

# TOPSERV® 121 acc. to INDRAMAT Standard INK, flexible two approvals drag chain servo cable, PUR, 0,6/1kV



## Technical data

- Special PUR drag chain cable acc. to UL AWM Style 20235 and CSA AWM
- **Temperature range**  
flexing -40°C to +80°C  
fixed installation -50°C to +90°C
- **Nominal voltage**  
acc. to UL/CSA 1000 V  
acc. to VDE  
power supply cores U0/U 600/1000 V  
control cores U0/U 300/500 V
- **A.c. test voltage**, 50 Hz  
power supply cores 4000 V  
control cores 1000 V
- **Insulation resistance**  
min. 20 Ohm x km
- **Coupling resistance**  
max. 250 Ohm/km
- **Minimum bending radius**  
approx. 7,5x cable Ø

## Cable construction

- Bare copper, ultra-fine wire to DIN VDE 0295 cl. 6 and/or IEC 60228 cl. 6
- TPE-E core insulation, halogen-free
- Black power supply cores with imprint U1, V2, W3
- Green-yellow earth core
- Black control cores with white imprint 5-6 and 7-8
- Screening of the control cores in pairs wrapped with plastic aluminium foil, copper drain-wire tinned and tinned copper braid, approx. coverage 85%
- Control cores stranded in pairs and laid up in layers together with the power supply cores with optimal lay length and stabilising filler
- Fleece wrapping facilitates sliding
- Overall screening of tinned copper wire braid, coverage approx. 85%
- PUR outer sheath
- Sheath colour orange (RAL 2003) according to DESINA®

## Properties

- PUR outer sheath: low adhesion, extremely abrasion resistant, halogen-free, resistant to UV-, oil-, hydrolysis and microbial attack
- PUR sheath: self-extinguishing and flame retardant, test method B acc. to DIN VDE 0472 part 804 and IEC 60332-1
- Optimum compliance with requirements for electromagnetic compatibility (EMC) by approx. 85% coverage from the braided screen
- These cables are produced to high quality specifications and conform to the DESINA®-standard

## • Acc. to INDRAMAT Standard

Part No.	cross-sec	INDRAMAT Part No.
73774	(4x1,0+2x(2x0,75))	INK-0653
700561	(4x1,0+2x(2x0,75))	INK-0650
73580	(4x2,5+2x(2x1))	INK-0602
700562	(4x4+(2x1)+(2x1,5))	INK-0603
700563	(4x6+(2x1)+(2x1,5))	INK-0504
700564	(4x10+(2x1)+(2x1,5))	INK-0605
75978	(4x16+(2x2x1,5))	INK-0606
75979	(4x25+(2x2x1,5))	INK-0607
75980	(4x35+(2x2x1,5))	INK-0667
700565	(4x50+(2x2x2,5))	INK-0668

INDRAMAT product designations INK are registered trademarks of Bosch-Rexroth AG and serve only for comparison purposes.

## Note

- For extreme applications extending beyond standard solutions we recommend that you request our questionnaire, which has been especially designed for energy supply systems.
- Please observe applicable installation regulations for use in energy supply chains.
- For linear motors, these cables are also available with 0,5 mm<sup>2</sup> signal cores.

## Application

The combination of supply cores with the control cores for the braking function and the thermal protection in these cables is ideal. Precision servomotors, as used today in many areas of highly-automated manufacturing processes, call for high-quality, reliable and long-lasting cables. These requirements are met to a high degree by these cables. The cables have an additional overall screen to ensure EMC compatibility, i.e. for protection against electromagnetic interference. Production is based on the specifications of established manufacturers of servo-drives and controls, as well as on various VDE, UL and CSA standards. Applications include machine, plant and robot construction, automation, drive, control and production engineering.

Attractive for export-oriented mechanical and system engineering.

**EMC** = Electromagnetic compatibility

To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

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

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.	Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
73774	(4 x 1,0 + 2 x (2 x 0,75))	11,5	148,0	254,0	17	700564	(4 x 10,0 + (2 x 1,0) + (2 x 1,5))	22,4	610,0	915,0	8
76103	(4 x 1,5 + 2 x (2 x 0,5))	11,4	145,0	250,0	16	74096	(4 x 10,0 + 2 x (2 x 1,0))	22,4	609,0	905,0	8
700561	(4 x 1,5 + 2 x (2 x 0,75))	12,2	170,0	290,0	16	78958	(4 x 10,0 + 2 x (2 x 1,5))	22,4	625,0	925,0	8
73579	(4 x 1,5 + 2 x (2 x 1,0))	12,6	182,0	262,0	16	73826	(4 x 16,0 + 2 x (2 x 1,0))	25,2	894,0	1225,0	6
78954	(4 x 1,5 + 2 x (2 x 1,5))	13,3	193,0	275,0	16	75978	(4 x 16,0 + 2 x (2 x 1,5))	25,2	904,0	1226,0	6
73580	(4 x 2,5 + 2 x (2 x 1,0))	15,0	229,0	336,0	14	74097	(4 x 25,0 + 2 x (2 x 1,0))	28,0	1313,0	1584,0	4
78955	(4 x 2,5 + 2 x (2 x 1,5))	15,6	241,0	350,0	14	75979	(4 x 25,0 + 2 x (2 x 1,5))	28,0	1323,0	1595,0	4
700562	(4 x 4,0 + (2 x 1,0) + (2 x 1,5))	16,0	318,0	485,0	12	74504	(4 x 35,0 + 2 x (2 x 1,0))	31,0	1912,0	2185,0	2
74094	(4 x 4,0 + 2 x (2 x 1,0))	15,7	312,0	475,0	12	75980	(4 x 35,0 + 2 x (2 x 1,5))	31,0	1921,0	2196,0	2
78956	(4 x 4,0 + 2 x (2 x 1,5))	16,4	324,0	490,0	12	74505	(4 x 50,0 + 2 x (2 x 1,0))	36,0	2585,0	2985,0	1
700563	(4 x 6,0 + (2 x 1,0) + (2 x 1,5))	18,8	445,0	615,0	10	75981	(4 x 50,0 + 2 x (2 x 1,5))	36,0	2595,0	2995,0	1
74095	(4 x 6,0 + 2 x (2 x 1,0))	18,2	437,0	606,0	10	700565	(4 x 50,0 + 2 x (2 x 2,5))	37,0	2600,0	3000,0	1
78957	(4 x 6,0 + 2 x (2 x 1,5))	19,0	450,0	621,0	10						

Dimensions and specifications may be changed without prior notice.