

# APAR Shakti | FR LSH (Low Smoke Low Halogen)



FLAME RETARDANT LOW SMOKE LOW HALOGEN · SINGLE CORE FLEXIBLE WIRES & CABLES

APAR's Single core Flexible Wires and Cables, made with finely drawn annealed bare copper strands and Flame Retardant low smoke low halogen (FR-LSH) PVC insulation, find applications in low voltage signals, electrical motors, appliances, control panels, transformers, electrical boards, and battery cables, boasting high thermal stability, insulation resistance, and fire safety with low smoke and toxic gas emission in case of fire.



ANNEALED BARE COPPER · FR-LSH PVC INSULATION



LOW SMOKE



LOW HALOGEN



FLAME-RETARDANT



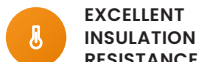
ENERGY SAVING



BETTER FLEXIBILITY



LONGER LIFE



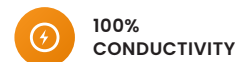
EXCELLENT INSULATION RESISTANCE



LEAD FREE



ANTI-TERMITE



100% CONDUCTIVITY

## TECHNICAL CHARACTERISTICS & STANDARDS

≥ 250°C  
TEMPERATURE INDEX

≥ 29%  
OXYGEN INDEX

≤ 60%  
SMOKE DENSITY (LIGHT ABSORPTION)

≤ 20%  
ACID GAS GENERATION

> 25 Years  
SERVICE LIFE

## Single Core, unsheathed FR LSH PVC Cables for 1100 V as per IS 694

Current Carrying Capacity  
2 tables, single phase

| Nominal Area of Copper Conductor / Class of Conductor<br>Sq.mm | Conductor Construction<br>(No./Dia.mm) | Thickness of Insulation<br>(180 mtr)<br>mm | Approx Overall Diameter<br>mm | Conductor Resistance (Max)<br>per km @20°C<br>ohms | In Conduit / Trunking<br>amps | Unenclosed – directly to surface or on cable tray<br>amps |
|----------------------------------------------------------------|----------------------------------------|--------------------------------------------|-------------------------------|----------------------------------------------------|-------------------------------|-----------------------------------------------------------|
| <b>CLASS 5 – FLEXIBLE CONDUCTOR</b>                            |                                        |                                            |                               |                                                    |                               |                                                           |
| Class 5 - 0.75                                                 | 24/0.2                                 | 0.6                                        | 2.20                          | 26                                                 | 6                             | 7                                                         |
| Class 5 - 1                                                    | 32/0.2                                 | 0.6                                        | 2.40                          | 19.5                                               | 11                            | 12                                                        |
| Class 5 - 1.5                                                  | 30/0.25                                | 0.7                                        | 2.85                          | 13.3                                               | 13                            | 16                                                        |
| Class 5 - 2.5                                                  | 50/0.25                                | 0.8                                        | 3.50                          | 7.98                                               | 18                            | 22                                                        |
| Class 5 - 4                                                    | 56/0.3                                 | 0.8                                        | 4.00                          | 4.95                                               | 24                            | 29                                                        |
| Class 5 - 6                                                    | 84/0.3                                 | 0.8                                        | 4.50                          | 3.3                                                | 31                            | 37                                                        |
| Class 5 - 10                                                   | 80/0.4                                 | 1.0                                        | 6.1                           | 1.91                                               | -                             | 46                                                        |
| Class 5 - 16                                                   | 126/0.4                                | 1.0                                        | 7.30                          | 1.21                                               | -                             | 62                                                        |
| <b>CLASS 2 – STRANDED CONDUCTOR</b>                            |                                        |                                            |                               |                                                    |                               |                                                           |
| Class 2 - 1                                                    | 7/0.43                                 | 0.7                                        | 2.70                          | 18.1                                               | 12                            | 13                                                        |
| Class 2 - 1.5                                                  | 7/0.53                                 | 0.7                                        | 3.00                          | 12.1                                               | 14                            | 17                                                        |
| Class 2 - 2.5                                                  | 7/0.67                                 | 0.8                                        | 3.60                          | 7.41                                               | 19                            | 24                                                        |
| Class 2 - 4                                                    | 7/0.85                                 | 0.8                                        | 4.10                          | 4.61                                               | 26                            | 31                                                        |
| Class 2 - 6                                                    | 7/1.04                                 | 0.8                                        | 4.70                          | 3.08                                               | 33                            | 40                                                        |

### CORE

Single Core

### INSULATION

FR-LSH PVC

### LENGTH

90 Mtr & 180 Mtr  
(Also available in custom sizes)

### COLOUR

Red, Green, Blue, Black, White, Yellow (Also available in custom colours)