



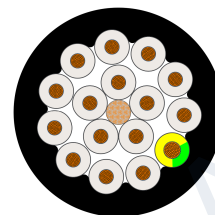
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

(N)12YRD11Y-J/O CABLE

Halogen-free PUR power and control cable for severe mechanical service



APPLICATION

Highly flexible halogen-free cable for festoon and 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	Halogen-free power and control cable for festoon systems, trolleys, drag chains and moving machine parts
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
Protection	Halogen-free PUR jacket with high flexibility, UV, ozone, moisture and oil resistance

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
Outer sheath	Halogen-free PUR compound, black matt finish

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
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)12YRD11Y-O - SINGLE-CORE DATA								
Configuration	Size mm2	Stranding	Insulation thickness mm	Jacket thickness mm	Outer diameter mm	Ampacity A	Min. bend diameter mm	Weight kg/km
1x25	25	1x25	1.5	3.2	10.7-12.2	-	177.8	290
1x35	35	1x35	1.5	3.6	12.0-13.5	-	203.2	380
1x50	50	1x50	1.5	3.6	13.8-15.3	-	228.6	530
1x70	70	1x70	1.5	4.4	15.8-17.3	-	254.0	725
1x95	95	1x95	2.0	4.3	17.9-19.4	-	304.8	965
1x120	120	1x120	2.0	4.3	19.4-20.9	-	330.2	1200
1x150	150	1x150	2.0	4.3	21.9-23.4	-	330.2	1475
1x185	185	1x185	2.0	4.3	24.7-26.2	-	330.2	1770

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
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
Data note	Dimensions and weights are approximate and subject to manufacturing tolerances

TECHNICAL DATA

(N)12YRD11Y-J - MULTI-CORE DATA								
Configuration	Size mm2	Stranding	Insulation thickness mm	Jacket thickness mm	Outer diameter mm	Ampacity A	Min. bend diameter mm	Weight kg/km
4x1.5	1.5	4x1.5	-	-	8.6-10.1	-	-	110
4x2.5	2.5	4x2.5	-	-	10.0-11.5	-	-	155
4x4	4	4x4	-	-	11.7-13.2	-	-	235
4x6	6	4x6	-	-	13.2-14.7	-	-	320
4x10	10	4x10	-	-	15.6-17.1	-	-	495
4x16	16	4x16	-	-	18.2-19.7	-	-	730
4x25	25	4x25	-	-	22.3-24.3	-	-	1130
4x35	35	4x35	-	-	24.9-26.9	-	-	1540
4x50	50	4x50	-	-	29.8-31.8	-	-	2185
5x2.5	2.5	5x2.5	-	-	10.8-12.3	-	-	190
5x4	4	5x4	-	-	12.7-14.2	-	-	285
5x6	6	5x6	-	-	14.5-16.0	-	-	395
5x10	10	5x10	-	-	17.1-18.6	-	-	615
5x16	16	5x16	-	-	19.9-21.4	-	-	910
7x2.5	2.5	7x2.5	-	-	12.6-14.1	-	-	255
12x1.5	1.5	12x1.5	-	-	14.8-16.3	-	-	330
12x2.5	2.5	12x2.5	-	-	17.7-19.2	-	-	490
18x1.5	1.5	18x1.5	-	-	15.1-16.6	-	-	380
18x2.5	2.5	18x2.5	-	-	18.1-19.6	-	-	580
24x1.5	1.5	24x1.5	-	-	18.0-19.5	-	-	525
24x2.5	2.5	24x2.5	-	-	21.6-23.6	-	-	790

COMPLIANCE AND SERVICE NOTES

Parameter	Value
Insulation	Polyester-based insulation; up to 5 cores colored, from 6 cores white and numbered

CERTIFICATIONS

