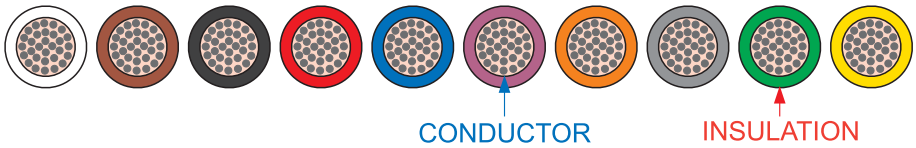
VEGA-TRONIK Commercial Office
01-910 Warszawa / POLAND ul. Lekka 3
tel. +48 22 817 80 80 / fax +48 22 817 80 81
biuro1@vega-tronik.pl / www.vega-tronik.eu

TECHNICAL SPECIFICATION & PRODUCT DESCRIPTION

Single wires kit SET 1,50 mm² LGY / H05V-K 10 x 5 m

The offered wires have a flexible, multi-stranded conductors with cross-sections of **1,50 mm²** insulated with new generation polyvinite PVC. Each **SET** consists of **10** different colored wires individually wound on separate spools. Thanks to its outstanding performance, it is a great choice for any professional who relies on excellent quality, reliability and convenience of use. This flexible, well-laying, resistant to surrounding conditions and user-friendly product is ideal for even the most advanced production projects and any assembly, service or hobby work.



Wires technical parameters :

• Product normative classification mark	**LGY / H05V-K PRO Series**
• Nominal conductor cross-sectional areas	**1,50 mm² CSA**
• Wire conductor sizes in AWG inch system	**AWG 16**
• Manufacturer product number BQ MPN	**LGY-SET1.50/5**
• Structure of twisted multi-stranded conductors	**30 x ∅ 0,25 mm**
• Construction of the conductive conductors	**Regularly twisted wire strands**
• Conductive conductors material	**Copper Cu**
• Conductors resistance at T = 20°C	max.**12,7** ÷ min.**11,7 mΩ/m**
• Insulation material of conductors	**Modified polyvinite PVC**
• Outer diameter of each single wire	**∅ 2,4 mm** ± 0,05
• RAL code number and insulation color order of each single wires in the set	**01.** RAL 9016 **White** **02.** RAL 8003 **Brown** **03.** RAL 9005 **Black** **04.** RAL 3000 **Red** **05.** RAL 5015 **Blue** **06.** RAL 4005 **Violet** **07.** RAL 2011 **Orange** **08.** RAL 7001 **Grey** **09.** RAL 6018 **Green** **10.** RAL 1021 **Yellow**

• Approximate net weight of wire	**16,6 kg/km**
• Copper index - conductor net weight	**14,4 kg/km**
• Resistance to vibration, oscilation, overload	**YES**
• Resistance to lubricants and chemical agents	**YES**
• Resistance to flame propagation	**YES / Self - extinguishing type Eca**
• Method of electrical assembly and connecting	**Crimping, Soldering, Twisting**
• Permissible current load of each single wire	**14,7 A** (max. **16 A**)
• Long-term current capacity of each wire	**7,9 A**
• Maximum operating voltage of each wire	**750 V**
• Nominal working voltage U_o / U	**300 V / 500 V**
• Breakdown voltage of the insulation	**> 9 kV**
• Operating temperature range of each wire	**- 40°C ÷ +105°C** (max. **+120°C**)
• Length of wire sections per package	**10 x 5 meters**
• Approximate gross weight of the package	**0,91 kg**
• Packaging system for each wire color	**Evenly wound on separate PP spools**
• Package dimensions of the set - spools	**∅ = 50 mm / H = 220 mm (10 x 22 mm)**
• Packaging logistical security	**Thermo - shrinkable POF film cover**

We guarantee constant availability of items in stock and immediate shipping !

SET single wire kits with the **BQ** logo, containing **10** of the most popular **TLY / LIY** type or **LGY / H05V - K** type wire insulation colors, depending on the cross-sections selected, are completely manufactured in **EU** and guarantee not only the highest global product quality and the latest production technologies, taking into account environmental protection, but also ensure comfort of use and savings resulting from reliability.

Thanks to the use of highest quality copper, with specially increased purity in regularly twisted conductor strands with cross sections of **0,12 mm²**, **0,22 mm²**, **0,35 mm²**, **0,50 mm²**, **0,75 mm²**, **1,00 mm²** and **1,50 mm²** and their appropriate construction, single wires from **SET** kits supplied by **BQ** guarantee almost lossless transmission of sent signal or current, significant facilitation of soldered, twisted, welded, terminal blocks screwed and connectors crimped assembly, resistance to vibrations and oscillations as well as exceptional softness, ease of bending and flexibility.

BQ new generation of modified polyvinite insulation is specially thinned to guarantee a smaller outer diameter of the wires at the same cross-sectional areas of conductive conductors and while maintaining all dielectric parameters and operating voltage up to **300 V** or **500 V** depending on the cross-section of the wires used. This allows for better planning of electrical harnesses and more efficient use of cable glands. This is possible thanks to the increased physicochemical properties of insulation, which further makes offered wires perfectly cope with the surrounding conditions and aggressive chemical agents. The insulation is extremely smooth and glossy, is not absorbent, does not harden and does not crumble, and allows an unprecedented operating temperature in the wide range from **- 40°C** up to **+105°C** (max. **+120°C**). This increased thermal range also reduces installation time and significantly decreases the risk of insulation melting when making high-current soldered connections or encapsulating connections with heat shrink covers or tubes. Additionally series of new generation multi-pin connectors requires using wires in thinned insulation, since wires of standard thickness are unable to fit in dense array of contact fields, covers or cable glands.

The availability of **10** insulation colors allows significant savings in wire marking systems in multi-wire harnesses, eliminates the need for cable markers use and allows quick identification of a given wire along the entire length of the harness, even in hard-to-reach places. This makes service jobs or modernization works simpler and easier to do.

The wires are supplied in sets of **5m** or **10m** lengths depending on the wires cross sections areas used and evenly wound on convenient to use and fully recyclable plastic spools, with outer diameter of **Ø = 50mm** with an internal guide hole **Ø = 20mm**, which allows you to increase the comfort of work because each color of wire is wound on a separate spool and eliminates the problem of finding the end of the wire or laboriously untangling it after an uncontrolled unwinding. It greatly accelerates and facilitates the execution of multi-wire harnesses, because it is enough to put spools with a fixed number of wires on one guide rod and pull them all together and, as you develop, connect them into a bundle with the appropriate adhesive electrical insulation tape or PET fleece wire harness tape, self-clamping cable ties or passing them through the cable protection corrugated conduit. **BQ** packs **10** spools each as a set of different colored wires, set on a temporary core, in a sealed cover made of transparent shrink film, which stiffens the product, protects the insulation from oxidation, dust or getting dirty during storage and always guarantees the end user the highest quality of wires after removing them from the packaging.

BQ single wires have been made using **ISO 9001** and **ISO 14001** standards, are approved for use in **EU** markets and comply with the requirements of the environmental directives **RoHS-3** (2015/863/EU), **RoHS-2** (2011/65/EU), **RoHS** (2002/95/EU) and also comply with the requirements of **REACH** (Regulation 1907/2006) meeting regularly updated ECHA restrictions.

BQ wires kits are universally applicable thanks to their professional design & performance and are ideal for most manufacturing, service or hobby projects in all areas of electronics and electrotechnical or electrical engineering. They are most often used in industrial and electro-medical automation, cranes, lifts, automotive and lighting industry, construction of all kinds of machines and devices from toys, alarm systems, traffic lights and sound signals, multimedia advertising screens, power supplies, distribution and vending machines, scales, arcade game machines, audio video equipment, consumer electronics devices, household appliances, wheel balancers, parcel lockers, parking meters, industrial air conditioners or tanning sunbeds to advanced technological lines, when making power supply lines, steering, control, executive and on-board installations, warning or alarm systems and many other applications. They are also often used in the manufacture, modernization, modification, tuning or reconstruction of all types of vehicles: electric drive scooters, mopeds, bikes and skateboards, motorbikes, quads, buggies, cars, vans and trucks with electric, hybrid or fuel engines drive, special vehicles (taxis, ambulances, fire trucks, police cars, banking armored cars, campers, cranes, tow trucks, loading lifts etc.), buses, tractors, semi-trailers, trailers, caravans, trams, trains and they can be found even on yachts and speedboats, drones, powered hang gliders or sailplanes. **BQ** wires kits are often used to control and power energy-efficient LED lighting and emergency lighting systems, connect sensors and computer controllers to receivers, implement complex smart buildings projects. Due to its packaging system, multiplicity of colors and small quantities, this product is most often chosen for all service, assembly and hobby work, equipment prototype construction or laboratory and measurement technology.

SET single wires kits supplied by **BQ** are the perfect solution for any professional who appreciates the quality and convenience of wires use. The use of these wires is simple, fast, economical and always guarantees excellent reliability.

BQ CABLE

BQ CABLE
LgY 300/500V · H05V-K
1,00 mm²
100
LgY 300/500V · H05V-K
2,50 mm²
50
LgY 300/500V · H05V-K
0,35 mm²
200