ROV POWER TYPE CABLE

TETHERS & UMBILICALS FOR REMOTELY OPERATED VEHICLES (ROVS)

ROV Tether Cable

Typical ROV Tethers include power conductors, shielded data pairs and video using coax, TSP, or fiber optics. Designs available in several configurations, including Neutral Buoyancy.A varied degree of strength designs available depending onworkloads and handling system. The sample cables listed be low are proven working designs for vehicles used worldwide.

Design Variations

RV POWER GROUP manufactures many custom ROV cables using tried and proven components for power, video, data, etc., which are available for your design, providing shorter lead times.

Cable Properties

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

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

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.

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 ANDIN-DRECT 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 KEEPIN-GA'NOTTODO LISTFOR EVERY-OVE 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

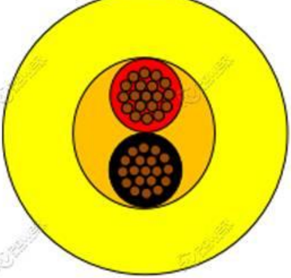
ROV POWER TYPE CABLE

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

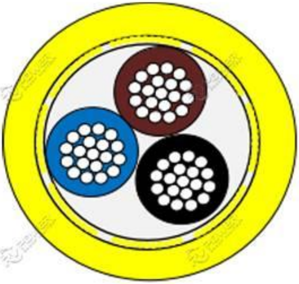
COMPONENTS AND MATERIALS:

- Optical fibers in SS steel tubes /Plastic Tube from 1-24 fibers, single mode, multi-mode,
- Data signals using Ethernet Cat5e and Cat6 signal pairs, RS-232, RS-485, analog, coaxial, shielded components
- Power conductors from 300V to 3.0kv,
- Water block Material : Block water Yarn / Block water Glue
- Strength layers of Synthetic fibers including Kevlar, Vectran
- Jacket compounds :Polyurethane, PE, HDPE, Light weight TPE, foam PE or Foam PUR

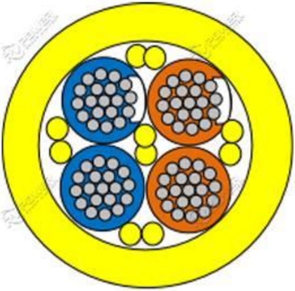
PRODUCT MIX



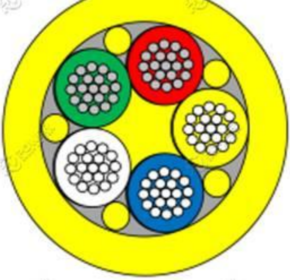
Neutrally buoyant ROV cable
2 POWER Cable
Single Layer
Overall diameter: 5.0mm



Neutrally buoyant ROV cable
3 POWER Cable
Single Layer
Overall diameter:6.0mm



Neutrally buoyant ROV cable
4 POWER Cable
Single Layer
Overall diameter:7.0mm



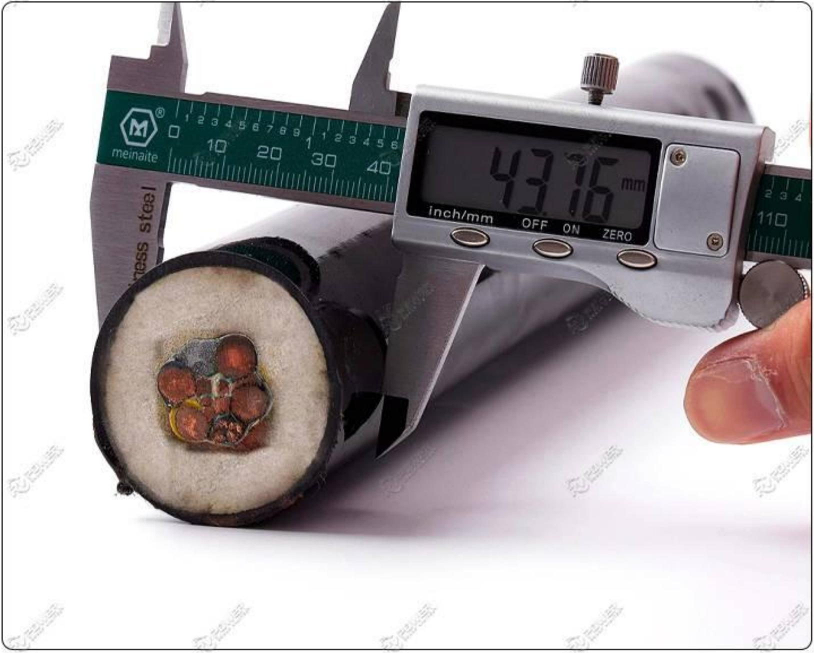
Neutrally buoyant ROV cable

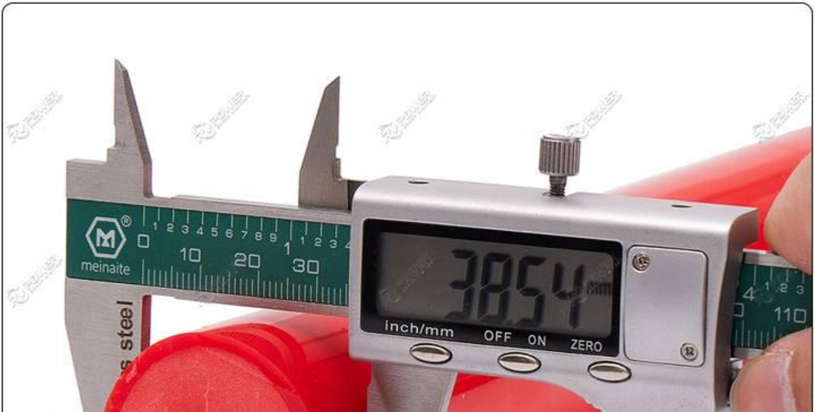
5 POWER Cable

Single Layer

Overall diameter: 8.0mm

meinaite
Stainess steel
40.79 mm
inch/mm
OFF
ON
ZERO





meinaite
0 10 20 30
1 2 3 4 5 6 7 8 9 1
30.93 mm
inch/mm
OFF ON
ZERO
Stainess steel
100 110

meinaite
Stainess steel
22.81 mm
inch/mm
OFF
ON
ZERO

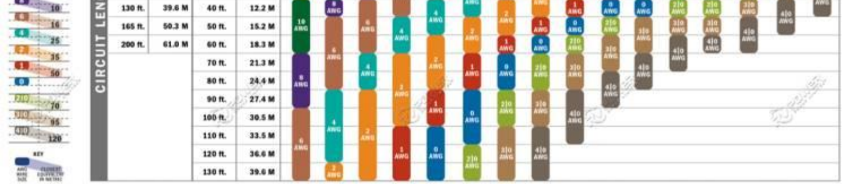
meinaite
Stainess steel
19.18 mm
inch/mm
OFF
ON
ZERO

meinaite
1 2 3 4 5 6
0
10
Stainless steel
18.70 mm
inch/mm
OFF
ON
ZERO

Wire Gauge Chart vs Amps vs Length

Use this chart to help determine what size wire you should be using based on AMPS being pulled and the length of the wire you will be running.

Remember, when in doubt bigger is always better. And always use a fuse smaller than the rating of the wire to prevent fires



Standard and Metric Wire Comparison Table

Available Wire Size AWG	Available Wire Size Metric
16	1.5
14	2.5
12	4
10	6
8	10
6	16
4	25
2	35
1	50
0	
2/0	70
3/0	95
4/0	120

KEY: AWG WIRE SIZE — CLOSEST EQUIVALENT IN METRIC

CIRCUIT TYPE: 10% VOLTAGE DROP Non Critical		3% VOLTAGE DROP Critical		CURRENT FLOW IN AMPS: 5A	10A	15A	20A	25A	30A	40A	50A	60A	70A	80A	90A	100A	120A	150A	200A
0 to 20 ft.	0 to 6.1 M	0 to 6 ft.	0 to 1.8 M	16 AWG	16 AWG	14 AWG	14 AWG	12 AWG	10 AWG	8 AWG	6 AWG	6 AWG	6 AWG	4 AWG	4 AWG	4 AWG	2 AWG	1 AWG	2/0 AWG
30 ft.	9.1 M	10 ft.	3.0 M		14 AWG	12 AWG	12 AWG	10 AWG											
50 ft.	15.2 M	15 ft.	4.6 M		12 AWG	10 AWG	10 AWG	8 AWG	8 AWG	6 AWG		4 AWG	4 AWG		2 AWG	2 AWG			
65 ft.	19.8 M	20 ft.	6.1 M	14 AWG	10 AWG		8 AWG	6 AWG	6 AWG		4 AWG		2 AWG	2 AWG			1 AWG	0 AWG	
80 ft.	24.4 M	25 ft.	7.6 M	12 AWG		8 AWG	6 AWG			4 AWG		2 AWG			1 AWG	1 AWG	0 AWG	2/0 AWG	3/0 AWG
100 ft.	30.5 M	30 ft.	9.1 M						4 AWG		2 AWG		1 AWG	1 AWG	0 AWG	0 AWG	2/0 AWG	3/0 AWG	4/0 AWG
130 ft.	39.6 M	40 ft.	12.2 M	10 AWG	8 AWG	6 AWG		4 AWG		2 AWG		1 AWG	0 AWG	0 AWG	2/0 AWG	2/0 AWG	3/0 AWG	4/0 AWG	
165 ft.	50.3 M	50 ft.	15.2 M		6 AWG		4 AWG		2 AWG		1 AWG	0 AWG	2/0 AWG	3/0 AWG	3/0 AWG	3/0 AWG	4/0 AWG		
200 ft.	61.0 M	60 ft.	18.3 M					2 AWG		1 AWG	0 AWG	2/0 AWG	3/0 AWG		4/0 AWG	4/0 AWG			
		70 ft.	21.3 M	8 AWG		4 AWG	2 AWG		1 AWG	0 AWG	2/0 AWG	3/0 AWG		4/0 AWG					
		80 ft.	24.4 M										4/0 AWG						
		90 ft.	27.4 M		4 AWG	2 AWG		1 AWG	0 AWG	2/0 AWG	3/0 AWG	4/0 AWG							
		100 ft.	30.5 M	6 AWG															
		110 ft.	33.5 M				1 AWG	0 AWG		3/0 AWG	4/0 AWG								
		120 ft.	36.6 M						2/0 AWG										
		130 ft.	39.6 M		2 AWG														

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

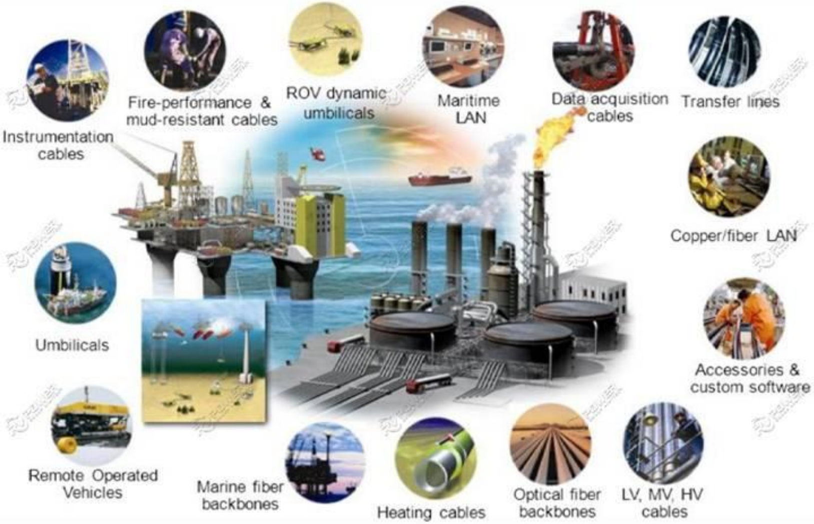
Diver umbilical

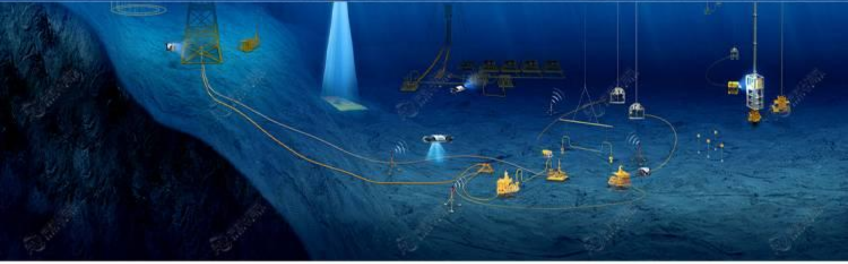
Pool robotic cleaner cable

Neutrally Buoyant Cables

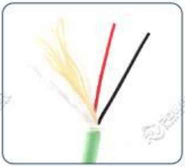
Diver Communications Cable

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





ROV POWER TYPE CABLE



DETAIL DISPLAY

ONE

LONG DISTANCE DATA TRASMISSION

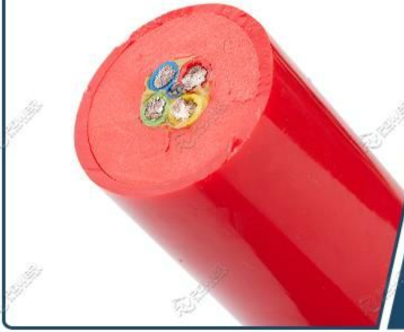
Conductors: Stranded Pure/ tin copper conductors for flexibility and corrosion resistance. Light weight, low dielectric copolymer insulation with great mechanical and moisture resistance.

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



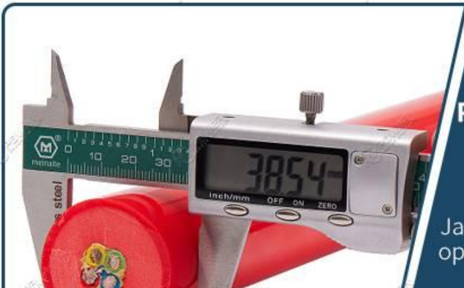
WATER BLOCKED CABLE

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 max imum 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

HALOGEN FREE

ABRASION RESISTANT

UV RESISTANT

MUD RESISTANT

FLAE RESISTANT

COLD RESISTANT

OZONE RESISTANT

MICROBE RESISTANT

WATER RESISTANT