## Single wire LGY/H05V - K 0,50mm<sup>2</sup> 100m Color: Light Green

The offered wire has a flexible, multi-strand conductor with a cross-section of **0.50 mm²** insulated with new generation polyvinite PVC. 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-oriented product is ideal for even the most advanced production projects and any assembly, service and hobby work.

## Wire technical parameters :

Long-term current capacity of the cable

Maximum cable operating voltage

Breakdown voltage of the insulation

<ul> <li>Product normative classification</li> </ul>	LGY/H05V-K PRO Series
The rated cross-section of the conductor	0,50mm <sup>2</sup>
Wire cross-section in AWG	AWG 20
<ul> <li>Manufacturer part number BQ MPN</li> </ul>	LGY0.50-GB
Structure of twisted multi-wire conductor	16 x Ø 0,20mm
Construction of conductor	Regularly twisted strand
Conductor material	Copper Cu
<ul> <li>Conductor resistance at T=20°C</li> </ul>	max. <b>37,1</b> ÷ min. <b>34,1 mΩ/m</b>
Insulating material	Modified polyvinite PVC
Outer diameter of wire	Ø <b>1,6mm</b> ± 0,05
<ul> <li>Type of color insulation</li> </ul>	Plain color
<ul> <li>Wire insulation color and RAL number</li> </ul>	RAL 6019 Light Green
<ul> <li>Approximate net weight of wire</li> </ul>	6,30 kg/km
<ul> <li>Copper index – conductor net weight</li> </ul>	4,80 kg/km
Resistance to vibration, oscilation, overload	YES
Resistance to lubricants and chemical agents	YES
Resistance to flame spreading	YES – Self extinguishing type
Method of electrical assembly and connecting	Crimping, Soldering, Twisting
Permissible current load of the cable	<b>5,0 A</b> (max. <b>7,2 A</b> )

3,9 A

500 V

> 7,5kV

Operating temperature range of the cable
 -40°C ÷ +105°C (max. +120°C)

Section in packaging
 100 meters

Approximate gross weight of the package
 0,72 kg

Packaging - way of wire confection
 Evenly winded onto a spool

• Packaging material and dimensions - spools ABS  $\emptyset$  = 132mm / H = 37mm

Packaging logistical security
 Thermo-shrinkable POF film cover

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

Single wires **LGY 300V/500V / H05V-K** with **BQ** logo guarantee not only the highest global product quality and the latest technologies of workmanship taking into account environmental protection, but also provide convenience of usage and savings coming from reliability.

Thanks to the use of highest quality copper, with specifically raised pureness in our regularly twisted strands with cross sections of **0,35mm**<sup>2</sup>, **0,50mm**<sup>2</sup>, **0,75mm**<sup>2</sup>, **1,00mm**<sup>2</sup>, **1,50mm**<sup>2</sup> and **2,50mm**<sup>2</sup> and their regularity, **LGY/H05V-K** wires provided by **BQ** guarantee almost lossless transmission of sent signal or current, significant facilitation of soldered and crimped assembly, resistance to vibration and oscillation and outstanding pliability and flexibility.

**BQ** new generation of modified polyvinite insulation is specially thinned to guarantee a smaller outer diameter of the wire at the same cross-section of the conductive vein with holding all dielectric parameters and operating voltage of up to **500V**. 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 range of **-40°C** 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 shrink pipes.

A very wide range of plain colors insulation and hudge range of two-color variety types in the form of a base color and marker stripe significantly save on wire marking systems in multi-wire harnesses, eliminate the need for cable markers and allow quick identification of a given wire along the entire length of the harness, even in hard-to-reach places. The cables are supplied in sections of **200m**, **100m** or **50m** depending on the cross section of the wire, and winded onto a fully recyclable, comfortable-to-use spool with diameter of  $\emptyset$  = **132mm** with internal guide hole  $\emptyset$  = **26mm**, which allows you to increase the comfort of work, ending the problem with finding the end of the wire or laborious untangling after uncontrolled expansion. It greatly accelerates and facilitates the execution of multi-wire harnesses, because it is enough to put spools with a set number of wires on one guide rod and pull them all together and, as you develop, connect them into a bundle with the appropriate electrical tape, self-clamping bands or passing them through the corrugated conduit. **BQ** equip all spools with test seals to help you quickly find the beginning of the cable section and pack them in a sealed cover made of transparent shrink film, which allows you to quickly find the necessary color on the shelf of the warehouse, protects insulation from oxidation, dust or getting dirty during storage and always

guarantees the final recipient the highest quality of the cables when removed from the package.

The parameters of the cables meet the requirements of ISO 9001, ISO 14001, PN-87/E-90054 (Polish standard), VDE (German standard), BASEC (UK standard), are authorized for use on EU markets (73/23/EEC standard) and CE marked (Directive 2006/95/EC), and comply with environmental directives RoHS (Act 2002/95/EU), RoHS-2 (Act 2011/65/EU), RoHS-3 (Act 2015/863) and comply with REACH environmental requirements (Regulation 1907/2006). According to EN 60332-1-2, the cables are Eca grade, do not spread flame and are approved for usage in construction works.

At each request of the Recipient, we issue a certificate of conformity free of charge.

Offered single wires 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 electrical engineering. They are most oftenly used in industrial and electromedical automation, automotive industry, cranes, lighting, construction of all kinds of devices from alarms, scales, arcade machines or sunbeds to advanced technological lines, when making power lines, steering, control, executive installations, on-board installations, alarms and many other applications. They are also often used in the manufacture, modernization, modification or reconstruction of all types of vehicles: electric scooters and electric skateboards, mopeds, motorbikes, quads, buggies, cars and trucks, special vehicles (taxis, ambulances, fire trucks, cranes, tow trucks, loading lifts etc.), buses, tractors, semitrailers, trailers, trams, trains, and they can be found even on inland yachts and speedboats, powered hang gliders or sailplanes. They are also oftenly used to control and power energy-efficient LED lighting systems, connect computer controllers to receivers, implement smart building projects, and for any service and hobby work.

**LGY/H05V-K** wires provided by **BQ** are an excellent solution for any professional who values quality and convenience of use in wires. The use of these wires is simple, fast, economical and guarantees perfect reliability.