



USE OF CABLE

as fieldbus cables for DeviceNet™ systems in the field of production automation for reliable data and energy transmission (e.g. between sensors, actuators and controllers), for high flexible applications (e.g. power chains, gantry robots, pick&place units, conveyors, machine tools, automated production systems, etc.)

DeviceNet™ is an Allen Bradley (Rockwell Automation) developed, based on proven CAN technology bus system.
Standard acc. ODVA specifications



SPECIAL FEATURES

- low adhesion
- largely resistant to grease, coolant fluids and lubricants
- oil-resistant: PUR & PVC acc.to DIN EN 6081 1-2-1 (PVC only mineral oil)
- UV-resistant
- optimized EMC compliant shielding
- max. cable lengths for a bus segment at stated transmission rate a supply cable:
 - Trunk - thick: 125 kbit/s-max.500m | 250 kbit/s-max.250m | 0,5 Mbit/s-max.100m
 - Drop - thin : 125 kbit/s-max.100m | 250 kbit/s-max.100m | 0,5 Mbit/s-max.100m

REMARKS

- conform to RoHS // conform to DESINA (violet)
- LABS-/silicone-free (during production)
- conform to 2014/35/EU-Guideline ("Low-Voltage Directive") CE
- FRNC: Flame Retardant Non Corrosive, halogen free
- ODVA - Open DeviceNet Vendors Association

PRODUCT INFORMATION

Conductor material:	Fine wire, tinned copper strand
Core insulation:	BUScores: foamed PE, supply cores: PVC or polyolefin
Core identification:	BUScores: bu, wh; supply cores: rd, bk
Stranding:	Cores twisted to pairs
Shield:	Pairs in aluminium clad foil, cover. 100%
Overall stranding:	Pairs stranded in layers
Shield3:	Copper braid tinned, with subjacent tinned drain wire
Outer sheath:	PVC or PUR
Sheath colour:	Violet RAL 4001 (VT) or grey RAL 7001 (GY)
Rated voltage:	300 V (not for high voltage purposes)
Testing voltage:	1,5 kV
Loop resistance:	Max. 181,8 Ω/km - AWG24, max. 114,8 Ω/km - AWG22, max. 71,6 Ω/km - AWG18, max. 22,6 Ω/km - AWG15
Characteristic impedance:	120 Ω +/- 12 Ω
Min. bending radius fixed:	5 x d
Min. bending radius moved:	7,5 x d < 3mVW* 15 x d ≥ 3mVW
Operat. temp. fixed min/max:	-40 °C / +80 °C
Operat. temp. moved min/max:	PVC: -10 °C / +70 °C; PUR: -30 °C / +70 °C
Halogen free:	Acc. to IEC 60754-1 (FRNC Types)
Burning behavior:	Flame retardant, PVC: acc. to IEC 60332-3-24 Cat. C, FT4 resp. PUR: acc. to IEC 60332-1-2, VW-1
Approvals:	UL/CSA: PVC: (Trunk Cable) cULus 300V, 75°C, CMG/ PLTC/SunRes/OilRes & cURus 600V, 60°C (Drop Cable) cULus 300V, 75°C, CMG/CL2/SunRes/OilRes & cURus 600V, 60°C PUR: cULus 300V, 75°C CMX/CL2X
Speed:	Self-supporting: 4 m/s
Acceleration:	Max. 5 m/s ²

ITEM OVERVIEW

Product No.	Dimension [n x mm²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
2003696	1 X 2 X AWG 18 + 1 X 2 X AWG 15	12,2	95,00	203,00	grey	V1: DeviceNet+ SK-C-PVC TRUNK & DROP UL/CSA - cULus - CMG
2003697	1 X 2 X AWG 24 + 1 X 2 X AWG 22	7,0	37,00	68,00	grey	V1: DeviceNet+ SK-C-PVC TRUNK & DROP UL/CSA - cULus - CMG
2003698	1 X 2 X AWG 18 + 1 X 2 X AWG 15	12,2	95,00	203,00	violet	V2: DeviceNet+ SK-C-PUR TRUNK & DROP UL/CSA - cULus - CMX DESINA
2003699	1 X 2 X AWG 24 + 1 X 2 X AWG 22	7,0	37,00	68,00	violet	V2: DeviceNet+ SK-C-PUR TRUNK & DROP UL/CSA - cULus - CMX DESINA