TOPSERV® 101 PUR-jacket, EMV*-preferred type, halogen-free
High flexible motor supply cable for drag chain 0,6/1 kV

Technical data

- Spezial-PUR drag chain cable
- Adapted to DIN VDE 0250, 0281, 0293, 0295
- **Temperature range**
  flexing −40° C to +80° C
  fixed installation −50° C to +90° C
- **Nominal voltage**
  U_0/U 600/1000 V
- **Test voltage**
  4000 V
- **Insulation resistance**
  min. 20 MOhm x km
- **Minimum bending radius**
  approx 7,5 x cable ∅
- **Coupling resistance**
  max. 250 Ohm/km

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Cable structure

- Bare copper, extra fine wire conductor, bunch stranded to DIN VDE 0295 cl. 6 and IEC 60228 cl. 6
- TPE-E core insulation halogen-free
- Black cores with continuous white numbering according to DIN VDE 0293
- Green-yellow earth core
- Cores stranded in layers with optimal lay-length and stabilized filler
- Vlies taping with sliding abilities
- Tinned copper braided screening, approx. 85% coverage
- PUR-outer jacket, low adhesion, abrasion resistant, halogen-free, resistant to UV-. oil-. hydrolysis and microbial attack
- PUR-outer jacket self-extinguishing and flame retardant, test method B according to VDE 0472 part 804 and IEC 60332-1
- Jacket colour orange RAL 2003 according to DESINA®

Advantage

These cables are produced by a high quality performance and conform DESINA® standard.

Application

As optimised supply cable for the supply to motors, in particular to DNC motors, servo-motors and frequency converters. These cables are specially designed for use in power drag chains, handling equipment, robotics, tooling machinery, processing and manufacturing machinery. Optimised insulation materials guarantee resistance to oils (mineral oils as well), greases, refrigerants, hydraulic fluids as well as numerous alkalis and solvents. The optimum outer diameter, reduced weights and excellent torsion behaviour assures the application in multi-shift operation with extreme stress of alternating bending cycles.
Optimum compliance with requirements for electromagnetic compatibility (EMC*) by min. 85% coverage from the braided screen. In particular to be recommended as supply cable between frequency converter and servo-motor.

*** EMC** = Electromagnetic compatibility
Note To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No. of cores x cross section mm²	Outer ∅ ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
74408	4G1,5	10,2	105	140	16
74409	4G2,5	11,4	158	215	14
74410	4G4	13,1	232	295	12
74411	4G6	15,9	333	425	10
74412	4G10	18,8	527	670	8

Part No.	No. of cores x cross section mm²	Outer ∅ ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no.*)
74413	4G16	24,0	794	985	6
74414	4G25	27,5	1180	1425	4
74415	4G35	32,0	1603	1895	2
74416	4G50	36,5	2165	2620	1

Note
For applications which extend beyond standard solutions we recommend the questionnaire especially designed for energy management systems (see page 13). Please observe the guidelines on installation for energy management chains (installation instructions).

Further technical details see selection table for drag chain cables (pages 8–11).

DESINA®: DEcentralised and **S**tandardised **IN**st**A**llation is a recommendation from VDW, the German toolmakers' association, for harmonisation of components, interfaces and connecting systems

G = with green-yellow earth core

***) Note**
AWG sizes are approximate equivalent values.
The actual cross-section is in mm² – see page T 15.

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