# PURWIL, single-core, EPR/PUR

# Flexible single-conductor polyurethane cable EPR/PUR

The PowerFlex single-conductor cable is ideally suitable as a flexible, easy-to-lay cable in mechanical and plant engineering and for transformers. Thanks to finely stranded copper cores, it can be optimally laid through limited installation spaces. The cable meets international fire safety standards with respect to flame retardancy, freedom from halogen and thus also the corrosivity of fumes. The sheath is made of polyurethane (PUR), the core insulation of a durable ethylene-propylene (EPR) mixture. The singleconductor cable is available in all customary cross-sections and designed for use in the temperature range from -40°C to +90°C.

# Materials and components

- Cu conductor bare class 5 (IEC 60228), finely stranded
- Core insulation made of cross-linked EPR
- Outer sheath made of polyurethane (PUR)

#### Jacket colour

Grey similar to RAL 7011

#### **Functions**

- Abrasion resistant
- Flexible
- Halogen-free
- High mechanical strength
- Oil and petrol resistance

### **Technical data**

### Envioronmental conditions

- Good resistance at high and low temperatures
- Hydrolysis- and microbe-resistant
- Ozone- and weather-resistant

#### Performance

- Mechanical Performance:min. bending radius: with tensile 8 x D, without tensile 6 x D
- Nominal voltage Uo/U 600/1000 V

#### **Temperature range**

- -40°C ... +90°C
- In case of short-circuit, +250°C (max. 5 sec.)
- Capable of carrying current for short time up to 130°C (8h/day and 100h/year)

## Standards

IEC 60228 Cu-conductor cl.5 Based on EN 50525-2-51, HD603 S1 IEC 60754-1 Halogen free IEC 60754-2 No corrosive gases

### Remarks

d1=Ø across copper cord d2=Ø across first inner sheath D= total Ø Brugg Cables AG also provides the appropriate accessories.

| Cross-section<br>mm <sup>2</sup> | Part no. | Conductor code | Conductor colour | Ø d1<br>approx. mm | Ø d2<br>mm | Ø D<br>mm | Weight<br>kg/km |
|----------------------------------|----------|----------------|------------------|--------------------|------------|-----------|-----------------|
| 1X50                             | 24001    | L              | black            | 9.4                | 12.6       | 15.0      | 524             |
| 1G50                             |          | PE             | green/yellow     | 9.4                | 12.6       | 15.0      | 524             |
| 1X95                             | 24002    | L              | black            | 13.1               | 16.7       | 19.5      | 940             |
| 1G95                             |          | PE             | green/yellow     | 13.1               | 16.7       | 19.5      | 940             |
| 1X120                            | 24003    | L              | black            | 14.8               | 18.4       | 21.4      | 1294            |
| 1G120                            |          | PE             | green/yellow     | 14.8               | 18.4       | 21.4      | 1294            |
| 1X150                            | 24004    | L              | black            | 16.7               | 20.7       | 23.9      | 1618            |
| 1G150                            |          | PE             | green/yellow     | 16.7               | 20.7       | 23.9      | 1618            |
| 1X185                            | 24005    | L              | black            | 17.6               | 22.0       | 25.4      | 1952            |
| 1G185                            |          | PE             | green/yellow     | 17.6               | 22.0       | 25.4      | 1952            |
| 1X240                            | 24006    | L              | black            | 20.3               | 25.1       | 28.9      | 2395            |
| 1G240                            |          | PE             | green/yellow     | 20.3               | 25.1       | 28.9      | 2395            |
| 1X300                            | 24007    | L              | black            | 24.0               | 29.2       | 33.4      | 3205            |
| 1X400                            |          | L              | black            | 28.0               | 33.6       | 38.2      | 4022            |





# S1BQ-F