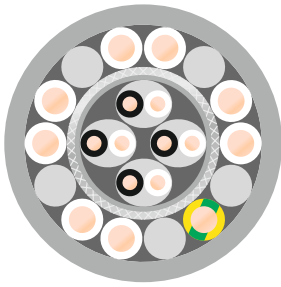


# HYBRID CABLES

## Thermoelectric and control cable



### TECHNICAL SPECIFICATION

**Operating temperature range** thermoelectric part  
-30°C to +105°C  
control part  
-25°C to +70°C

**Nominal voltage** 300/500 V

**Test voltage** 2500 V

### CONSTRUCTION

Thermoelectric part:

- Multiwire thermoelectric core cl.1 type J acc. to IEC 584
- Conductors insulated with heatresistant PVC TI3 acc. to PN-EN 50363-3
- Color identification acc. to IEC 584
- Conductors stranded in pairs with optimal lay length
- Sheath with heatresistant PVC type TM3 acc. to PN-EN 50363-4-1 (product JXYcLek without outer sheath)
- Outer sheath color acc. to IEC 584
- Tinned copper braid screen

Control part:

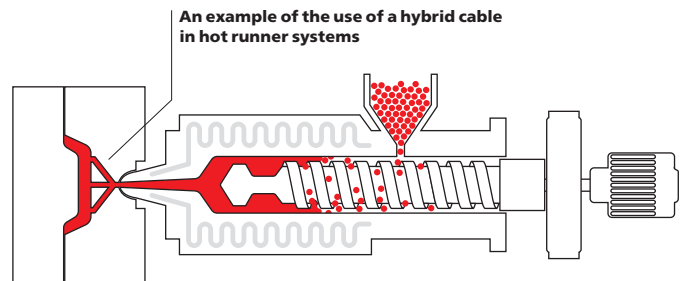
- Multiwire bare copper conductor acc. to PN-EN 60228 cl.5
- Cores insulation of PVC type TI1 acc. to PN-EN 50363-3
- Insulation color: white or natural depends on demand
- Filling pads
- conductors with filling pads twisted into layer on thermoelectric part with optimal lay length
- Outer sheath with PVC TM2 acc. to PN-EN 50363-4-1
- Outer sheath color: light grey

### PROPERTIES

- Good resistance to oil and gasoline
- Excellent mechanical properties
- The thermocouple part is made of the same components as the thermocouple
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers.

### APPLICATION

Hybrid cables (thermoelectric and control cables) are intended for connecting measuring devices with thermoelectric sensors (thermocouples) and power supply. The thermoelectric part is made of the same materials as the thermocouple. Injection molds are a good example in the use of these lines. A good example in the application of these cables are hot runner systems of injection moulds, where the control part powers the electric heaters and the thermoelectric part reads the temperature of the runner.



Visualization of the Injection moulding process

Part no.	Type	Outer ø app. mm	Cu wieght kg / km	Weight app. kg / km
18048916	JXYcLYcek 4x2x0,5 mm² + LiYYzo 9x1,5 mm²	17,4	138,0	447,0
18048990	JXYcLek 6x2x0,25 mm² + LiYYzo 13x1,5 mm²	16,0	183,0	395,0
18048991	JXYcLek 2x2x0,25 mm² + LiYYzo 5x1,5 mm²	11,3	83,0	190,0
18049017	JXYcLYc 4x2x0,5 mm² + LiYYzo 8x1,5 mm²	17,4	107,0	420,0
18049464	JXYcLYcek 6x2x0,5 mm² + LiYYzo 13x1,5 mm²	19,0	203,0	538,6
18051576	JXYcLek 4x2x0,25 mm² + LiYYzo 9x1,5 mm²	11,3	146,0	339,8