



About Us

Prysmian is a global market leader in optical cables, supplying a major part of the world's optical cable needs. With a strong heritage of highly advanced R&D, Prysmian is at the leading edge of the technology.

Prysmian has a worldwide telecom manufacturing presence in 12 countries and 4 continents. This global expertise and local manufacturing capacity make Prysmian a significant force in the international marketplace, assuring continuity of supply and high levels of service.

Prysmian's optical technology encompasses optical fibres, cables, connectivity, projects and services ensuring that not only the right cable but the right total optical communication system is matched to our customers' needs.

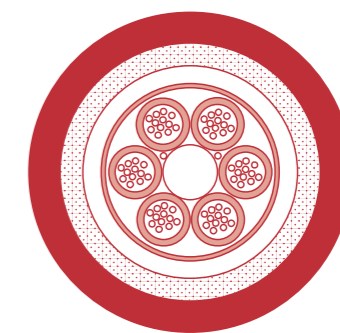
Prysmian offers a complete service from design, development and manufacture through to technical support of commissioned cable networks. Planning and logistics are the cornerstone of our operation, with quality maintained through the expertise and dedication of all our staff working across the business to ISO 9001 and 14000 standards.

When a project is in Prysmian's hands, our customers can depend on a total quality service.

AirBag™



- > **Totally compatible with existing cabling networks**
- > **Dielectric and light weight protection**
- > **Providing ease of installation**
- > **Improved mechanical performances vs. traditional cables**



Specifications are subject to change without notice. Cable are designed and tested according to the main national and international specifications (IEC specifications).

dega design group

CABLE

AirBag™



AirBag™

The traditional method of reducing mechanical damage is to protect cables with **metal armouring**, generally applied as tapes, or to use **additional external protection** during installation. Both solutions have a number of disadvantages when compared with unarmoured cables, in particular:

- Metal Armoured cables result in significant increases in weight, rigidity and installation time.
- Additional external protections (pipes, covered trays, etc) do not protect the cable during transport or during installation and involve considerable extra costs and longer installation times.

Air Bag™ is an innovative protection system based on a composite structure of extruded compounds with specific mechanical properties. All components work as an integrated system, giving the highest efficiency in terms of mechanical protection.

Impact energy is dissipated with small deformation, thus with high specific force.

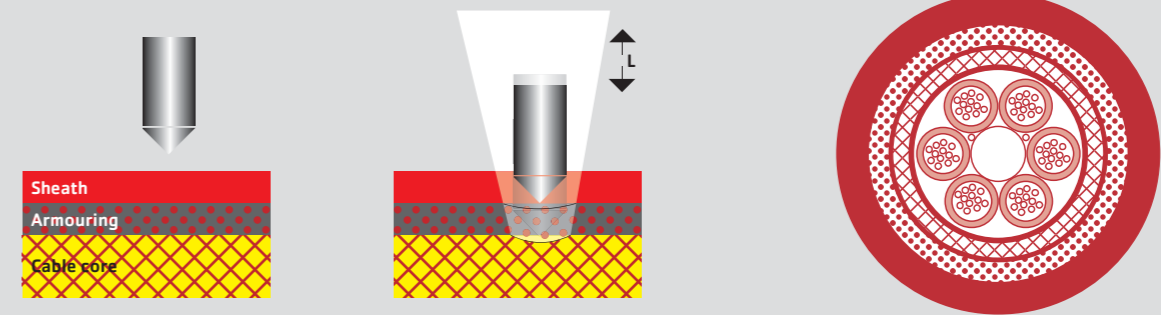
Metal armouring shows a non-recoverable deformation that generates a permanent stress in cable cores.

Air Bag™ system works as a shock absorber. The deformation is elastic and the specific force generated by the impact is considerably lower. There is no permanent deformation. After the impact, the cable recovers its initial shape.



STEEL ARMoured

EGF6E up to 48f - 425 kg/km 21 mm ø



BENEFITS

vs armoured cables

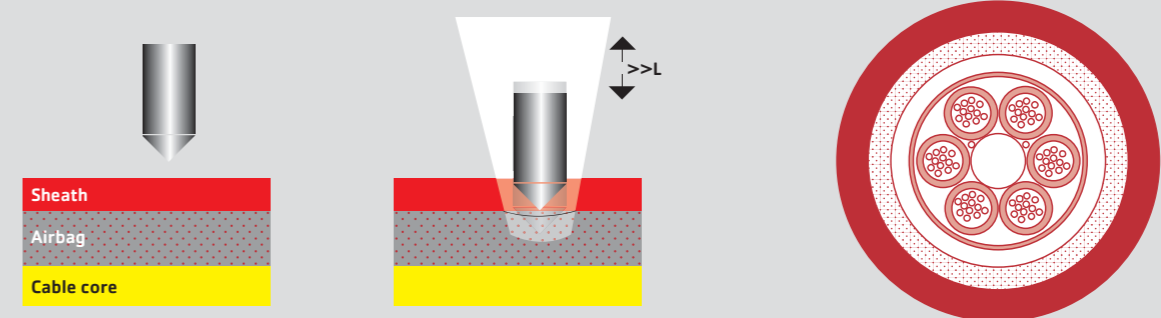
Better impact performance
 Reduced diameter
 Lower weight
 Longer cable lengths
 Improved flexibility
 Equivalent fire performance
 Equal resistance to oils/chemicals
 Equal resistance to water damage
 Easier installation
 No earthing required

vs unarmoured cables

Impact resistance greatly enhanced
 Diameter: limited variation
 Weight: limited variation
 Equal flexibility
 Equivalent fire performance
 Equal resistance to oils/chemicals
 Equal resistance to water damage
 Ease of installation retained

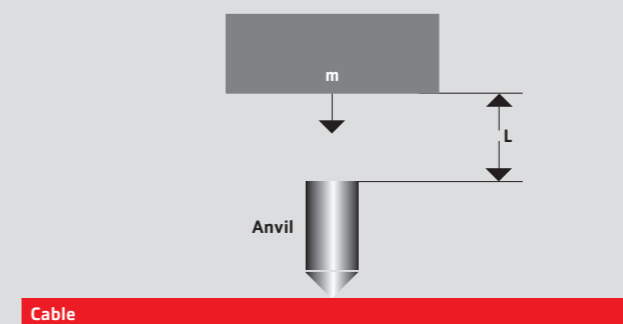
AIRBAG™

EBGE up to 48f - 232 kg/km 19 mm ø



IMPACT TEST

IEC 60794 Standards



Anvil radius = 10 mm
 Energy = $m \times g \times L$ (Joule)
 No attenuation increase
 No sheath damage

Telecom cables are often damaged through mechanical abuse.

Damage to optical cables can often be invisible from outside, but can lead to a dramatic decrease in reliability.

Any questions? Our team of experienced technical staff is ready to talk to you. See contact details.