

Mission Specialist Tether Comparison Sheet

REQUIRES SUBSEA VEHICLE BATTERIES

FIBER OPTIC

Diameter: 4.5 mm (0.18 in)
Buoyancy: ~ Neutral (-2/-3kg/km seawater weight)
Breaking Strength: 300 kg (660 lb)
Recommended Maximum Length: 2 km (~6,500 ft)
Bandwidth: 1 Gbps, 100 Mbps (depending on vehicle module)



EXPEDITIONARY COPPER

Diameter: 4.2mm (0.17 in)
Buoyancy: Neutral (-2/-3 kg/km seawater weight)
Breaking Strength: 170 kg (375 lb)
Recommended Maximum Length: 600 m (1,969 ft)
Bandwidth: 60 Mbps



HYBRID – FIBER / COPPER

Diameter: 12.0 – 17.0 mm (0.47 – 0.67 in)
Buoyancy: Negative (-8/-10 kg/km seawater weight)
Breaking Strength: 730kg (1,600 lb)
Recommended Maximum Length: 1.2 km (~3,900 ft)
Bandwidth: 1 Gbps, 100 Mbps (depending on vehicle module)



PERFORMANCE / PPT - COPPER

Diameter: 9-10 mm (0.35-0.39 in)
Buoyancy: Neutral
Breaking Strength: 635 kg (1,400lb)
Recommended Maximum Length: 450 m (1,476 ft)
Bandwidth: 60 Mbps (Up to 300m)



NEUTRAL - COPPER

Diameter: 11.7 mm (0.46 in)
Buoyancy: Neutral
Breaking Strength: 457 kg (1,007 lb)
Recommended Maximum Length: 400 m (1,312 ft)
Bandwidth: 60 Mbps (Up to 300 m)



NEGATIVE - COPPER

Diameter: 7.62 mm (0.3 in)
Buoyancy: Negative
Breaking Strength: 457 kg (1,007lb)
Recommended Maximum Length: 400 m (1,312 ft)
Bandwidth: 60 Mbps (Up to 300 m)



Standard minimum for bend radius at 20 times diameter per tether.

REQUIRES TOPSIDE POWER SUPPLY