



South Bay Cable Corp.



PICTURE OF QUALITY

SPECIALTY CABLE - FOR THE TOUGHEST JOBS AND MOST DIFFICULT SPECIFICATIONS

OUR COMPANY

Since 1957 *SOUTH BAY CABLE* - under the same ownership and management, has been making hard-working specialty cables. In an ever changing world, we have consistently shown innovation in meeting the most unusual requirements, however difficult. In our commitment to meet customers needs and create better cables, our designers combine state-of-the-art materials, machinery, measurement instrumentation and computerized design analysis into every cable we build. From single requirement applications to prototype and large production runs you can count on *SOUTH BAY CABLE*.



OUR CABLES

Whether you require a custom design for a new application, or a replacement cable for an existing system, we can draw from our more than 60,000 designs on file to meet your exact needs. *SOUTH BAY CABLE* has designed and manufactured cable for a spectrum of commercial and military uses including: underwater ROV systems, tethered airborne aerostats, geophysical lead-ins, fiber optic down hole video inspection, and a multitude of other demanding uses. *SOUTH BAY CABLES* work because they are designed and built to do the job.

OUR COMMITMENT TO QUALITY

Quality and reliability are designed and manufactured into every cable we build. Each cable design is thoroughly reviewed prior to production, and then tested during all phases of production. This commitment to quality ensures the customer that they are getting the best possible cable for their intended application.

Thank you for considering *SOUTH BAY CABLE* and we welcome the opportunity to provide a prompt professional response for your specialty cable needs.



South Bay Cable Corp.

P.O. Box 67 • Idyllwild, California 92549 • (951) 659-2183 • FAX (951) 659-3958
www.southbaycable.com

CORPORATE INFORMATION

For over fifty years **South Bay Cable Corp.** has been designing and manufacturing hard-working, reliable specialty cables. Geographically our company is located in Southern California with our corporate offices in Idyllwild. We have manufacturing facilities at both our Idyllwild facility and in Temecula, California.

As a leader in the design and manufacture of specialty cable, **South Bay Cable** has the engineering ability, manufacturing equipment, and highly skilled personnel necessary to supply an almost endless variety of cable constructions. Our cables are designed for the most demanding applications and harshest environments; from the far reaches of outer space to the deepest depths of the ocean you can count on **South Bay Cable**.

South Bay Cable possesses a wide variety of cable manufacturing equipment including: copper stranders, insulation and jacketing extruders, small and large planetary cable machines, armoring lines, serving lines (for the application of aramid fibers), and a host of other unique equipment for the production of specialty cable. In fact, since 1957 we have designed and manufactured over 50,000 different styles of cable!

In our brochure we have included cross sectional drawings which describe the various types of cable we build. These are only examples of our product range; your cable will be designed and manufactured to meet your exact requirements.

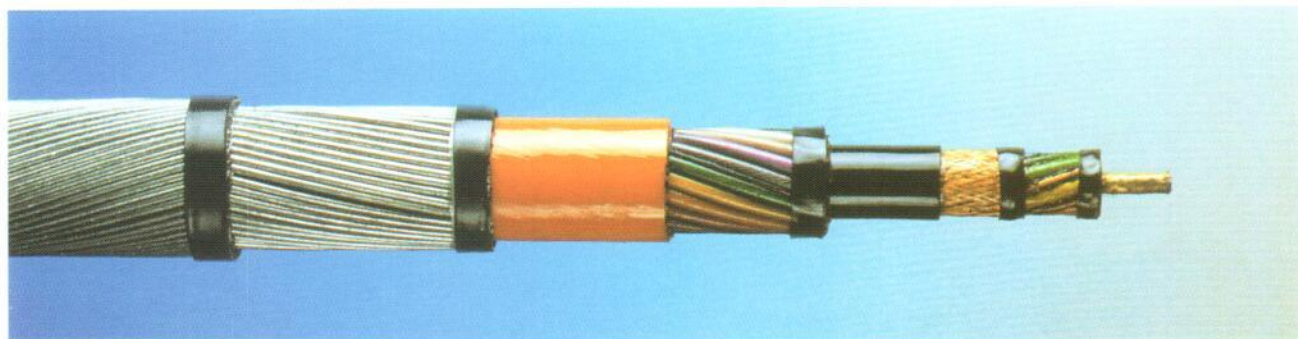
Please review the information contained in our brochure and contact us with any questions or comments you may have. We look forward to providing you with a prompt and professional response; just what you would expect from the industry leader.

Best regards,

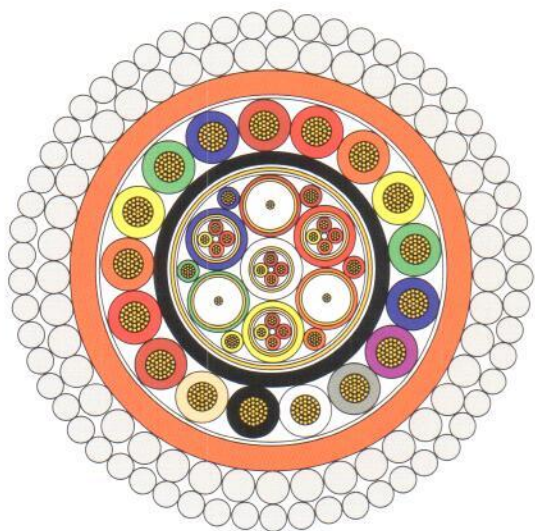
Gary Brown
Sales Manager



Fact Sheet



ROV UMBILICAL STEEL



SB-45709

FIBER OPTICS

6 Single Mode Fibers in a SS Tube

SHIELDED QUADS-4 UNITS

Awg No. 20(Stranded)B/C

COAXIAL RG-59 TYPE-3 UNITS

Awg No. 22(Stranded)B/C

SINGLE CONDUCTORS-6 UNITS

Awg No. 18(Stranded)B/C

POWER CONDUCTORS-17 UNITS

Awg No. 11(Stranded)B/C

INTERSTICES WATERBLOCKED

JACKET

Polyurethane

ARMOR-STEEL WIRES

Two Layers GIPS

CABLE CHARACTERISTICS

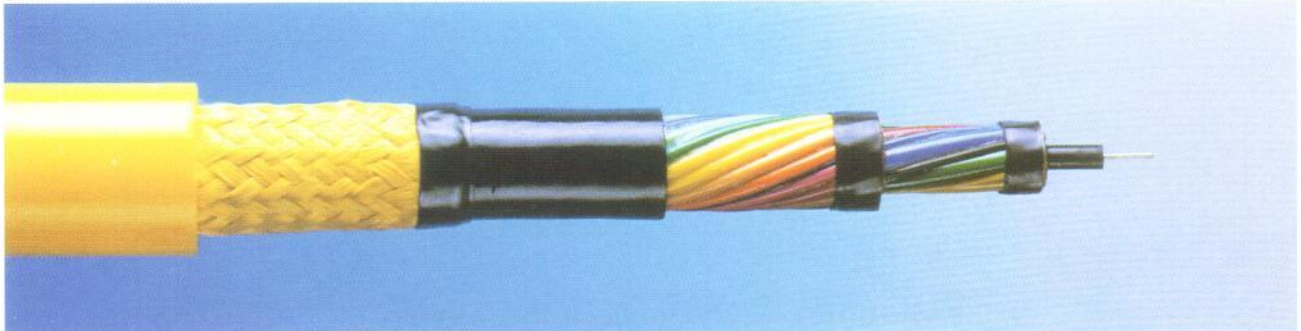
	<u>English</u>	<u>Metric</u>
Outer Diameter	1.68 Inches	42.7 mm
Weight in Air	3,330 Lbs/1000 Ft	4,956 Kg/Km
Weight in Sea Water	2,440 Lbs/1000 Ft	3,630 Kg/Km
Breaking Strength	100,000 Lbf	444 KN
Maximum Load	21,000 Lbf	93 KN
Min. Bend Diameter	36 Inches	914 mm



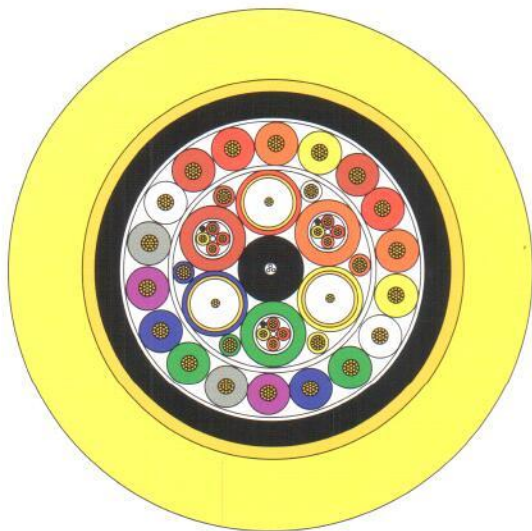
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email: sales@southbaycable.com • www.southbaycable.com



Fact Sheet



ROV TETHER LARGE VEHICLE



SB-39063

75 OHM COAX-3 UNITS

Awg No. 22(Stranded)B/C

SHIELDED QUADS-3 UNITS

Awg No. 22(Stranded)B/C

FIBER OPTICS

3 Fiber Optics in a SS Tube

DRAIN WIRE

POWER CONDUCTORS-15 UNITS

Awg No. 18(Stranded)B/C

INNER JACKET

Polyethylene

STRENGTH MEMBER

Kevlar Braid

OUTER JACKET

Thermoplastic Elastomer

CABLE CHARACTERISTICS

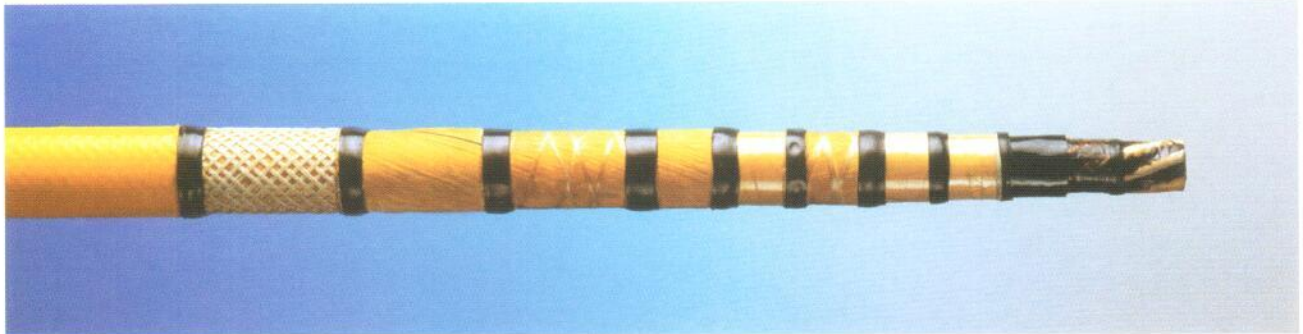
	<u>English</u>	<u>Metric</u>
<i>Outer Diameter</i>	1.78 Inches	45.2 mm
<i>Weight in Air</i>	1,133 Lbs/1000 Ft	1,686 Kg/Km
<i>Weight in Sea Water</i>	27 Lbs/1000 Ft	40 Kg/Km
<i>Breaking Strength</i>	14,000 Lbf	62 KN
<i>Maximum Load</i>	2,000 Lbf	9 KN
<i>Min. Bend Diameter</i>	20 Inches	508 mm



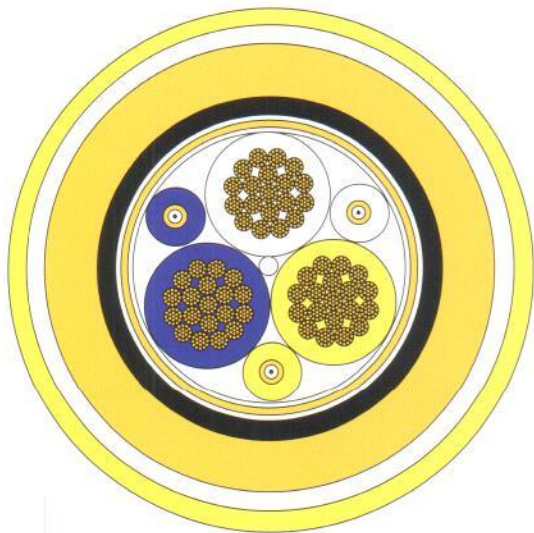
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Fact Sheet



E-O-M UMBILICAL (Electro-Optical-Mechanical)



SB-37535

POWER CONDUCTORS 3 KVAC-3 UNITS
AWG No. 4 (STRANDED) BARE COPPER

RUGGEDIZED FIBER OPTICS-3 UNITS
SINGLE MODE 200 KPSI PROOF
KEVLAR-TPE BUFFER

INTERSTICES WATERBLOCKED

OVERALL SHIELD
BARE COPPER BRAID

POLYURETHANE INNER JACKET

STRENGTH MEMBER
MULTI-LAYER SERVED KEVLAR

OUTER JACKET
REINFORCED POLYURETHANE

CABLE CHARACTERISTICS

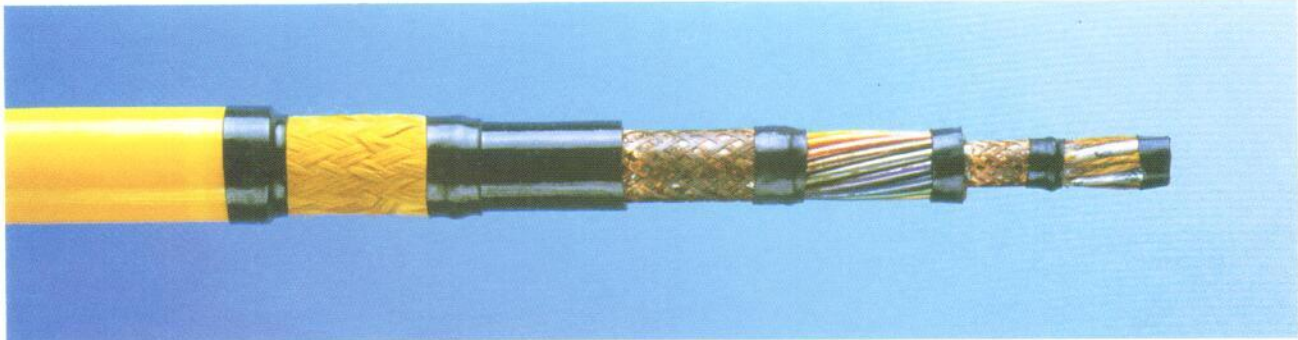
	<i>English</i>	<i>Metric</i>
<i>Outer Diameter</i>	<i>1.360 Inches</i>	<i>34.54 mm</i>
<i>Weight in Air</i>	<i>1,124 Lbs/1000 Ft</i>	<i>1,673 Kg/Km</i>
<i>Weight in Sea Water</i>	<i>479 Lbs/1000 Ft</i>	<i>713 Kg/Km</i>
<i>Breaking Strength</i>	<i>80,000 Lbf</i>	<i>356 KN</i>
<i>Maximum Load</i>	<i>14,300 Lbf</i>	<i>64 KN</i>
<i>Min. Bend Diameter</i>	<i>40 Inches</i>	<i>1 Meter</i>
<i>Elongation @ 14,300 Lbf</i>	<i>0.5% Nominal</i>	<i>0.5% Nominal</i>



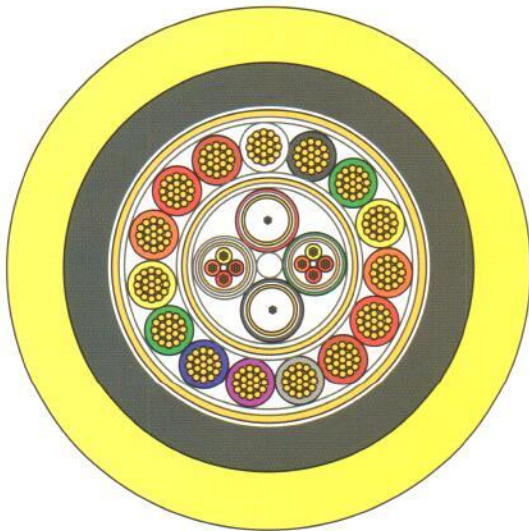
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Fact Sheet



ROV UMBILICAL KEVLAR™



SB-36278

SHIELDED QUADS-2 UNITS

Awg No. 22(Stranded)B/C

COAXIAL RG-59 TYPE-2 UNITS

Awg No. 24(Stranded)B/C

POWER CONDUCTORS-15 UNITS

Awg No. 14(Stranded)B/C

INNER & OUTER SHIELDS

Bare Copper Braids

INNER JACKET

Polyurethane

STRENGTH MEMBER

Kevlar Braid

OUTER JACKET

Polyurethane

CABLE CHARACTERISTICS

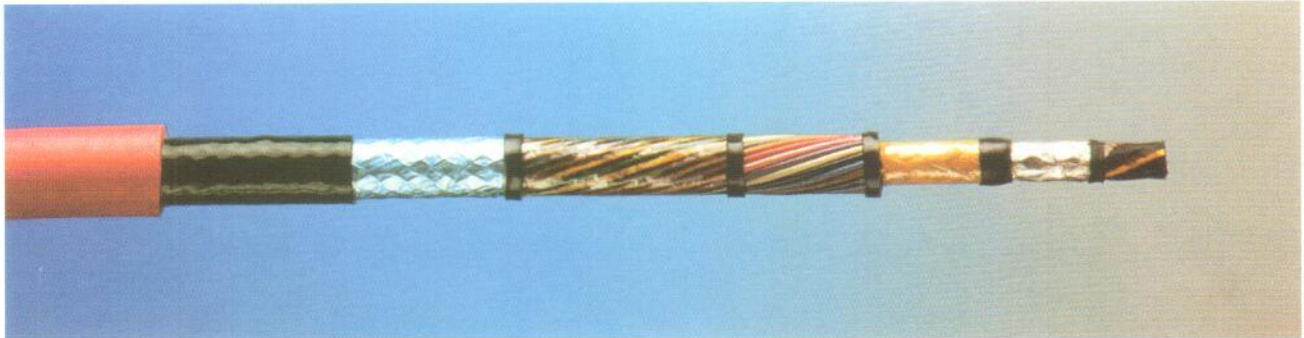
	<u>English</u>	<u>Metric</u>
<i>Outer Diameter</i>	1.15 Inches	29.2 mm
<i>Weight in Air</i>	765 Lbs/1000 Ft	1,139 Kg/Km
<i>Weight in Sea Water</i>	304 Lbs/1000 Ft	452 Kg/Km
<i>Breaking Strength</i>	11,000 Lbf	49 KN
<i>Maximum Load</i>	1,570 Lbf	7 KN
<i>Min. Bend Diameter</i>	32 Inches	813 mm



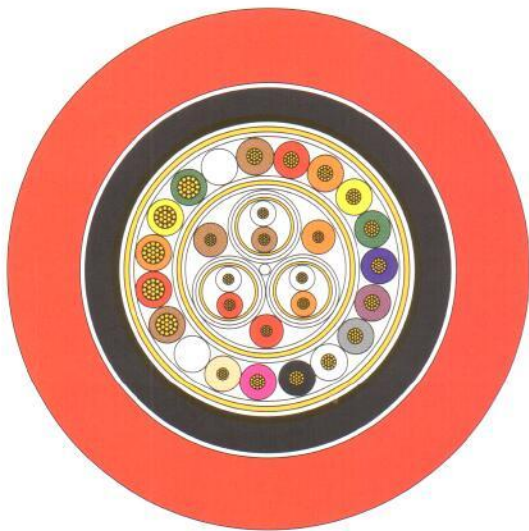
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Fact Sheet



ROV TETHER



SB-39823

SHIELDED PAIRS-3 UNITS

Awg No. 24(Stranded)B/C

SINGLE CONDUCTORS-4 UNITS

Awg No. 26(Stranded)B/C

SINGLE CONDUCTORS-11 UNITS

Awg No. 24(Stranded)B/C

SINGLE CONDUCTORS-5 UNITS

Awg No. 21(Stranded)B/C

INNER & OUTER SHIELDS

Bare Copper Braids

STRENGTH MEMBER

Aramid Braid

JACKET

Polyurethane

FLOTATION JACKET

Foam Polyethylene

CABLE CHARACTERISTICS

	<u>English</u>	<u>Metric</u>
<i>Outer Diameter</i>	<i>0.860 Inches</i>	<i>21.8 mm</i>
<i>Weight in Air</i>	<i>258 Lbs/1000 Ft</i>	<i>384 Kg/Km</i>
<i>Weight in Sea Water</i>	<i>Neutral</i>	<i>Neutral</i>
<i>Breaking Strength</i>	<i>1,800 Lbf</i>	<i>8 KN</i>
<i>Maximum Load</i>	<i>220 Lbf</i>	<i>1 KN</i>
<i>Min. Bend Diameter</i>	<i>20 Inches</i>	<i>510 mm</i>



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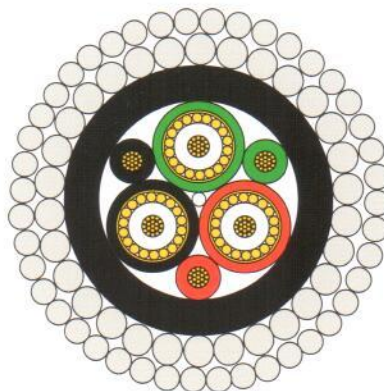
Fact Sheet

TOW CABLES



SB-40687

2-9 AWG Power conductors
7-20 AWG Conductors
2-19 AWG Shielded pairs
4-20 AWG Twisted Quad
8-26 AWG Twisted pairs
Waterblocked
PU Inner jacket
Galvanized armor
Kevlar reinforced PU jacket
Weight Air = 3,115 Lbs/1000 Ft
Weight water = 1,900 Lbs/1000 Ft
Breaking Strength =
105,000 Pounds
Nominal O.D. = 1.860 Inches



SB-41323

3-22 AWG Shielded conductors
3-22 AWG Single conductors
Waterblocked
PU Jacket
Galvanized armor
Weight air = 435 Lbs/1,000 Ft
Weight water = 345 Lbs/1000 Ft
Breaking Strength =
20,000 Pounds
Nominal O.D. = 0.550 Inches



SB-40774

Jacketed F/O Tube:
8 Multi-mode
F/O's in a stainless steel tube
Polyethylene jacket
6-11 AWG Power conductors
6-20 AWG Drain wires
Waterblocked
Polyethylene Inner jacket
Galvanized armor
Polyethylene Outer jacket
Weight air = 1,350 Lbs/1000 Ft
Weight water = 955 Lbs/1000 Ft
Breaking strength =
65,000 Pounds
Nominal OD = 1.060"



SB-45713

4-Single Mode Fiber Optics
4-22 awg Single conductors
4-18 AWG Shielded conductors
Waterblocked
Aramid Strength Member
PU jacket
Weight Air = 170 Lbs/1000 Ft
Weight water = 63 Lb/1000 Ft
Breaking Strength =
4,500 Pounds
Nominal O.D. = 0.550 Inches





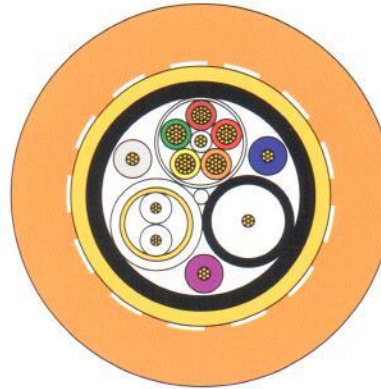
Fact Sheet

NEUTRAL TETHERS



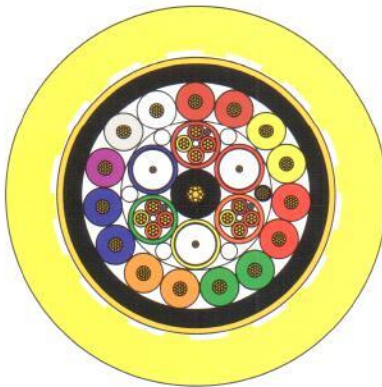
SB-41418

1-75 Ohm coaxial cable
 1-22 AWG Shielded Pair
 2-12 AWG Power Conductors
 1-22 AWG Shielded Quad
 5-24 AWG Conductors
 Waterblocked
 Kevlar Strength Member
 TPE Inner Jacket
 Foam Polyethylene Jacket
 Weight Air = 225 Lbs/1000 Ft
 Breaking Strength = 3,000 Pounds
 Nominal O.D. = 0.810 Inches



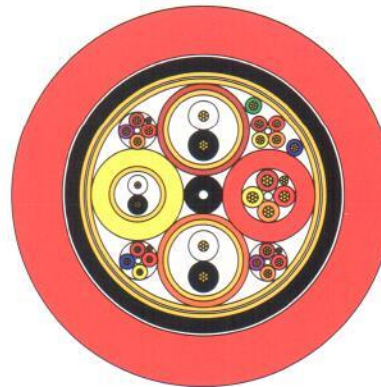
SB-38537

1-6 Conductor Complex:
 1-20 AWG Conductor
 5-16 AWG Conductors
 1-RG-108 Equivalent
 3-20 AWG Conductors
 1-RG-59 Equivalent Coax
 Waterblocked
 PU Inner Jacket
 Kevlar Strength member
 Load Transfer Braid
 TPE Jacket
 Weight in Air = 665 Lbs/1000 Ft
 Breaking Strength =
 10,000 Pounds
 Nominal OD = 1.38 Inches



SB-45706

6-Single Mode Fiber Optics
 3-75 Ohm coaxial cable
 3-22 AWG Shielded Quads
 15-17 AWG Power Conductors
 Waterblocked
 Polyethylene Inner Jacket
 Aramid Strength Member
 Reinforcement Braid
 TPE Jacket
 Weight Air = 1150 Lbs/1000 Ft
 Breaking Strength =
 14,000 Pounds
 Nominal O.D. = 1.780 Inches



SB-45707

4-Single Mode Fiber Optics
 2-22 AWG Shielded pairs
 2-23 AWG Shielded Quads
 1-26 AWG Shielded pair
 1-26 AWG Shielded quad
 1-23 AWG Twisted quad
 1-20 AWG Shielded quad
 2-23 AWG Conductors
 Waterblocked
 Bare copper overall shield
 Aramid Strength Member
 PU Inner jacket
 Foam polyethylene Jacket
 Weight Air = 400 Lbs/1000 Ft
 Breaking Strength =
 1,800 Pounds
 Nominal O.D. = 1.070 Inches





Fact Sheet

ARMORED UMBILICALS



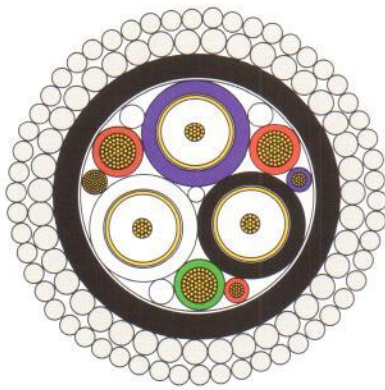
SB-45712

10 SM Fiber optics in a SS Tube
2-10 AWG Power Conductors
12-20 AWG Shielded Pairs
4-18 AWG Single Conductors
Waterblocked
PU Inner Jacket
Armor-Steel wires
Reinforced PU Jacket
Weight Air =
2,420 Lbs/1000 Ft
Weight Water =
1,690 Lbs/1000 Ft
Breaking Strength =
86,000 Pounds
Nominal O.D. = 1.45 Inches



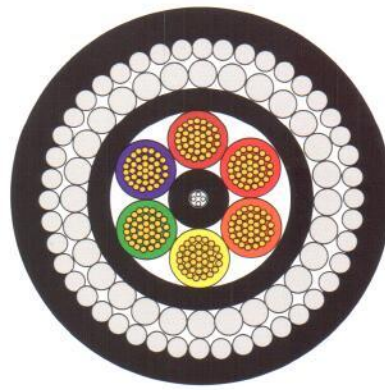
SB-40375

18-16 AWG Single Conductors
6-Single Mode Optical Fibers
3-75 Ohm Coaxial Cables
6-20 AWG Shielded Pairs
9-10 AWG Single Conductors
PU Jacket
Galvanized Armor
Weight Air =
2,930 Lbs/1000 Ft
Weight Water =
2,150 Lbs/1000 Ft
Breaking Strength =
100,000 Pounds
Nominal O.D. = 1.57 Inches



SB-36379

3-50 Ohm Coaxial Cables
3-8 AWG Single Conductors
3-16 AWG Single Conductors
PU Jacket
Galvanized Armor
Weight Air =
2,610 Lbs/1000 Ft
Weight Water =
1,870 Lbs/1000 Ft
Breaking Strength =
100,000 Pounds
Nominal O.D. = 1.52 Inches



SB-45504

4 Single Mode Fiber Optics
6-10 AWG Single Conductors
PU Inner Jacket
Galvanized Armor
PU Outer Jacket
Weight Air =
1,150 Lbs/1000 Ft
Weight Water =
790 Lbs/1000 Ft
Breaking Strength =
36,000 Pounds
Nominal O.D. = 1.030 Inches





Fact Sheet

Custom Cable Information Sheet

Company _____

Address _____

City and State _____

Contact _____

Phone _____

No. conductors	AWG	Voltage	Amperes	Shield

Preferred conductor insulation (if known) _____

Are optical fibers required? Yes _____ No _____

	Multimode Fiber Optic		Single Mode Fiber Optics	
	50/125	62.5/125	Standard	Dispersion Shifted
No. of Fibers				
No. of Fibers				

Does this cable require a strength member? Yes: _____ No: _____						
Central S/M	External S/M	GIPS	Stainless Steel	Kevlar™	Other	Maximum or Peak Load?

Are there requirements for?
Bending Radius _____

In Air or Water Weights _____

Diameter Constraints _____

Operating Temperature Range _____

