CE compliant

| UNSHIELDED SENSOR/ACTUATOR CABLES

PVC	3x 0.34 mm²	4x 0.34 mm²	5x 0.34 mm²
			

1	**Type of drum**			
	Drum (100 m)	**01**		
	Drum (200 - 500 m)	**05**		
2	**Cable length**			
	100 m	**01**		
	200 m	**02**		
	300 m	**03**		
	400 m	**04**		
	500 m	**05**		
3	**Jacket color**			
	yellow	**013**	**014**	**015**
	gray	**213**	**214**	**215**
	black	**613**	**614**	**615**

Article no.

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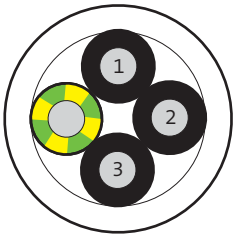
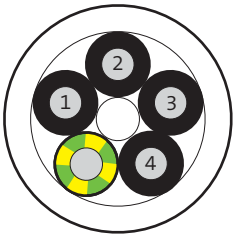
Technical Data			
Copper index	10.8 kg/km	14.4 kg/km	17.9 kg/km
Outer diameter	approx. 4.6 mm	approx. 5.0 mm	approx. 5.2 mm
Wire structure	0.34 mm² (Class 5)		
Wire insulation	PVC		
Outer jacket	PVC		
Resistance	limited resistance to oil and high resistance to chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2000 V		
Temperature range			
Fixed installation	-30...+70°C		
Flexible installation	-5...+70°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed:	–		
Number of bending cycles	–		
Robot data			
Torsion	–		
Approvals			
	CE compliant UL (AWM Style 2464), CSA		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PVC	3x 0.75 mm²	4x 0.75 mm²	5x 0.75 mm²
			
1 Type of drum			
Drum (100 m)	**01**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
yellow	**016**	**017**	**018**
gray	**216**	**217**	**218**
black	**616**	**617**	**618**

Article no.

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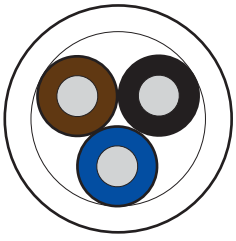
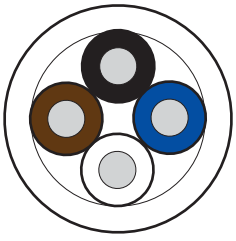
Technical Data			
Copper index	23.8 kg/km	31.9 kg/km	39.6 kg/km
Outer diameter	approx. 5.9 mm	approx. 6.5mm	approx. 7.0 mm
Wire structure	0.75 mm² (Class 5)		
Wire insulation	PVC		
Outer jacket	PVC		
Resistance	limited resistance to oil and high resistance to chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	3000 V		
Temperature range			
Fixed installation	-30...+70°C		
Flexible installation	-5...+70°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed:	–		
Number of bending cycles	–		
Robot data			
Torsion	–		
Approvals			
	CE compliant		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR/PVC	3x 0.25 mm²	4x 0.25 mm²
		
1 Type of drum		
Drum (100 m)	**01**	
Drum (200 - 500 m)	**05**	
2 Cable length		
100 m	**01**	
200 m	**02**	
300 m	**03**	
400 m	**04**	
500 m	**05**	
3 Jacket color		
yellow	**020**	**021**
gray	**220**	**221**
black	**620**	**621**

Article no.

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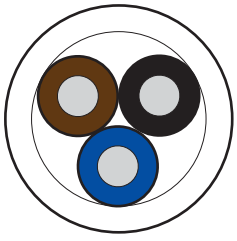
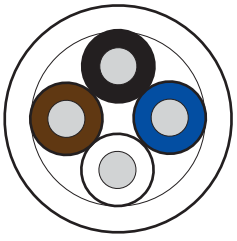
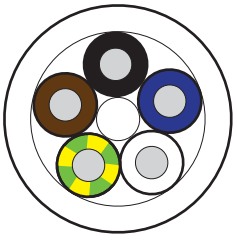
Technical Data		
Copper index	7.9 kg/km	10.6 kg/km
Outer diameter	approx. 4.4 mm	approx. 4.7 mm
Wire structure	0.25 mm² (Class 6)	
Wire insulation	PVC	
Outer jacket	PUR/PVC	
Resistance	high resistance to oil, fuel and chemicals	
Electrical data		
Nominal voltage	300 V	
Test voltage	2000 V	
Temperature range		
Fixed installation	-30...+70°C	
Flexible installation	-5...+70°C	
Bend radius		
Fixed installation	10x outer Ø	
Flexible installation	15x outer Ø	
C-track data		
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)	
Number of bending cycles	> 2M	
Robot data		
Torsion	–	
Approvals		
	CE compliant	

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR/PVC	3x 0.34 mm²	4x 0.34 mm²	5x 0.34 mm²
			

1 Type of drum

Drum (100 m)	**01**
Drum (200 - 500 m)	**05**

2 Cable length

100 m	**01**
200 m	**02**
300 m	**03**
400 m	**04**
500 m	**05**

3 Jacket color

yellow	**023**	**024**	**025**
gray	**223**	**224**	**225**
black	**623**	**624**	**625**

Article no.

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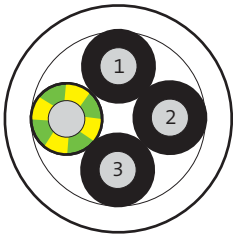
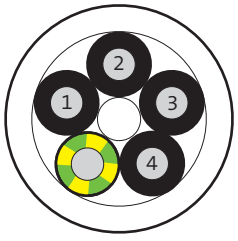
Technical Data			
Copper index	10.8 kg/km	14.4 kg/km	17.9 kg/km
Outer diameter	approx. 4.9 mm	approx. 5.2 mm	approx. 5.9 mm
Wire structure	0.25 mm² (Class 6)		
Wire insulation	PVC		
Outer jacket	PUR/PVC		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2000 V		
Temperature range			
Fixed installation	-30...+70°C		
Flexible installation	-5...+70°C		
Bend radius			
Fixed installation	10x outer Ø		
Flexible installation	15x outer Ø		
C-track data			
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)		
Number of bending cycles	> 2M		
Robot data			
Torsion	–		
Approvals			
	CE compliant		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PVC	3x 0.75 mm²	4x 0.75 mm²	5x 0.75 mm²
			
1 Type of drum			
Drum (100 m)	**01**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
yellow	**026**	**027**	**028**
gray	**226**	**227**	**228**
black	**626**	**627**	**628**

Article no.

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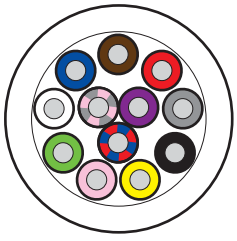
Technical Data			
Copper index	23.8 kg/km	31.9 kg/km	39.6 kg/km
Outer diameter	approx. 5.9 mm	approx. 6.5 mm	approx. 7.0 mm
Wire structure	0.75 mm² (Class 5)		
Wire insulation	PVC		
Outer jacket	PUR/PVC		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2000 V		
Temperature range			
Fixed installation	-30...+70°C		
Flexible installation	-5...+70°C		
Bend radius			
Fixed installation	10x outer Ø		
Flexible installation	15x outer Ø		
C-track data			
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)		
Number of bending cycles	> 2M		
Robot data			
Torsion	–		
Approvals			
	CE compliant		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR (UL/CSA)	12x 0.14 mm²



1	**Type of drum**	
	Drum (100 m)	**01**
	Drum (200 - 500 m)	**05**
2	**Cable length**	
	100 m	**01**
	200 m	**02**
	300 m	**03**
	400 m	**04**
	500 m	**05**
3	**Jacket color**	
	black	**705**

Article no.

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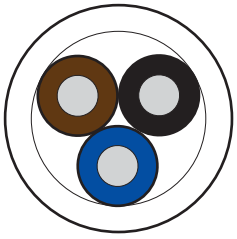
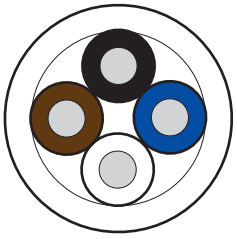
Technical Data	
Copper index	18.5 kg/km
Outer diameter	approx. 6.0 mm
Wire structure	0.14 mm² (Class 6)
Wire insulation	PP
Outer jacket	PUR
Resistance	high resistance to oil, fuel and chemicals
Electrical data	
Nominal voltage	300 V
Test voltage	1500 V
Temperature range	
Fixed installation	-40...+80°C
Flexible installation	-25...+80°C
Bend radius	
Fixed installation	5x outer Ø
Flexible installation	10x outer Ø
C-track data	
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles	> 2M
Robot data	
Torsion	± 180°/m
Approvals	
	UL (AWM Style 20233), CSA, CE compliant

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR (UL/CSA)	3x 0.25 mm²	4x 0.25 mm²
		
1 Type of drum		
Drum (100 m)	**01**	
Drum (200 - 500 m)	**05**	
2 Cable length		
100 m	**01**	
200 m	**02**	
300 m	**03**	
400 m	**04**	
500 m	**05**	
3 Jacket color		
yellow	**030**	**031**
gray	**230**	**231**
black	**630**	**631**

Article no.

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Technical Data		
Copper index	7.9 kg/km	10.6 kg/km
Outer diameter	approx. 4.1 mm	approx. 4.4 mm
Wire structure	0.25 mm² (Class 6)	
Wire insulation	PP	
Outer jacket	PUR	
Resistance	high resistance to oil, fuel and chemicals	
Electrical data		
Nominal voltage	300 V	
Test voltage	2500 V	
Temperature range		
Fixed installation	-40...+80°C	
Flexible installation	-25...+80°C	
Bend radius		
Fixed installation	5x outer Ø	
Flexible installation	10x outer Ø	
C-track data		
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)	
Number of bending cycles	> 5M	
Robot data		
Torsion	± 180°/m (2M cycles)	
Approvals		
	UL (AWM Style 20233), CSA, CE compliant	

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR (UL/CSA)	8x 0.25 mm²	12x 0.25 mm²
		

1	**Type of drum**		
	Drum (100 m)	**01**	
	Drum (200 - 500 m)	**05**	
2	**Cable length**		
	100 m	**01**	
	200 m	**02**	
	300 m	**03**	
	400 m	**04**	
	500 m	**05**	
3	**Jacket color**		
	gray	**295**	**301**

Article no.

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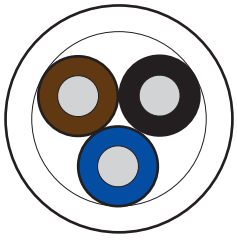
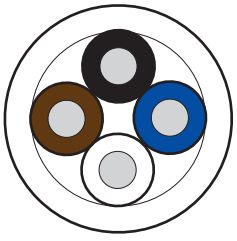
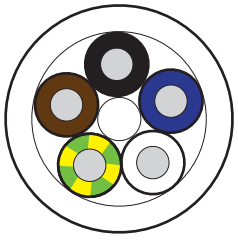
Technical Data		
Copper index	21.1 kg/km	31.7 kg/km
Outer diameter	approx. 6.0 mm	approx. 6.9 mm
Wire structure	0.25 mm² (Class 6)	
Wire insulation	PP	
Outer jacket	PUR	
Resistance	high resistance to oil, fuel and chemicals	
Electrical data		
Nominal voltage	300 V	
Test voltage	1500 V	
Temperature range		
Fixed installation	-40...+80°C	
Flexible installation	-20...+80°C	
Bend radius		
Fixed installation	5x outer Ø	
Flexible installation	10x outer Ø	
C-track data		
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)	
Number of bending cycles	> 2M	
Robot data		
Torsion	–	
Approvals		
	UL, CSA, CE compliant	

| UNSHIELDED SENSOR/ACTUATOR CABLES

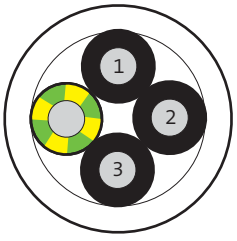
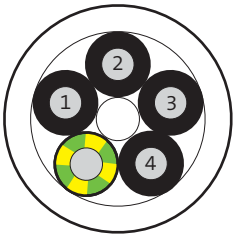
PUR (UL/CSA)	3x 0.34 mm²	4x 0.34 mm²	5x 0.34 mm²
			
1 Type of drum			
Drum (100 m)	**01**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
yellow	**033**	**034**	**035**
gray	**233**	**234**	**235**
black	**633**	**634**	**635**

Article no.

7	0	0	0	–	C	1 __	2 __	–	3 ___	0	0	0	0

Technical Data			
Copper index	10.8 kg/km	14.4 kg/km	17.9 kg/km
Outer diameter	approx. 4.3 mm	approx. 4.7 mm	approx. 5.0 mm
Wire structure	0.34 mm² (Class 6)		
Wire insulation	PP		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2500 V		
Temperature range			
Fixed installation	-40...+80°C		
Flexible installation	-25...+80°C		
Bend radius			
Fixed installation	5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)		
Number of bending cycles	> 5M		
Robot data			
Torsion	± 180°/m (2M cycles)		
Approvals			
	UL (AWM Style 20233), CSA, CE compliant		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR (UL/CSA)	3x 0.75 mm²	4x 0.75 mm²	5x 0.75 mm²
			

1 Type of drum

Drum (100 m)	**01**		
Drum (200 - 500 m)	**05**		

2 Cable length

100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		

3 Jacket color

yellow	**036**	**037**	**038**
gray	**236**	**237**	**238**
black	**636**	**637**	**638**

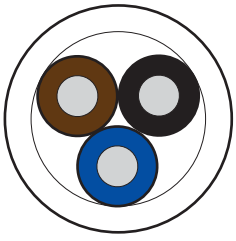
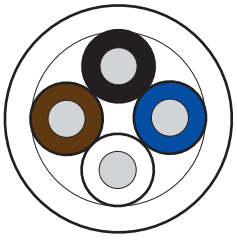
Article no.

7	0	0	0	–	C	1 __	2 __	–	3 ___	0	0	0	0

Technical Data			
Copper index	23.8 kg/km	31.7 kg/km	39.6 kg/km
Outer diameter	approx. 5.9 mm	approx. 6.5 mm	approx. 7.0 mm
Wire structure	0.75 mm² (Class 6)		
Wire insulation	PP		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2500 V		
Temperature range			
Fixed installation	-40...+80°C		
Flexible installation	-25...+80°C		
Bend radius			
Fixed installation	5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)		
Number of bending cycles	> 5M		
Robot data			
Torsion	± 180°/m (2M cycles)		
Approvals			
	UL (AWM Style 20233), CSA, CE compliant		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR
Welding spark resistant

	3x 0.25 mm²	4x 0.25 mm²
		
1 Type of drum		
Drum (100 m)	**01**	
Drum (200 - 500 m)	**05**	
2 Cable length		
100 m	**01**	
200 m	**02**	
300 m	**03**	
400 m	**04**	
500 m	**05**	
3 Jacket color		
yellow	**050**	**051**
gray	**250**	**251**
black	**650**	**651**

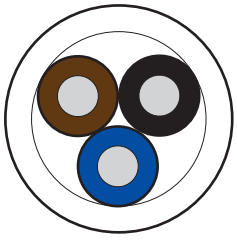
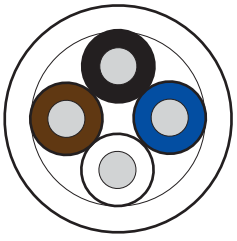
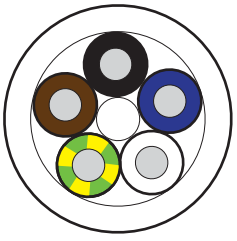
Article no.

1	2	3										
7	0	0	0	–	C	__	__	–	__	__	__	0	0	0	0

Technical Data		
Copper index	7.9 kg/km	10.6 kg/km
Outer diameter	approx. 4.1 mm	approx. 4.4 mm
Wire structure	0.25 mm² (Class 6)	
Wire insulation	PP	
Outer jacket	PUR welding spark resistant	
Resistance	high resistance to oil, fuel and chemicals	
Electrical data		
Nominal voltage	300 V	
Test voltage	2500 V	
Temperature range		
Fixed installation	-40...+90°C	
Flexible installation	-25...+90°C	
Bend radius		
Fixed installation	5x outer Ø	
Flexible installation	10x outer Ø	
C-track data		
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)	
Number of bending cycles	> 10M	
Robot data		
Torsion	± 360°/m (1M cycles)	
Approvals		
	UL (AWM Style 21198), CSA, CE compliant	

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR
Welding spark resistant

	3x 0.34 mm²	4x 0.34 mm²	5x 0.34 mm²
			

1 Type of drum

Drum (100 m)	**01**		
Drum (200 - 500 m)	**05**		

2 Cable length

100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		

3 Jacket color

yellow	**053**	**054**	**055**
gray	**253**	**254**	**255**
black	**653**	**654**	**655**

Article no.

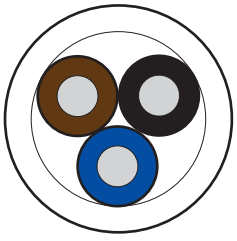
1	2	3	
7000 - C	__	__ -	___ 0000

Technical Data			
Copper index	10.8 kg/km	14.4 kg/km	17.9 kg/km
Outer diameter	approx. 4.3 mm	approx. 4.7 mm	approx. 5.0 mm
Wire structure	0.34 mm² (Class 6)		
Wire insulation	PP		
Outer jacket	PUR welding spark resistant		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2500 V		
Temperature range			
Fixed installation	-40...+90°C		
Flexible installation	-25...+90°C		
Bend radius			
Fixed installation	5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)		
Number of bending cycles	> 10M		
Robot data			
Torsion	± 360°/m (1M cycles)		
Approvals			
	UL (AWM Style 21198), CSA, CE compliant		

| UNSHIELDED SENSOR/ACTUATOR CABLES

PUR
Welding spark resistant

3x 0.75 mm²



1 Type of drum

Drum (100 m)	**01**
Drum (200 - 500 m)	**05**

2 Cable length

100 m	**01**
200 m	**02**
300 m	**03**
400 m	**04**
500 m	**05**

3 Jacket color

yellow	**056**
gray	**256**
black	**656**

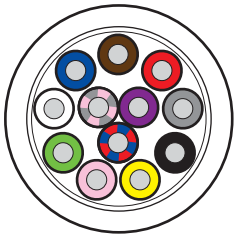
Article no.

1	2	3	
7000 – C	__	__ –	___ 0000

Technical Data	
Copper index	23.8 kg/km
Outer diameter	approx. 5.2 mm
Wire structure	0.75 mm² (Class 6)
Wire insulation	PP
Outer jacket	PUR welding spark resistant
Resistance	high resistance to oil, fuel and chemicals
Electrical data	
Nominal voltage	300 V
Test voltage	2500 V
Temperature range	
Fixed installation	-40...+90°C
Flexible installation	-25...+90°C
Bend radius	
Fixed installation	5x outer Ø
Flexible installation	10x outer Ø
C-track data	
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles	> 10M
Robot data	
Torsion	± 360°/m (1M cycles)
Approvals	
	UL (AWM Style 21198), CSA, CE compliant

| SHIELDED SENSOR/ACTUATOR CABLES

PVC	12x 0.14 mm²



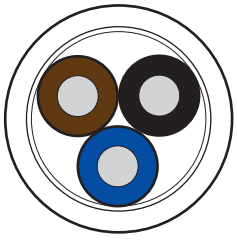
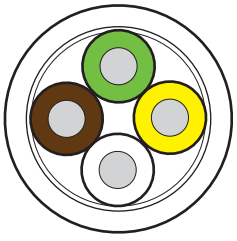
1	**Type of drum**	
	Drum (100 m)	**02**
	Drum (200 - 500 m)	**05**
2	**Cable length**	
	100 m	**01**
	200 m	**02**
	300 m	**03**
	400 m	**04**
	500 m	**05**
3	**Jacket color**	
	black	**703**

Article no.

1	2	3	
7000 - C	__	__ -	___ 0000

Technical Data	
Copper index	33.6 kg/km
Outer diameter	approx. 6.5 mm
Wire structure	0.14 mm² (Class 6)
Wire insulation	PVC
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece
Outer jacket	PVC
Resistance	limited resistance to oil and high resistance to chemicals
Electrical data	
Nominal voltage	300 V
Test voltage	1500 V
Temperature range	
Fixed installation	-30...+70°C
Flexible installation	-5...+70°C
Bend radius	
Fixed installation	7.5x outer Ø
Flexible installation	10x outer Ø
C-track data	
Movement speed:	–
Number of bending cycles	–
Robot data	
Torsion	–
Approvals	
	CE compliant

| SHIELDED SENSOR/ACTUATOR CABLES

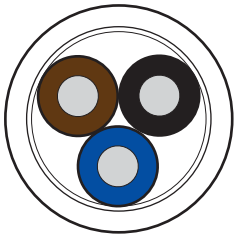
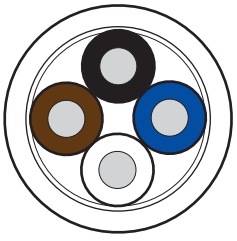
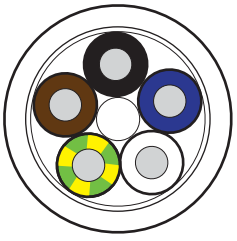
PVC	3x 0.25 mm²	4x 0.25 mm²
		
1 Type of drum		
Drum (100 m)	**02**	
Drum (200 - 500 m)	**05**	
2 Cable length		
100 m	**01**	
200 m	**02**	
300 m	**03**	
400 m	**04**	
500 m	**05**	
3 Jacket color		
gray	**274**	**275**

Article no.

7000	–	C	1 __	2 __	–	3 ___	0000

Technical Data		
Copper index	20.5 kg/km	24.2 kg/km
Outer diameter	approx. 4.8 mm	approx. 4.6 mm
Wire structure	0.25 mm² (Class6)	0.25 mm² (Class 5)
Wire insulation	PVC	
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece	
Outer jacket	PVC	
Resistance	limited resistance to oil and high resistance to chemicals	
Electrical data		
Nominal voltage	300 V	250 V
Test voltage	1500 V	2000 V
Temperature range		
Fixed installation	-30...+80°C	-30...+80°C
Flexible installation	-5...+70°C	-5...+70°C
Bend radius		
Fixed installation	10x outer Ø	
Flexible installation	15x outer Ø	
C-track data		
Movement speed:	–	
Number of bending cycles	–	
Robot data		
Torsion	–	
Approvals		
	CE compliant	

| SHIELDED SENSOR/ACTUATOR CABLES

PVC	3x 0.34 mm²	4x 0.34 mm²	5x 0.34 mm²
			

1 Type of drum

Drum (100 m)	**02**
Drum (200 - 500 m)	**05**

2 Cable length

100 m	**01**
200 m	**02**
300 m	**03**
400 m	**04**
500 m	**05**

3 Jacket color

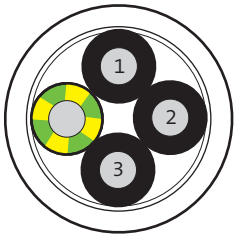
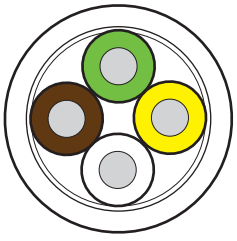
gray	**317**	**330**	**348**
gray (UL/CSA)		**947 (UL/CSA)**	**948 (UL/CSA)**

Article no.

1	2	3	
7000 – C	__	__ –	___ 0000

Technical Data			
Copper index	24.2 kg/km	30.8 kg/km	34.1 kg/km
Outer diameter	approx. 5.9 mm	approx. 5.9 mm	approx. 5.9 mm (348) / ca. 6.3 mm(948)
Wire structure	0.34 mm² (Class 6)		
Wire insulation	PVC		
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece		
Outer jacket	PVC		
Resistance	limited resistance to oil and high resistance to chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	1500 V		
Temperature range			
Fixed installation	-40...+80°C	-30...+80°C (330) / -40...+70°C (947)	-30...+80°C (348) / -40...+80°C (948)
Flexible installation	-5...+80°C	-5...+70°C	-5...+70°C (348) / -20...+80°C (948)
Bend radius			
Fixed installation	10x outer Ø		
Flexible installation	15x outer Ø		
C-track data			
Movement speed	–		
Number of bending cycles	–		
Robot data			
Torsion	–		
Approvals			
	CE compliant		

| SHIELDED SENSOR/ACTUATOR CABLES

PVC	4x 0.75 mm²	4x 0.75 mm²
		
1 Type of drum		
Drum (100 m)	**02**	
Drum (200 - 500 m)	**05**	
2 Cable length		
100 m	**01**	
200 m	**02**	
300 m	**03**	
400 m	**04**	
500 m	**05**	
3 Jacket color		
gray	**499**	**504**

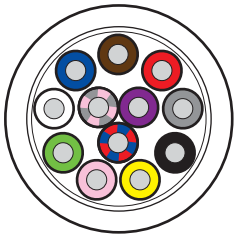
Article no.

7000	–	C	1 __	2 __	–	3 ___	0000

Technical Data		
Copper index	62.8 kg/km	62.8 kg/km
Outer diameter	approx. 6.4 mm	approx. 7.0 mm
Wire structure	0.75 mm² (Class 5)	
Wire insulation	PVC	
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece	
Outer jacket	PVC	
Resistance	limited resistance to oil and high resistance to chemicals	
Electrical data		
Nominal voltage	300 V	
Test voltage	2000 V	
Temperature range		
Fixed installation	-40...+70°C	-40...+80°C
Flexible installation	-5...+70°C	-5...+80°C
Bend radius		
Fixed installation	10x outer Ø	
Flexible installation	15x outer Ø	
C-track data		
Movement speed:	–	
Number of bending cycles	–	
Robot data		
Torsion	–	
Approvals		
	CE compliant	

| SHIELDED SENSOR/ACTUATOR CABLES

PUR	12x 0.14 mm²



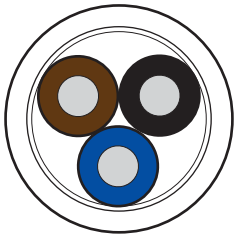
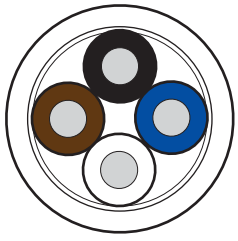
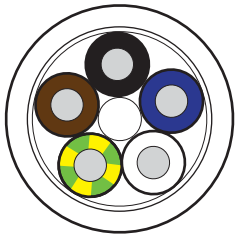
1	**Type of drum**	
	Drum (100 m)	**02**
	Drum (200 - 500 m)	**05**
2	**Cable length**	
	100 m	**01**
	200 m	**02**
	300 m	**03**
	400 m	**04**
	500 m	**05**
3	**Jacket color**	
	black	**706**

Article no.

1	2		3	
7000 – C	__	__	–	___ 0000

Technical Data	
Copper index	33.6 kg/km
Outer diameter	approx. 6.5 mm
Wire structure	0.14 mm² (Class 6)
Wire insulation	PP
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece
Outer jacket	PUR
Resistance	high resistance to oil, fuel and chemicals
Electrical data	
Nominal voltage	300 V
Test voltage	1500 V
Temperature range	
Fixed installation	-40...+85°C
Flexible installation	-25...+85°C
Bend radius	
Fixed installation	7.5x outer Ø
Flexible installation	10x outer Ø
C-track data	
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles	> 2M
Robot data	
Torsion	± 180°/m
Approvals	
	UL (AWM Style 20233), CSA, CE compliant

| SHIELDED SENSOR/ACTUATOR CABLES

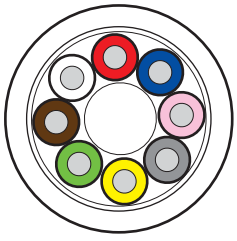
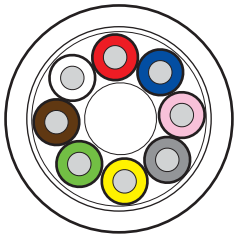
PUR	3x 0.25 mm²	4x 0.25 mm²	5x 0.25 mm²
			
1 Type of drum			
Drum (100 m)	**02**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
gray			**290**
black	**709**	**714**	

Article no.

7 0 0 0 – C [1] [2] – [3] 0 0 0 0

Technical Data			
Copper index	20.5 kg/km	24.2 kg/km	29.2 kg/km
Outer diameter	approx. 4.8 mm	approx. 5.1 mm	approx. 5.0 mm
Wire structure	0.25 mm² (Class 6)		
Wire insulation	PVC	PVC	PP
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	1500 V		
Temperature range			
Fixed installation	-30...+80°C		-40...+70°C
Flexible installation	-5...+70°C		-20...+70°C
Bend radius			
Fixed installation	10x outer Ø		7.5x outer Ø
Flexible installation	15x outer Ø		10x outer Ø
C-track data			
Movement speed:	–		max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles	–		> 2M
Robot data			
Torsion	–		± 180°/m
Approvals			
	CE compliant		

| SHIELDED SENSOR/ACTUATOR CABLES

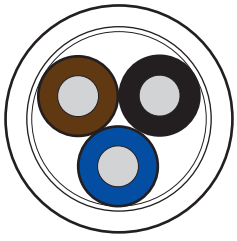
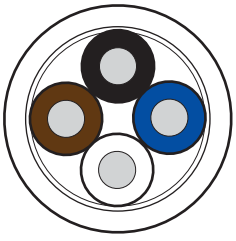
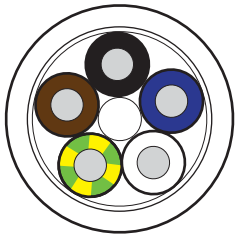
PUR	8x 0.25 mm²	8x 0.25 mm²	8x 0.25 mm²
			
1 Type of drum			
Drum (100 m)	**02**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
gray	**291**		**294**
black		**717**	**715**

Article no.

1	2	3	
7000 – C	__	__ –	___ 0000

Technical Data			
Copper index	46.4 kg/km	46.4 kg/km	46.4 kg/km
Outer diameter	approx. 7.0 mm	approx. 6.6 mm	approx. 7.0 mm
Wire structure	0.25 mm² (Class 6)		
Wire insulation	PP		
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	1500 V		
Temperature range			
Fixed installation	-40...+80°C		
Flexible installation	-20...+80°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed	max. 3.3 m/s (Stroke length 5 m, acceleration 5 m/s²)		
Number of bending cycles	> 2M		
Robot data			
Torsion	–	± 180°/m	
Approvals			
	CE compliant	UL, CSA, CE compliant	

| SHIELDED SENSOR/ACTUATOR CABLES

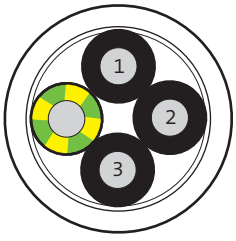
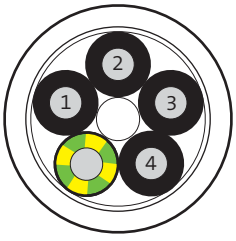
PUR	3x 0.34 mm²	4x 0.34 mm²	5x 0.34 mm²
			
1 Type of drum			
Drum (100 m)	**02**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
gray		**335**	**949**
black	**319**	**728**	**733**

Article no.

1	2	3	
7000 – C	__	__ –	___ 0000

Technical Data			
Copper index	24.2 kg/km	30.8 kg/km	34.1 kg/km
Outer diameter	approx. 5.9 mm	approx. 5.9 mm	approx. 6.4 mm
Wire structure	0.34 mm² (Class 6)		
Wire insulation	PP		
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	2000 V		
Temperature range			
Fixed installation	-40...+80°C		
Flexible installation	-20...+80°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed:	–		
Number of bending cycles	–		
Robot data			
Torsion	–		
Approvals			
	UL, CSA, CE compliant		

| SHIELDED SENSOR/ACTUATOR CABLES

PUR	3x 0.75 mm²	4x 0.75 mm²	5x 0.75 mm²
			

1 Type of drum

Drum (100 m)	**02**
Drum (200 - 500 m)	**05**

2 Cable length

100 m	**01**
200 m	**02**
300 m	**03**
400 m	**04**
500 m	**05**

3 Jacket color

gray	**492**	**508**	**518**

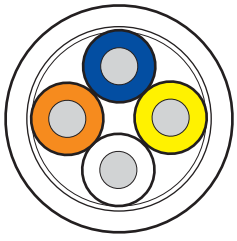
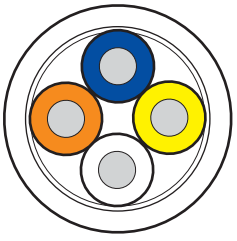
Article no.

1	2	3	
7000 – C	__	__ –	___ 0000

Technical Data			
Copper index	55.1 kg/km	62.8 kg/km	77.1 kg/km
Outer diameter	approx. 6.1 mm	approx. 6.5 mm	approx. 7.1 mm²
Wire structure	0.75 mm² (Class 5)		
Wire insulation	PVC		
Shielding	polyester foil, screen tinned copper wire braid, polyester fleece		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	300 V		
Test voltage	3000 V		
Temperature range			
Fixed installation	-40...+80°C		
Flexible installation	-5...+80°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	10x outer Ø		
C-track data			
Movement speed:	–		
Number of bending cycles	–		
Robot data			
Torsion	–		
Approvals			
	CE compliant		

| FIELDBUS CABLE

Ethernet / Profinet
CAT 5e
ISO/IEC 11801 Class D

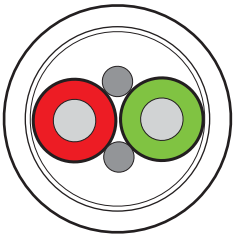
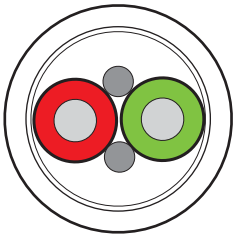
	2x 2x 0.34 mm²		**2x 2x 0.34 mm²**
			
1 Type of drum			
Drum (100 m)	**02**		
Drum (200 - 500 m)	**05**		
2 Cable length			
100 m	**01**		
200 m	**02**		
300 m	**03**		
400 m	**04**		
500 m	**05**		
3 Jacket color			
green	**794**	**796**	
violet			**798**

Article no.

1	2	3	
7000 – C	__	__ –	___ 0000

Technical Data			
Copper index	34.5 kg/km		34.5 kg/km
Outer diameter	approx. 6.7 mm		approx. 6.5 mm
Wire structure	7-strand, 2x 2x AWG 22/7 (2x 2x 0.34 mm²)		2x 2x 0.34 mm² (Class 5)
Wire insulation	PE		
Shielding	polyester fleece, aluminum foil, screen tinned copper wire braid		
Outer jacket	PUR		
Resistance	high resistance to oil, fuel and chemicals		
Electrical data			
Nominal voltage	60 V	60 V	
Test voltage	2000 V		700 V
Temperature range			
Fixed installation	-25...+80°C		-40...+70°C
Flexible installation	-20...+60°C		
Bend radius			
Fixed installation	7.5x outer Ø		
Flexible installation	15x outer Ø		
C-track data			
Movement speed:	–	max. 3.3 m/s (Stroke length 5 m, acceleration 2 m/s²)	max. 4 m/s (Stroke length 5 m, acceleration 4 m/s²)
Number of bending cycles	–	> 5M	> 3M
Transfer characteristics			
Impedance level	100 ± 15 Ohm at 100 MHz	100 ± 5 Ohm at 100 MHz	100 ± 15 Ohm at 100 MHz
Conductor resistance	55 Ohm/km		
Isolation resistance	500 MOhm x km		
Approvals			
	UL, CSA, CE compliant		

| FIELDBUS CABLE

Profibus	1x 2x Ø 0.64 mm	1x 2x Ø 0.64 mm
		

1	**Type of drum**		
	Drum (100 m)	**02**	
	Drum (200 - 500 m)	**05**	
2	**Cable length**		
	100 m	**01**	
	200 m	**02**	
	300 m	**03**	
	400 m	**04**	
	500 m	**05**	
3	**Jacket color**		
	violet	**840**	**841**

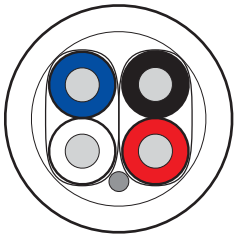
Article no.

7	0	0	0	–	C	1 __	2 __	–	3 ___	0	0	0	0

Technical Data		
Copper index	29.0 kg/km	29.0 kg/km
Outer diameter	approx. 7.7 mm	
Wire structure	1x 2x Ø 0.64 mm (Class 6)	
Wire insulation	cell polyethylene	
Shielding	polyester fleece, aluminum foil, screen tinned copper wire braid	
Outer jacket	PUR	
Resistance	high resistance to oil, fuel and chemicals	
Electrical data		
Nominal voltage	60 V	250 V
Test voltage	1500 V	
Temperature range		
Fixed installation	-40...+80°C	
Flexible installation	-20...+70°C	
Bend radius		
Fixed installation	10x outer Ø	
Flexible installation	15x outer Ø	
C-track data		
Movement speed	max. 4 m/s (Stroke length 5 m, acceleration 8 m/s²)	
Number of bending cycles	> 10M	> 3M
Electrical data		
Impedance level	150 Ohm	
Conductor resistance	82 Ohm/km	72.5 Ohm/km
Isolation resistance	1 GOhm x km	5 GOhm x km
Approvals		
	UL, CSA, CE compliant	

| FIELDBUS CABLE

DeviceNet / CANopen	2x 0.25mm² + 2x 0.34mm²



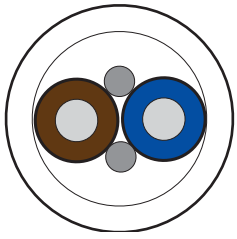
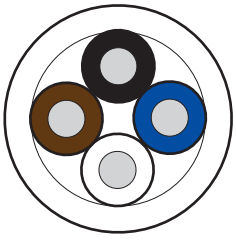
1	**Type of drum**	
	Drum (100 m)	**02**
	Drum (200 - 500 m)	**05**
2	**Cable length**	
	100 m	**01**
	200 m	**02**
	300 m	**03**
	400 m	**04**
	500 m	**05**
3	**Jacket color**	
	violet	**803**

Article no.

7	0	0	0	–	C	1 __	2 __	–	3 ___	0	0	0	0

Technical Data	
Copper index	30.9 kg/km
Outer diameter	approx. 6.9 mm
Wire structure	2x 0.25 mm² + 2x 0,34mm² (Class 5)
Wire insulation	data pair 2x 0.25mm², cell polyethylene + power supply 2x 0.34mm², PE
Shielding	pair shielding (data, power supply) with aluminum foil drain wire 22 AWG/19, overall shielding tinned copper wires
Outer jacket	PUR
Resistance	high resistance to oil, fuel and chemicals
Electrical data	
Nominal voltage	300 V
Test voltage	2000 V
Temperature range	
Fixed installation	-40...+80°C
Flexible installation	-20...+70°C
Bend radius	
Fixed installation	10x outer Ø
Flexible installation	15x outer Ø
C-track data	
Movement speed	max. 3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles	> 5M
Electrical data	
Impedance level	120 Ohm
Conductor resistance	78 Ohm/km
Approvals	
	UL, CSA, CE compliant

FIELDBUS CABLE

MASI	2x 1.5 mm²	4x 0.75 mm²
		
1 Type of drum		
Drum (100 m)	**02**	
Drum (200 - 500 m)	**05**	
2 Cable length		
100 m	**01**	
200 m	**02**	
300 m	**03**	
400 m	**04**	
500 m	**05**	
3 Jacket color		
gray	**588**	**862**

Article no.

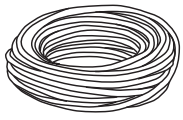
7 0 0 0 – C [1] [2] – [3] 0 0 0 0

Technical Data		
Copper index	31.9 kg/km	31.9 kg/km
Outer diameter	approx. 8.0 mm	approx. 6.5 mm
Wire structure	2x 1.5 mm² (Class 5)	4x 0.75 mm² (Class 6)
Wire insulation	PP	
Shielding	polyester fleece, aluminum foil, screen tinned copper wire braid	
Outer jacket	PUR	
Resistance	high resistance to oil, fuel and chemicals	
Electrical data		
Nominal voltage	250 V	240 V
Test voltage	1500 V	2000 V
Temperature range		
Fixed installation	-50...+80°C	-40...+80°C
Flexible installation	-25...+80°C	-20...+80°C
Bend radius		
Fixed installation	7.5x outer Ø	5x outer Ø
Flexible installation	10x outer Ø	7.5x outer Ø
C-track data		
Movement speed	–	max. 3 m/s (Stroke length 5 m, acceleration 5 m/s²)
Number of bending cycles	–	> 5M
Electrical data		
Impedance level	70 - 140 Ohm	75 Ohm
Conductor resistance	13.3 Ohm/km	26 Ohm/km
Isolation resistance	5 GOhm x km	
Approvals		
	UL, CSA, CE compliant	

| COILS OF CABLES

7/8" Cable

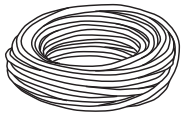
50 m



Art. no.	Strand no./ cross section mm²	Wire insulation	Suitable for C-tracks	Jacket	Outer Ø mm	Bending radius moving	Temperature range fixed °C	moving °C	Copper Index kg/km
7000-00000-9615000	5x1.5	PP (bw num., gn/ye)	yes (5M)	PUR (UL/CSA)	approx. 8.7	15x Ø	-50...+80	-20...+80	79.7
7000-00000-9655000	5x1.0	PVC (bw num., gn/ye)	no	PUR/PVC	approx. 8.7	15x Ø	-30...+70	-5...+70	77.1

M8 distributor cable

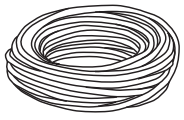
50 m



Art. no.	Strand no./ cross section mm²	Wire insulation	Suitable for C-tracks	Jacket	Outer Ø mm	Bending radius moving	Temperature range fixed °C	moving °C	Copper Index kg/km
M8 distributor 3-pole: Cable type PUR/PVC									
8000-00000-3375000	4x0.34 / 3x0.75 for 4-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 6.9	10x Ø	-30...+80	-5...+70	30.3
8000-00000-3505000	6x0.34 / 2x0.75 for 6-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, pk, rd 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 7.8	10x Ø	-30...+80	-5...+70	37.4
8000-00000-3575000	8x0.34 / 2x0.75 for 8-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, pi, rd, bw, vi 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 8.6	10x Ø	-30...+80	-5...+70	44.6
8000-00000-3855000	10x0.34 / 2x0.75 for 10-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, pk, bw, vi, gr/pk, rd/bl 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 8.3	10x Ø	-30...+80	-5...+70	51.8
M8 distributor 3-pole: Cable type PUR (UL/CSA), halogen-free									
8000-00000-3345000	4x0.34 / 2x0.75 for 4-way distributors	TPE 0.34 mm²: wh, gn, ye, gr, 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 7.6	10x Ø	-40...+80	-5...+80	30.8
8000-00000-3565000	6x0.34 / 2x0.75 for 6-way distributors	TPE 0.34 mm²: wh, gn, ye, gr, pk, rd 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 8.5	10x Ø	-40...+80	-5...+80	37.4
8000-00000-3595000	8x0.34 / 2x0.75 for 8-way distributors	TPE 0.34 mm²: wh, gn, ye, gr, pi, rd, bw, vi 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 9.2	10x Ø	-40...+80	-5...+80	45.1
8000-00000-3845000	10x0.34 / 2x0.75 for 10-way distributors	TPE 0.34 mm²: wh, gn, ye, gr, pi, rd, bw, vi gr/pk, rd/bl 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 9.3	10x Ø	-40...+80	-5...+80	52.9

M8 distributor cable

50 m

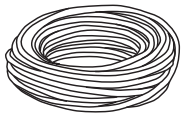


Art. no.	Strand no./ cross section mm²	Wire insulation	Suitable for C-tracks	Jacket	Outer Ø mm	Bending radius moving	Temperature range fixed °C	moving °C	Copper Index kg/km
M8 distributor 4-pole: Cable type PUR/PVC									
8000-00000-3585000	8x0.34 / 2x0.75 for 4-way distributors	PVC 0.34 mm²: wh, gn, ye, gr/pk, rd/bl, wh/gn, br/gn 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 8.6	12x Ø	-30...+70	-5...+70	45.1
8000-00000-3865000	12x0.34 / 2x0.75 for 6-way distributors	PVC 0.34 mm²: wh, gn, ye, gr/pk, rd/bl, wh/gn, br/gn, ye/br, pk, wh/ye, rd 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 8.8	12x Ø	-30...+70	-5...+70	59.5
8000-00000-3955000	16x0.34 / 2x0.75 for 8-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, gr/pk, rd/bl, wh/gn, br/gn, ye/br, pk, wh/ye, rd, wh/gr, vi, bw, gr/br 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 9.6	12x Ø	-30...+70	-5...+70	73.8
8000-00000-4125000	20x0.34 / 2x0.75 for 10-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, gr/pk, rd/bl, wh/gn, br/gn, ye/br, pk, wh/ye, rd, wh/gr, vi, bw, gr/br, br/bl, whpk, wh/bl, pk/br 0.75mm²: br, bl	yes (2M)	PUR/ PVC	approx. 10.4	12x Ø	-30...+70	-5...+70	88.1
M8 distributor 4-pole: Cable type PUR (UL/CSA), halogen-free									
8000-00000-3605000	8x0.34 / 2x0.75 for 4-way distributors	TPE 0.34 mm²: wh, gn, ye, gr/pk, rd/bl, wh/gn, br/gn 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 9.2	10x Ø	-40...+80	-5...+80	45.1
8000-00000-3895000	12x0.34 / 2x0.75 for 6-way distributors	TPE 0.34 mm²: wh, gn, ye, gr/pk, rd/bl, wh/gn, br/gn, ye/br, pk, wh/ye, rd 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 9.5	10x Ø	-40...+80	-5...+80	59.5
8000-00000-3965000	16x0.34 / 2x0.75 for 8-way distributors	TPE 0.34 mm²: wh, gn, ye, gr, gr/pk, rd/bl, wh/gn, br/gn, ye/br, pk, wh/ye, rd, wh/gr, vi, bw, gr/br 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 10.4	10x Ø	-40...+80	-5...+80	73.8
8000-00000-4115000	20x0.34 / 2x0.75 for 10-way distributors	TPE 0.34 mm²: wh, gn, ye, gr, gr/pk, rd/bl, wh/gn, br/gn, ye/br, pk, wh/ye, rd, wh/gr, vi, bw, gr/br, br/bl, whpk, wh/bl, pk/br 0.75mm²: br, bl	yes (5M)	PUR (UL/CSA)	approx. 11.3	10x Ø	-40...+80	-5...+80	88.1

| COILS OF CABLES

M12 distributor cable

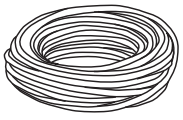
50 m



Art. no.	Strand no./ cross section mm²	Wire insulation	Suitable for C-tracks	Jacket	Outer Ø mm	Bending radius moving	Temperature range fixed °C	moving °C	Copper Index kg/km
M12 distributor 4-pole: Cable type PUR/PVC									
8000-00000-3335000	4x0.34 / 3x0.75 for 4-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, 0.75mm²: br, bl, gn/ye	yes (2 Mio.)	PUR/ PVC	approx. 8.5	12x Ø	-30...+80	-5...+80	45.4
8000-00000-3625000	8x0.34 / 3x0.75 for 8-way distributors	PVC 0.34 mm²: wh, gn, ye, gr, pk, rd, bw, vi 0.75mm²: br, bl, gn/ye	yes (2 Mio.)	PUR/ PVC	approx. 8.5	12x Ø	-30...+80	-5...+70	52.9
M12 distributor 4-pole: Cable type PUR (UL/CSA), halogen-free									
8000-00000-4475000	8x0.5 / 3x1.0 for 4-way distributors	PUR 0.5 mm²: wh, gn, ye, gr, pk, rd, bw, vi 1.0 mm²: br, bl, gn/ye	yes (2 Mio.)	PUR (UL/CSA)	approx. 9.4	10x Ø	-40...+80	-40...+90	74
M12 distributor 5-pole: Cable type PUR/PVC									
8000-00000-3635000	8x0.34 / 3x0.75 for 4-way distributors	PVC 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gr, gr 0.75mm²: br, bl, gn/ye	yes (2 Mio.)	PUR/ PVC	approx. 9.1	12x Ø	-30...+80	-5...+70	52.9
8000-00000-3885000	12x0.34 / 3x0.75 for 6-way distributors	PVC 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gr, gr, wh/ye, pk, ye/br, rd 0.75mm²: br, bl, gn/ye	yes (2 Mio.)	PUR/ PVC	approx. 9.8	12x Ø	-30...+80	-5...+70	81.4
8000-00000-3985000	16x0.34 / 3x0.75 for 8-way distributors	PVC 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gr, gr, wh/ye, pk, ye/br, rd, wh/gr, bw, gr/br, vi 0.75mm²: br, bl, gn/ye	yes (1 Mio.)	PUR/ PVC	approx. 10.7	12x Ø	-30...+80	-5...+70	81.4
M12 distributor 5-pole: Cable type PUR (UL/CSA), halogen-free									
8000-00000-4485000	8x0.5 / 3x1.0 for 4-way distributors	TPE 0.5 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gr, gr 1.0 mm²: br, bl, gn/ye	yes (5M)	PUR (UL/CSA)	approx. 9.0	10x Ø	-40...+90	-40...+90	74
8000-00000-4525000	16x0.5 / 3x1.0 for 6-way distributors	TPE 0.5 mm²: gr/pk, wh, rd/bl, gn, wh/gn, ye, br/gr, gr, wh/ye, pk, ye/br, rd, w/gn, bw, gr/br, vi 1.0 mm²: br, bl, gn/ye	yes (5M)	PUR (UL/CSA)	approx. 11.5	10x Ø	-40...+90	-40...+90	116.7
8000-00000-4035000	16x0.34 / 5x0.75 for 8-way distributors	TPE 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gr, gr, wh/ye, pk, ye/br, rd, wh/gr, bl, gr/br, vi 0.75mm²: br1, bl1, br2, bl2, gn/ye	yes (5M)	PUR (UL/CSA)	approx. 11.5	10x Ø	-40...+90	-40...+90	98

M12 distributor cable

50 m



Art. no.	Strand no./ cross section mm²	Wire insulation	Suitable for C-tracks	Jacket	Outer Ø mm	Bending radius moving	Temperature range fixed °C	moving °C	Copper Index kg/km
M12 distributor 5-pole: Cable type PUR/PVC shielded									
8000-00000-3745000	8x0.34 / 3x0.75 for 4-way distributors	PVC 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn, ye, br/gr, gr 0.75mm²: br1, br2, bl1, bl2, gn/ye	yes (0.5M)	PUR/ PVC	approx. 9.1	12x Ø	-30...+80	-5...+80	52.9
8000-00000-4045000	16x0.34 / 3x0.75 for 8-way distributors	PVC 0.34 mm²: gr/pi, wh, rd/bl, gn, wh/gn ye, br/gn, gr, wh/ye, pk, ye/br, rd, wh/gr, bw, gr/br, vi 0.75mm²: br1, br2, bl1, bl1, gn/ye	yes (0.5M)	PUR/ PVC	approx. 10.7	12x Ø	-30...+80	-5...+70	98
M12 distributor 5-pole: Cable type PUR (UL/CSA), shielded, halogen-free									
8000-00000-3735000	8x0.34 / 5x0.75 for 4-way distributors	TPE 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gr, gr 0.75mm²: br, bl, gn/ye	yes (5M)	PUR (UL/CSA)	approx. 9.3	12x Ø	-40...+90	-40...+90	85.9
8000-00000-4015000	16x0.34 / 3x0.75 for 8-way distributors	TPE 0.34 mm²: gr/pk, wh, rd/bl, gn, wh/gn ye, br/gn, gr, wh/ye, pk, ye/br, rd, wh/gr, bw, gr/br, vi 0.75mm²: br, bl, gn/ye	yes (5M)	PUR (UL/CSA)	approx. 11.7	12x Ø	-40...+90	-40...+90	121.1
Universal distributor 4-pole: Cable type PUR/PVC									
8000-00000-5335000	18x0.75	PVC (bk, num. gn/ye)	no	PUR/ PVC	approx. 11.7	20x Ø	-40...+80	-5...+70	142.7

| COPPER PRICE

In general, the cost of material for cables and wires is based on a copper price of €150.00/100 kg. At the time of invoicing, the difference between the general cost and the daily rate is calculated as copper surcharge.

The **formula for calculating the copper surcharge** is:

$$\text{Copper surcharge EUR/km} = \text{copper index (kg/km)} \times \frac{(\text{DEL}+1\%\ \text{delivery costs}) - \text{copper basis}}{100}$$

DEL

DEL (German Electrolytic High-Conductivity Copper) is the German stock exchange rate for 99.5% pure copper and can be found in EUR/100 kg in the business section of any newspaper.

Example: DEL rate = €194.29
The price for 100 kg copper is €194.29 plus
1% delivery costs added for cables.

Copper Basis

The prices stated in our general catalog include a certain copper percentage for almost all cables.

- Copper basis = €150.00/100 kg

Copper Index

The copper index is indicated in our general catalog. It is the weight of copper in a cable.

Example:
Jacket color/code 636 3 x 0.75 mm²
Copper index 23.8 kg/km

Calculation example for 636 3 x 0.75 mm²
DEL €194.29/100 kg (assumed value)
Copper basis = €150.00/100 kg
Copper index 23.8 kg/km

$$\text{Copper surchage} = 23.8 \times \frac{(194.29+1.9429) - 150}{100}$$

= €11/km

The net price including copper is calculated with:

- Gross price
- Individual discount
- Copper surcharge

Note

In our invoices, the copper surcharge is shown separately.

WIRE STRUCTURE

DIN VDE 0295, IEC 60228 or HD 383

Wire cross section in mm	Stranded wires		Four-strand wires		Fine-strand wires		Extra-fine strand wires							
	Class 2 DIN VDE 0295				Class 5 DIN VDE 0295		Class 6 DIN VDE 0295							
	Column 1		Column 2		Column 3		Column 4		Column 5		Column 6		Column 7	
	No. of strands	Single strand	No. of strands	Single strand	No. of strands	Single strand	No. of strands	Single strand	No. of strands	Single strand	No. of strands	Single strand	No. of strands	Single strand
0.14					18x0.1		18x0.1		18x0.1		36x0.07		72x0.5	
0.25					14x0.15		32x0.1		32x0.1		65x0.07		128x0.5	
0.34			7x0.25		19x0.15		42x0.1		42x0.1		88x0.07		174x0.5	
0.38			7x0.25		12x0.2		21x0.15		48x0.1		100x0.07		194x0.5	
0.5	7x0.30		7x0.30		16x0.2		28x0.15		64x0.1		131x0.07		256x0.5	
0.75	7x0.37		7x0.37		24x0.2		42x0.15		96x0.1		195x0.07		384x0.5	
1.0	7x0.43		7x0.30		32x0.2		56x0.15		128x0.1		260x0.07		512x0.5	
1.5	7x0.52		7x0.37		30x0.25		74x0.15		192x0.1		392x0.07		768x0.5	

CONVERSION AWG TO METRIC CROSS SECTIONS

AWG	mm²	AWG	mm²	AWG	mm²	kcmil	mm²
30	0.05	18	0.75	6	16	300	150
28	0.08	17	1	4	25	350	185
26	0.14	16	1.5	2	35	500	240
24	0.25	14	2.5	1	50	600	300
22	0.34	12	4	2/0	70	750	400
21	0.38	10	6	3/0	95	1000	500
20	0.5	8	10	4/0	120		

OVERVIEW OF INSULATION MATERIALS

Temperature range	Volume resistivity (Ω x cm)	Capacitivity (10^{-3})	Elongation %	Tensile strength N/mm²	Oil resistance	Fuel resistance	Weather resistance
Y = PVC (polyvinyl chloride) self-extinguishing							
-30...+70°C	10^{12}-10^{15}	4.0	150-300	10-25	moderate	high	moderate
11Y = PUR (polyurethane) / flammable							
-40...+90°C	10^{12}	4.0-6.0	300-600	30-45	high	high	very high
2Y = LDPE (high pressure polyethylene) / flammable							
-50...+70°C	10^{17}	2.3	500	20-30	low	moderate	high
2Y = HDPE (low pressure polyethylene) / flammable							
-50...+100°C	10^{17}	2,3	800	30	low	moderate	moderate
12Y = TPE-E (thermoplastic polyester elastomer) / flammable							
-70...+125°C	10^{12}	3.7-5.1	280-650	3-25	high	very high	very high
02Y = Cell-PE (cell polyethylene) / flammable							
-40...+70°C	10^{17}	1.6	350-450	8-12	low	moderate	high
9Y = PP (polypropylene) / flammable							
-40...+80°C	10^{16}	2.3-2.4	300	20-35	high	high	moderate

(All data are intended as guidelines only)

| CURRENT CAPACITY (DIN VDE 0298-4, 2003-08/ [1] VDE 0891-1)

of cables with nominal voltage up to 1000 V and heat resistant cables
at ambient temperature +30°C

	Single wire cables • Rubber insulation • PVC insulation • TPE insulation • Heat resistant	**Multiple wire cables for home and handheld devices** • Rubber insulation • PVC insulation • TPE insulation	**Multiple wire cables excluding home and handheld devices** • Rubber insulation • PVC insulation • TPE insulation • Heat resistant
Nominal cross section in mm²	**Capacity in [A]**	**Capacity in [A]**	**Capacity in [A]**
0.08[1]	1.5	-	1
0.14[1]	3	-	2
0.25[1]	5	-	4
0.34[1]	8	-	6
0.5	12	3	9
0.75	15	6	12
1	19	10	15
1.5	24	16	18
2.5	32	20	26

| CONVERSION FACTORS

for ambient temperatures different from 30°C referring to DIN VDE 0298-4, 2003-08.
Approved or recommended operating temperature for cable (see Cables chapter)

Ambient temperature in °C	**60 °C**	**70 °C**	**80 °C**	**85 °C**	**90 °C**
	Conversion factors				
10	1.29	1.22	1.18	1.17	1.15
15	1.22	1.17	1.14	1.13	1.12
20	1.15	1.12	1.1	1.09	1.08
25	1.08	1.06	1.05	1.04	1.04
30	1	1	1	1	1
35	0.91	0.94	0.95	0.95	0.96
40	0.82	0.87	0.89	0.9	0.91
45	0.71	0.79	0.84	0.85	0.87
50	0.58	0.71	0.77	-	0.82
55	0.41	0.61	0.71	-	0.76
60	-	0.5	0.63	-	0.71
65	-	0.35	0.55	-	0.65
70	-	-	0.45	-	0.58
75	-	-	0.32	-	0.5
80	-	-	-	-	0.41
85	-	-	-	-	0.29

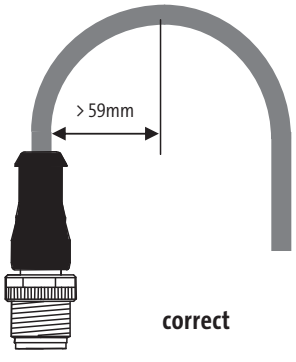
INSTALLATION INSTRUCTIONS FOR SENSOR/ACTUATOR CONNECTORS

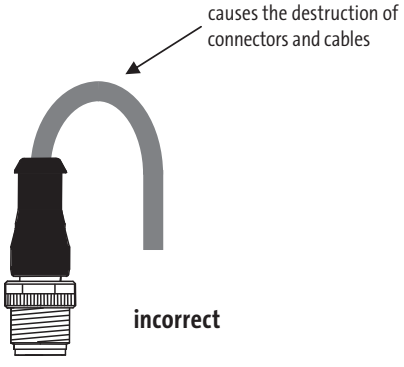
Professional installation guarantees the following:

- Reliable and safe electrical connections (even when exposed to chemical and mechanical influences)
- Long system lifetime
- Low maintenance and repair costs

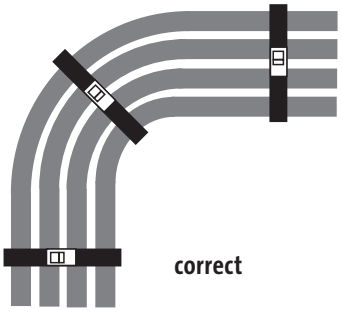
Avoid the following common problems:

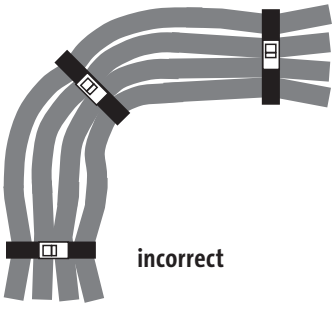
- Apply the recommended amount of torque for the particular type of connector (use a torque wrench to be sure!).
- Do not exceed the maximum bending radius when laying the cable (example: cable diameter = 5.9 mm, bending radius = min. 10x outer diameter, i.e. bending radius = min. 59 mm)





- If you use cable ties, make sure that they do not cut into the cable jacket or even deform the cable. If you follow these tips, you will prevent short-circuits, line breaks and dips in dielectric strength.





| NOTES

Cable Range | 02_12 EN | Art. no. 9841072

MURR ELEKTRONIK

stay connected

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