UNITRONIC® BUS ASi

For Actuator Sensor Interface (AS-i) bus systems; stationary & flexible applications; 140 Ω

UNITRONIC® BUS ASi is a geometrically-coded, 2-conductor flat cable designed for data and power transfer between simple I/O devices on the sensor/actuator level. The cable is available with 3 different jackets: PVC, rubber, or TPE. The voltage drop on the long distance version is smaller due to larger conductor cross-sections.

Recommended applications

Data and power transmission between sensors, actuators, slaves, repeaters and master; TPE version suitable for wet areas and cooling lubricants

Cable attributes page 648

See attribute list by part number on page 166

Construction

Conductors: stranded tinned copper

Insulation: PVC, rubber, or TPE

Jacket: PVC, EPDM (rubber), or TPE

Application advantage

- Data and power transmission in one cable
- Quick connections to ASi-module due to piercing technology
- Protection against polarity reversal
- UNITRONIC® BUS ASi LD (Long Distance) allows even longer cable runs; more devices or devices with higher power demand can be connected to the network.

Approvals

Complete the installation

SKINTOP® strain relief
page 492

SKINTOP® DIX-ASi
page 547

Technical data

Minimum bend radius:
- for stationary use: 12 mm
- for flexible use:
  - PVC & rubber: 24 mm
  - TPE: 16 mm

Temperature range:
- PVC:
  - during use: -30°C to +90°C
  - during installation: -20°C to +90°C
- rubber & TPE:
  - during use: -40°C to +85°C
  - during installation: -30°C to +85°C

Peak voltage:
- yellow & black: 300V (not for power applications)
- red: 300V

Test voltage: 2000V

Characteristic impedance: 70 - 140 Ω (@ 167 KHz)

Nominal capacitance: 24 pF/ft

Color code: blue & brown

Approvals:
UL: CMG (PVC jacket)
CL2 (PVC jacket)
AWM 2095 (PVC jacket)
Canada: c(UL) CMG (PVC jacket)
Additional: ASi
CE & RoHS

Part number	Jacket construction material	Jacket construction color	Conductor description	Approvals	Application	Copper weight lbs/mft	Approx. weight lbs/mft
2170842	PVC	yellow	2 x 16 AWG	UL/CSA CMG	data & power transmission	19	47
2170843	PVC	black	2 x 16 AWG	UL/CSA CMG	transmission of 30V DC auxiliary power	19	47
2170228	EPDM rubber	yellow	2 x 16 AWG	–	data & power transmission	19	57
2170229	EPDM rubber	black	2 x 16 AWG	–	transmission of 30V DC auxiliary power	19	57
2170371	EPDM rubber	yellow	2 x 14 AWG	–	long distance data & power transmission	32	57
2170372	EPDM rubber	black	2 x 14 AWG	–	long distance transmission of 30V DC auxiliary power	32	57
2170230	TPE	yellow	2 x 16 AWG	–	data & power transmission	19	43
2170231	TPE	black	2 x 16 AWG	–	transmission of 30V DC auxiliary power	19	43
2170232	TPE	red	2 x 16 AWG	–	transmission of 230V AC auxiliary power	19	43