



Construction:

Conductor	: aluminium (class 1 or 2) - monowire (re), multiwire (rm).
Insulation	: PVC type A.
Inner sheath	: extruded PVC, black or grey.
Armour	: blank or zinc-plated cold-rolled steel tape, min. thickness 0.2-0.5 mm.
Outer sheath	: PVC type ST 1 black or grey.

Technical data and tests:

Conductor type	: monowire (re), multiwire (rm).
Rated voltage U ₀ /U	: 0.6/1 kV.
Test voltage	: 3.5 kV AC or 8.4 kV DC, 5 min.
Min. temperature of cable	: installation : -5° C. operation : -30° C.
Max. allowed operating temperature	: 70° C.
Max. short-circuit temperature	: 160° C.
Min. bending radius	: 12 x cable diameter with more than 1 conductors. 15 x cable diameter with 1 conductor.
Max. tensile strain during instal.	: max 50 N/mm ² .
Color coding	: 1 conductor - blue or yellow-green; 2 conductors - blue, brown; - yellow-green, black for sect > 10 mm ² ; 3 conductors - brown, black, grey; - yellow-green, blue, brown; 4 conductors - blue, brown, black, grey; - yellow-green, brown, black, grey; 5 conductors - blue, brown, black, grey, black; - yellow-green, blue, brown, black, grey; More than 5 conductors: - numbered black conductors; - yellow-green and numbered conductors.

Standards:

Cable	: IEC 60502-1.
Conductors	: IEC 60228.
Insulation	: IEC 60502-1.
Flame retardancy	: ACYAbY : EN 50265-2-1 (IEC 60332-1) - burning on a single vertical cable. ACYAbY-F : EN 50266-2-4 (IEC 60332-3-25 Cat. C) - burning on a bundle of cables.

Applications:

This cable is used to transmit the power supply to power stations. It must be protected against: corrosive chemicals, chemical solvents and solar radiation. This cable can be installed underground, in air, inside or outside and has a high resistance to mechanical shocks. This is a flame retardant cable.



HALLEY CABLES

ACYAbY / ACYAbY-F

Low voltage power cables (0.6/1 kV)

Aluminium power cable with PVC armour and outer sheath

www.halleycables.com

DIMENSIONS

No. of conductors x cross section mm ²	External diameter approx. mm	Weight approx. kg/km	Max. electrical resist. at 20° C Ω/km	Permissible load in air at 30° C A	Permissible load in ground at 20° C A
2x4 re	15	340	741	30	42
2x6 re	16	400	461	38	52
2x10 re	17	470	308	52	69
2x16 re	19	580	191	70	90
3x4 re	16	370	741	27	36
3x6 re	17	430	461	34	45
3x10 re	18	515	308	47	60
3x16 re	20	640	191	63	78
3x25 re	24	860	120	82	100
3x35 s m	25	840	868	100	120
3x50 s m	28	1070	641	125	145
3x70 s m	32	1350	443	155	175
3x95 s m	37	2060	32	190	215
3x120 s m	40	2430	253	220	245
3x150 s m	43	2790	206	250	275
3x185 s m	48	3415	164	285	310
3x240 s m	55	4310	125	340	360
3x25+16 re+re	25	930	1,20 / 1,91	82	100
3x35+16 sm+re	27	950	0,868 / 1,91	100	120
3x50+25 sm+re	31	1235	0,641 / 1,20	125	145
3x70+35 sm+sm	35	1580	0,443 / 0,868	155	175
3x95+50 sm+sm	40	2020	0,320 / 0,641	190	215
3x120+70 sm+sm	46	2900	0,253 / 0,443	220	245
3x150+70 sm+sm	48	3240	0,206 / 0,443	250	275
3x185+95 sm+sm	54	4050	0,164 / 0,320	285	310
3x240+120 sm+sm	61	5010	0,125 / 0,253	340	360
4x4 re	17	420	741	27	36
4x6 re	18	490	461	34	45
4x10 re	20	580	308	47	60
4x16 re	22	735	191	63	78
4x25 rm	27	1060	120	82	100
4x35 sm	27	1035	868	100	120
4x50 sm	31	1330	641	125	145
4x70 sm	35	1690	443	155	175
4x95 sm	41	2550	320	190	215
4x120 sm	45	3020	253	220	245
4x150 sm	47	3480	206	250	275
4x185 sm	53	4280	164	285	310
4x240 sm	61	5450	125	340	360
5x4 re	18	480	741	27	36
5x6 re	19	560	461	34	45
5x10 re	21	670	308	47	60
5x16 rm	25	890	191	63	78
5x25 rm	29	1250	120	82	100
5x35 rm	32	1515	868	100	120

For all the sections with one conductor starting from 1 x 25 up to 1 x 300, the technical details will be provided upon request.



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