UNITRONIC® BUS PB FD P A

Highly flexible application

For use where the combination of a halogen-free outer sheath with properties similar to PUR and enhanced flame-retardance is required; Cables can be used for PROFIBUS-DP as well as PROFIBUS-FMS and FIP; For highly flexible applications (power chains, moving machine parts)

- A for Advanced here: UL and CSA approvals

Product description

Application range

- PROFIBUS DP (in accordance with DIN 19245 and EN 50170, e.g. for SIEMENS SIMATIC® NET, also suitable for FIP - Factory Instrumentation Protocol).
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

Benefits

- For use where the combination of a halogen-free outer sheath with properties similar to PUR and enhanced flame-retardance is required
- Cables can be used for PROFIBUS-DP as well as PROFIBUS-FMS and FIP
- For highly flexible applications (power chains, moving machine parts)

Product Make-up

- Stranded bare copper wire
- Foam Skin - core isolation (O2YS)
- Overall screening with copper braid and plastic-laminated aluminium foil
- Screening: wrapped with braided tinned-copper wires
- Outer sheath: PUR compound

Norm references / Approvals

- Approval: UL/CSA type CMX in accordance with UL 444 and CSA C22.2 no. 214

Product features

- Halogen-free
- Flame-retardant according IEC 60332-1-2
- Oil-resistant
- Based on the bit rates listed, in accordance with PNO specifications the following maximum cable lengths for a bus segment apply
  (cable type A, PROFIBUS-DP):
  93.75 kbit/s = 1200 m
  187.5 kbit/s = 1000 m
  500 kbit/s = 400 m
  1.5 Mbit/s = 200 m
  12.0 Mbit/s = 100 m

Technical Data

Mutual capacitance	(800 Hz): max. 30 nF/km
Peak operating voltage	(not for power applications) 250 V
Torsion movement in WTG	TW-0 & TW-2, refer to Appendix T0
Minimum bending radius	65 mm
Test voltage	Core/core: 1500 V rms
Temperature range	Flexing: -30°C to +70°C Fixed installation: -40°C to +80°C
Characteristic impedance	150 ± 15 Ohm