

MULTICOLOR SINGLE WIRES PVC INSULATED LGY/H05V-K & TLY/LIY

- The modern and highly advanced technology is applied to our single wires production, based i.a. on microprocessor controlled sensors
 and laser beams used to continous control all technical parameters during manufacturing process. This system influences considerably
 the precision of ready wires and guarantees obtainment of professional products on the highest world level.
- Each wire is separately insulated with plain or bi-coloured insulation of the highest class produced from the special lead free
 thermoplastic material on base of new generation polyvinits at increased physical and chemical parameters at raised thermal resistance.
 It assurances perfect dielectric parameters and ensures the exceptional smoothness, bright lustre, softness and elasticity of ready single
 wires.
- Wires are available in different colours of insulation. We use as standard the following colours of plain coloured or bi-coloured insulation in
 form of basic colour with marker at any colour configuration. Access to wide colours variety makes easier quick identification particular
 wires at making of multiwire bundles and reduces costs by eliminating use of additional cable markers. On request we can make wires
 in any other insulation colour.



| Colour code acc. RAL | 3000 | 5015 | 9005 | 9016 | 6018 | 8003 | 1021 | 2011 | 4005 | 3015 | 5041 | 7001 | 0000 |
|-------------------------|------|------|-------|-------|-------|-------|--------|--------|--------|------|-----------|------|-------------|
| Insulation colour | RED | BLUE | BLACK | WHITE | GREEN | BROWN | YELLOW | ORANGE | VIOLET | PINK | DARK BLUE | GREY | TRANSPARENT |

- Single wires are made in system of thinned insulation at preservation of all dielectric and electric parameters, which makes assembling
 easier and allows more effective use of transitions or cable glands.
- Wires conductors are strands in form of steadily twisted wires made of very thin, bare and soft copper wires Cu at increased purity, which
 makes our cables exceptionally elastic, easy fixing, soldering and clamping.
- Single wires are winded on yellow plastic reels at outer diameter Ø = 132mm and inner diameter of lead hole Ø = 26mm. Depending of wire diameter we use reels at height 37, 47, 57 or 77mm. All wires are winded evenly and compactly, which ensures them perfect visual effect, makes their storage easier and prevents their uncontrolled unwinding. Additionally each reel is QC sealed at the end of wire facilitating its finding and is protected with cover made of transparent therm-shrinking foil against cable oxidation, insulation hardening or getting dirty during storage period.

TECHNICAL PARAMETERS OF SINGLE WIRES LGY 300/500V (H05V-K) & TLY 150/300V (LIY)

| Nominal conductor cross section CSA | Size AWG system | Package: reel length | Conductor size structure quantity x Ø wires | The average external wire diameter | Maximum working voltage | Maximum load current | Conductor resistance at T = 20°C maximum + minimum | Wire net weight approx. |
|--|-----------------------|----------------------------|---|---|-------------------------------|-------------------------|--|-------------------------------|
| 0,12 mm ² | AWG 26 | 200 meters | 7 x 0,15 mm | Ø 1,2 mm | 300 V | 1,2 A | 155 ÷ 139 mΩ/m | 2,4 kg/km |
| 0,22 mm ² | AWG 24 | 200 meters | 7 x 0,20 mm | Ø 1,3 mm | 300 V | 2,2 A | 89,3 ÷ 80,4 mΩ/m | 3,4 kg/km |
| 0,35 mm ² | AWG 22 | 200 meters | 12 x 0,20 mm | Ø 1,4 mm | 500 V | 3,5 A | 52,0 ÷ 47,8 mΩ/m | 4,7 kg/km |
| 0,50 mm ² | AWG 20 | 100 meters | 16 x 0,20 mm | Ø 1,6 mm | 500 V | 5,0 A | 37,1 ÷ 34,1 mΩ/m | 6,3 kg/km |
| 0,75 mm ² | AWG 18 | 100 meters | 24 x 0,20 mm | Ø 1,9 mm | 500 V | 7,5 A | 24,7 ÷ 22,7 mΩ/m | 9,0 kg/km |
| 1,00 mm ² | AWG 17 | 100 meters | 32 x 0,20 mm | Ø 2,1 mm | 500 V | 10 A | 18,5 ÷ 17,0 mΩ/m | 11,8 kg/km |
| 1,50 mm² | AWG 16 | 100 meters | 30 x 0,25 mm | Ø 2,4 mm | 500 V | 15 A | 12,7 ÷ 11,7 mΩ/m | 16,0 kg/km |
| 2,50 mm ² | AWG 14 | 50 meters | 50 x 0,25 mm | Ø 3,0 mm | 500 V | 25 A | 7,6 ÷ 7,0 mΩ/m | 26,3 kg/km |

- Operating temperature of our wires is in the range from -40°C to +105°C (max. +120°C).
- Single wires comply with the environmental directive RoHS according to 2002/95/EU act and RoHS-2 according to 2011/65/EU act
 with later additions on the restriction of the use of certain hazardous, harmful or poisonous substances in electric and electronic
 equipment. They also meet the requirements of REACH system according to 1907/2006 decree of EC Parliament on applied
 restrictions regarding production and distribution of chemical materials.
- Application of single wires LGY / H05V-K and TLY / LIY types is universal and they are applied in the most areas of electronics, electrotechnics and electric activities. They are excellent for making wiring in the majority of commercial equipment, electromedical and industrial automation, telecommunication and motorization at carrying out supply, control, test, executing, on-board, alarm, data transfer installation and many others. The are widely used in the manufacture, improvement or reconstructions of all types of vehicles such as scooters, motorbikes, cars, trucks, buses, special purpose vehicles, trams, trains, boats, yachts, planes, drones also cranes, lifts, machinery, technological lines, home appliances like washers, dishwashers, dryers, cookers, ovens, fridges, air conditioners and other devices and electronic equipment. They are also suitable for wiring power and control LED lighting systems, smart buildings projects realization, electrical and lighting installation and for all service or hobby jobs.
- Using single wires is simple, quick and economical. Our wide sizes range, huge colours variety and professional packing system is
 additionally helpful and makes production of multiwire harnesses much more easier. More info and photos of all products types
 are available on our website www.tme.eu

