TOPSERV® 113 PUR

TECHNICAL DATA

PUR Motor and servo cable acc. to UL Std. 758 (AWM) Style 21209

Temperature range	flexible -30°C to +80°C fixed -40°C to +90°C
Nominal voltage	VDE AC U0/U 600/1000 V UL (AWM) AC 1000 V
AC Test voltage	50 Hz 4000 V
Minimum bending radius	flexible 7.5 x outer Ø fixed 4 x outer Ø

CABLE STRUCTURE

- Copper wire bare, extra finely stranded acc. to DIN VDE 0295 cl. 6 / IEC 60228 cl. 6
- Core insulation: PP
- Core identification:
  Power supply cores
  Core 1: black with imprint U/L1/C/L+
  Core 2: black with imprint V/L2
  Core 3: black with imprint W/L3/D/L-
  Control cores (Bosch, Divers)
  Core 1: black with imprint BR1
  Core 2: white with imprint BR2
  19 drähtige verzinnte Beilauflitze im Steuerpaar
  Control cores (Siemens)
  Core 1: black with imprint BR1
  Core 2: white with imprint BR2
  Control cores (Lenze)
  Core 1: brown with imprint BR1
  Core 2: white with imprint BR2
- G = with protective conductor GN-YE,
  x = without protective conductor
- Screened cores: control cores in pairs, with tinned copper wires, approx. Coverage 85%
- Power supply cores laid up with optimal lay length and stabilising filler
- Sliding movement supporting fleece wrapping
- Screen: braided screen of tinned copper wires, approx. Coverage 85%
- Outer sheath: PUR
- Sheath colour: see table
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation, oil, grease, coolants, hydraulic fluids, microbes, numerous alkalis and solvents, as well as cleaning agents and disinfectants according to ECOLAB®
- low adhesion
- low capacity
- suitable for drag chain application
- These cables are manufactured in accordance with high quality guidelines and complies with the DESINA® standard
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, UL VW-1, CSA FT1
- certifications and approvals:
- ECOLAB®

APPLICATION

With HELUKABEL TOPSERV® 113 PUR, the power cores are ideally combined with the control cores for the brake function and thermal protection. The production is in accordance with the specifications of well known servo drive and control manufacturers. They are used, for example, in machine, plant and robot construction as well as in automation, drive, control and production technology. Interesting for export-oriented machine and plant construction.EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- Brackets ( ) mean screen
- BOSCH Rexroth® Article designations INK are registered trademarks of Bosch Rexroth AG. Schneider Electric® is a registered trademark of Schneider Electric GmbH. SIEMENS® Article designations are registered trademarks of SIEMENS AG. Lenze® is a registered trademark of Lenze GmbH. The references in the table are for guidance only.
- DESINA is a registered trademark and stands for decentralized and standardized installation technology for machine tools and production systems.
- for use in energy supply systems:
- 1) the assembly instructions must be observed
- 2) for special applications, we recommend contacting us and using our data entry form for energy supply systems

Part no.	No. cores x cross-sec. mm²	for system	Part no. OEM	Sheath colour	Outer-Ø approx. mm	Cu factor per km	Weight kg/km, approx
78948	(4G1,5 + (2x1,5)C)C	Siemens®	6FX8008-1BA11	orange	11.7	148.0	233.1
78949	(4G2,5 + (2x1,5)C)C	Siemens®	6FX8008-1BA21	orange	13.4	187.0	315.8
78950	(4G4 + (2x1,5)C)C	Siemens®	6FX8008-1BA31	orange	14.8	268.0	400.9

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Part no.	No. cores x cross-sec. mm²	for system	Part no. OEM	Sheath colour	Outer-Ø approx. mm	Cu factor per km	Weight kg/km, approx
78951	(4G6 + (2x1,5)C)C	Siemens®	6FX8008-1BA41	orange	16.8	358.0	555.3
78952	(4G10 + (2x1,5)C)C	Siemens®	6FX8008-1BA51	orange	19.4	584.0	772.7
75956	(4G16 + (2x1,5)C)C	Siemens®	6FX8008-1BA61	orange	23.1	825.0	1203.0
75957	(4G25 + (2x1,5)C)C	Siemens®	6FX8008-1BA25	orange	26.6	1283.0	1642.0
75958	(4G35 + (2x1,5)C)C	Siemens®	6FX8008-1BA35	orange	30.9	1850.0	2119.0
75959	(4G50 + (2x1,5)C)C	Siemens®	6FX8008-1BA50	orange	34.0	2540.0	2601.0
707228	(4G1,0 + (2x0,5)C)C	Lenze®		orange	10.5	88.0	167.7
707229	(4G1,5 + (2x0,5)C)C	Lenze®		orange	11.5	106.0	205.7
707230	(4G2,5 + (2x0,5)C)C	Lenze®		orange	13.2	152.0	270.6
707231	(4G4 + (2x1,0)C)C	Lenze®		orange	14.6	250.0	386.6
707232	(4G6 + (2x1,0)C)C	Lenze®		orange	17.6	344.5	524.0
707746	(4G10 + (2x1,0)C)C	Lenze®		orange	20.1	508.0	766.2
707747	(4G16 + (2x1,0)C)C	Lenze®		orange	23.8	751.0	1174.0
706003	(4G0,75 + (2x0,5)C)C	Bosch Rexroth®	INK0670	orange	9.2	77.0	137.4
77376	(4G1,0 + (2x0,75)C)C	Divers		orange	10.0	134.0	162.1
74506	(4G1,5 + (2x1,0)C)C	Divers		orange	11.1	138.0	207.8
74507	(4G2,5 + (2x1,0)C)C	Divers		orange	12.5	177.0	269.2
74508	(4G4 + (2x1,0)C)C	Divers		orange	14.3	258.0	372.3
74514	(4G6 + (2x1,0)C)C	Divers		orange	16.2	348.0	492.6
710176	(4G10 + (2x0,5)C)C	Divers		orange	18.6	542.0	714.0
74509	(4G10 + (2x1,0)C)C	Divers		orange	19.0	510.0	726.2
710177	(4G16 + (2x0,5)C)C	Divers		orange	22.5	752.4	1055.0
74510	(4G16 + (2x1,0)C)C	Divers		orange	22.2	798.0	1070.0
710178	(4G25 + (2x0,5)C)C	Divers		orange	26.2	1129.8	1537.0
74511	(4G25 + (2x1,0)C)C	Divers		orange	26.0	1273.0	1576.0
710179	(4G35 + (2x0,5)C)C	Divers		orange	30.3	1615.2	2052.0
74512	(4G35 + (2x1,0)C)C	Divers		orange	29.8	1490.0	2052.0
710180	(4G50 + (2x0,5)C)C	Divers		orange	33.7	2130.8	2834.0
74513	(4G50 + (2x1,0)C)C	Divers		orange	33.7	2110.0	2818.0