



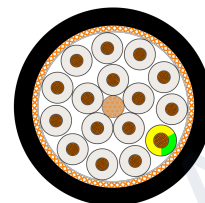
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

(N)12YRDC11Y-J/O CABLE

Screened halogen-free PUR power and control cable for severe mechanical service



APPLICATION

Highly flexible halogen-free cable for trolley systems, drag chains, moving machine parts and conveyor facilities. Suitable for dry and wet rooms, outdoor use and permanent water service up to 50 m depth.

KEY FEATURES

Parameter	Value
Application	Screened halogen-free power and control cable for trolley systems, drag chains and moving machine parts
EMC protection	Tinned copper wire braid with approximately 85% coverage
Water service	Suitable for permanent use in water up to 50 m depth, AD8; not for drinking water
Temperature range	Fixed installation: -50 to 90 deg C; flexible operation: -40 to 90 deg C

DESIGN

Parameter	Value
Conductor	Bare copper wires, finely stranded Class 5 according to DIN EN/IEC 60228
Insulation	Polyester-based insulation with numbered core identification
Core arrangement	Cores stranded in layers around a central aramid-yarn supporting element
Screen	Tinned copper wire braid, approximately 85% coverage
Sheath system	Halogen-free PUR inner and outer sheaths

ELECTRICAL, THERMAL, MECHANICAL AND MATERIAL DATA

Parameter	Value
Rated voltage U0/U	0.6/1 kV
Max. AC operating voltage	0.7/1.2 kV
Max. DC operating voltage	0.9/1.8 kV
AC test voltage	2.5 kV
Conductor temperature	90 deg C; short circuit 250 deg C
Bending radius, fixed	At least 6 x outer diameter
Bending radius, free moving	At least 7.5 x outer diameter
Tensile load per conductor	Maximum 15 N/mm ²
Screen	Tinned copper wire braid, approximately 85% coverage
Standards	DIN EN/IEC 60228; EN 60811-404; EN 60754; EN 60332-1-2
Environmental	Halogen-free; RoHS 2015/863/EU; suitable for indoor, outdoor and wet rooms

TECHNICAL DATA

(N)12YRDC11Y-J/O - SINGLE-CORE DATA								
Configuration	Size mm ²	Stranding	Insulation thickness mm	Jacket thickness mm	Outer diameter mm	Ampacity A	Min. bend diameter mm	Weight kg/km
1x25	25	1x25	-	-	11.5-13.0	-	-	330
1x35	35	1x35	-	-	12.8-14.3	-	-	420
1x50	50	1x50	-	-	14.9-16.4	-	-	590
1x70	70	1x70	-	-	16.7-18.2	-	-	795
1x95	95	1x95	-	-	18.9-20.4	-	-	1050
1x120	120	1x120	-	-	20.4-22.4	-	-	1295
1x150	150	1x150	-	-	23.1-25.1	-	-	1610
1x185	185	1x185	-	-	25.8-27.8	-	-	1920

CONSTRUCTION AND APPLICATION NOTES	
Parameter	Value
Conductor	Bare finely stranded copper, Class 5 according to DIN EN/IEC 60228
Supporting element	Central aramid yarn element supports the layered core arrangement
Screen	Tinned copper wire braid with approximately 85% coverage
Outer sheath	Halogen-free PUR compound, black matt, inkjet marking
Water service	Permanent use in water up to 50 m depth, AD8; not for drinking water

TECHNICAL DATA

(N)12YRDC11Y-J/O - MULTI-CORE DATA (2)								
Configuration	Size mm2	Stranding	Insulation thickness mm	Jacket thickness mm	Outer diameter mm	Ampacity A	Min. bend diameter mm	Weight kg/km
4x2.5	2.5	4x2.5	-	-	13.0-14.5	-	-	250
4x4	4	4x4	-	-	14.8-16.3	-	-	350
4x6	6	4x6	-	-	16.6-18.1	-	-	450
4x10	10	4x10	-	-	19.3-20.8	-	-	680
4x16	16	4x16	-	-	22.4-24.4	-	-	985
4x25	25	4x25	-	-	26.9-28.9	-	-	1460
4x35	35	4x35	-	-	30.4-32.4	-	-	1940
4x50	50	4x50	-	-	35.2-37.2	-	-	2665
5x1.5	1.5	5x1.5	-	-	12.4-13.9	-	-	220
5x2.5	2.5	5x2.5	-	-	13.9-15.4	-	-	295
7x1.5	1.5	7x1.5	-	-	11.5-13.0	-	-	205
12x1.5	1.5	12x1.5	-	-	15.5-17.0	-	-	380
12x2.5	2.5	12x2.5	-	-	18.6-20.1	-	-	580
18x1.5	1.5	18x1.5	-	-	16.1-17.6	-	-	440
18x2.5	2.5	18x2.5	-	-	19.2-20.7	-	-	670

COMPLIANCE AND SERVICE NOTES

Parameter	Value
Insulation	Polyester-based insulation; up to 5 cores colored, from 6 cores white and numbered
Core identification	With or without green/yellow protective conductor
Mechanical service	Designed for frequent bending in trolley, drag-chain and conveyor systems
Approvals	Halogen-free, oil-resistant, UV/weather resistant; CPR and LVD compliant
Data note	Dimensions and weights are approximate; manufacturer-specific catalog numbers omitted

CERTIFICATIONS

