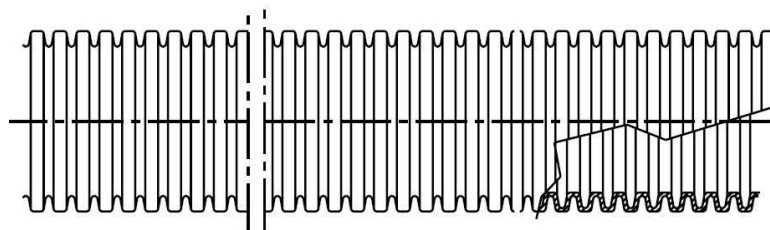


## LGP Robotic flexible conduits

Item codes : from 666430 to 666437



### SUMMARY

### PAGES

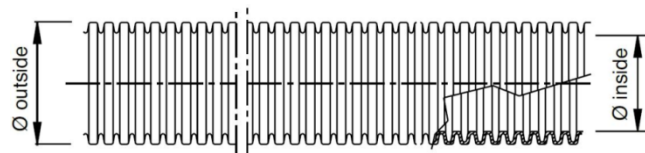
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## 1. DESCRIPTION AND APPLICATIONS

Flexible corrugated conduit made of high quality, halogen free and flame retardant polyamide. Suitable for any applications in which are required good mechanical and thermal performances with a very high flexibility and geometrical adaptation. Ideal dynamic applications it ensures an high cadence to handling cycles. It's the appropriate solution for energy, signal or power distribution in automation, robotics and industrial processes and ensures an IP68 protection used with the patented connectors.

## 2. DIMENSIONS AND COMPATIBILITY

### Dimensions and packaging:



Item GREY	Nominal diameter	Internal diameter [mm]	External diameter [mm]	Curvature radius* [mm]	Pack [m]
666430	7	7,0	10,0	35	50
666431	8	8,0	12,0	40	50
666432	12	12,0	16,0	50	50
666433	15	15,0	20,0	65	50
666434	19	19,0	25,0	80	50
666435	25	25,0	32,0	100	25
666436	33	33,0	40,0	130	25
666437	42	42,0	50,0	160	25

\* Approximate value: for more information contact Legrand technical offices

### Compatibility:

Connectors, fittings and accessories LGP series.



## 3. TECHNICAL FEATURES

### Raw material:

Polyamide PA12 [UL94-V2] halogen free and flame retardant.

### IEC 61386 classification:

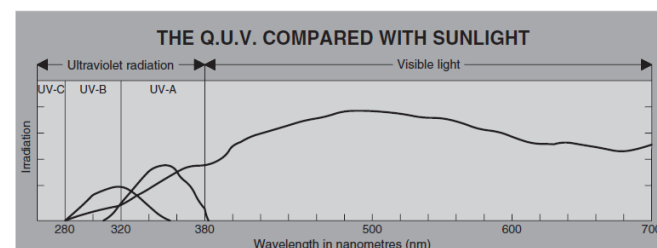


(1 1 5 2 for item 666430)

1 <sup>st</sup> figure	2 <sup>nd</sup> figure	3 <sup>rd</sup> figure	4 <sup>th</sup> figure
Resistance to compression	Resistance to shock	Maximum installation and normal use temperature	Minimum transport, installation and normal use temperature
1 = very slight 125 N 2 = slight 320 N 3 = medium 750 N 4 = strong 1250 N 5 = very strong 4000 N	1 = very slight 0.5 J 2 = slight 1 J 3 = medium 2 J 4 = strong 6 J 5 = very strong 20 J	1 = +5 °C 2 = -5 °C 3 = -15 °C 4 = -25 °C 5 = -45 °C	1 = +60 °C 2 = +90 °C 3 = +105 °C 4 = +120 °C 5 = +150 °C 6 = +250 °C 7 = +400 °C

### Resistance to UV rays:

Represents the resistance to the degradation of mechanical performance caused by exposure to UV radiation contained in sunlight. All RTA conduit systems have been subjected to the Q.U.V. test which, with exposure cycles of 4+4 hours, simulates the continued alternation of light and condensation. The conduits of LGP series are not recommended for long exposition to UV radiation even if they have a good resistance to UV rays: all LGP conduits are indicated for internal uses or covered uses.



**Resistance to chemical agents:**

Represents the resistance to chemicals or external agents. The used test method consist of: immersion of the items under test in the chemical substance for 24 hours; once they were dried and conditioned at a constant temperature for other 24 hours, they were checked with the following examinations:

- Visual inspection to check the integrity
- Mechanical bending test
- Mechanical compression test
- IP protection test

Industrial chemical agents	Resistance*
Unleaded petrol	●
Industrial detergent	●
Diesel fuel	●
Lubricant oil	●
Emulsifier solution	●
Washing solvent	●

\* resistances to chemicals are indicative. For any specific application or environment please contact Legrand technical offices

- Good resistance
- Medium resistance
- No resistance

**Operating temperature:**

Minimum: -45° C / -49° F

Maximum: +90° C / +194° F

**Heat resistance:**

Glow wire test: 750° C / 1382° F

**Self-extinguishing:**

Does not propagate flames in according to IEC 61386.

**IP protection index:**

IP65 with LGP series connectors.

IP68 with LGP series connectors and gaskets

**4. ENVIRONMENTAL PROFILE**

All the items identified in this technical sheet respect in terms of concentration of substances and raw materials the European legislations about dangerous and forbidden substances and chemical preparations.



All items identified in this technical sheet are constituted by raw materials completely recyclable.

**5. CONFORMITY AND APPROVALS**

All the items identified in this technical sheet are compliant to all the requirements and the regulations currently in force in the European Union about safety, health and environmental issues.



IMQ mark: items from 666430 to 666437.



RINA mark: items from 666430 to 666437.

1 <sup>st</sup> digit IP	
Protection against the ingress of solid bodies	
0	No protection
1	Protection against solid bodies larger than 50 mm (e.g.: accidental contact)
2	Protection against solid bodies larger than 12 mm (e.g.: finger)
3	Protection against solid bodies larger than 2.5 mm
4	Protection against solid bodies larger than 1 mm
5	Protection against dust
6	Complete protection against dust

2 <sup>nd</sup> digit IP	
Protection against the ingress of liquids	
2	Protection against drops of water falling at up to 15° from the vertical
3	Protection against drops of rain water at up to 60° from the vertical
4	Protection against sprays of water from all directions
5	Protection against jets of water from all directions
6	Protection against jets of water of similar force to heavy seas
7	Protection against the effects of immersion
8	Protection against prolonged effects of immersion under pressure

For technical documentation, test reports, commercial information or any other needs please refer to the local LEGRAND office.