



Reliable and versatile cable for easy installation.

### Description

The multi-fiber extension cable is used to connect multiple sensors to a reading unit with a single cable without the need to install a cable for each sensor. To obtain a connection between all the sensors and the reading unit, the connecting ends of all the sensors are first connected to an Intermediate Connection Box (ICB). Then, a multi-fiber extension cable connected on one side of the ICB is used to connect the end of each sensor to the reading unit placed at some distance from the ICB. Thus, it serves as a carrier of information between the sensor and the reading unit. Depending on the number of sensors to be connected to the reading unit, the number of fibers inside the multi-fiber extension cable can vary. Each type of cable features high flexibility, reliability and durability, insensitiveness to thermal variation, corrosion, humidity and electro-magnetic fields and is connected with standard E-2000 connectors with a built in protective cover. A multi-fiber extension cable consists of optical fibers protected with primary coating, gel-filled loose tube, glass yarns with water-blocking tape and PE outer sheath. This cable has enhanced chemical and/or mechanical resistance and also enhanced rodent protection. The cable can easily bear harsh environmental conditions and is therefore particularly adapted to any kind of outdoors conditions. It features high crush resistance and the load won't irreversibly affect the optical characteristics of the fiber nor damage the cable. The pulling, stepping on, accidental crush, weather changes, sunlight or low temperature can not damage it in long-term.

No metals are used in the cable and therefore it requires neither to be grounded nor to be shielded. This makes cable insensitive to electromagnetic fields. This cable is attached to connection box using gland nut PG21.

### Key Features

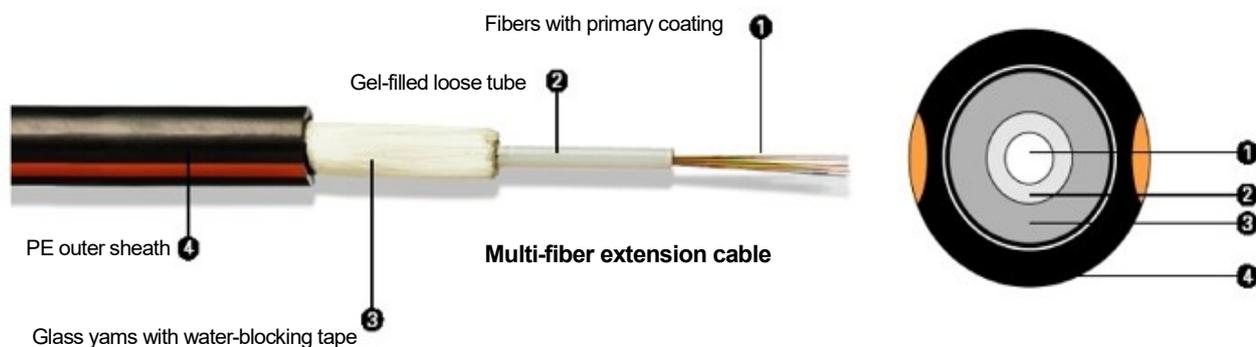
- Outdoor installation
- Easy to install due to small bending radius
- High reliability and durability
- Longitudinally watertight
- Enhanced rodent protection
- Not affected by thermal variations
- Insensitive to corrosion and vibrations
- Immune to electromagnetic fields
- Applicable on all types of construction materials
- Application adapted

### Applications

- Fiber optic sensing networks
- Bridge monitoring
- Building monitoring
- Tunnel monitoring

### Technical Characteristics

<b>Cable type:</b>	12F	24F
<b>Number of fibers:</b>	Up to 12	Up to 24*
<b>Cable diameter:</b>	9,6 mm	9,9 mm
<b>Cable weight:</b>	90 kg/km	100 kg/km
<b>Minimum bending radius:</b>	100 mm (without tensile loading) 200 mm (with tensile loading)	100 mm (without tensile loading) 200 mm (with tensile loading)
<b>Maximum tensile (pulling) force:</b>	Short term: 3000 N Long term: 2500 N	Short term: 3000 N Long term: 2500 N
<b>Maximum crush resistance:</b>	400 N/cm	400 N/cm
<b>Operating temperature:</b>	-20°C to +60°C	-20°C to +60°C
<b>Installation temperature:</b>	0°C to +50°C	0°C to +50°C
<b>Conditions of use:</b>	Outdoors	Outdoors



### Ordering information

- Number of fibers
- Singlemode or Multimode fibers
- Number and type of connectors