

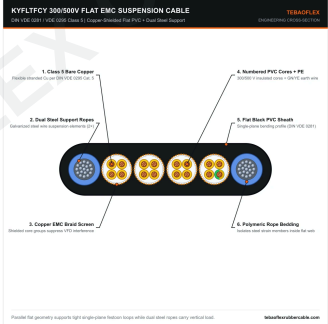
KYFLTCY 300/500V EMC-Screened Flat PVC Cable with Steel Suspension Elements

KYFLTCY is a 300/500 V copper-shielded flat PVC power and control cable with integrated steel suspension elements (TF = Tragorgan Flachleitung), purpose-built for overhead cranes, container-handling hoists, high-bay stacker cranes, and deep vertical suspended drops requiring both single-plane bending and tensile strain relief.

1. CABLE CONSTRUCTION

1. Conductors	Flexible fine-stranded bare copper conductors according to DIN VDE 0295 Category 5 / IEC 60228 Class 5
2. Core Insulation & Coding	Special flexible PVC core insulation; 5-, 20-, and 28-wire numbered/color-coded control cores plus one dedicated green/yellow (GN/YE) protective earth wire
3. Core Sub-Bundle Lay-Up	Cores stranded in low-torsion four-core / multi-core groups arranged side-by-side in a single flat plane for strong unidirectional bends
4. Copper EMC Shield (CY)	Braided copper screen over core sub-bundles providing high optical coverage against electromagnetic interference
5. Integrated Suspension Elements (TF)	Two stranded galvanized steel wire ropes embedded symmetrically inside polymeric bedding along the left and right outer flanks of the flat cable
6. Outer Sheath	Flexible black flat PVC compound per DIN VDE 0281 — suitable for dry, damp, and wet industrial halls

Cross-Section Reference



Flat single-plane bending profile integrating dual outer galvanized steel strain-relief ropes and copper-braided EMC core groups.

2. ELECTRICAL, MECHANICAL & ENVIRONMENTAL DATA

Nominal Voltage (U0/U)	300 / 500 V AC
Conductor Stranding	DIN VDE 0295 Category 5 (IEC 60228 Class 5 flexible bare copper)
Max. Conductor Operating Temp.	+70°C
Minimum Temperature (Mobile)	-25°C (dynamic single-plane festoon & vertical hoist flexing)
Minimum Temperature (Fixed)	-40°C
Bending Plane & Radius	Strong operational bends in one flat plane (typical ~10 × cable thickness H)
Operating Environment	Dry, damp, and wet indoor/covered industrial crane halls, machine tools, and hoists
Environmental Compliance	RoHS & REACH compliant; flame-retardant per IEC 60332-1-2

3. DIMENSIONAL, WEIGHT & PERFORMANCE SPECIFICATIONS

KYFLTCY 300/500 V Flat EMC PVC Cable with Integrated Steel Suspension Elements				
Part Designation	Core & Support Architecture	Copper Weight (kg/km)	Total Weight (kg/km)	Outer Sheath
KYFLTCY 28×1	28 × 1.0 mm² (numbered + GN/YE) + Cu EMC screen + 2 steel ropes	462.00	Project-specific*	Black PVC
KYFLTCY 20×1 (Custom)	20 × 1.0 mm² (numbered + GN/YE) + Cu EMC screen + 2 steel ropes	On request	On request	Black PVC
KYFLTCY 5×1.5 / 2.5 (Custom)	5-core power/control + Cu EMC screen + 2 steel ropes	On request	On request	Black PVC

***Engineering Packing & Customization Note:** Total finished weight and exact flat profile dimensions (H × W mm) vary with the customer-specified tensile breaking load of the dual galvanized steel wire ropes. Standard delivery is 500 m on wooden drums; custom core counts (5 to 36 cores, 0.75–2.5 mm²) are extruded to order.