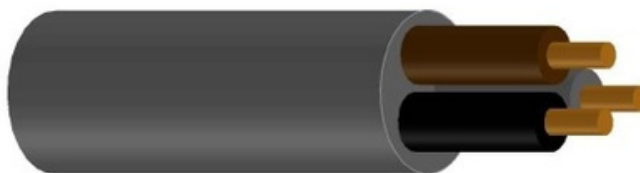


APPLICATION

For fixed indoor installations in dry, damp, or wet conditions, into concrete, in residential, commercial, or industrial situations. Installation in direct sunlight is not recommended without extra shielding,



CONSTRUCTION

Conductor

- 1.5 mm² to 6 mm²: Class 1 solid copper conductor
- 1.5 mm² to 35 mm²: Class 2 stranded copper conductor

Insulation

PVC

Filler/ bedding

PVC

Outer sheath

PVC

Jacketing color

Any color can be requested, including the standard colors below:

- Black
- Gray

Marking

Applicable only as 100 meter/100 yards or on drum based on customer request

TECHNICAL CHARACTERISTICS



Voltage Rating (U0/U):

- 300/500 V
- Test voltage: 2Kv / 50Hz



Max continuous operating Temp: 70°C

Max short circuit temperature: 160°C

Cable operating Temp Range: -15°C to +55°C



Minimum Bending Radius Fixed:

- Single Core: 7.5 x overall diameter
- Multicore: 4 x overall diameter

CORE IDENTIFICATION

With Protective Conductor (J)

- 2 cores: ● Blue ● Brown
- 3 cores: ● Green/Yellow ● Blue ● Brown
- 4 cores: ● Green/Yellow ● Brown ● Black ● Gray
- 5 cores: ● Green/Yellow ● Blue ● Brown ● Black ● Gray

Without Protective Conductor(O)

- 2 cores: ● Blue ● Brown
- 3 cores: ● Brown ● Black ● Gray
- 4 cores: ● Blue ● Brown ● Black ● Gray
- 5 cores: ● Blue ● Brown ● Black ● Gray ● Black

STANDARDS

- IEC 60227
- BS 6004
- Conductor acc. to IEC 60228
- In case of flame retardant, IEC/EN 60332-1-2
- DIN VDE 0281-1
- VDE 0250
- For thermoplastic insulation : EN 50525-2-31:2011

Dimensional Characteristics

No. of wires	Section (mm ²)	Conductor diameter (mm)	Insulation thickness (mm)	Outer sheath thickness	Overall diameter (mm)	Approx weight (kg/km ±3%)
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FR-N05VV-U

2	1.5	1.5	0.7	1.2	9.0	121.0
2	2.5	2.0	0.8	1.2	10.4	167.8
2	4	2.5	0.8	1.2	11.4	215.7
2	6	3.1	0.8	1.2	12.4	273.7

3	1.5	1.5	0.7	1.2	9.5	142.2
3	2.5	2.0	0.8	1.2	11.0	196.8
3	4	2.5	0.8	1.2	12.1	258.0
3	6	3.1	0.8	1.4	13.5	346.7

4	1.5	1.5	0.7	1.2	10.2	168.1
4	2.5	2.0	0.8	1.2	11.9	239.6
4	4	2.5	0.8	1.4	13.5	331.0
4	6	3.1	0.8	1.4	15.1	443.8

5	1.5	1.5	0.7	1.2	11.0	195.5
5	2.5	2	0.8	1.2	12.1	265.1
5	4	2.5	0.8	1.4	15.1	404.5
5	6	3.1	0.8	1.4	16.4	525.0

Electrical & Mechanical Characteristics

No. of wires	Section (mm ²)	Electrical resistance at 20°C (Ω/km)	Current carrying capacity (A)	Voltage drop cosφ=0.8 (V/A/Km)
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FR-N05VV-U

2	1.5	12.1	22	23.1
2	2.5	7.41	30	14.2
2	4	4.61	40	8.95
2	6	3.08	51	6.06

3	1.5	12.1	22	23.1
3	2.5	7.41	30	14.2
3	4	4.61	40	8.95
3	6	3.08	51	6.06

4	1.5	12.1	18.5	20
4	2.5	7.41	25	12.3
4	4	4.61	34	7.75
4	6	3.08	43	5.24

5	1.5	12.1	18.5	20
5	2.5	7.41	25	12.3
5	4	4.61	34	7.75
5	6	3.08	43	5.24

Dimensional Characteristics

No. of wires	Section (mm ²)	Conductor diameter (mm)	Insulation thickness (mm)	Outer sheath thickness	Overall diameter (mm)	Approx weight (kg/km ±3%)
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FR-N05VV-R

2	1.5	1.5	0.7	1.2	9.0	121.0
2	2.5	2.0	0.8	1.2	10.4	167.8
2	4	2.5	0.8	1.2	11.4	215.7
2	6	3.1	0.8	1.2	12.4	273.7
2	10	4.1	1.0	1.4	16.0	453.3
2	16	5.1	1.0	1.4	18.2	627.6
2	25	6.3	1.2	1.4	21.4	915.6
2	35	7.1	1.2	1.6	24.0	1209.6

3	1.5	1.5	0.7	1.2	9.5	142.2
3	2.5	2.0	0.8	1.2	11.0	196.8
3	4	2.5	0.8	1.2	12.1	258.0
3	6	3.1	0.8	1.4	13.5	346.7
3	10	4.1	1.0	1.4	17.0	551.7
3	16	5.1	1.0	1.4	19.5	796.0
3	25	6.3	1.2	1.6	23.2	1169.3
3	35	7.1	1.2	1.6	25.5	1528.3

Dimensional Characteristics

No. of wires	Section (mm ²)	Conductor diameter (mm)	Insulation thickness (mm)	Outer sheath thickness	Overall diameter (mm)	Approx weight (kg/km $\pm 3\%$)
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FR-N05VV-R

4	1.5	1.5	0.7	1.2	10.2	168.1
4	2.5	2.0	0.8	1.2	11.9	239.6
4	4	2.5	0.8	1.4	13.5	331.0
4	6	3.1	0.8	1.4	15.1	443.8
4	10	4.1	1.0	1.4	18.5	686.6
4	16	5.1	1.0	1.4	21.6	996.7
4	25	6.3	1.2	1.6	25.8	1498.1
4	35	7.1	1.2	1.6	27.9	1933.9

5	1.5	1.5	0.7	1.2	11.0	195.5
5	2.5	2	0.8	1.2	12.1	265.1
5	4	2.5	0.8	1.4	15.1	404.5
5	6	3.1	0.8	1.4	16.4	525.0
5	10	4.1	1.0	1.4	20.2	816.8
5	16	5.1	1.0	1.6	24.0	1214.3
5	25	6.3	1.2	1.6	28.2	1794.2
5	35	7.1	1.2	1.6	31.0	2358.0

Electrical & Mechanical Characteristics

No. of wires	Section (mm ²)	Electrical resistance at 20°C (Ω/km)	Current carrying capacity (A)	Voltage drop cosφ=0.8 (V/A/Km)
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FR-N05VV-R

2	1.5	12.1	22	23.1
2	2.5	7.41	30	14.2
2	4	4.61	40	8.95
2	6	3.08	51	6.06
2	10	1.83	70	3.6
2	16	1.15	94	2.3
2	25	0.727	119	1.5
2	35	0.524	147	1.1

3	1.5	12.1	22	23.1
3	2.5	7.41	30	14.2
3	4	4.61	40	8.95
3	6	3.08	51	6.06
3	10	1.83	70	3.6
3	16	1.15	94	2.3
3	25	0.727	119	1.5
3	35	0.524	147	1.1

Electrical & Mechanical Characteristics

No. of wires	Section (mm ²)	Electrical resistance at 20°C (Ω/km)	Current carrying capacity (A)	Voltage drop cosl=0.8 (V/A/Km)
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FR-N05VV-R

4	1.5	12.1	18.5	20
4	2.5	7.41	25	12.3
4	4	4.61	34	7.75
4	6	3.08	43	5.24
4	10	1.83	60	3.1
4	16	1.15	80	2
4	25	0.727	101	1.3
4	35	0.524	126	0.9

5	1.5	12.1	18.5	20
5	2.5	7.41	25	12.3
5	4	4.61	34	7.75
5	6	3.08	43	5.24
5	10	1.83	60	3.1
5	16	1.15	80	2
5	25	0.727	101	1.3
5	35	0.524	126	0.9