



## JIS C 3342 Cables

### VV/VVR

#### Application and Description:

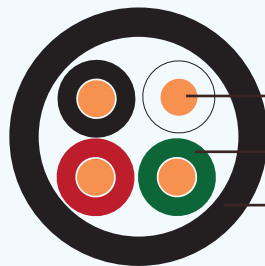
For exposed fix installation in dry location, surface wiring, concealed wiring in wooden partition or above ceiling, embedded in plaster.

#### Name Code:

V: Polyvinyl chloride (PVC)

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R : Round type



— Annealed copper conductor

— PVC insulation

— PVC sheath

#### Cable Construction:

**Conductor:** Solid, circular stranded, circular or segmental compacted stranded annealed copper wires

**Insulation:** Polyvinyl chloride (PVC)

**Color :**

1 core- Black

2 cores- Black and white

3 cores- Black, white and red

4 cores- Black, white, red and green

**Filler:** Non-hygroscopic material(optional)

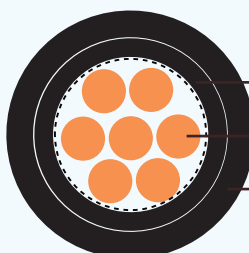
**Binding tape:** Polyester (Mylar) tape (optional)

**Sheath:** Polyvinyl chloride (PVC), Black color, other colors are upon request.

#### Technical Characteristics:

Maximum conductor temperature 70°C

Circuit voltage not exceeding 600 volts



— PVC insulation

— Annealed copper conductor

— PVC sheath





## Cable Parameter

Diameter /Nominal sectional area	No. of wire	Diameter of Conductor (approx.)	Thickness of insulation	Thickness of sheath	Overall diameter (approx.)	Maximum DC. resistance of Cdr. at 20°C	Test Vltage	Insulation Resistance	Cable weight (approx.)
mm/mm <sup>2</sup>		mm	mm	mm	mm	Ohm / km	V	kOhm / km	kg / km
1 core									
1	solid	1.0	0.8	1.5	5.6	22.8	1500	50	41
1.2	solid	1.2	0.8	1.5	5.8	15.8	1500	50	46
1.6	solid	1.6	0.8	1.5	6.2	8.92	1500	50	60
2.0	solid	2.0	0.8	1.5	6.6	5.65	1500	50	75
2.6	solid	2.6	1	1.5	7.6	3.35	1500	50	105
3.2	solid	3.2	1.2	1.5	8.6	2.21	1500	50	145
2	7/0.6	1.8	0.8	1.5	6.4	9.24	1500	50	65
3.5	7/0.8	2.4	0.8	1.5	7.0	5.20	1500	50	85
5.5	7/1.0	3.0	0.8	1.5	8.0	3.33	1500	50	115
8	7/1.2	3.6	1.2	1.5	9.0	2.31	1500	50	155
8	compacted	3.4	1.2	1.5	8.8	2.29	1500	50	150
14	7/1.6	4.8	1.4	1.5	11.0	1.3	2000	40	235
14	compacted	4.4	1.4	1.5	10.5	1.31	2000	40	225
22	7/2.0	6.0	1.6	1.5	12.5	0.824	2000	40	335
22	compacted	5.5	1.6	1.5	12.0	0.832	2000	40	320
38	7/2.6	7.8	1.8	1.5	14.5	0.847	2500	40	515
38	19/1.6	8.0	1.8	1.5	15.0	0.479	2500	40	520
38	compacted	7.3	1.8	1.5	14.0	0.481	2500	40	510
60	19/2.0	10.0	1.8	1.5	17.0	0.303	2500	30	750
60	compacted	9.3	1.8	1.5	16.0	0.305	2500	30	735
100	19/2.6	13.0	2.0	1.5	20	0.180	2500	30	1200
100	compacted	12	2.0	1.5	19.0	0.183	2500	30	1 160
150	37/2.3	16.1	2.2	1.6	24	0.118	3000	20	1760
150	compacted	14.7	2.2	1.6	23	0.122	3000	30	1690
200	37/2.6	18.2	2.4	1.7	21	0.0922	3000	20	2220
200	compacted	17	2.4	1.7	26	0.091 5	3000	20	2220
250	61/2.3	20.7	2.4	1.8	30	0.0722	3000	20	2830
250	compacted	19.0	2.4	1.8	28	0.0739	3000	20	2740
325	61/2.6	23.4	2.6	1.9	33	0.0565	3000	20	3580
325	compacted	22	2.6	1.9	31	0.0568	3000	20	3520





Diameter /Nominal sectional area	No. of wire	Diameter of Conductor (approx.)	Thickness of insulation	Thickness of sheath	Overall diameter (approx.)	Maximum DC. resistance of Cdr. at 20°C	Test Vltage	Insulation Resistance	Cable weight (approx.)
mm/mm <sup>2</sup>		mm	mm	mm	mm	Ohm / km	V	kOhm / km	kg / km
400	61/2.9	26.1	2.6	2.1	36	0.0454	3000	20	4390
400	compacted	24.1	2.6	2	34	0.0462	3000	20	4280
500	61/3.2	28.8	2.8	2.2	39	0.0373	3500	20	5320
500	compacted	26.9	2.8	2.1	37	0.0369	3500	20	5310
600	91/2.9	31.9	3.0	2.3	43	0.0304	3500	20	6 470
600	compacted	29.5	3.0	2.2	40	0.0308	3500	20	6340
800	127/2.8	36.4	3.2	2.5	48	0.0234	3500	20	8340
800	compacted	34.0	3.2	2.4	46	0.0231	3500	20	8360
800	segmental	34	3.2	2.4	46	0.0231	3500	20	8350
1000	127/3.2	41.6	3.2	2.7	54	0.0179	3500	20	10800
1000	compacted	38.0	3.2	2.6	50	0.0185	3500	20	10500
1000	segmental	38.0	3.2	2.6	51	0 0181	3500	20	10400
2 cores									
1	solid	1.0	0.8	1.5	8.7	23.3	1500	50	85
1.2	solid	1.2	0.8	1.5	9.1	16.1	1500	50	95
1.6	solid	1.6	0.8	1.5	9.9	9.10	1500	50	120
2.0	solid	2.0	0.8	1.5	11	5.76	1500	50	155
2.6	solid	2.6	1	1.5	13.0	3.42	1500	50	225
3.2	solid	3.2	1.2	1.5	15.0	2.25	1500	50	315
2	7/0.6	1.8	0.8	1.5	10.5	9.42	1500	50	130
3.5	7/0.8	2.4	0.8	1.5	11.5	5.30	1500	50	175
5.5	7/1.0	3.0	1	1.5	13.5	3.40	1500	50	245
8	7/1.2	3.6	1.2	1.5	15.5	2.36	1500	50	335
8	compacted	3.4	1.3	1.5	15.5	2.34	2000	50	325
14	7/1.6	4.8	1.4	1.5	19.0	1.33	2000	40	520
14	compacted	4.4	1.5	1.5	18.0	1.34	2000	40	500
22	7/2.0	6.0	1.6	1.6	23	0.840	2000	40	760
22	compacted	5.5	1.7	1.5	21	0.849	2000	40	715
38	7/2.6	7.8	1.8	1.7	27	0.497	2500	40	1 190
38	19/1.6	8.0	1.8	1.8	28	0.489	2500	40	1200
38	compacted	7.3	1.8	1.9	26	0.491	2500	40	1 160
60	19/2.0	10.0	1.8	1.9	32	0.309	2500	30	1740
60	compacted	9.3	1.8	1.9	31	0.311	2500	30	1680





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mm/mm <sup>2</sup>		mm	mm	mm	mm	Ohm / km	V	kOhm / km	kg / km
100	19/2.6	13.0	2.0	2.2	39	0.184	2500	30	2800
100	compacted	12.0	2.0	2.1	37	0.187	2500	30	2670
150	37/2.3	16.1	2.2	2.5	47	0.129	3000	20	4 120
150	compacted	14.7	2.2	2.3	44	0.124	3000	30	3870
200	37/2.6	18.2	2.4	2.7	52	0.0940	3000	20	5 1□
200	compacted	17.0	2.4	2.6	50	0.0933	3000	20	5090
250	61/2.3	20.7	2.4	2.9	58	0.0736	3000	20	6570
250	compacted	19□0	2.4	2.7	54	0.0736	3000	20	6250
325	61/2.6	23.4	2.6	3.1	64	0.0576	3000	20	8300
325	compacted	21.7	2.6	3.0	61	0□0579	3000	20	8040
3 cores									
1	solid	1.0	0.8	1.5	9.1	23.3	1500	50	100
1.2	solid	1.2	0.8	1.5	9.5	16.1	1500	50	115
1.6	solid	1.6	0.8	1.5	10.5	9.10	1500	50	150
2.0	solid	2.0	0.8	1.5	11.5	5.76	1500	50	195
2.6	solid	2.6	1	1.5	13.5	3.42	1500	50	290
3.2	solid	3.2	1.2	1.5	16.0	2.25	1500	50	410
2	7/0.6	1.8	0.8	1.5	11.0	9.42	1500	50	160
3.5	7/0.8	2.4	0.8	1.5	12.5	5.30	1500	50	220
5.5	7/1.0	3.0	1	1.5	14.5	3.40	1500	50	320
8	7/1.2	3.6	1.2	1.5	16.5	2.36	1500	50	440
8	compacted	3.4	1.3	1.5	16.0	2.34	2000	50	425
14	7/1.6	4.8	1.4	1.5	20	1.33	2000	40	690
14	compacted	4.4	1.5	1.5	19.0	1.34	2000	40	665
22	7/2.0	6.0	1.6	1.6	24	0.840	2000	40	1020
22	compacted	5.5	1.7	1.6	23	0.849	2000	40	975
38	7/2.6	7.8	1.8	1.8	29	0.497	2500	40	1620
38	19/1.6	8.0	1.8	1.8	30	0.489	2500	40	1640
38	compacted	7.3	1.8	1.8	28	0.491	2500	40	1590
60	19/2.0	10.0	1.8	2.0	34	0.309	2500	30	2400
60	compacted	9.3	1.8	1.9	33	0.311	2500	30	2320
100	19/2.6	13.0	2.0	2.3	42	0.184	2500	30	3870
100	compacted	12.0	2.0	2.2	40	0.187	2500	30	3720





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mm/mm <sup>2</sup>		mm	mm	mm	mm	Ohm / km	V	kOhm / km	kg / km
150	37/2.3	16.1	2.2	2.6	50	0.120	3000	20	5720
150	compacted	14.7	2.2	2.5	47	0.124	3000	30	5430
200	37/2.6	18.2	2.4	2.8	56	0.124	3000	20	7220
200	compacted	17.0	2.4	2.7	53	0.0933	3000	20	7130
250	61/2.3	20.7	2.4	3.0	62	0.0736	3000	20	9160
250	compacted	19.0	2.4	2.9	58	0.0754	3000	20	8800
325	61/2.6	23.4	2.6	3.3	69	0.0576	3000	20	11700
325	compacted	21.7	2.6	3.1	65	0.0579	3000	20	11300
4cores									
1	solid	1.0	0.8	1.5	9.8	23.3	1500	50	120
1.2	solid	1.2	0.8	1.5	10.5	16.1	1500	50	140
1.6	solid	1.6	0.8	1.5	11.5	9.10	1500	50	185
2.0	solid	2.0	0.8	1.5	12.5	5.76	1500	50	240
2.6	solid	2.6	1	1.5	15.0	3.42	1500	50	365
3.2	solid	3.2	1.2	1.5	17.0	2.25	1500	50	515
2	7/0.6	1.8	0.8	1.5	12.0	9.42	1500	50	195
3.5	7/0.8	2.4	0.8	1.5	13.5	5.30	1500	50	275
5.5	7/1.0	3.0	1	1.5	16.0	3.40	1500	50	400
8	7/1.2	3.6	1.2	1.5	18.0	2.36	1500	50	555
8	compacted	3.4	1.3	1.5	17.5	2.34	2000	50	535
14	7/1.6	4.8	1.4	1.6	22	1.33	2000	40	890
14	compacted	4.4	1.5	1.5	21	1.34	2000	40	855
22	7/2.0	6.0	1.6	1.7	27	0.840	2000	40	1320
22	compacted	5.5	1.7	1.7	25	0.849	2000	40	1260
38	7/2.6	7.8	1.8	1.9	32	0.497	2500	40	2100
38	19/1.6	8.0	1.8	1.9	33	0.489	2500	40	2120
38	compacted	7.3	1.8	1.9	31	0.491	2500	40	2060
60	19/2.0	10.0	1.8	2.1	38	0.309	2500	30	3120
60	compacted	9.3	1.8	2.1	36	0.311	2500	30	3030
100	19/2.6	13.0	2.0	2.5	47	0.184	2500	30	5060
100	compacted	12.0	2.0	2.4	44	0.187	2500	30	4870
150	37/2.3	16.1	2.2	2.8	56	0.120	3000	20	7480
150	compacted	14.7	2.2	2.7	52	0.124	3000	30	7110





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mm/mm <sup>2</sup>		mm	mm	mm	mm	Ohm / km	V	kOhm / km	kg / km
200	37/2.6	18.2	2.4	3.0	62	0.0940	3000	20	9440
200	compacted	17.0	2.4	2.9	59	0.0933	3000	20	9330
250	61/2.3	20.7	2.4	3.3	69	0.0736	3000	20	12100
250	compacted	19□0	2.4	3.1	65	0.0754	3000	20	11600
325	61/2.6	23.4	2.6	3.6	77	0.0576	3000	20	15300
325	compacted	21.7	2.6	3.4	73	0.0579	3000	20	14900

