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## RTD & THERMOCOUPLE WIRE & CABLE

### PVC RIPCORD P

This cable has a Figure 8 Rip Design for easy conductor separation. It is small and compact in size and is also flexible, flame retardant and economical in it's construction.

- ◆ Available in Solid 24 AWG conductors
- ◆ Designed for continuous use at temperatures from  $-26^{\circ}\text{C}$  to  $105^{\circ}\text{C}$
- ◆ Individual Insulation - Colour Coded
- ◆ Construction - Parallel conductors bonded together.

#### APPLICATIONS

- ◆ Temperature Sensors
- ◆ Test Facilities
- ◆ Laboratories
- ◆ Transportation
- ◆ Heating and Air Conditioning
- ◆ Appliances



### PVC / PVC PP

The least expensive jacketed extension wire insulation available. The PVC individual colour-coded conductors are insulated with 15 mils (nominal) of PVC, then parallel conductors are given a 20 mil PVC jacket. The jacket is easily striped for separation of insulated conductors for assembly.

- ◆ Available In Solid or Stranded Conductors
- 24AWG, 20AWG & 16 AWG; 7x.2, 14x.2, 7x.3,

#### APPLICATIONS

- ◆ Permanent Sensor Fabrication
- ◆ Laboratories
- ◆ Test Facilities
- ◆ Short-run Extension Leads



# RTD & THERMOCOUPLE WIRE & CABLE

## PVC/SCREEN/PVC PSP

Single & Multipair cables with an overall shield are constructed by insulating the single conductors with PVC. One conductor of each pair is numbered and twisted with its counterpart. The twisted pairs are cabled with an Insulated copper communications wire and the entire construction is wrapped with an aluminium/Mylar tape shield. A copper drain wire is applied under the extruded PVC jacket.

- ◆ Continuous temperature rating of 105°C
- ◆ Shielded construction provides noise protection.
- ◆ Excellent moisture resistance; good chemical and abrasion resistance.

### APPLICATIONS

- ◆ General plant installation

Available in Solid 20AWG and Stranded 7x.3, 14.2 in single pair, Multipair only 20AWG solid conductors.



## PVC/SCREEN/PVC

### Individual & Overall Screen PSPIO

This construction is the same as the PSP construction, with the addition of an aluminium/Mylar tape and drain wire over each single pair in the construction in addition to the overall shield. This provides isolation for each separate pair in the construction and eliminates internal and external noise in the circuit.

- ◆ Continuous temperature rating of 105°C
- ◆ Dual-shielded construction provides excellent noise protection.
- ◆ Excellent moisture resistance; good chemical and abrasion resistance.

### APPLICATIONS

- ◆ General plant installation. Available in 20AWG Solid Conductors



## PVC / BRAIDED SCREEN / PVC

RTD / Instrument cable in 2, 3, 4 or 6 conductors.

The stranded conductors are tinned copper in 24 or 20 awg sizes covered in colour coded extruded PVC .

A tinned copper wire braided screen and a PVC colour coded outer jacket complete the cable.

Insulation Working Temperature – 30 to 105 Deg C

Shielded construction provides noise protection

Excellent moisture resistance; abrasion resistance



## Teflon / Teflon TT

Colour-coded Teflon is extruded over each single conductor. The single insulated conductors are laid parallel and insulated with an extruded jacket of Teflon.

- ◆ Continuous temperatures up to 205°C
- ◆ Intermittent temperatures up to 260°C

### APPLICATIONS

- ◆ Power Generating Plants
- ◆ Petroleum Plants
- ◆ Field Heat Treating

Available in 30AWG, 24AWG, 20AWG Solid Conductors

7x.2, 7x.3 Stranded Conductors

## TEFLON / BRAIDED SCREEN / TEFLON

Thermocouple or RTD / Instrument cable in 2, 3, 4 or 6 conductors.

The stranded conductors are nickel or silver plated copper in

24 or 20 awg sizes covered in colour coded extruded PFA teflon .

A tinned or nickel plate braided screen and a PFA Teflon colour coded outer jacket complete the cable.

Insulation Working Temperature – 200 to 260 Deg C

Shielded construction provides noise protection

Excellent moisture resistance; chemical and abrasion resistance



## SILICON RUBBER / SILICON RUBBER

Thermocouple or RTD Cable

Colour coded silicon rubber is extruded over solid or stranded conductors.

The single insulated conductors may be laid parallel or twisted and insulated with a Colour coded silicon rubber jacket.

Insulation Working Temperature – 40 to 200 Deg C

Excellent moisture & chemical resistance



## Kapton / Kapton KK

Construction Description: Very tough, durable double wrap of heat-fused polyimide tape is applied over each conductor. Each insulated single conductor is coated with an ANSI colour-coded polyimide varnish. The jacket consists of a double-wrapped heat-fused polyimide tape.

- ◆ Designed for continuous use at temperatures to 260°C, intermittent readings to 343°C
- ◆ Colour-coded single conductor and a double-wrapped jacket offers easy polarity identification.
- ◆ Excellent abrasion, moisture and chemical resistance.

### APPLICATIONS

- ◆ Power Plants
- ◆ Kilns
- ◆ Petroleum Plants
- ◆ Aerospace Industry
- ◆ Cryogenic Applications

Available in 24, 20 AWG Solid Conductors



## Glass Twist STW

A high temperature, high tensile strength, extra heavy fibreglass yarn is braided over each conductor. The insulated, colour-coded conductors are impregnated with a high-temperature modified resin and twisted to form a pair. This product construction does not include an overall jacket.

- ◆ Designed for continuous use at temperatures to 648°C, intermittent use to 787°C
- ◆ Good abrasion resistance.
- ◆ Easily stripped and terminated.
- ◆ Economically practical for short-duration applications.

### APPLICATIONS

- ◆ Homogenizing furnaces for billet pre-heating.
- ◆ Furnace Temperature Surveys.
- ◆ Heat treating.

Available in 24AWG & 20AWG Solid Conductors



## Glass / Glass GG

Most popular and widely applied of all glass insulations. A colour-coded fibreglass braid saturated with a high-performance resin is used for insulation of the single conductors and jacket.

- ◆ Designed for continuous use at temperatures to 510°C intermittent use 648°C
- ◆ Good moisture and chemical resistance; fair abrasion resistance.

### APPLICATIONS

- ◆ Heat treating.
- ◆ Glass & Ceramic Kilns.
- ◆ Foundries.
- ◆ Extensive applications in aluminium processing.

Available in 40AWG, 30AWG, 24AWG, 20AWG Solid Conductors

7x.2, 7x.3, 7x.5 Stranded Conductors



## High Temperature Glass/ Glass HGHG

A high-temperature, high tensile strength fibreglass, either colour-coded or with tracer yarn, is braided on both the single conductors and the overall jacket. Both are impregnated with a 260°C modified resin Saturant.

- ◆ Designed for continuous use at temperatures to 648°C, intermittent readings to 787°C
- ◆ Good moisture and abrasion resistance.

### APPLICATIONS

- ◆ Preheating & Stress Relieving of forgings.
- ◆ Heat Treating for annealing, aging, or hardening.
- ◆ Furnace Temperature Surveys.

Available in 24 AWG, 20 AWG Solid Conductors

## Refrasil / Refrasil RR

High temperature silica fibres are braided on the single conductors as well as the overall jacket. Because saturant is not used, this product is not recommended for abrasive applications. Each conductor as well as the overall jacket are braided with this high temperature yarn to provide maximum flexibility at extremely high temperatures. A tracer is braided into insulation for polarity and calibration identification.

- ◆ Designed for continuous use at temperatures to 982°C intermittent use to 1093°C
- ◆ Not recommended for applications where insulation may be subject for abrasion.

### APPLICATIONS

- ◆ Furnace survey thermocouples
- ◆ Heat treating

Available in 20AWG Solid Conductors



## Ceramic Fibre CFCF

Highest temperature flexible insulation available. The braided yarn is a composition of the oxides of alumina, boric and silicone. Each conductor as well as the overall jacket are braided with this high temperature yarn to provide maximum flexibility at extremely high temperatures.

- ◆ Designed for continuous use at temperatures 1204°C, intermittent use to 1426°C
- ◆ Good abrasion and chemical resistance.

### APPLICATIONS

- ◆ As a replacement for beaded thermocouples
- ◆ Heat treating
- ◆ Coke ovens
- ◆ Soaking pits
- ◆ Furnace Survey Thermocouples
- ◆ Brick & Tile Kilns

Available in 20AWG Solid Conductors.



## Autoclave AC

A unique construction designed to eliminate the 'leakage path through wire' often found in autoclave applications.

24 AWG solid conductors, colour coded and Teflon insulated are bonded together in a proprietary process eliminating the need for a conventional jacket. Maximum Temperature 260°C.



## Stainless Steel Braiding

To provide increased strength and abrasion resistance all cables may be over braided

