



AS-Interface, ISOBUS & KNX Building Bus Cables

ISOBUS

Agricultural Machinery Cable

ISO 11783-2 9-core hybrid CAN star-quad (4×0.5 mm²) + ECU & 60 A implement power PUR



ISO 11783-2 · AEF ISOBUS

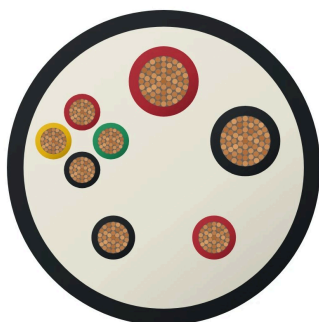
4×0.5 mm² TBC Quad + PowerUp to 60 A (6 / 10 / 16 mm²) PUR

Application

ISOBUS Agricultural Machinery Cable is the ISO 11783-2 9-conductor hybrid tractor-to-implement cable combining a special 75–120 Ω twisted Star-Quad data unit (4×0.50 mm²: Yellow CAN_H, Green CAN_L, Red TBC_PWR, Black TBC_RTN), two ECU power cores (2×1.5 or

Typical uses: Agricultural tractors & harvesters, Precision planters, seeders & sprayers, Baler, mower & slurry tanker implements, Forestry & municipal utility attachments

Construction



Cross-section, not to scale

1	Fine-stranded bare copper power &	ISO 11783-2 / ISO 6722
2	Automotive XLPE / PP / PVC core	ISO 11783-2
3	ISO 11783-2 TBC Star-Quad + hybrid	ISO 11783-2 Annex B
4	Non-woven binder wrap	ISO 11783-2
5	Heavy-duty agricultural PUR sheath	ISO 11783-2 / ISO 6722

Technical data

Typical values

TBC data quad impedance Z0	75 Ω to 120 Ω at 1 MHz per ISO 11783-2
Data quad DC resistance (0.50 mm ²)	≤ 37.1 Ω/km per core @ 20 °C
Attenuation (TBC quad @ 1 MHz)	≤ 1.5 dB/100m
Operating temperature range	-40 °C to +85 °C (+105 °C peak)
Min. bending radius	5 × D fixed · 10 × D drawbar flexing
Agricultural chemical resistance	Liquid manure/slurry, ammonia, urea/DEF
Standards	ISO 11783-2 (Tractors and machinery for

TBC data quad capacitance & delay	≤ 75 pF/m · propagation delay ≤ 5.0 ns/m
Main power resistance (6 / 10 / 16	≤ 3.1 / ≤ 1.82 / ≤ 1.16 Ω/km @ 20 °C
Operating / test voltage	60 V DC automotive (300 V peak) · 1.5 kV AC
Cold flexibility	-40 °C drawbar articulation without sheath
Abrasion & tear resistance	Heavy-wall PUR per DIN EN 50363-10-2 / ISO
UV, ozone & microbe resistance	ISO 4892 UV weatherometer · EN 50396

Sizes

4 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Configuration	Conductor size	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard ISOBUS configurations 4 sizes						
☐ ISOBUS TBC Data Quad 4×0.50 mm ² PUR	4×0.50 mm ² (TBC Data Quad)	0.50 mm ² (20 AWG)	6.2	20	48	31
☐ ISOBUS Hybrid 2×6.0 + 2×1.5 + 1×0.5 + 4×0.5Q PUR	2×6.0 + 2×1.5 + 5×0.5 mm ²	6.0 / 1.5 / 0.5 mm ²	15.2	168	285	76
☐ ISOBUS Hybrid 2×10.0 + 2×2.5 + 1×0.5 + 4×0.5Q PUR	2×10.0 + 2×2.5 + 5×0.5 mm ²	10.0 / 2.5 / 0.5 mm ²	17.8	264	415	89
☐ ISOBUS Hybrid 2×16.0 + 2×2.5 + 1×0.5 + 4×0.5Q PUR	2×16.0 + 2×2.5 + 5×0.5 mm ²	16.0 / 2.5 / 0.5 mm ²	20.6	380	560	103

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per ISO 11783-2 (ISOBUS Tractor-Implement Hybrid Bus Cable).

Impedance, capacitance & attenuation

4 sizes

Configuration	Impedance Z0	Max. DC R @ 20 °C Ω/km	Mutual C pF/m ≈	VoP %	Attenuation @ 20 °C dB/100m	Dielectric test V
4×0.50 mm ² (TBC Data Quad)	95 Ω	74.2	50.0	68	1.35 dB/100m @ 1 MHz	1,500
2×6.0 + 2×1.5 + 5×0.5 mm ²	95 Ω	74.2	52.0	68	1.40 dB/100m @ 1 MHz	1,500
2×10.0 + 2×2.5 + 5×0.5 mm ²	95 Ω	74.2	52.0	68	1.40 dB/100m @ 1 MHz	1,500
2×16.0 + 2×2.5 + 5×0.5 mm ²	95 Ω	74.2	52.0	68	1.40 dB/100m @ 1 MHz	1,500

– Transmission values (characteristic impedance Z0, mutual capacitance, VoP, and attenuation) are measured at +20 °C per ISO 11783-2 (ISOBUS Tractor-Implement Hybrid Bus Cable).

Standards and approvals

- ✓ ISO 11783-2
- ✓ AEF Compatible
- ✓ ISO 6722-1

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/isobus-agricultural-machinery-cable



Typical values for this cable type, based on ISO 11783-2 (ISOBUS Tractor-Implement Hybrid Bus Cable). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.