

# 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:** 600m (1,969 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