



South Bay Cable Corp.

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

CUSTOMER: MBARI (Monterey Bay Aquarium Research Institute)

DATE: 03/28/19

CUSTOMER P.O. NO: 1811014

SBC JOB NO: 29173-SB

CUSTOMER PART NO: NAVSEA8423907 Rev. 1

SBC P/N: SBC 49528 Rev. B

REEL NUMBER: 75504

FOOTAGE: 2,300 METERS

INVOICE NO: 55984

CERTIFICATION OF CONFORMANCE

We certify that the product furnished against the above subject purchased and manufactured and tested in accordance with the applicable specifications and requirements.

We certify that our products do not contain metallic mercury, mercury, or mercury contamination. We certify the cable jackets to be 100% insulated.

Test reports and/or certifications for materials used during manufacturing are on file with us or with our vendors and are available for examination.

Leita C. Ford
Quality Assurance Manager



SOUTH BAY CABLE CORP.

Job. No. 29173-1
P.O. 1811014
Part No. SB-49528 Rev B
Reel No. 75504

LENGTHS

Inside 1. 2,300 meters
2. _____
3. _____
4. _____
5. _____

Outside 6. _____

TOTAL 2,300 meters
SB-108

**SOUTH BAY CABLE
IDYLLWILD CA. 92549
CAGE CODE 20857**

**TEST REPORT
29173-TR**

DATE: 03/28/19

CUSTOMER: Monterey Bay Aquarium Research Institute

CABLE PART NUMBER: SB-49528 Rev. B

PURCHASE ORDER NUMBER: 1811014

JOB NUMBER: 29173-SB

REEL NUMBER: 75504

LENGTH: 2,300 meters

Tested by:

Jeff Barn



Date:

03/28/19

Approved by:

Luke Ford



Date:

3/28/19

1.0) DC Resistance @ 20° C:

1.1) Awg No. 12:

MAXIMUM DC RESISTANCE @ 20° C (OHMS/1000 FT)		
COLOR	REQUIRED	ACTUAL
BROWN	2.0	1.90 Ω /KFT
ORANGE		1.88 Ω /KFT
YELLOW		1.88 Ω /KFT

1.2) Awg No. 16:

MAXIMUM DC RESISTANCE @ 20° C (OHMS/1000 FT)		
COLOR	REQUIRED	ACTUAL
RED	5.0	4.81 Ω /KFT
GREEN		4.66 Ω /KFT

2.0) Voltage withstand conductor to conductor

VOLTAGE WITHSTAND CONDUCTOR TO CONDUCTOR			
COLOR	REQUIRED	PASS	FAIL
AWG 12-BROWN	8,000 VDC	✓	
AWG 12-ORANGE		✓	
AWG 12-YELLOW		✓	
AWG 16-RED		✓	
AWG 16-GREEN		✓	

3.0) Insulation Resistance conductor to conductor

INSULATION RESISTANCE CONDUCTOR TO CONDUCTOR (MEGOHMS-1000 FT)			
COLOR	REQUIRED	PASS	FAIL
AWG 12-BROWN	1000 (MINIMUM)	✓	
AWG 12-ORANGE		✓	
AWG 12-YELLOW		✓	
AWG 16-RED		✓	
AWG 16-GREEN		✓	

4.0) Fiber optic attenuation

MAXIMUM FIBER OPTIC ATTENUATION (dB/km)				
COLOR	REQUIRED		ACTUAL	
	1310 nm	1550 nm	1310 nm	1550 nm
Brown	0.40	0.30	.312	.204
Green			.339	.219
Gray			.324	.209
Orange			.322	.186
Pink			.321	.224
Yellow			.324	.201

5.0) Visual & Dimensional

AWG No. 12 STRANDED CONDUCTOR:

REQUIRED: 19 x 0.0179" BARE COPPER

ACTUAL: 19 x 0.0178"

AWG No. 16 STRANDED CONDUCTOR:

REQUIRED: 19 x 0.0113" BARE COPPER

ACTUAL: 19 x 0.0112"

AWG NO. 12 INSULATION OD		
COLOR	REQUIRED	ACTUAL
BROWN	0.180" $\pm$ 0.004"	0.179"
ORANGE		0.182"
YELLOW		0.180"

AWG No. 16 INSULATION OD		
COLOR	REQUIRED	ACTUAL
RED	0.180" $\pm$ 0.004"	0.179"
GREEN		0.182"

FIBER OPTIC TUBE JACKET OD:

Required: 0.150" $\pm$ 0.003"

Actual: 0.150"

OD OVER CABLED COMPONENTS:

Required: 0.516 Nominal

Actual: 0.511"

INNER JACKET OD:

Required: 0.620" $\pm$ 0.010"

Actual: 0.620"

OD OVER STRENGTH MEMBER:

Required: 0.780" Nominal

Actual: 0.790"

FINAL OD:

Required: 0.930" $\pm$ 0.020"

Actual: 0.940

WEIGHT OF CABLE IN AIR:

Required: 400 LB/1000 FT NOMINAL

Actual: 385.4 LBS/KFT

CALCULATED WEIGHT OF CABLE IN SEAWATER:

Required: 95 LB/1000 FT NOMINAL

Actual: 77.0 LBS/KFT