



■ SERVICE IN THE FIELD

All our connectors have higher resistance to pollutions, but even the best fitted EB connectors must be cleaned sometimes. To make it as easy as possible we offer a range of cleaning kits which allow you to clean the connector fast and efficiently.

Our cables are difficult to break but they have to be flexible as well. Thus it can happen that they will be broken. To allow our customers immediate repair we can deliver a choice of splice kits and tools necessary to install them on the broken cable. We can as well organize trainings to teach our customers how to use it in the best way.

■ REELS SYSTEMS

Many of our products are simple jumpers a few hundred meter long. To manage them in efficient way we offer wide range of reels and transportation accessories that help deploy the cables in quick and convenient way. Attached cranks allow you to roll up your network without any problems. Well thought out design of drums allows to transport them safely in any kind of vehicle. Stacking feature will save your space in warehouse and minimize freight costs too.



■ WIDE RANGE OF CHOICE



Each connector is offered in many variants of various shell materials, seals, keying, channel number etc. The same with the cables. We cooperate with many producers and we never force a solution proposed by one company only. For your needs we will propose at least two options and explain the advantages and disadvantages of both of them. For us the most important issue is customers satisfaction from the best suited product for their requirements. Give us the chance to share our experience and knowledge with you. Our target is giving you outstanding solutions of top features.

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HARSH ENVIRONMENT FIBRE OPTIC HARNESS SHOP



R Radiotechnika
marketing sp. z o.o.

■ QUALITY – NO SPACE TO COMPROMISE

Our products must be reliable, they operate in very important applications like military command post, radar systems, live data transfer in deep coal mines, broadcasting etc. **There is only one way to give good reliability – total quality control, using only proper technology, high class tools and approved testing equipment.** We test not only our products, but first of all we verify the test equipment and tools. We pay attention to keep technological requirements in each step of the production process to manufacture goods, which will for sure survive in harsh environment for which they are dedicated.



Our workers, who produce fibre optic harness, are high class, well educated and very experienced specialist. The best certificate of their skills are thousands of reliable fibre optic harness working continuously in various conditions: in mud and dust, in arctic frost and equator sun, on the seas and the deserts, thousands meters below ground level as well as in aircrafts and helicopters.

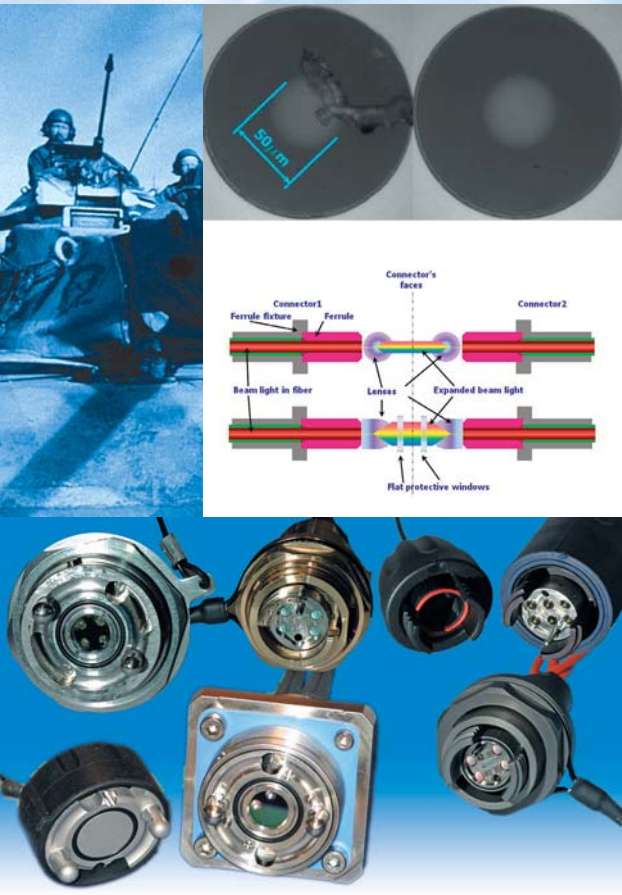
■ EXPANDED BEAM CONNECTORS – THE ONLY SOLUTION AGAINST MUD AND DUST

All optical connectors are very accurate devices. In multi mode application the diameter of light beam is generally $50\mu\text{m}$ (usually human hair is about $80\mu\text{m}$ diameter). Each dust particle between optical terminie of the connectors is like huge dam which stops travelling light from transmitting to the receiver. The only way to make the harsh environment optical connector more immune from the pollutions is usage of the lenses inside the connectors – on the transmitter side the light beam is expanded by the lens and its intersection area increases even a few thousand times comparing to the original area in the fibre and then goes 1..2 millimeters through air between connector's faces to be focused by second lens on the receiver side connector and introduced again into the fibre. This method has two main advantages:

- It is more difficult to disrupt a bigger diameter of beam light than a smaller one
- There is no physical contact between terminie of both connectors, thus even a hard sand particles which will appear inside of the matched connectors will not destroy optical components of the connector because of the air gap between lenses.

Radiotechnika Marketing focus on assembling of expanded beam (EB) connectors on cables of various structure. EB connector installed in our laboratories avoid potential problems with fibre optic links due to their idea of operation. **We terminate the cables with**

EB connectors for years. Each of them has increased our experience in producing it the best way. Our knowledge will help you to choose the right connector and right cable for your application.



■ BUTT JOINT FIBRE OPTIC CONNECTORS – THE CLASSICS

There are some aspects of fibre optic technology where EB connectors cannot be used – one of them is Return Loss. Only classical physical contact connectors are able to give so good RL performance that EB connectors will be never able to reach. Another very important issue is price – simple structure of butt joint connectors will always be cheaper than complex structure of EB connectors.



Radiotechnika's FO department is prepared to install various types of butt joint connectors. Our polishing machines have a lot of different ferrule holders which allow us to assembly connectors with ferrules of diameters from 1.00mm (size 20) to 3.25mm (SMA). We can finish ferrule face with differ standards (flat, PC, APC) and our test equipment is able to verify parameters of the termini's face in objective way. **Our advanced systems analyze the microscopic picture of the ferrule face giving an operator clear information if the termini could be released or should be re-polished. Metrological information about ferrule geometry is given by our sophisticated interferometer that allow to analyze parameters in monochromatic or white light.**

The key issue in butt joint connectors is possibility of easy terminie face cleaning. For this reason we offer connectors which could be easily unassembled even by inexperienced users and **cleaned in the simplest possible way. We cannot eliminate pollution from your environment, but we have knowledge what connector you should choose to use in your fibre harness without specials efforts.**

■ POWER FIBRE OPTIC, WHICH MEANS HYBRID / COMPOSITE HARNESS

Radiotechnika Marketing produces both – fibre optic and electrical harness. Our workers skills allow us to combine features of both kinds in one product: composite harness where there are electrical wires next to optical fibre. **This solution allows us to use copper wires to supply remote sensors or cameras and to transmit sensitive data trough optical fibre, which are secure way for that data (optical signals are very immune to interferences and difficult to tap).**

Wide range of offered connectors and cables gives us possibility to propose composite solutions in physical contact as well as in expanded beam technology in many combinations of copper / fibre and connectors types.

