UNDERWATER INSTRUMENTATION CABLE

PREMIUM GRADE UNDERWATER CABLE DESIGNS FOR VARIOUS OCEANOGHRAPHIC INSTRUMENT EQUIPMENT APPLICATIONS

Data pairs:
・Shielded twisted pairs with aluminum/mylar shield, drain wire and shield isolation.
・Pairs are designed for RS232, RS422, RS485 signal rates
Cable cores:
・Composite constructions with isolated shielded data pairs cabled with single
power/control wires and interstices filled with thermoset water-block
Strain Relief :
・Overall synthetic fiber strength layer with rating listed below.
800 lb. break strength.
Recommended safe work load not to exceed 20% of break strength.
Jacket :
・Flexible premium grade black polyurethane rated for long term subsea deployment
Conductor Coding:
・Pairs Blk & Wht with number codes. Singles color coded.
Rating:
・-25C to 90C, Power 600V, Data Pairs 300V depth rating to 2 km
Note: Variations of break strengths, jackets, colors and shields are offered as special order

OUR ADVANTAGES

EASY SOLUTIONS

ADAPTABILITY IS ONE OF OUR BEST QUALITESIT PERMIT US TO COPE WITH YOUR REQUE STON A SHORT NOTICE AND EFFEC TIVELY.

NO PRICE FIGHTS

WE ESCAPED THE OLASSICAL REBATE UNTILYOU DROP " POLICY . WE ARE PRICE WISE SINCETHE BEGINNING

HIGH LEVEL EXPERIENCE

QUR TECHNLAL CAPABILITIES HAVE BEENTESTED FOR MORE THAN 30 YEARS ANDINDRECT CONNECTION WITH END USERS . SO TOSAY

ENDLESS INVESTIGATION

WE CONTINUOUSY MEASURE EVERYTHINGTEST . TEST AND TESTAGAIN . THIS HELPS NUNDERSTAND RISKS AND REWARDS . ANDBEPREPARED

NO FORTUNE TELLER

WE BASE OUR DECISIONS ON CLEAR BUSIESSPLANS , THINKING BEFORE MAKING OUR STEPSAND KEEPINGA'NOTTODO LISTFOR EVERYOVE OF THEM

TEAM BUILDING

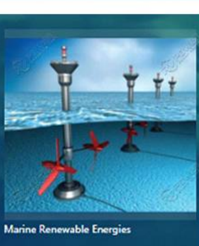
OUR TEAMIS MADE NOT ONLY BY OUR STAFFBUTIT INCLUDES ALSO ALL OUR CUSTOMERSWEACT LIKEA TEAM WEGROW LKEA TEAMWE WINLIKE A TEAM

UNDERWATER INSTRUMENTATION CABLE

UNDERWATER CABLE

It can be applied to submarine observation network / offshore oil / marine sonar / seismic detection / underwater robot / marine wind power / smart ocean and other fields.

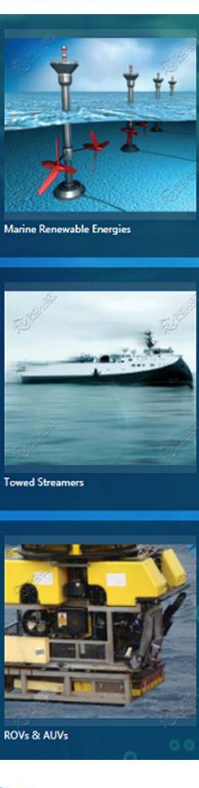
☑ Customized Design ☑ Full Ocean Depth Application
☑ Vertical and Horizontal Watertightness
☑ Photoelectric multi-core Composite Structure ☑ High Tensile Strength



Marine Renewable Energies

Diving

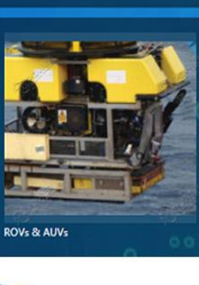
Oil and Gas



Towed Streamers

Submarines

Water Treatment

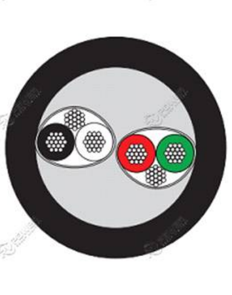


ROVs & AUVs

Vessels

Geophysics

PRODUCT MIX



2 twisted screened pairs,
Screens with foil and drain wire
Nominal cable OD: 0.335'', 8.50 mm

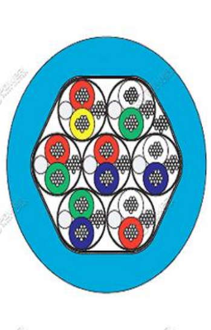
3 twisted pairs,
Screens with foil and drain wire
Nominal cable OD: 0.400'', 10.16 mm

4 twisted screened pairs
Screens with foil and drain wire
Nominal cable OD: 0.500'', 12.70 mm

3 twisted screened pairs,
1 twisted screened pair,
Screens with foil and drain wire
Nominal cable OD: 0.400'', 10.16 mm

Twisted Pairs
0,34 mm² (#22AWG) stranded tinned copper wires, twisted together in pairs, with Water block core for roundness (7 off)
Conductors
0,80 mm² (#18AWG) stranded tinned copper wires, insulated with Polypropylene (2 off)
Binder
Mylar tape over the entire water blocked core and under jacket
Outer jacket
Polyurethane jacket. Color black. Nominal thickness approx. 1,65 mm
Mechanical Characteristics
Diameter
Nom. 12,2 mm

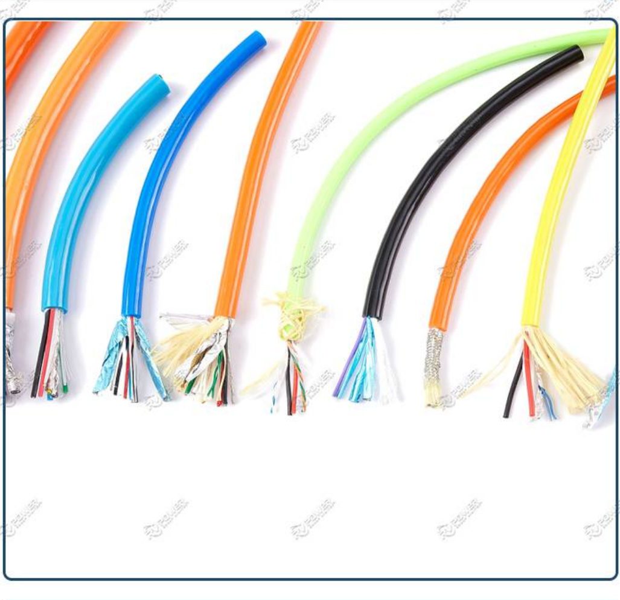
4 twisted screened pairs,
Screens with foil and drain wire
Nominal cable OD: 0.409'', 10.40 mm

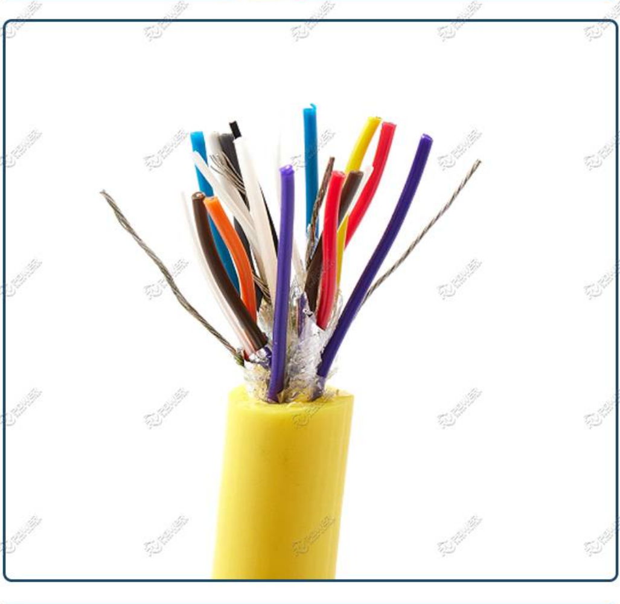


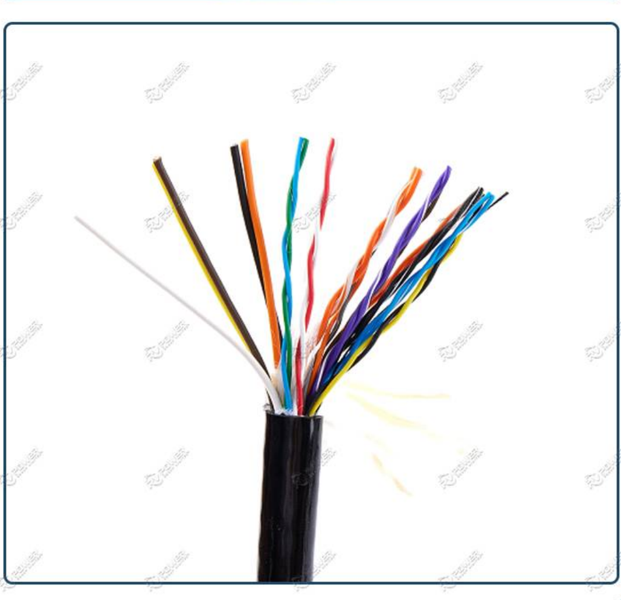
Shielded twisted pairs 0.50 mm² bare copper conductor insulated with PE. Two conductors twisted together with a tinned copper drain wire and aluminium/polyester foil (7 each)
Shield Aluminium/polyester foil and tinned copper drain wire, coverage 100%
Outer jacket Polyurethane jacket, blue
Mechanical characteristics
Diameter 12.70 mm ±0.30 mm

8 twisted screened pairs, 20 AWG
Screens with foil and drain wire
Nominal cable OD: 0.508'', 12.90 mm

1 twisted screened pair, 20 AWG
Screen with foil and drain wire
5 conductors, 20 AWG
Nom. cable OD: 0.339'', 8.62 mm







CABLES FOR MARITIME AND UNDERWATER TECHNOLOGIES

Underwater technology, especially at great depths, is challenging. ROVs, used for underwater inspection, survey and search work,Require cables with high performance and reliability for efficient and accurate control, providing the required strength to support the vehicle.Cables and tethers used for Remotely Operated Vehicles represent the vital connection between the vehicle and the vessel.These products include: neutrally buoyant tethers, Kevlar strength member cables, hybrid cables.
We has many years of knowledge and experience manufacturing cables for the ROV.We offer a complete range of standard communication, video, power and combined service cables, designed to meet the extreme pressures of the subsea environment. Whatever your diving application needs, we can create flexible, cost-effective engineering solutions to suit your requirements and your budget.

SUBSEA CABLES TYPE

ROV Tether Cable
ROV Umbilicals Cable
Diver umbilical
Pool robotic cleaner cable
Neutrally Buoyant Cables
Diver Communications Cable
Underwater Video Cable – Diver
CCTV Inspection Crawler Video Cables
Underwater Fiber Optic Cable
Underwater Instrumentation Cable
Underwater Multiconductor Power & Control Cable
Underwater Ethernet Cable
Sidescan Sonar Tow Cable
Coax Oceanoghraphic Tow Cable
Push-rod Cables
Polyurethane or Polyethylene Jacketed Cables
Composite Underwater Communication Cables
PUR underwater umbilical hybrid Optical
Custom Cable Designs

UNDERWATER INSTRUMENTATION CABLE

DETAIL DISPLAY

ONE

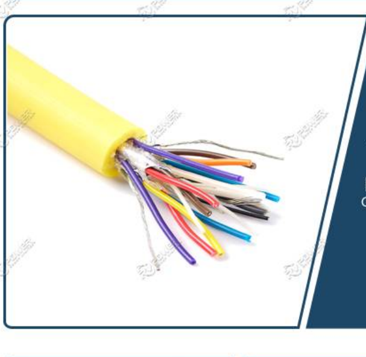
LONG DISTANCE DATA TRASMISSION

Conductors: Stranded Pure/tin copper conductors for flexibility and corrosion resistance. Light weight, low dielectric copolymer insulation with great mechanical and moisture resistance.

TWO

RESILIENT, FLEXIBLE AND NEUTRALLY BOUYANT ONE SINGLE LONG CONTINUOUS LENGTH REQUIRED

Custom ROV cables using tried and proven components for power, video, data, etc., which areavailable for your design, providing shorter lead times.



THREE

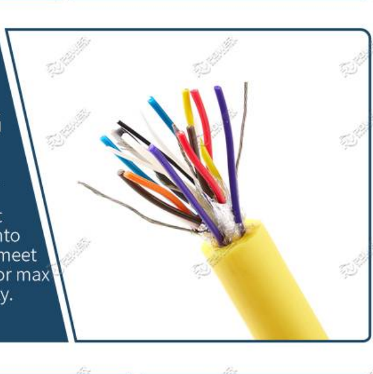
WATER BLOCKED CABLE

Water block flooding compounds offered to each specific design are light wgt and fully encapsulating, design for extreme ocean depths and pressures, salt and oil resistant elastomeric and thermosetting

FOUR

HIGH BREAKING STRENGTH

Strength Layer: Light weight Kevlar fibers are designed into each cable construction to meet specific ROV intended use for maximum strength and longevity.



FIVE

SMALL SIZED. LIGHT . PRESSURE RESISTANT . ABRASION/ EROSION RESISTANT

Jacket Materials are chosen for optimal bonding, moisture and mechanical resistance. Each ROV cable is uniquely designed for specific ROV types using PE, TPE, PUR, and foam variations for flotation.

OIL RESISTANT
FLAE RESISTANT
HALOGEN FREE
COLD RESISTANT
ABRASION RESISTANT
OZONE RESISTANT
UV RESISTANT
MICROBE RESISTANT
MUD RESISTANT
WATER RESISTANT