

# Surface and shallow water : geophysical connectors



## GE01 Series

### Description

- Optical system : expanded beam
- Quick bayonet locking
- Mixed contacts :
  - 2 optical contacts
  - 2 electrical contacts
- Possibility of on site maintenance

### Applications

- Harsh environment outdoor use

### Technical features

#### Mechanical

- Bayonet locking
- Material : Stainless steel
- Electrical contacts : Copper alloy, gold plated
- Endurance : 3000 cycles

#### Electrical

- Contact : #16
- Test voltage : 2300 Vrms
- Insulation resistance :  $\geq 5000 \text{ M}\Omega$  at (500 Vcc)
- Contact resistance :  $\leq 3 \text{ m}\Omega$
- Current rating : 13 A

#### Optical

- Insertion loss : 2 dB
- Max. value : 3 dB
- Optical fibre type : 62.5 / 125  $\mu\text{m}$
- Cable type : Assembly cable  $\varnothing 6 \text{ mm}$ 
  - 2 optical fibre ways
  - 2 electrical ways



## GE02 Series

### Description

- Designed to match the harshest environments
- Shells in polyurethane : resist to
  - Shocks and falls
  - Vibrations
  - Intensive usage
  - Corrosion
- High sealing level (IP 68)
- Quick and robust screw coupling system (5 keyways)
- Exist in 3 and 10 contact layouts
- Cable is overmoulded

### Applications

- Seismic data acquisition units for land and/or shallow water survey

### Technical features

#### Mechanical

- Durability : 400 cycles in humid conditions

#### Material

- Shell : Hard Polyurethane
- Insert : Soft Polyurethane
- Pins : Copper alloy with gold plating
- Sockets : Beryllium copper with gold plating

#### Electrical

- I Max = 15 Amps (3contacts)
- I Max = 7.5 Amps (10 contacts)
- Resistance :  $\geq 10000 \text{ M}\Omega$  under 500 Vcc
- Dielectric withstanding voltage : 1500 Vcc during 1 mn
- Contact resistance :  $\leq 25 \text{ m}\Omega$  Max

#### Cable acceptance

- Wire Gauge 14 Max
- Solder Terminations

#### Environmental

- Working temperature
- IP 68 :  $R_i \geq 200 \text{ M}\Omega$  under 30 meters of water
- Damp heat : 56 days
- Resistance to salt spray : 500 hours unmated conditions
- Hermeticity :  $10^{-7} \text{ Atm.cm}^3/\text{s}$
- Resistance to hydrocarbons like kerosen, gasoil

