



PUR – for complex applications

Application areas:

Suitable for long-term flexible use in the most challenging of environments such as with machine tools, rotary tables and swivel tables. Shielded versions available to meet additional EMC requirements.

- **Halogen-free**
- **Capable of withstanding a high level of mechanical stress**
- **Effective resistance to chemicals**
- **Effective resistance to oil**
- **UL cable types are extremely flame-retardant**

Features:

- Free from silicone and substances that inhibit lacquer adhesion
- Resistant to microbes and hydrolysis
- UV-resistant





Temperature range

Permanently installed –40 °C ... 80 °C
 Non-fixed –20 °C ... 80 °C
 Minimum bend radius 10 x D

Additional data for UL-approved cable types (unshielded):

Min. no. of bend cycles 5 million
 Distance 5 m
 Acceleration 5 m/s²
 Speed 3.33 m/s
 Torsion ±180°/m tested at 20 °C ... 25 °C

Cable types

Cable type	Structure	Diameter	Use
PUR, gray	3/4/5 x 0.34 mm ² (19 x 0.15 mm)	D = 4.8 mm	M12
	3/4 x 0.25 mm ² (14 x 0.15 mm)	D = 4.3 mm	M8
PUR, blue (NAMUR)	2/4 x 0.34 mm ² (19 x 0.15 mm)	D = 4.8 mm	M8 / M12
PUR-U, black 	8 x 0.25 mm ² (14 x 0.15 mm)	D = 6.0 mm	M12
	2+1/4+1 x 0.5 mm ² (28 x 0.15 mm)	D = 4.8 mm/5.5 mm	Valve connectors
	3/4 x 0.34 mm ² (42 x 0.1 mm)	D = 4.3 mm	M8 / M12
PUR-U/ABG, black, shielded 	8 x 0.25 mm ² (14 x 0.15 mm)	D = 6.0 mm	M12
PUR-ABG, gray, shielded	4/5 x 0.34 mm ² (19 x 0.15 mm)	D = 4.8 mm	M8 / M12
PUR-U, yellow 	4 x 0.34 mm ² (42 x 0.1 mm)	D = 4.3 mm	M8 / M12
PUR-U/0.75, black 	5 x 0.75 mm ² (42 x 0.15 mm)	D = 6.0mm	M12



Irradiated PUR – for extreme applications

Application areas:

This cable boasts properties that are better than those of conventional PUR cables, making this highly-flexible control cable also suitable for use in robot applications and particularly with welding robots.

- **Welding bead resistant**
- **Resistant to high temperatures**
- **Capable of withstanding mechanical stress**
- **Robot-compatible**
- **Halogen-free**
- **Excellent flame retardance**

Features:

- Effective resistance to oil
- Effective resistance to chemicals
- UV-resistant
- Free from silicone and substances that inhibit lacquer adhesion
- Resistant to microbes and hydrolysis


Temperature range

Permanently installed	-50 °C ... 105 °C	
	-50 °C ... 80 °C	for UL cable types
Non-fixed	-40 °C ... 105 °C	
	-40 °C ... 80 °C	for UL cable types
Minimum bend radius	10 x D	

Min. no. of bend cycles 5 million

Distance	10 m
Acceleration	10 m/s ²
Speed	3 m/s
Torsion	Torsion ±360°/m tested at 20 °C ... 25 °C

Cable types

Cable type	Structure	Diameter	Use
PUR H/S, orange	4 x 0.34 mm ² (19 x 0.15 mm)	D = 4.8 mm	M8 / M12
PUR H/S, yellow 	3/4/5 x 0.75 mm ² (42 x 0.15 mm)	D = 5.8 mm	1/2"



POC welding bead resistant – for the most challenging scenarios

Application areas:

This special cable comes into its own for applications in the welding sector that cannot be solved with irradiated PUR cables.

- Welding bead resistant
- Resistant to high temperatures
- Capable of withstanding mechanical stress
- Robot-compatible
- Excellent flame retardance

Features:

- Effective resistance to oil
- Effective resistance to chemicals
- UV-resistant
- Free from silicone and substances that inhibit lacquer adhesion
- Resistant to microbes and hydrolysis

Temperature range

Permanently installed	-40 °C ... 150 °C
Non-fixed	-15 °C ... 150 °C
Minimum bend radius	10 x D
Torsion	±360°/m tested at 20 °C ... 25 °C

Cable types

Cable type	Structure	Diameter	Use
POC, orange	4 x 0.34 mm ² (19 x 0.15 mm)	D = 4.8 mm	M8 / M12