



CONTROL SIGNAL CABLE

STANDARD STATIC AND DYNAMIC APPLICATION CABLES

The cables of this family cover the main application requirements for power, signal and control in automation systems.

For each type of applications we have chosen the most modern materials, adequate to ensure the maximum reliability of the electrical connection.

From the fixed installation up to continuous movements with high performance behaviour, all our cables are characterized by excellent resistance to oils and industrial fluids, low capacity and - in the shielded version - with an excellent noise immunity

300 V - 80 °C (22 AWG, 24 AWG, 26 AWG 0.14mm² - 0.25mm² - 0.34mm²)



OUR ADVANTAGES



EASY SOLUTIONS

ADAPTABILITY IS ONE OF OUR BEST QUALITIES. IT PERMITS US TO COPE WITH YOUR REQUESTS AT A SHORT NOTICE AND EFFECTIVELY.



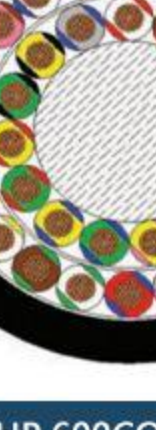
NO PRICE FIGHTS

WE ESCAPED THE CLASSICAL "REBATE UNTIL YOU DROP" POLICY. WE ARE PRICE WISE SINCE THE BEGINNING.



HIGH LEVEL EXPERIENCE

OUR TECHNICAL CAPABILITIES HAVE BEEN TESTED FOR MORE THAN 30 YEARS AND INDIRECT CONNECTION WITH END USERS - SO TODAY



ENDLESS INVESTIGATION

WE CONTINUOUSLY MEASURE EVERYTHING. TEST, TEST AND TEST AGAIN. THIS HELPS US UNDERSTAND RISKS AND REWARDS, AND BE PREPARED.



NO FORTUNE TELLER

WE BASE OUR DECISIONS ON CLEAR BUSINESS PLANS, THINKING BEFORE MAKING OUR STEPS AND KEEPING A NOT TO DO LIST FOR EVERY-ONE OF THEM.



TEAM BUILDING

OUR TEAMS HAVE NOT ONLY BY OUR STAFF BUT ALSO ALL OUR CUSTOMERS. WE ACT LIKE A TEAM. WE GROW LIKE A TEAM. WE WIN LIKE A TEAM.

CONTROL SIGNAL CABLE



SIGNAL CABLES WITH RATED CROSS

Signal cables with rated cross sections from 0.14mm² up to 0.34mm². The signal cables are suitable - for their construction - to be used with encoder, I/O connection, sensors, etc..

For their size, the signal cable conductors are set up with different colours of the sheath according to the DIN 47100 standard.

A low capacity dielectric with high insulation resistance, allows us reduced dimensions.



PRODUCT MIX



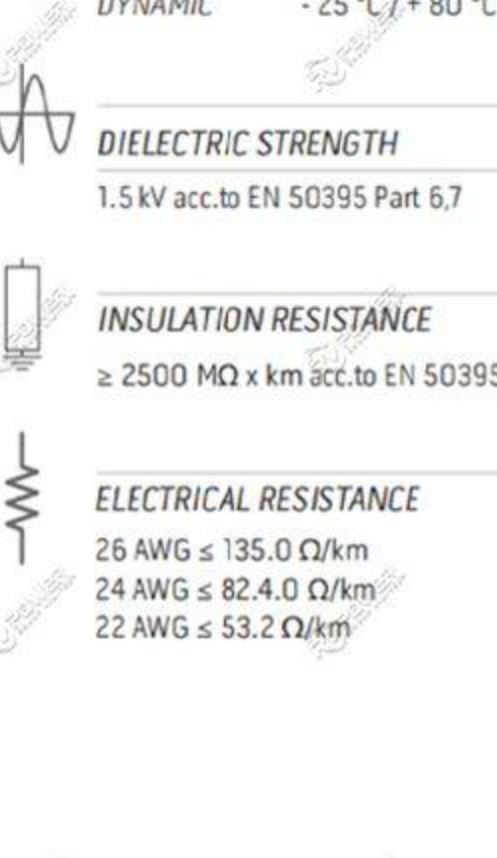
APPLICATIVE FEATURES



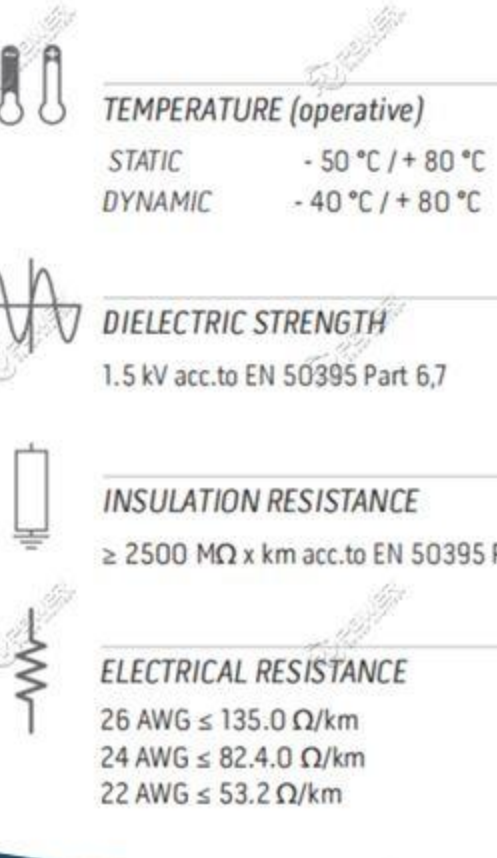
DP 300CONTROL DYNAMIC PERFORMANCE



HP 600CONTROL HIGH PERFORMANCE



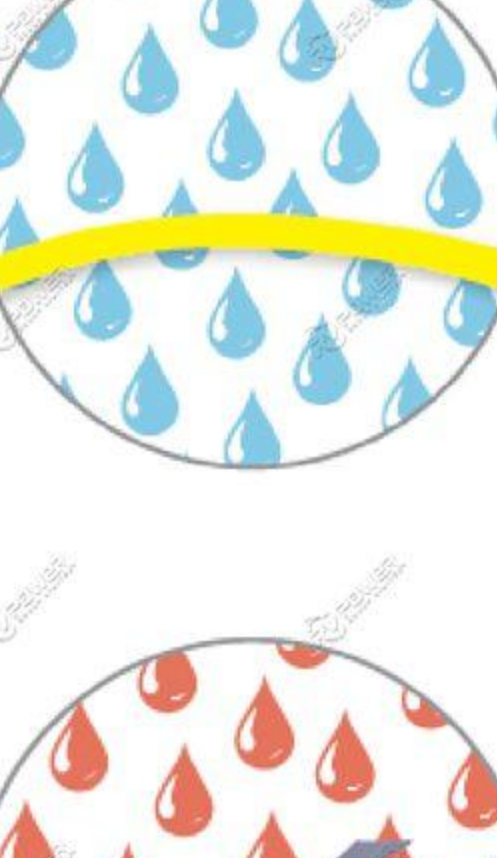
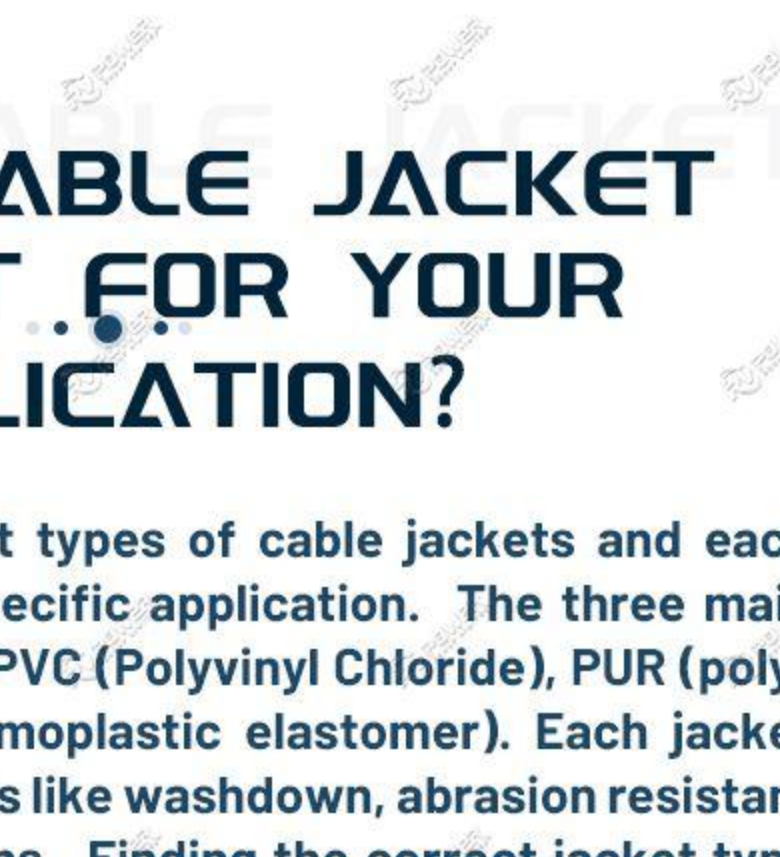
DP 300 CCONTROL SH DYNAMIC PERFORMANCE



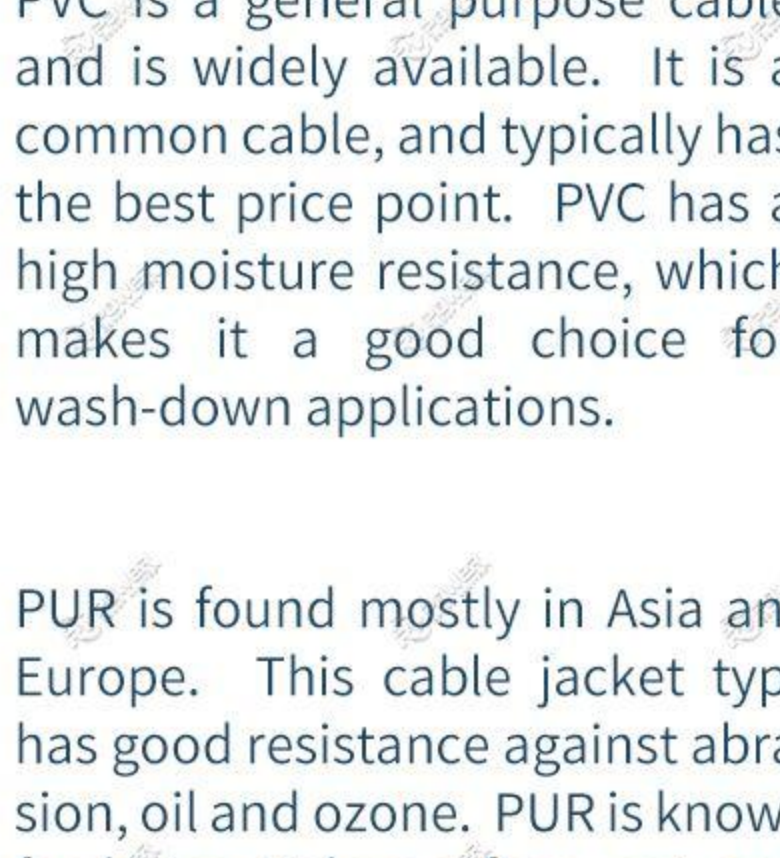
HP 600 CCONTROL SH HIGH PERFORMANCE



300TPCONTROL TP DYNAMIC PERFORMANCE



HP 600 TPCONTROL TP HIGH PERFORMANCE



PVC

TECHNICAL DATA

| | |
|--|---|
| | OPERATING VOLTAGE 300 V |
| | TEMPERATURE (operative) STATIC -40 °C / +80 °C DYNAMIC -25 °C / +80 °C |
| | DIELECTRIC STRENGTH 1.5 kV acc.to EN 50395 Part 6,7 |
| | INSULATION RESISTANCE ≥ 2500 MΩ x km acc.to EN 50395 Part 8 |
| | ELECTRICAL RESISTANCE 26 AWG ≤ 135.0 Ω/km 24 AWG ≤ 82.4.0 Ω/km 22 AWG ≤ 53.2 Ω/km |

CONSTRUCTION FEATURES

| | |
|--------------|---|
| Conductor | Extra Flexible Bare Copper |
| Insulation | Special Polypropylene |
| Colour code | OEM |
| Assembly | Multi-layers divided by non-woven tape insert |
| Shield | Tinned Copper Braid O.C. ≥ 85% |
| Separator | Easy Strip-Away Tape |
| Outer Sheath | PVC |
| Colour | Grey RAL 7001 |

PUR

TECHNICAL DATA

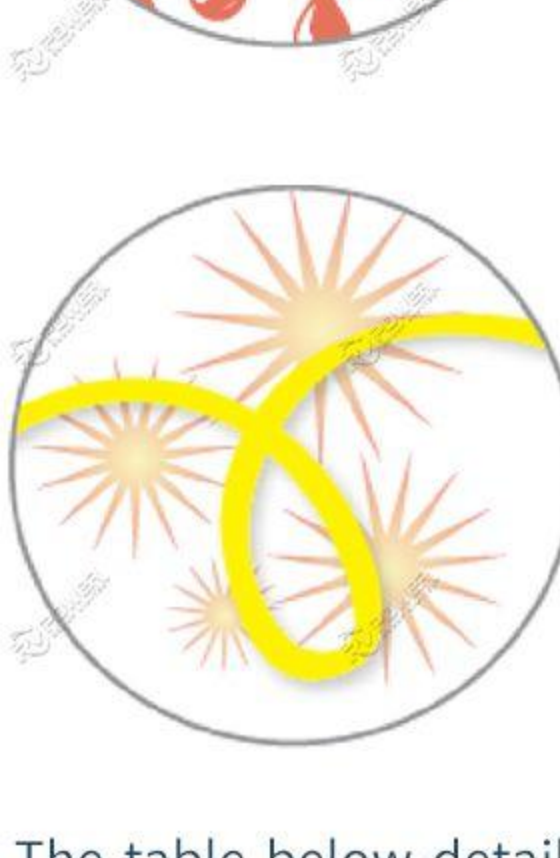
| | |
|--|---|
| | OPERATING VOLTAGE 300 V |
| | TEMPERATURE (operative) STATIC -50 °C / +80 °C DYNAMIC -40 °C / +80 °C |
| | DIELECTRIC STRENGTH 1.5 kV acc.to EN 50395 Part 6,7 |
| | INSULATION RESISTANCE ≥ 2500 MΩ x km acc.to EN 50395 Part 8 |
| | ELECTRICAL RESISTANCE 26 AWG ≤ 135.0 Ω/km 24 AWG ≤ 82.4.0 Ω/km 22 AWG ≤ 53.2 Ω/km |

CONSTRUCTION FEATURES

| | |
|--------------|---|
| Conductor | Extra Flexible Bare Copper |
| Insulation | Special Polypropylene |
| Colour code | DIN 47100 |
| Assembly | Multi-layers divided by non-woven tape insert |
| Shield | Tinned Copper Braid O.C. ≥ 85% |
| Separator | Easy Strip-Away Tape |
| Outer Sheath | PUR |
| Colour | Black RAL 9005 |

WHICH CABLE JACKET IS BEST FOR YOUR APPLICATION?

There are many different types of cable jackets and each jacket works well in a specific application. The three main sensor cable jackets are PVC (Polyvinyl Chloride), PUR (polyurethane) and TPE (thermoplastic elastomer). Each jacket type has different benefits like washdown, abrasion resistant or high flexing applications. Finding the correct jacket type for your application can extend the life of the cable.



PVC is a general purpose cable and is widely available. It is a common cable, and typically has the best price point. PVC has a high moisture resistance, which makes it a good choice for wash-down applications.



PUR is found mostly in Asia and Europe. This cable jacket type has good resistance against abrasion, oil and ozone. PUR is known for being Halogen free, not containing: chlorine, iodine, fluorine, bromine or astatine. This jacket type does have limited temperature range compared to the other jacket types, -40...+80°C.



TPE is flexible, recyclable and has excellent cold temperature characteristics, -50...+125°C. This cable is resistant against aging in the sunlight, UV and ozone. TPE has a high-flex rating, typically 10 million.

The table below details the resistance to different conditions. Note that these relative ratings are based on average performance. Special selective compounding of the jacket can improve performance.

Choosing the right jacket type can help reduce failures in the field, reducing downtime and costs.

| Resistance to: | PVC | PUR | TPE |
|-----------------------------|------------------|------------------|-------------|
| Oxidation | Excellent | Excellent | Outstanding |
| Heat | Good - Excellent | Excellent | Outstanding |
| Oil | Fair | Outstanding | Outstanding |
| Low Temperature Flexibility | Poor-Good | Excellent | Outstanding |
| Weather, Sun | Good - Excellent | Excellent | Outstanding |
| Ozone | Excellent | Excellent | Excellent |
| Abrasion | Fair-Good | Excellent | Excellent |
| Electrical Properties | Fair-Good | Excellent | Excellent |
| Flame | Excellent | Excellent | Outstanding |
| Nuclear Radiation | Fair | Excellent | Poor |
| Water | Good - Excellent | Good - Excellent | Excellent |
| Acid | Good - Excellent | Excellent | Excellent |
| Alkali | Good - Excellent | Excellent | Excellent |
| Gasoline | Poor | Excellent | Excellent |
| Benzol | Poor - Fair | Excellent | Excellent |
| Degreaser Solvents | Poor - Fair | Excellent | Excellent |
| Alcohol | Good - Excellent | Excellent | Excellent |
| Weld Slag | Fair | Excellent | Excellent |



CONTROL SIGNAL CABLE



DETAIL DISPLAY



ONE

OXYGEN FREE PURE COPPER

Extra Flexible Bare Copper Class 6 acc.to IEC 60228

TWO

INSULATION

PUR/Special Rubber compound/On request



THREE

REINFORCE

steel wire / Kevlar braid (optional) / on request Play the role of bearing gravity and super tensile for the cable, and make the cable life longer

FOUR

LOW ECCENTRICITY

The outer skin is thin and uniform, effectively preventing current breakdown and ensuring power safety



FIVE

HIGH FLEXIBLE THREAD BODY

Special Thermoplastic Compound PUR/Special rubber compound based on NBR/others. Special PUR/Special rubber compound based on NBR/others

