NYSHA®
MOBILITY TECH

AUTOMOTIVE CABLES & WIRES

UL REGISTERED FIRM
50257886 ISO 9001:2015
DQS

www.nyshamobilitytech.com

IATF 16949

STANDARD AUTOMOTIVE CABLES

(DIN EN 13602 : Soft Annealed Electrolytic Cu - ETP1)

(DIN 72551, ISO 6722-1 : Bare or Tinned Conductor Construction & Insulation)

Abbreviations

FL – Automotive Cable Low Voltage	YK – Cold Resistant PVC
R – Reduced Insulation Wall Thickness	YH – PVC & Highly Flexible
Y – PVC Insulation	11Y – TPE-U Insulation
YW – Heat & Hot Pressure Resistant PVC	4Y – Polyamide Insulation
TYPE A – Symmetrical (FLRYW - A & FLR4Y-A)	TYPE B – Unsymmetrical (FLRYW -B & FLR4Y-B)

Cable Types

FLRY- A (T1) – thin wall PVC Insulation	-40°C to +85°C (3000 hrs)
FLRY- B (T2) – thin wall PVC Insulation	-40°C to +105°C (3000 hrs)
FLRY- C (T3) – PVC / TPE / XLPO Insulation	-40°C to +125°C (3000 hrs)
FLRY- D (T4) – XLPO / TPEE Insulation	-40°C to +150°C (3000 hrs)
FLRY- E (T5) – SILICON Insulation	-40°C to +175°C (3000 hrs)
FLRY- F (T6) – Fluoropolymer Insulation (Extruded / Sintered)	-40°C to +200°C (3000 hrs)
FLY – PVC Insulation	-40°C to +105°C (3000 hrs)
FLYW – PVC Insulation – Hot Pressure Resistant	-40°C to +125°C (3000 hrs)
FLYK – PVC Insulation – Cold Resistant & Increased Flexibility	-50°C to +105°C (3000 hrs)
FLRYK – thin wall PVC Insulation – Cold Resistant	-50°C to +105°C (3000 hrs)
FLRYW- TYPE A – thin wall PVC Insulation – Hot Pressure Resistant	-40°C to +125°C (3000 hrs)
FLRYW- TYPE B – thin wall PVC Insulation – Hot Pressure Resistant	-40°C to +125°C (3000 hrs)
FLR4Y- TYPE A – Polyamide Insulation	-40°C to +105°C (3000 hrs)
FLR4Y- TYPE B – Polyamide Insulation	-40°C to +105°C (3000 hrs)
FLRYH – thin wall PVC Insulation – Highly Flexible Fine Wire	-40°C to +105°C (3000 hrs)
FL11Y – TPE-U Insulation for Battery Cables	-40°C to +110°C (3000 hrs)
FLYY – PVC Insulation & Sheath	-40°C to +110°C (3000 hrs)

AUTOMOTIVE CABLES ACCORDING TO AMERICAN STANDARDS

(ATSM B3 – Soft Annealed Electrolytic Cu - ETP1)

(SAE J1128 – Bare Conductor Construction & Insulation)

TXL – Thin Wall XPLE / XPLO Insulation	-40°C to +125°C (3000 hrs)
GXL – General Purpose with thicker wall XLPE / XLPO Insulation	-40°C to +125°C (3000 hrs)
SXL – Special Purpose with stranded wall XLPE / XLPO Insulation	-40°C to +125°C (3000 hrs)

AUTOMOTIVE CABLES ACCORDING TO JAPANESE STANDARDS

(JIS C 3102 – Soft Annealed Electrolytic Cu – ETP1)

(JASO D 611 : 2009, JASO D 608 & JASO D 618 : 2008 – Bare Conductor Construction & Insulation)

Abbreviations

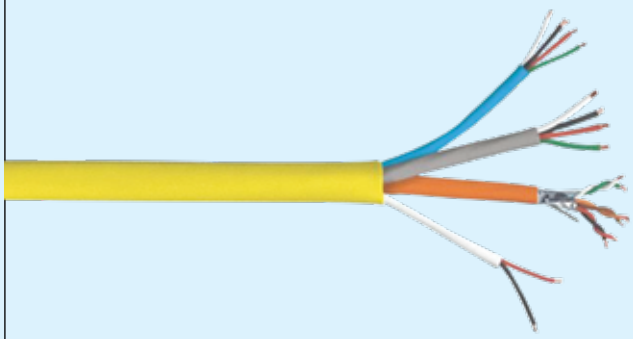
A – Low Tension Cables for Automotives	HF – Halogen Free
V – Vinyl Insulated	C – Compressed Conductor
S – Thin Wall Type	X – Electron Beam Cross Linked
SS – Very Thin Wall Type	E – Polyethylene Insulated
US – Ultra Thin Wall Type	H – Heat Resistant

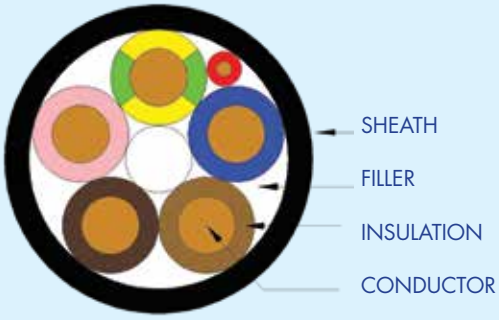
Cable Types

AV – PVC Insulation	80°C (3000 hrs)
AVS – thin wall PVC Insulation	80°C (3000 hrs)
AVSS – extremely thin wall PVC Insulation	80°C (3000 hrs)
HF – Halogen Free Insulation	85°C (3000 hrs)
HFSS – Halogen Free extremely thin wall Insulation	85°C (3000 hrs)
CHFS – Compressed Conductor Halogen Free thin wall Insulation	85°C (3000 hrs)
CAVUS – Compressed Conductor ultra-thin wall PVC Insulation	80°C (3000 hrs)
CHFUS – Compressed Conductor Halogen Free ultra-thin wall Insulation	85°C (3000 hrs)
AVX – Cross-linked Heat Resistant PVC Insulation	100°C (3000 hrs)
AVSX – Cross-linked Heat Resistant thin wall PVC Insulation	100°C (3000 hrs)
AVSSX – Cross-linked Heat Resistant extremely thin wall PVC Insulation	100°C (3000 hrs)
AVSSH – Heat Resistant extremely thin wall PVC Insulation	100°C (3000 hrs)
AEX – Cross-linked Heat Resistant PE Insulation	120°C (3000 hrs)
AESSX – Cross-linked Heat Resistant extremely thin wall PE Insulation	120°C (3000 hrs)

EV SHIELDED, UNSHIELDED & BATTERY CABLES - NYSHA SUPERFLEX

- We manufacture NYSHA SUPERFLEX a range of shielded and unshielded cables for the automotive industry
- Single and Multi core cables available with or without shielding
- Sizes upto 1C x 240 mm^2, 4C x 120 mm^2, 25C x 2.5 mm^2
- Braiding with Annealed Bunched Copper / Annealed Tinned Copper
- Shielding can include tapes (Aluminium-Mylar, Polyester etc) and drain wire
- Flame Retardant, Heat Resistant, Highly Flexible
- NYSHA SUPERFLEX Cables have Superior Bending radius of 3D to 8D
- Manufactured as per IS 2465 / ISO 6722 / ISO 19642
- IS 2465 : Temp Range: -40°C to 105°C
- ISO 6722 : Class B – Temp Range: -40°C to 105°C
  Class C – Temp Range: -40°C to 125°C
  Class D – Temp Range: -40°C to 150°C
  Class E – Temp Range: -40°C to 175°C
  Class F – Temp Range: -40°C to 200°C



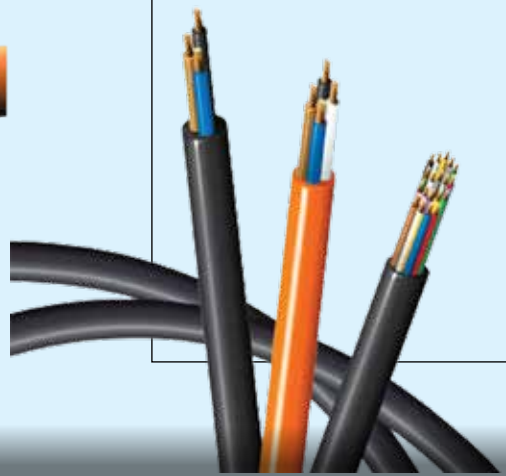


COMPOSITE CABLES

- Our highly skilled and experienced team can design, develop and manufacture any complex composite cable to meet customer requirements.
- Applications include two and three wheelers, passenger vehicles, commercial vehicles, charging gun cables as well as non-automotive purposes such as in the telecommunication industry, defence industry including drones, internal wiring for machines etc
- General Form: DC power (2.5 mm^2 to 95 mm^2) + CAN bus (2 wires / 4 wires) + Signal Wire (1 to 25 wires)

SENSOR CABLES

- Purpose: Signal transfer in a wide variety of sensor based applications
- Applications:
  - Fuel Injection, Sensor Throttle, Wheel Speed Sensor
  - Braking Systems – Anti-Lock Braking System (ABS) / EBS, Parking Assist
  - Extension cables for ABS systems on trucks and trailers
  - Brake Wear Indicator
  - O_2 Sensor wires and cables
- Temperature ranges from 80°C, 100°C, 105°C, 125°C, 150°C, 180°C & 200°C



CHARGING GUN CABLES

AC CHARGING GUN CABLES – 1 PHASE 3 PHASE TYPE 2

As per EN 50620 standard or customer requirement

- 16A – 1 Phase – 3C x 2.5 mm^2 + 1C or 2C x 0.5 mm^2
- 16A – 3 Phase – 5C x 2.5 mm^2 + 1C or 2C x 0.5 mm^2
- 32A – 1 Phase – 3C x 6 mm^2 + 1C or 2C x 0.5 mm^2
- 32A – 3 Phase – 5C x 6 mm^2 + 1C or 2C x 0.5 mm^2
- 63A – 1 Phase – 3C x 16 mm^2 + 1C or 2C x 0.5 mm^2
- 63A – 3 Phase – 5C x 16 mm^2 + 1C or 2C x 0.5 mm^2
- As per customer requirement

DC CHARGING GUN CABLES – GB/T

As per GB/T 20234.2-2015

- 250A – 2C x 80 mm^2 + 1C x 35 mm^2 + Control & CAN wires
- 200A – 2C x 70 mm^2 + 1C x 25 mm^2 + Control & CAN wires
- As per customer requirement

AC + DC CCS 2 COMBO CHARGING GUN CABLES

As per IEC 62196-3

- 250A – 2C x 80 mm^2 + 1C x 35 mm^2 + 6C x 0.75 mm^2
- 200A – 2C x 70 mm^2 + 1C x 25 mm^2 + 6C x 0.75 mm^2
- 150A – 2C x 50 mm^2 + 1C x 25 mm^2 + 6C x 0.75 mm^2
- 80A – 2C x 25 mm^2 + 1C x 16 mm^2 + 6C x 0.75 mm^2
- 63A – 2C x 16 mm^2 + 1C x 16 mm^2 + 6C x 0.75 mm^2
- As per customer requirement

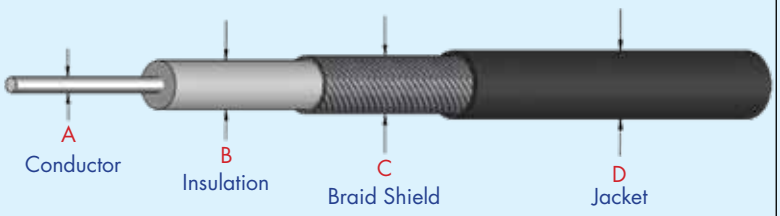
SPIRAL / COILED CABLES

- Truck Trailer Applications Products range of
  - 24V – 24N, 24S, Adaptor, EBS (7P), ABS (5P) in TPU, TPE
  - 12V – SAE 52394
- EV Charging as per IEC 62196
- Earth Moving Equipment Sensors
- Medical Equipment
- Telecommunication Equipment
- Industrial Gauges

ANTENNA CABLES

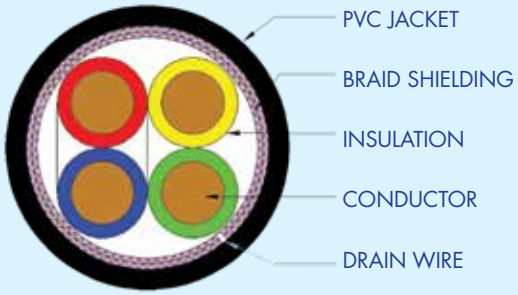
- RG174
- RG58
- RG59
- 3C – 2V
- 1.5C – 2V
- 1.5C – 2V AVS.05
- 5P3 – 30B

as per OEM/Hyundai/Kia/Suzuki Standards.



USB CABLES

- 1P x 28 + 2C x 20/22/24/26 AWG
- 1P x 26 + 2C x 20/22/24/26 AWG
- 1P x 24 + 2C x 20/22/24 AWG
- 1P x 24 + 3C x 20 AWG
- 1P x 20 + 3C x 20 AWG



Halogen free or PVC Jackets with temperature ranges of 80°C, 105°C & 125°C

NYSHA®
MOBILITY TECH

Nysha Mobility Tech Pvt Ltd.

Factory: 276-D, Dabaspete, 4th Phase, Avverhalli, Nelamangala Taluk, Bangalore Rural – 562111
Email: sales@nyshamobilitytech.com, sales01@nyshamobilitytech.com
Mob: +91 6366-353509 / +91 6366-353520 / +91 6366-353521