



power connection cable series

400 Hz Aircraft Ground Power Cable

SAE AS5756 115/200 V 400 Hz low-reactance 7-core + control aircraft GPU cable



115/200 V AC 400 Hz GPU

Symmetrical 7-Core Low Reactance

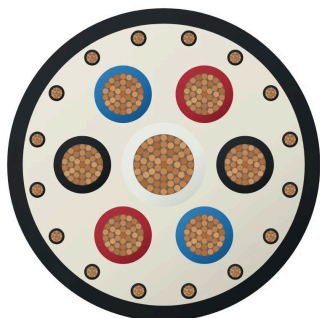
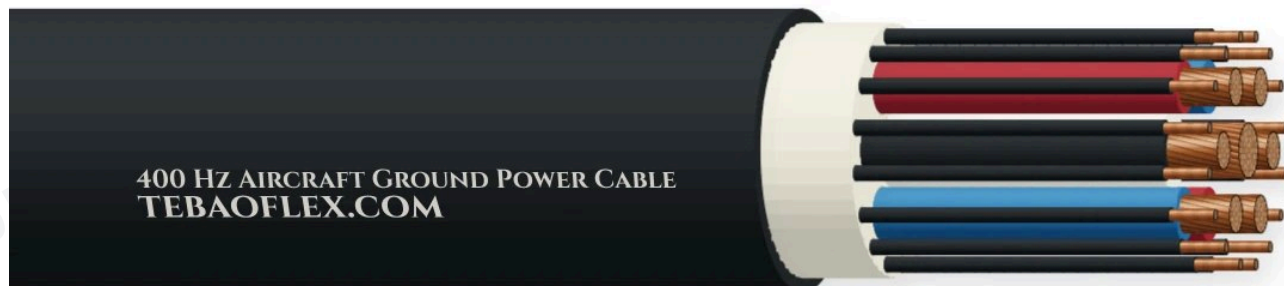
SAE AS5756 / ISO 6858

Application

400 Hz Aircraft Ground Power Cable engineered per SAE AS5756, ISO 6858 and MIL-DTL-3432 for 115/200 V AC 400 Hz solid-state frequency converters, mobile diesel GPUs and passenger boarding bridge cable reels—featuring a symmetrical.

Typical uses: Commercial Airport Passenger Boarding Bridges (PBB), Mobile Diesel & Battery Apron Ground Power Units (GPU), Military Fighter & Transport Hangar 400 Hz Pits, Aircraft MRO Hangars & Avionics Test Bays, Naval Flight-Deck 400 Hz Helicopter Servicing

Construction



Cross-section, not to scale

- 1 Central Neutral + 6 Symmetrical Phase Conductors (Class 6 Cu)
- 2 4 to 12 × 28 V DC Interlock & Voltage-Sense Control Cores
- 3 Low-loss 90 °C EPR / TPE-E dielectric insulation
- 4 Anti-torsion synthetic yarn reinforcing braid
- 5 Skydrol- & Jet-A-resistant Hi-Vis Yellow/Orange outer sheath

Technical data

Typical values

Operating system voltage	115 / 200 V AC three-phase 400 Hz (cable insulation rated 600 V)	400 Hz inductive reactance	0.068 to 0.092 Ω/km at 400 Hz (vs ~0.38 Ω/km for 4-core cable)
400 Hz voltage drop	0.042–0.058 V / (A·km) at cos φ = 0.8 (400 Hz)	Dielectric test voltage	3,000 V AC on power cores · 1,500 V AC on control cores
Continuous conductor temp.	+90 °C	Dynamic apron temp. range	-55 °C to +80 °C (flexible operation on arctic/desert tarmacs)
Short-circuit temperature	+250 °C	Nominal outer diameter	32.5 mm (90 kVA) · 37.8 mm (140 kVA) · 42.5 mm (180 kVA)
Min. bend radius	6 × OD (dynamic reeling / apron handling) · 4 × OD (static)	Wheel crush resistance	Withstands aircraft service truck and nose-gear tire roll-over
Aviation fluid immunity	Resistant to Jet-A1 kerosene, Skydrol LD-4/500B hydraulic fluid & MIL-PRF-5606	Runway de-icer & weather	Resistant to potassium/sodium formate, propylene glycol, UV & ozone
Abrasion & flame	Concrete tarmac drag-resistant PUR/CPE · Flame retardant per IEC 60332-1-2	Standards	SAE AS5756 · MIL-DTL-3432 · German DFS 400

Sizes

4 standard constructions

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

GPU cable rating	6 Phase + 1 Neutral + Control	Outer Ø ≈ mm	Weight ≈ kg/m	400 Hz XL Ω/km	400 Hz rating A (kVA)
115/200 V 400 Hz Symmetrical 7-Power-Core + Control Cables 4 sizes					
☐ 400Hz-90kVA (Metric 6×16+25)	6×16 mm² Ph + 1×25 mm² N + 7×1.5C	32.5	1.85	0.088	260 A (90 kVA)
☐ 400Hz-140kVA (Metric 6×25+35)	6×25 mm² Ph + 1×35 mm² N + 12×1.5C	37.8	2.65	0.079	390 A (140 kVA)
☐ 400Hz-180kVA (Metric 6×35+50)	6×35 mm² Ph + 1×50 mm² N + 12×1.5C	42.4	3.55	0.072	500 A (180 kVA)
☐ 400Hz-180kVA (SAE 6×2AWG+1/0)	6×2 AWG Ph + 1×1/0 AWG N + 6×16AWG	41.8	3.42	0.074	500 A (180 kVA)

– At the ISO 461 aircraft nose plug, phase cores A1+A2 crimp into Pin A, B1+B2 into Pin B, and C1+C2 into Pin C.

Standards and approvals

- ✓ SAE AS5756 & MIL-DTL-3432
- ✓ ISO 6858 / ISO 461 Compatible
- ✓ DFS 400 German Airport Spec

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/400-hz-aircraft-ground-power-cable



Typical values for this cable type, based on SAE AS5756 / MIL-DTL-3432 / ISO 6858 / DFS 400. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.