

# Rubber Cable

## H07RN-F

Rubber power and control cable, based on AS/NZS 5000.1

### Construction:

Class 5 tinned copper conductors. colour or number coded ethylene-propylene rubber insulating material. flame-retardant. UV. ozone and oil-resistant black rubber sheath.

### Minimum Bending Radius:

Flexing: 4 x cable diameter (up to 12mm Ø)  
 5 x cable diameter (12-20mm Ø)  
 6 x cable diameter (over 20mm Ø)  
 Fixed: 3 x cable diameter (up to 12mm Ø)  
 4 x cable diameter (over 12mm Ø)

### Temperature Range:

-40°C to +90°C

### Colour Coding:

Colour coding of power conductors comply to HD 308 . DIN VDE 0293- 308.  
 2-core: Blue and brown  
 3-core: Blue. brown. green-yellow  
 4-core: Brown. black. grey. green-yellow  
 5-core: Green-yellow. blue. brown. black. grey  
 Above 5-core: Black with green-yellow consecutive white numbers. 1 core

### Features:

- Submersible to 500 metres
- UV-resistant
- Flame-retardant
- Oil-resistant
- Tinned conductors

### Nominal Voltage:

600/1000V



Part No.	Nominal conductor area mm <sup>2</sup> and number of cores	Number x max. Ø of wire mm	Nominal thickness of insulation mm	Nominal thickness of jacket			Approx. O.D. of cable mm	Voltage drop V/A/km	Approx. weight of cable kg/km	Max. conductor resistance at 20°C Ω/km	
				Single mm	Double layer						
					Internal mm	Outer mm					
<b>2 CORE</b>											
G-023028	1mm <sup>2</sup>	2 core	29x0.21	08	13	—	—	82	4.000	93	200
G-023029	1.5mm <sup>2</sup>	2 core	28x0.26	08	15	—	—	92	2.740	116	137
G-023030	2.5mm <sup>2</sup>	2 core	45x0.26	09	17	—	—	110	1.642	168	821
G-025331	0.75mm <sup>2</sup>	2 core	22x0.20	08	13	—	—	80	—	80	267
G-023041	4mm <sup>2</sup>	2 core	51x0.31	10	18	—	—	129	1.018	227	509
G-023042	6mm <sup>2</sup>	2 core	76x0.31	10	20	—	—	144	678	282	339
G-023043	10mm <sup>2</sup>	2 core	74x0.41	12	—	12	19	193	390	559	195
G-023044	16mm <sup>2</sup>	2 core	116x0.41	12	—	13	20	221	249	748	124
G-023045	25mm <sup>2</sup>	2 core	180x0.41	14	—	14	22	257	160	1061	0.795
<b>2 CORE + EARTH</b>											
G-023011	1mm <sup>2</sup>	3 core	29x0.21	08	14	—	—	88	3.464	107	200
G-023012	1.5mm <sup>2</sup>	3 core	28x0.26	08	16	—	—	100	2.373	137	137
G-023013	2.5mm <sup>2</sup>	3 core	45x0.26	09	18	—	—	118	1.422	203	821
G-023014	4mm <sup>2</sup>	3 core	51x0.31	10	19	—	—	138	882	292	509
G-023015	6mm <sup>2</sup>	3 core	76x0.31	10	21	—	—	154	587	378	339
G-023016	10mm <sup>2</sup>	3 core	74x0.41	12	—	13	20	207	338	674	195
G-023017	16mm <sup>2</sup>	3 core	116x0.41	12	—	14	21	236	215	922	124
G-023018	25mm <sup>2</sup>	3 core	180x0.41	14	—	15	23	275	138	1318	0.795
G-023019	35mm <sup>2</sup>	3 core	254x0.41	14	—	16	25	304	099	1702	0.565
G-023020	50mm <sup>2</sup>	3 core	364x0.41	16	—	18	27	357	069	2377	0.393
G-023021	70mm <sup>2</sup>	3 core	514x0.51	16	—	19	29	400	050	3144	0.277
G-023022	95mm <sup>2</sup>	3 core	684x0.51	18	—	21	32	464	039	4153	0.210
G-023023	120mm <sup>2</sup>	3 core	870x0.51	18	—	22	34	493	031	5018	0.164
G-023024	150mm <sup>2</sup>	3 core	1092x0.51	20	—	24	36	550	026	6228	0.132
G-023025	185mm <sup>2</sup>	3 core	1325x0.51	22	—	25	39	614	023	7614	0.108
G-023026	240mm <sup>2</sup>	3 core	1752x0.51	24	—	28	43	669	018	9638	00.817
G-023027	300mm <sup>2</sup>	3 core	2203x0.51	26	77	31	46	769	016	12167	00.654

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Part No.	Nominal conductor area mm <sup>2</sup> and number of cores	Number x max. Ø of wire mm	Nominal thickness of insulation mm	Nominal thickness of jacket			Approx. O.D. of cable mm	Voltage drop V/A/km	Approx. weight of cable kg/km	Max. conductor resistance at 20°C Ω/km	
				Single mm	Double layer						
					Internal mm	Outer mm					
<b>3 CORE + EARTH</b>											
G-022879	1mm <sup>2</sup>	4 core	29x0.21	08	15	—	—	97	3.464	131	200
G-022880	1.5mm <sup>2</sup>	4 core	28x0.26	08	17	—	—	109	2.373	169	137
G-022981	2.5mm <sup>2</sup>	4 core	45x0.26	09	19	—	—	129	1.422	247	821
G-022982	4mm <sup>2</sup>	4 core	51x0.31	10	20	—	—	152	882	351	509
G-022983	6mm <sup>2</sup>	4 core	76x0.31	10	23	—	—	172	587	473	339
G-022984	10mm <sup>2</sup>	4 core	74x0.41	12	—	14	20	226	338	828	195
G-022985	16mm <sup>2</sup>	4 core	116x0.41	12	—	14	22	257	215	1141	124
G-022986	25mm <sup>2</sup>	4 core	180x0.41	14	—	16	25	305	138	1668	0.795
G-022987	35mm <sup>2</sup>	4 core	254x0.41	14	—	17	27	336	099	2156	0.565
G-022988	50mm <sup>2</sup>	4 core	364x0.41	16	—	19	29	395	069	3011	0.393
G-022989	70mm <sup>2</sup>	4 core	514x0.51	16	—	20	32	444	050	4011	0.277
G-022990	95mm <sup>2</sup>	4 core	684x0.51	18	—	23	36	51.9	039	5333	0.210
G-022991	120mm <sup>2</sup>	4 core	870x0.51	18	—	24	36	547	031	6404	0.164
G-022992	150mm <sup>2</sup>	4 core	1092x0.51	20	—	26	39	611	026	7968	0.132
G-022993	185mm <sup>2</sup>	4 core	1325x0.51	22	—	28	42	685	023	9754	0.108
G-022994	240mm <sup>2</sup>	4 core	1752x0.51	24	—	31	46	744	018	12345	00.817
<b>4 CORE + EARTH</b>											
G-022909	1mm <sup>2</sup>	5 core	29x0.21	08	16	—	—	107	3.464	162	200
G-022910	1.5mm <sup>2</sup>	5 core	28x0.26	08	18	—	—	120	2.373	208	137
G-022951	2.5mm <sup>2</sup>	5 core	45x0.26	09	20	—	—	142	1.422	305	821
G-022952	4mm <sup>2</sup>	5 core	51x0.31	10	22	—	—	169	882	441	509
G-022953	6mm <sup>2</sup>	5 core	76x0.31	10	25	—	—	191	587	590	339
G-022954	10mm <sup>2</sup>	5 core	74x0.41	12	—	14	22	248	338	1009	195
G-022955	16mm <sup>2</sup>	5 core	116x0.41	12	—	15	24	285	215	1407	124
G-022956	25mm <sup>2</sup>	5 core	180x0.41	14	—	17	27	338	138	2052	0.795
G-024457	35mm <sup>2</sup>	5 core	254x0.41	14	—	18	28	370	099	2639	0.565
G-024459	50mm <sup>2</sup>	5 core	364x0.41	16	—	21	31	448	069	3723	0.386
G-024460	70mm <sup>2</sup>	5 core	514x0.51	16	—	23	34	495	050	4979	0.277
G-025754	95mm <sup>2</sup>	5 core	684x0.51	18	—	25	38	574	039	6571	0.210
G-029183	120mm <sup>2</sup>	5 core	870x0.51	18	—	25	38	604	031	7912	0.164
G-027746	150mm <sup>2</sup>	5 core	1092x0.51	20	—	27	41	675	026	9793	0.132
G-029184	185mm <sup>2</sup>	5 core	1325x0.51	22	74	—	—	758	023	12020	0.108
G-034164	240mm <sup>2</sup>	5 core	1752x0.51	24	81	—	—	823	018	15235	00.817
<b>5 CORE + EARTH</b>											
G-030764	1.5mm <sup>2</sup>	6 core	28x0.26	08	25	—	—	145	2.740	290	137
tba	2.5mm <sup>2</sup>	6 core	45x0.26	09	27	—	—	163	1.642	412	821
G-029053	4mm <sup>2</sup>	6 core	51x0.31	10	29	—	—	202	1.018	599	509
<b>6 CORE + EARTH</b>											
G-022973	1.5mm <sup>2</sup>	7 core	28x0.26	08	26	—	—	157	4.000	336	137
G-022974	2.5mm <sup>2</sup>	7 core	45x0.26	09	28	—	—	183	2.740	478	821
tba	4mm <sup>2</sup>	7 core	51x0.31	10	31	—	—	201	1.642	650	509
<b>9 CORE + EARTH</b>											
tba	1.5mm <sup>2</sup>	10 core	28x0.26	08	28	—	—	184	2.740	446	137
G-030763	2.5mm <sup>2</sup>	10 core	45x0.26	09	31	—	—	215	1.642	633	821
tba	4mm <sup>2</sup>	10 core	51x0.31	10	35	—	—	234	1.018	819	509

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Part No.	Nominal conductor area mm <sup>2</sup> and number of cores		Number x max. Ø of wire mm	Nominal thickness of insulation mm	Nominal thickness of jacket			Approx. O.D. of cable mm	Voltage drop V/A/km	Approx. weight of cable kg/km	Max. conductor resistance at 20°C Ω/km
					Single mm	Double layer					
						Internal mm	Outer mm				
G-022994	240mm <sup>2</sup>	4 core	1752x0.51	24	—	31	46	744	018	12345	00.817
<b>11 CORE + EARTH</b>											
G-022975	1.5mm <sup>2</sup>	12 core	28x0.26	08	29	—	—	189	2.740	493	137
G-022976	2.5mm <sup>2</sup>	12 core	45x0.26	09	31	—	—	22.1	1.642	708	821
TBA	4mm <sup>2</sup>	12 core	51x0.31	10	35	—	—	250	1.018	988	509
<b>17 CORE + EARTH</b>											
G-022977	1.5mm <sup>2</sup>	18 core	28x0.26	08	32	—	—	223	2.740	694	137
G-022978	2.5mm <sup>2</sup>	18 core	45x0.26	09	35	—	—	263	1.642	1007	821
TBA	4mm <sup>2</sup>	18 core	51x0.31	10	39	—	—	295	1.018	1417	509
<b>23 CORE + EARTH</b>											
TBA	1.5mm <sup>2</sup>	24 core	28x0.26	08	35	—	—	249	2.740	888	137
TBA	2.5mm <sup>2</sup>	24 core	45x0.26	09	39	—	—	298	1.642	1313	821
<b>35 CORE + EARTH</b>											
TBA	1.5mm <sup>2</sup>	36 core	28x0.26	08	38	—	—	285	2.740	1233	137
TBA	2.5mm <sup>2</sup>	36 core	45x0.26	09	43	—	—	343	1.642	1845	821

### Current rating in free air at air temperature of 30°C and conductor temperature of 90°C

Cross section	Single core	Two cores	Three cores	Four cores	Five cores	Seven cores
15	24	23	23	21	21	15
25	32	32	32	29	29	23
4	42	42	42	38	38	28
6	55	55	55	50	50	55
10	77	77	77	67	67	74
16	101	101	101	91	91	—
25	133	133	133	121	121	—
35	165	—	165	149	—	—
50	202	—	202	183	—	—
70	250	—	260	231	—	—
95	300	—	310	280	—	—
120	360	—	370	324	—	—
150	412	—	430	372	—	—
185	465	—	490	423	—	—
240	550	—	580	501	—	—
300	630	—	680	—	—	—
500	831	—	—	—	—	—

### Correction factor for ambient temperature

Temperature of air °C	35	40	45	50	55	60	65	70	75	80
Correct factor	0.95	0.90	0.85	0.82	0.76	0.70	0.64	0.57	0.50	0.40