

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 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.



Insulation colour	RED	BLUE	BLACK	WHITE	GREEN	BROWN	YELLOW	ORANGE	VIOLET	PINK	DARK BLUE	GREY	TRANSPARENT
Kod barwy wg. RAL	3000	5015	9005	9016	6018	8003	1021	2011	4005	3015	5041	7001	0000

- 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 \emptyset = 132mm and inner diameter of lead hole \emptyset = 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 ∅ 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 mm²	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 mm ²	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 meet the requirements and are in full accordance with international certificates or normative regulations ISO 9001, ISO 14001 and VDE / German standard, BASEC / British standard and they are allowed to be used in EC countries and marked with CE sign basing 73/23/EEC and 2006/95/EC directive.
- Technical and electrical parameters meet the requirements of Polish Standard PN-87/E-90054 or PN-91/T-90206.
- 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, drons 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.vega-tronik.eu























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