

**SHAHID GHANDI COMMUNICATION CABLE CO.**

**CODE: 0501-000**

**TECHNICAL SPECIFICATION FOR  
LOW VOLTAGE POWER WIRE  
FLEXIBLE CIRCULAR CONDUCTOR  
NY-RF or NYAF (607)02, (607)06**



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**SPECIFICATION FOR**  
***LOW VOLTAGE POWER CABLE***  
***FLEXIBLE CIRCULAR CONDUCTOR***

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## 1 - GENERAL

This specification details the construction of low voltage power wires with the rated voltage of 300/500 V for code (607)06 and 450/700 V for code (607)02. The conductors are round section formed with stranded finely wires copper (none compacted), covered with a solid plastic insulating compound (PVC insulation).

**Application:** In dry rooms, in apparatus, for laying in conduit on and under plaster for indoor electrical lighting fittings.

## 2 - ASSOCIATED DOCUMENTS

This specification is in accordance with ASTM (American society for testing and material), IEC (International Electrical Commission), VDE 0271 and ISIRI 607 (Institute of Standards and Industrial Research of Iran)

## 3- CONDUCTOR

Each conductor is round section formed with stranded finely wires copper of commercially pure annealed copper, smoothly drawn, circular in cross section, uniform in quality and free from defects. Conductors meet the quality requirements of ASTM B3.

## 4- CONDUCTOR INSULATION

The conductor is uniformly covered with polyvinyl chloride Type C (PVC-Insulation). The insulation color is can be used accordance with the requested. The nominal insulation thickness is in accordance with the following table (1).

## 5 – IDENTIFICATION MARKING

The wire shall be permanently identified as to the manufacturer, cross section wire and specification code. The marking will be printed on the jacket.

**NOTE:** Other method as request

## 6- POWER WIRE FIGURE

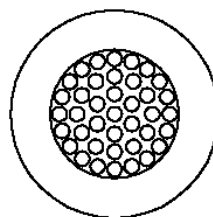
Wire construction is in accordance with the FIG. (1)

FIG 1

The figure normally shows the general structure

NY-RF or NYAF

(607) 02 , 06



## 7 - WIRE SIZES

Wire sizes are in accordance with the following table (1):

Table (1)

Specification code	Number of cores & Cross Section mm <sup>2</sup>	No of wire & diameter (mm)	Nominal Insulation Thickness (mm)	Approx Cable Diameter (mm)	Approx Cable weight (kg/km)
(607)06	0.5	16 × 0.20	0.6	2.1 – 2.5	8
	0.75	24 × 0.20	0.6	2.2 – 2.7	11
	1	32 × 0.20	0.6	2.4 – 2.8	14
(607)02	1.5	30 × 0.25	0.7	2.8 – 3.4	20
	2.5	50 × 0.25	0.8	3.4 – 4.1	32
	4	56 × 0.30	0.8	3.9 – 4.8	47
	6	84 × 0.30	0.8	4.4 – 5.3	66
	10	80 × 0.40	1.0	5.7 – 6.8	114
	16	126 × 0.40	1.0	6.7 – 8.1	171
	25	196 × 0.40	1.2	8.4 – 10.2	265
	35	276 × 0.40	1.2	9.7 – 11.7	362
	50	396 × 0.40	1.4	11.5 – 13.9	516
	70	356 × 0.50	1.4	13.2 – 16	702
	95	475 × 0.50	1.6	15.1 – 18.2	935
	120	608 × 0.50	1.6	16.7 – 20.2	1182
	150	756 × 0.50	1.8	18.6 – 22.5	1471
	185	925 × 0.50	2.0	20.6 – 24.9	1799
	240	1221 × 0.50	2.2	23.5 – 28.4	2363

**Note:** The above data is approximate and subject to manufacturing tolerance. Other sizes conductor cables are available upon request.