



Metallic Aerial Self-Supporting Cable (MASS)

Metallic Aerial Self-Supporting (MASS) Cable is an alternative solution used for installing optical cable on medium and high voltage power lines. It is typically used when the existing phase or ground wire replacement is not possible or economical. MASS cable is a compact, light-weight solution with no electrical functions, designed to provide a telecommunications path without interfering with the existing power lines or infrastructure. Its small size helps minimize loading on towers and poles yet it is completely self-supporting to meet sag and tension requirements. It is typically installed in "under build" applications beneath the live phases.

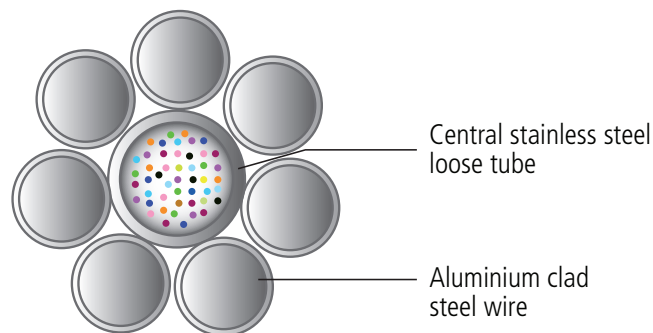
Features

- Central Stainless Steel loose tube design
- Typical diameter between 7.5 to 11.1 mm (0.295" to 0.438")
- Fiber counts up to 72
- Can be installed without an outage
- Small cable size limits additional structural loading
- Wind-loading properties similar to standard conductors
- Aluminum Clad, Aluminum Alloy or Galvanized Steel wire options available depending on mechanical properties required

Applications

- Energy Market
- Suitable for use on lines without a ground wire
- Deployed in regions with high lightning activity
- Suitable for wooden poles with universal attachment
- Suitable for medium and high voltage lines
- Convenient means to add fiber where OPGW is already installed

Cable Components



continued
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Specifications

FIBERS (MAX)	CABLE SIZE	AREA		OVERALL DIAMETER		APPROX. WEIGHT		APPROX. RBS		SAG10 #	MAX. SHIP LENGTH	
		in. ²	mm ²	in.	mm	lbs/ft	kg/m	lbs	kgf		WOOD (m)	STEEL (m)
24	MC-28/295	0.0459	29.59	0.295	7.5	0.138	0.205	7,900	3,580	1-1449	7000	7000
24	MC-40/346	0.0642	41.39	0.346	8.8	0.191	0.285	11,100	5,000	1-1449	7000	7000
48	MC-40/354	0.0654	42.22	0.354	9.0	0.197	0.294	11,300	5,100	1-1449	7000	7000
48	MC-58/417	0.0928	59.86	0.417	10.6	0.277	0.413	15,700	7,100	1-1449	6000	6000
72	MC-43/370	0.0703	45.36	0.370	9.4	0.212	0.315	12,100	5,500	1-1449	6000	6000
72	MC-63/438	0.1014	65.39	0.438	11.1	0.304	0.452	17,100	7,700	1-1449	5500	5500

ACS – Aluminum Clad Steel wire.

Wire is available in ACS and Aluminum Alloy.

MASS cables are designed to customer specification.

NOTE: The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
IEEE	1138	Cable
IEC	60794-4	Cable
TIA	598-D	Fiber
ASTM	B415	Aluminum Clad Steel Wire (ACS wire)

Contact AFL for your customized MASS solution.