DRINCABLE® 800

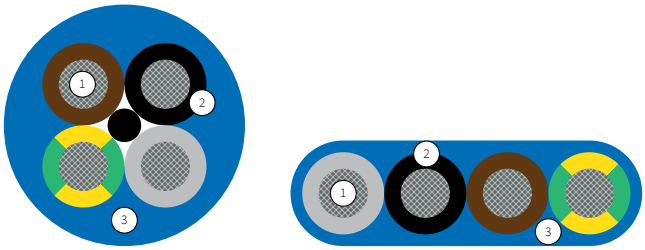
ACS - KTW - DVGW W270 - WRAS approved

1 **PHASE CONDUCTORS**
MATERIAL: tinned copper
CONSTRUCTION: class 5 IEC 60228 and VDE 0295

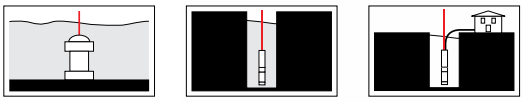
2 **INSULATION**
MATERIAL: EPR compound: EI7 quality according to EN 50363-1, 3GI3 quality according to VDE 0207 part 20, R-EP-90 quality acc. to AS/NZS 3808

CORES IDENTIFICATION
According to HD 308

3 **OUTER SHEATH**
INNER LAYER MATERIAL: special waterproof compound (if present)
OUTER LAYER MATERIAL: special cross-linked compound, 5GM3 (acc. to VDE 0207 part 21) - EM2 quality (acc.to EN 50363-2-1) for mechanical and themal properties
COLOUR: blue



APPLICATION





DRINCABLE® 800 is a flexible electrical cable no toxic, weather resistant (indoor and outdoor use), waterproof and submersible up to 800 meters, with special rubber insulation and outer sheath that makes the cable suitable for permanent immersion in drinking water. The exceptional performance of Aristoncavi DRINCABLE® 800 is provided by the unique and proprietary compound used for the outer sheath. The cable has successfully passed rigorous testing and is fully qualified for direct and permanent immersion in potable water: they are fulfilled requirements of health according to the German KTW-Recommendation, the requirements of the growth of microorganism according to German DVGW W270 Technical Standard and according to the ACS French law (Attestation de Conformité Sanitaire), moreover it also fulfilled the British Water Regulations Advisory Scheme WRAS. The cable is also respecting the Italian DM 174/04. The absence of microbial growth, the effects on water taste and appearance, the absence of any metals and toxic substances, are been tested and certified in the above protocols. The main fields of application are submersible pumps for drinking water, depuration/chlorination systems, operation and control equipment in aquarium, processing and preserving systems of drinks and foodstuff, swimming pool lightings. The cable can also be used for applications where improved chemical and abrasion resistance is required, as submersible pumps in mining application and for all the needs related the connections of electrical equipment used in presence of water. The chemical resistance of DRINCABLE® 800 makes it suitable for use even in contact with waste water, where the contact with a wide range of substances is allowed (to be checked case by case). The DRINCABLE® 800 is also available in flat version (FL family).



ELECTRICAL WORKING DATA

Nominal rated voltage U_0 / U	V	0,6/1
Test voltage	kV	4
Max AC voltage	kV	0,7/1,2
Max DC voltage	kV	1,8
Current rating	A	According to VDE 0298-4

THERMAL WORKING DATA

Maximum short circuit temperature	°C	250
Maximum working temp. on the conductor	°C	90
Minimum ambient temperature	°C	Mobile condition: - 25 Static condition: - 40

MECHANICAL WORKING DATA

Maximum water depth	m	800
Bending radius*	ROUND mm	Static condition: 3 x D Mobile condition: 5 x D
	FLAT mm	3 x H (for H ≤ 12 mm) 4 x H (for H > 12 mm)
Maximum tensile load	N/mm²	15

* (D = outer diameter)

CHEMICAL WORKING DATA

Chemicals resistance	Acid and alkaline solution acc.to IEC 60811-100
Ozone resistance	According to IEC 60811-403
Behaviour in water	Water resistance test acc.to EN 50525-2-21 (AD8 condition) and AC internal test, suitable for immersion in sea and brackish water



DRINCABLE® 800

CORES X CROSS SECTION Nr x mm²	CONDUCTOR Ø mm	MIN OVERALL Ø mm	MAX OVERALL Ø mm	APPROX WEIGHT kg/km	MAX TENSILE LOAD N
1x1,5	1,5	5,2	5,9	35	23
1x2,5	1,9	5,9	6,8	50	38
1x4	2,4	6,5	7,5	70	60
1x6	2,9	7,4	8,4	100	90
1x10	3,8	8,6	9,7	140	150
1x16	4,9	10,0	11,1	200	240
1x25	6,1	11,9	13,1	300	375
1x35	7,2	13,0	14,3	390	525
1x50	8,9	15,7	17,1	570	750
1x70	10,6	17,8	19,3	770	1050
1x95	12,3	20,7	22,7	1020	1425
1x120	14,2	22,2	24,3	1250	1800
1x150	15,5	24,0	26,1	1530	2250
1x185	17,0	25,7	27,7	1980	2775
1x240	19,5	28,6	31,0	2560	3600
1x300	22,2	31,7	34,1	3180	4500
1x400	25,2	35,3	37,7	4050	6000
1x500	29,5	40,5	42,9	4990	7500
3G1,5	1,5	8,8	9,8	110	68
3G2,5	1,9	10,0	11,2	180	113
3G4	2,4	11,2	12,4	225	180
3G6	2,9	12,5	13,7	295	270
3G10	3,8	15,9	17,9	480	450
3G16	4,9	18,2	20,2	680	720
3G25	6,1	22,7	24,7	995	1125
3G35	7,2	25,6	27,6	1325	1575
3G50	8,9	30,1	32,5	1890	2250
3G70	10,6	34,7	37,1	2620	3150
3G95	12,3	39,0	41,4	3225	4275
3G120	14,2	44,0	47,4	4130	5400
3G150	15,5	48,6	52,6	5115	6750
3G185	17,0	53,1	57,1	6200	8325
3G240	19,5	60,0	64,0	7850	10800
3G300	22,2	67,0	71,0	10050	13500

CORES X CROSS SECTION Nr x mm²	CONDUCTOR Ø mm	MIN OVERALL Ø mm	MAX OVERALL Ø mm	APPROX WEIGHT kg/km	MAX TENSILE LOAD N
4G1,5	1,5	9,6	10,8	135	90
4G2,5	1,9	11,2	12,4	200	150
4G4	2,4	12,6	13,8	270	240
4G6	2,9	14,0	15,2	380	360
4G10	3,8	17,8	19,8	630	600
4G16	4,9	20,1	22,1	870	960
4G25	6,1	25,2	27,4	1310	1500
4G35	7,2	28,1	30,7	1725	2100
4G50	8,9	33,4	36,0	2490	3000
4G70	10,6	38,5	41,1	3420	4200
4G95	12,3	43,6	47,2	4480	5700
4G120	14,2	48,8	52,4	5605	7200
4G150	15,5	54,1	58,1	6985	9000
4G185	17,0	59,6	63,6	8465	11100
4G240	19,5	66,9	70,9	10900	14400

FLAT CABLE

CORES X CROSS SECTION Nr x mm²	CONDUCTOR Ø mm	MIN HEIGHT mm	MAX HEIGHT mm	MIN WIDTH mm	MAX WIDTH mm	APPROX WEIGHT kg/km	MAX TENSILE LOAD N
3G1	1,2	5,8	6,8	11,5	12,5	100	45
3G1,5	1,5	6,0	7,0	12,1	13,1	120	68
3G2,5	1,9	6,7	7,7	14,2	15,2	160	113
3G4	2,4	7,3	8,3	16,0	17,0	220	180
3G6	2,9	7,8	9,0	17,7	18,9	290	270
3G10	3,8	9,4	11,4	21,9	23,9	470	450
3G16	4,9	11,2	13,2	25,6	27,6	680	720
4G1	1,2	5,8	6,8	14,5	15,5	130	60
4G1,5	1,5	6,0	7,0	15,0	16,5	150	90
4G2,5	1,9	6,5	8,0	17,6	19,4	220	150
4G4	2,4	7,0	8,7	20,2	22,2	290	240
4G6	2,9	8,0	10,0	22,9	24,9	410	360
3x1 + 1G1	1,2	5,0	5,6	15,6	16,3	120	60
3x1,5 + 1G1,5	1,5	5,2	5,8	16,5	17,2	140	90
3x2,5 + 1G2,5	1,9	6,0	6,8	20,0	20,8	200	150
3x4 + 1G4	2,4	6,6	7,4	22,8	23,8	270	240