Servo, drag-chain & OCT hybrid cables

MSHYB-DSL 180 PVC OCT

Single-Cable Servo

DESINA orange PVC hybrid power + DSL digital feedback servo cable



DIN VDE 0250 | U0/U 0.6/1 kV · 4 kV AC | EMC Screened

Application

MSHYB-DSL 180 PVC OCT integrates bare copper 0.6/1 kV servo power cores, a shielded brake pair, and a 100 Ω shielded digital DSL pair inside a flame-retardant DESINA orange PVC sheath for fixed and light-flex runs.

Typical uses: Automated assembly & handling lines, CNC machine tools & gantry axes, Packaging, robotics & intralogistics, Factory servo drive & motion bays

Construction





Cross-section, not to scale

1	Conductor	IEC 60228 Class 5 flexible bare annealed copper · IEC 60228 Class 5
2	Core insulation	Low-capacitance PP + foamed PE (100 Ω DSL pair) · DIN VDE 0250
3	Core assembly & separator	Concentric cabled assembly with low-friction fleece or polyester binder tape · DIN VDE 0250
4	EMC metallic screen	Individually shielded DSL + brake pairs + overall ≥ 85% tinned Cu braid · EMC ≥ 85% / 100% foil
5	Outer sheath	DESINA orange (RAL 2003) oil- & flame-retardant PVC sheath · IEC 60332-1-2 Flame

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV	AC test voltage	4 kV AC / 5 min
Conductor class	IEC 60228 Class 5 bare Cu	EMC screen	Individually shielded DSL + brake pairs +
Insulation resistance	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-40 °C to +80 °C
Temp. range (flexing)	-5 °C to +70 °C	Short-circuit temp.	+160 °C (5 s)
Min. bending radius	10 × OD (fixed)	Flame retardance	IEC 60332-1-2 Flame
Oil & chemical perf.	UL VW-1 Flame	Environmental / EMC	100 Ω DSL Feedback Pair
Outer sheath	DESINA orange (RAL 2003) oil- &		

Sizes

6 standard constructions

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

Hybrid Config mm²	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ 4G1.5 + 2×0.75 + 2×0.25	11.4	13.300	112	236	114
☐ 4G2.5 + 2×1 + 2×0.25	12.8	7.980	159	321	128
☐ 4G4 + 2×1 + 2×0.25	14.6	4.950	220	435	146
☐ 4G6 + 2×1.5 + 2×0.25	16.9	3.300	310	603	169
☐ 4G10 + 2×1.5 + 2×0.25	19.8	1.910	468	884	198
☐ 4G16 + 2×1.5 + 2×0.25	23.2	1.210	700	1,290	232

- Max. conductor DC resistance R20 at 20 °C per IEC 60228 (bare copper).
- Minimum bending radius calculated at 10 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- ✓ DIN VDE 0250
- ✓ UL AWM Style 2570
- ✓ IEC 60228 Class 5
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, RoHS 2 (2011/65/EU) & REACH

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/mshyb-dsl-180-pvc-oct-hybrid-servo-cable

Typical values for this cable type, based on DIN VDE 0250 · UL AWM Style 2570 · IEC 60228 Class 5. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.