Drag Chain Cable for Continuous Flexing

FLEXIBLE INDUSTRIAL CABLES

Fine-strand copper conductors, short lay length and a PUR sheath for continuous flexing in drag chains, robot axes and moving machine carriages.

VOLTAGE	CORES	SIZE	SHEATH
300/500 V	2 – 37	0.5 – 35 mm²	PUR

TECHNICAL DATA

Standard	IEC 60227-5, IEC 60228, VDE 0250 where specified	**Sheath**	PUR, oil and abrasion resistant
Rated voltage	300/500 V (0.6/1 kV on request)	**Bending radius**	7.5 × diameter (fixed), 10 × (moving)
Conductor	Class 5 / Class 6 fine-strand copper, bare or tinned	**Flex life**	3 – 5 million cycles at defined radius and speed
Cross-section	0.5 – 35 mm²	**Temperature range**	−30 °C to +80 °C (PUR)
Cores	2 – 37, higher counts on request	**Packing**	Coil or drum, cut lengths available
Insulation	TPE or PVC		

Typical values. The final construction is confirmed on the order datasheet and the released drawing.

STANDARDS, TESTING AND DOCUMENTS

Routine tests	Conductor resistance, voltage test and insulation resistance on every length
Type tests	Type-test reports for each construction, witnessed by a third party on request
Documents with the drum	Packing list, drum list, routine test certificate, datasheet, CO / FORM A
Traceability	Drum number marked and recorded against the routine test certificate

OTHER CONSTRUCTIONS FROM THE SAME RANGE

0.6/1kV PVC/XLPE Insulated LV Power Cable	www.zmslvcable.com/products/lv-power-cables-0-6-1kv/pvc-xlpe-lv-power-cable/
Shielded LV Power Cable	www.zmslvcable.com/products/lv-power-cables-0-6-1kv/shielded-lv-power-cable/

PACKING AND DELIVERY

Drum	Wooden or steel-framed export drum, 250–500 m per drum by cross-section
Packing	Sealed ends, protected lugs, desiccant, UV-resistant wrap
Marking	Drum no., designation, voltage, cross-section, length, gross weight
Lead time	15–25 working days for standard builds
Terms	FOB Qingdao, Tianjin or Shanghai. CIF, CFR and DAP on request

HOW TO ORDER

To quote, send the voltage class (U0/U), conductor material and cross-section, screen or armour, sheath, drum length, delivery port and the standard the project specifies. We return a released drawing, the test programme and a drum plan with the quotation.

SELECTION NOTES

What bend radius should the chain be designed for?
Use at least 10 × cable diameter for continuous flexing, and confirm against the datasheet value for the specific construction. The chain radius, not the cable, normally sets the limit.

How do I estimate service life?
Life is a function of travel, speed, acceleration, radius and fill weight. Our test data gives cycles at a defined condition; send the application data and we will confirm the expected life.

Can the cable be used on a robot arm?
Bend-only applications in a drag chain and torsion applications on a robot arm are different duty. State the axis movement — bending, torsion or both — so the correct construction is quoted.

Do you supply pre-assembled harnesses?
Cable is supplied in coils, drums or cut lengths. Terminated harnesses can be discussed for repeat orders with a fixed drawing.

Certification. Environmental management to ISO 14001:2015 and occupational health and safety to ISO 45001:2018, with CE marking under the EU low-voltage and EMC directives. Independent inspection and type testing are carried out through ISO/IEC 17020 and 17025 accredited laboratories. Certificate numbers and validity dates are published at www.zmslvcable.com/certificates/.

Request a quotation for this cable

Send the specification sheet or the cable schedule and we return a released drawing, the test programme and a drum plan with the price.

Tel +86 371 6782 9333
WhatsApp +86 173 0383 6349
info@zmscable.com
www.zmslvcable.com