

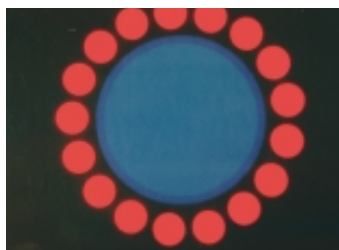
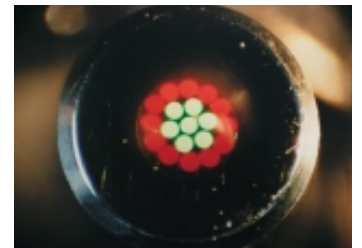
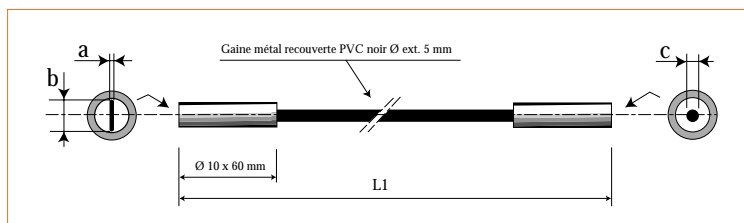
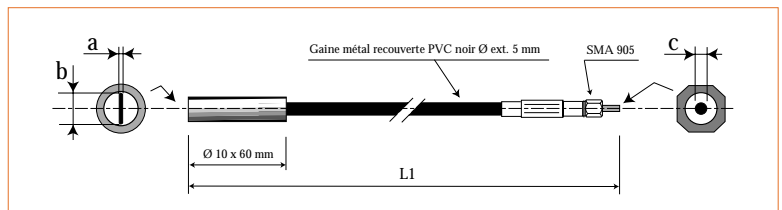
## BUNDLES FOR SPECTROMETRY AND MONOCHROMATORS

Spectroscopy is a rapidly growing technology in material analysis. Special optical fibers are extremely useful for spectroscopy. They can be used to link the measuring head to the instrument body or to transmit specific light generating fluorescence and collect the measure of this fluorescence. In every cases the fibers have to be carefully selected for accurate results particularly as far as the wavelengths used are concerned. The end configurations can be round, square or any geometry.

### BUNDLES AND SPECIAL ARRAYS

Arranged or random bundles are made from all silica fibers optimized for either UV+Visible or IR+Visible. The N.A is 0.22 and core diameters available are 100, 200, or 400 $\mu$ m. The standard mechanical end pieces are cylinders of 10mm diameter by 60mm length or 905 SMA (3.17mm ferrule). The position of the slit is + 5\* $\mu$ m in X and Y axis.

- "ARRAY / BUNDLE"



Special bundle for medical analysis by spectrometry. Excitation fiber (200 - 400nm) in the center and 17 light collecting fibers around.

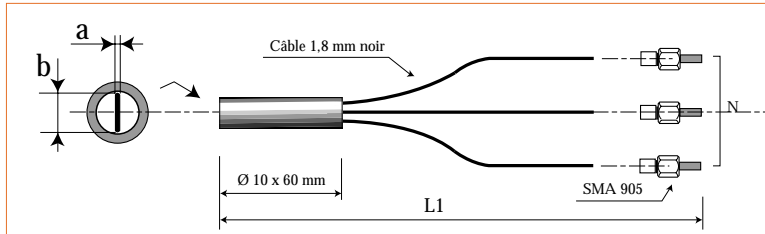


Double array with high precision alignment. 100 $\mu$ m polyimide fibers

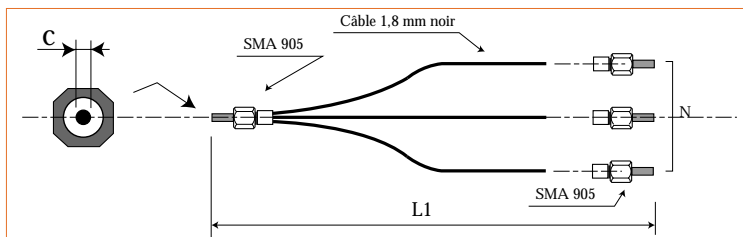
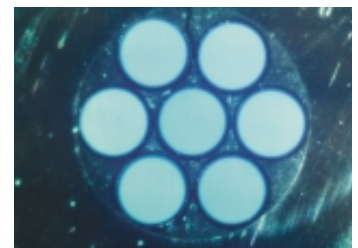
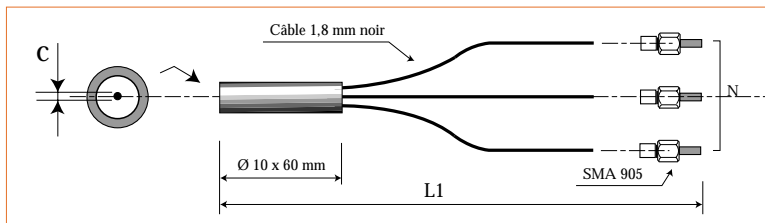


Circular or array arrangement of 7 fibers into an SMA connector ferrule

• "ARRAY / OCTOPUS"



• "BUNDLE / OCTOPUS"



QUESTIONS

Different points must be defined :

- Operating wavelength
- Dimensions of array (a and b)
- Bundle diameter (c)
- How many element for Octopus(N)
- Total length (L1)

