

## 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 mm<sup>2</sup> to 6 mm<sup>2</sup>: Class 1 solid copper conductor
- 1.5 mm<sup>2</sup> to 35 mm<sup>2</sup>: 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

## 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

## 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

FR-N05VV

Product Series Code: 5000

**Dimensional Characteristics**

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

FR-N05VV

Product Series Code: 5000

**Electrical & Mechanical Characteristics**

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

## NYM-O/J

## FR-N05VV

Product Series Code: 5000

## Dimensional Characteristics

No. of wires	Section (mm <sup>2</sup> )	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

FR-N05VV

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**Dimensional Characteristics**

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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
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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

FR-N05VV

Product Series Code: 5000

**Electrical & Mechanical Characteristics**

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

Product Series Code: 5000

### Electrical & Mechanical Characteristics

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