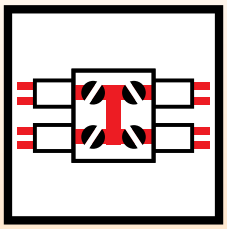
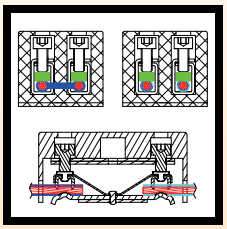
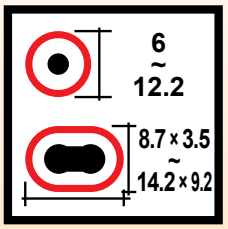
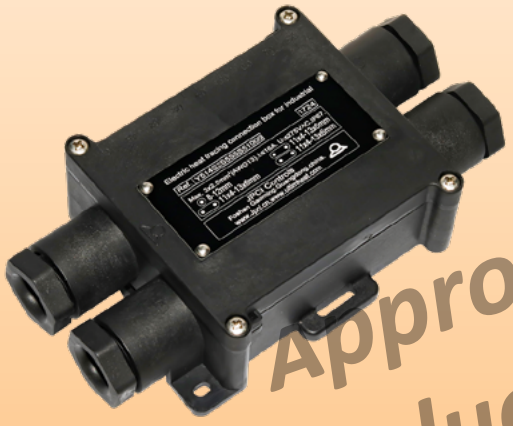
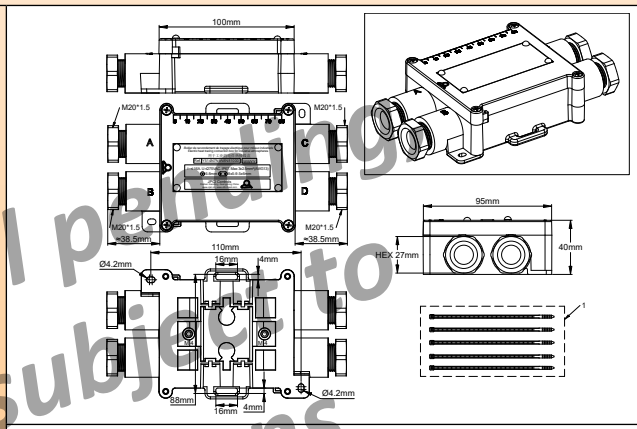
4 ways in line connection box for heat tracing cables, with insulation piercing terminals, for self-regulating cables, for industrial non-hazardous areas

4 ways in line	Insulation piercing	Wire gauge	Cables diameters		Type
		1~2.5mm²		RoHS REACH	Y514

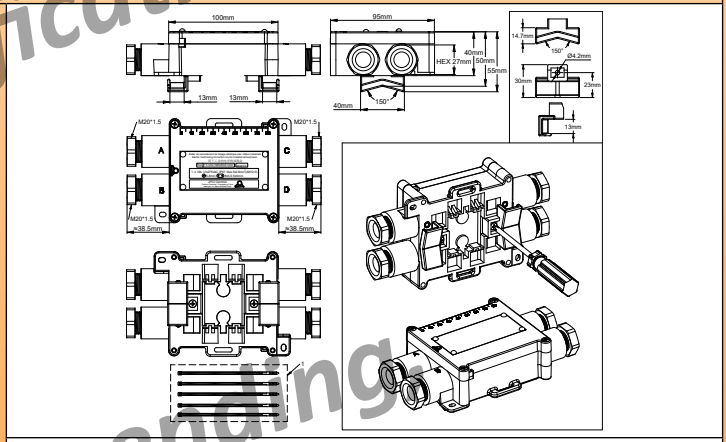
Wall mounting





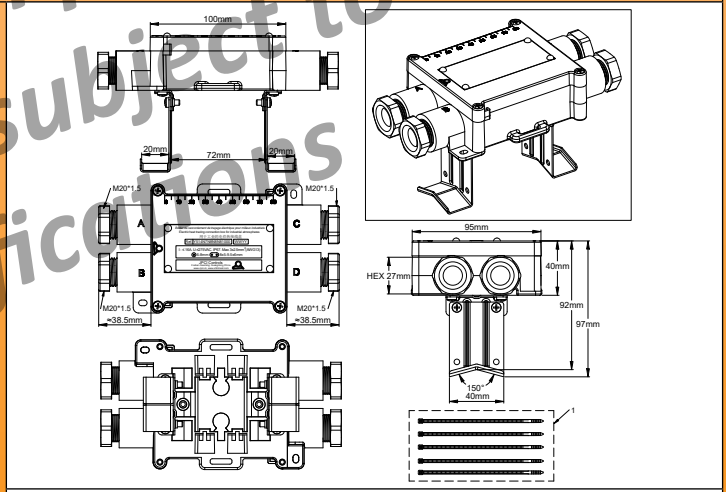
1.Red seal

10mm offset mounting for pipes mounting with PA66 legs (Standard accessory)



1.Red seal

50mm offset mounting for pipes with thermal insulation (optional 6YTQT accessory)



1.Red seal

4 ways in line connection box for heat tracing cables, with insulation piercing terminals, for self-regulating cables, for industrial non-hazardous areas

Example of mounting on pipe with the plastic legs	Example of mounting at distance of the pipe with the stainless steel bracket type 6YTQT
	

Applications

This box is used to connect a **power supply cable to 3 self-regulating cable.** It can be mounted flat on a surface, or on a pipe, including with insulation up to 50mm thick.
It is designed **to snap** onto the pipe mounting brackets.
The terminal blocks are easily accessible and the connection is very simple, in particular for flat self-regulating cables with metallic protective braid.

Main features

Material: Fiberglass reinforced polyamide 66 black, 100mm × 95mm × 40mm (Cable glands not included). Superior UV resistance.
Waterproof grade: IP67 and IP69K (high pressure hot water washing)
Shocks resistance: The highest, IK10 (Cable gland not included).
Mounting:
- Wall mounting: 2 wall mounting lugs allow the mounting on a flat surface. Holes distance 80 x 110mm.
- Pipe mounting with 10mm offset: Two plastic legs supplied as standard allow attachment to a tube using a nylon hose clamps.
- Pipe mounting with 50mm offset: one snap-on metal stainless steel bracket allows the installation of a thermal insulation and its protection before snapping-on the box on it and making electric connections. (Available as an accessory, see catalogue page on 6YTQT parts).

Terminals:
- The terminals intended for the self-regulating heating conductors are piercing the insulation layers with a double chisel blade, and retain the contact pressure by means of an elastic blade (patented).
- These terminals are designed to receive self-regulating heating cables with any distance between the bus wires between 2mm and 10mm.
- These terminals can also possibly be used for conventional conductors of power supply cables.
- The terminals for the conductors of the power supply cables are clamped with traditional pressure screw. We recommend them for this type of conductor, often flexible type, with many strands of small diameter, that can be damaged by the knives of the insulation piercing terminals.
- All terminals are protected against loosening by vibration or thermal shock.
- The mechanical tightening of the cable is ensured by a screwed metal saddle, usable on round or flat cable. This patented saddle also ensures the earthing of the metal braid of the heating cables.
- Wire gauge: 3 × 1mm² to 3 × 2.5mm².
- Maximum permissible intensity: 16A 250V.

Interconnection: The neutral terminals (N) are internally connected by a jumper and so are the Line (L) terminals.
Cables outlet: with M20 cable glands, with 70 shore NBR gaskets.
- Maximum diameter of round cables: 8; 12 or 14mm depending on the gaskets installed.
- Limit sizes of oblong cables:
- From 8 × 5 to 9.5 × 6mm
- From 9.5 × 2.5 to 11 × 3.5mm
- From 11 × 4 to 13 × 6mm
- From 12.5 × 8 to 14.2 × 9.2mm

For more information about tightening possibilities on round and oblong cables, see the catalogue page on 6YTP cable glands.
Inviolability: The case can receive one or two seals (delivered with 5 red seals)

4 ways in line connection box for heat tracing cables, with insulation piercing terminals, for self-regulating cables, for industrial non-hazardous areas

Sealing: Supplied with 5 red plastic ties for use in the sealing holes
Easy assembly: Assembly is made with full access to terminals when cover is removed. Mounting on wall or pipe can be made with cover removed or cover assembled.
Accessory: Bracket in stainless steel for offset mounting on pipe with up to 50mm insulation thickness. Designed to snap on the connection box. See the accessories pages on 6YTQT models.
Options:
- 3 output models (one cable gland is removed and replaced by a cap)
- Independent lines (internal jumpers between connectors are removed)

Consult us for parts numbers of simplified models with only one dimension of cable gland gasket for round wire and flat wires, customized label, and specific set of accessories for pipe mounting (OEM versions).

Main references*

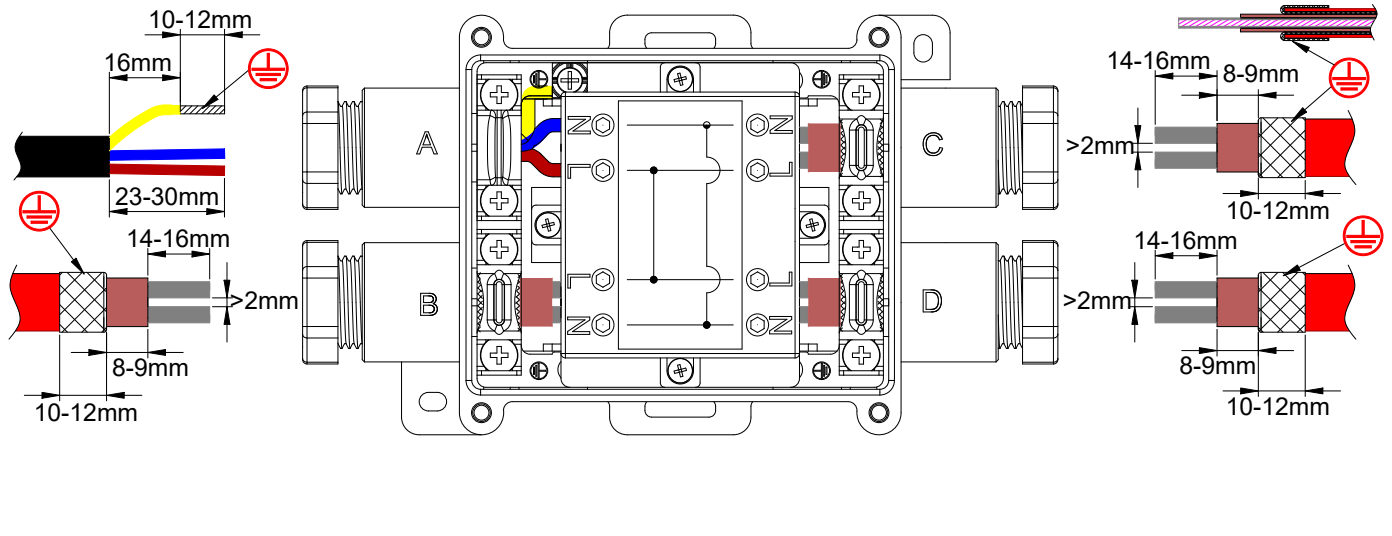
Model for 3 self-regulating cable and one power supply cable (Y514)

Part numbers	Hole dimension of the seal of cable gland on side A	Hole dimension of the seal of cable gland on side B, C, D
Y514N2N5N5N51	NBR seal for round cable dia. 12mm max.	NBR seal for oblong cable from 11 × 4 to 13 × 6mm.
Y514N7N8N8N81	Set of 3 NBR seal for round cable dia. max. 8, 12mm.	Set of 4 NBR seals for oblong cables, from 8 × 5 to 9.5 × 6mm; from 9.5 × 2.5 to 11 × 3.5mm; from 11 × 4 to 13 × 6mm; from 12.5 × 8 to 14.2 × 9.2mm.

* Includes 2 plastic tabs for wall mounting and 2 snap-on plastic legs for a 10mm offset mounting from the surface of a pipe.

Stripping dimensions of the braided self-regulating cable, and stripping dimension of the power supply cable.

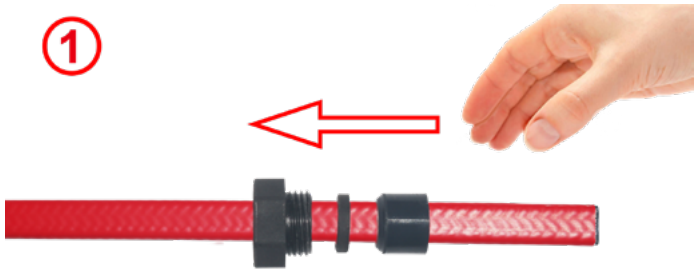
(More detailed instructions are available in the technical introduction)



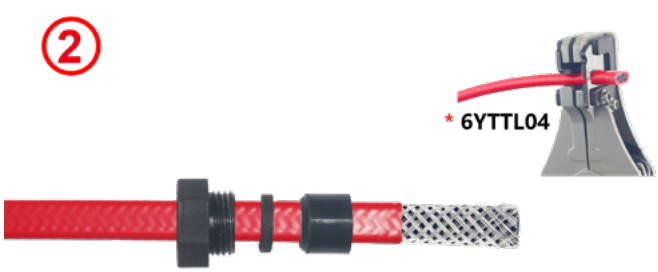
Model with 3 heating wires and one power supply cable (Y514)

4 ways in line connection box for heat tracing cables, with insulation piercing terminals, for self-regulating cables, for industrial non-hazardous areas

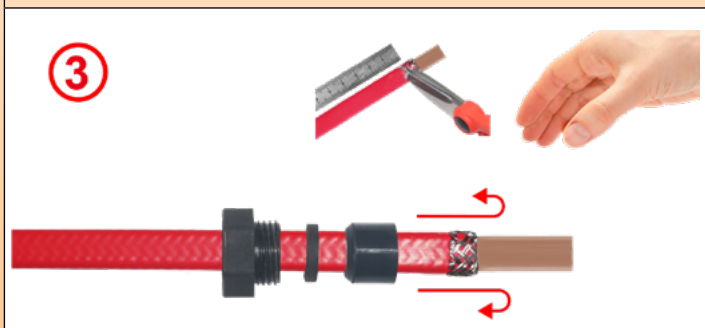
Self-regulating cables assembly steps



1: Cut the cable, slide on it the cable gland nut. Select the cable gland gasket with the compatible hole diameter and slide it on the cable

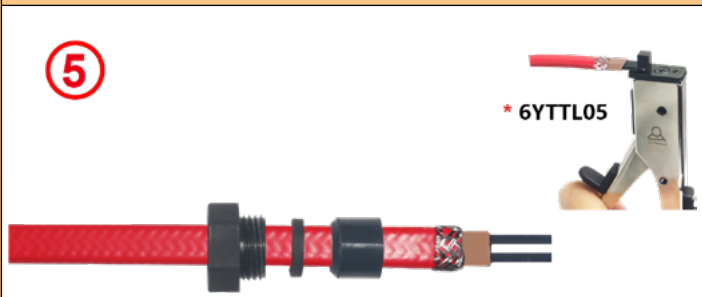


2: Remove external jacket on the requested length.



3: Cut the braid at the requested length. Don't unweave it.

4: Strip heating zone insulation at the requested length.



5: Cut the heating zone between the 2 bus wires at the requested length.

6: Adjust, if needed, the length of the bus wires.

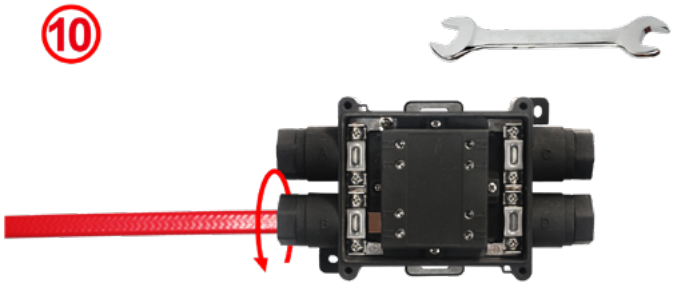
7: Unscrew the saddle and remove it if necessary, then pass the cable through the cable gland. Slide the end of the self-regulating cable into the terminal block until it stops.

8: Tighten the saddle on the metal braid. Recommended tightening torque: 1.6 Nm.

* These exclusive tools are available in accessories section

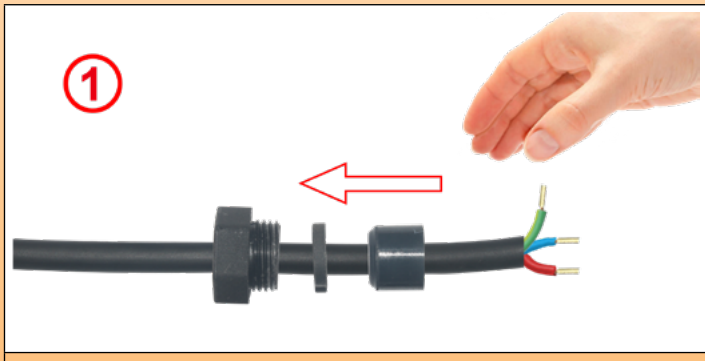
4 ways in line connection box for heat tracing cables, with insulation piercing terminals, for self-regulating cables, for industrial non-hazardous areas

9: Tighten the terminal screw until electrical contact is made with the conductor of the heating cable. Tightening torque is around 1.5 Nm. This tightening torque may vary depending on the thickness and hardness of the material of the semiconductor thermoplastic compound. If necessary, check the continuity with an ohmmeter by measuring the resistance between the two terminals N and L.

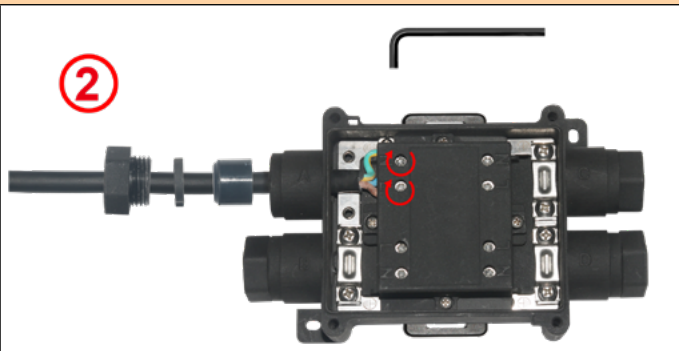


10: Slide the flat cable gasket into the cable gland and tighten the nut. Max. tightening torque 3N.m. If not yet made connect the other cable and close the lid.

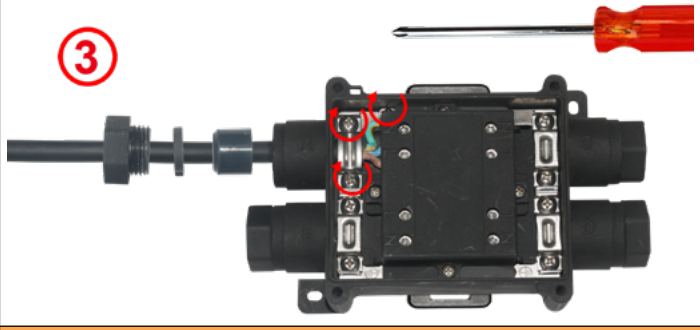
Round cable assembly steps



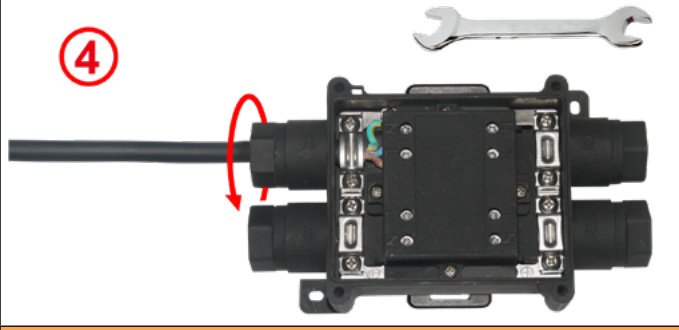
1: Remove outer jacket on 24mm. Then strip the conductors on 10mm. Eventually, crimp cable shoes. Slide the cable gland nut on the cable. Select the compatible diameter gasket and slide it too on the cable.



2: Put the neutral and line wires inside the screw terminals and tigthen them. Recommended torque 1.6 Nm.



3: Slide the ground wire under the ground terminal square washer and tigthen the screw. Recommanded torque 1.6 Nm.



4: Slide the round cable gasket into the cable gland and tighten the nut. Maximum tightening torque 3N.m.