

## BULKHEAD ADAPTERS

### K-POWER Power Transfer

The Power Transfer is designed like an air-spaced SMA to SMA adapter for connecting two SMA-905 terminated fiber optic cables. It is directly compatible with standard SMA-905 connectors and with power SMA-905 connectors with either a standard or a free-standing fiber tip. It is ideal to connect a high power patchcord coming from a Laser source to a disposable high power pigtail or patchcord.

Provided the two connected optical fibers are identical on both sides of the Power Transfer, this device with integrated optics will maintain both the laser beam diameter and the numerical aperture between the input and the output of the component. Besides, its design properly aligns the cores of each terminated fiber end.

The Power Transfer component is operational on 3 different wavelength ranges from 350 nm to 1700 nm depending on the choice of the AR coating on the integrated optics.

The robust mechanics are designed for industrial and medical applications. Three different shapes are available: stand alone, with a flange, or with a hermetic sealing that ensures a  $10^{-2}$  mbar.l/s hermeticity.

They can also be used in spectroscopy applications to improve the modal dispersion and coherence of a beam coming from a multi-fiber bundle to be connected to another bundle or to a single fiber.

Please contact us to discuss your specific requirements.



*As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.*  
DTSKPOWER May 2020

#### KEY FEATURES

- SMA-905 bulkhead adapter
- Stainless steel robust designs
- Different AR coatings available
- 3 different housings
- $10^{-2}$  mbar.l/s hermeticity available

#### APPLICATIONS

- Industrial
- Medical
- Spectroscopy

#### QUALITY

- ISO 9001:2015

## K-POWER Power Transfer

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### STANDARD PRODUCT SPECIFICATIONS

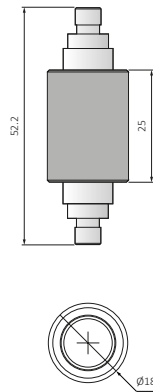
| Parameters  | Optical specifications  |                  |                  |
|---|---|------------------|------------------|
| Adapter interfaces  | SMA-905 type connectors   |                  |                  |
| Operating wavelength range                                    | UV: 350-650 nm  | VIS: 600-1060 nm | IR: 1050-1700 nm |
| Insertion loss*   | depending on the fiber; 1.6 dB typ. @850 nm on 600 µm silica/silica fiber                         |                  |                  |
| Optical power handling*<br><i>(tested but not limited to)</i> | 150 W CW @980 nm on 600 µm fiber<br>300 mJ pulsed > 100 ms @1060 nm on 200 µm silica/silica fiber |                  |                  |

\*Please note that the values can vary substantially according to the customer's measurement bench set up (light source, detector...).

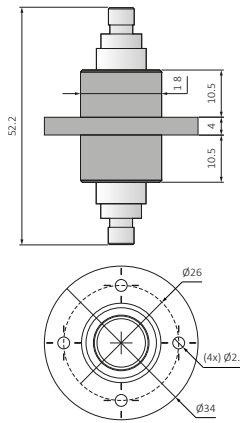
| Parameters              | Mechanical specifications |                           |                             |
|-------------------------|---------------------------|---------------------------|-----------------------------|
| Housing type            | Housing 1: stand alone    | Housing 2: flange         | Housing 3: hermetic sealing |
| Housing material        | Stainless steel 304L      | Stainless steel 304L      | Stainless steel 304L        |
| Panel drilling diameter | NA                        | 18.2 mm <sup>0/+0.3</sup> | 18.2 mm <sup>0/+0.3</sup>   |
| Hermeticity             | NA                        | NA                        | 10 <sup>-2</sup> mbar.l/s   |

### MECHANICAL SCHEMES

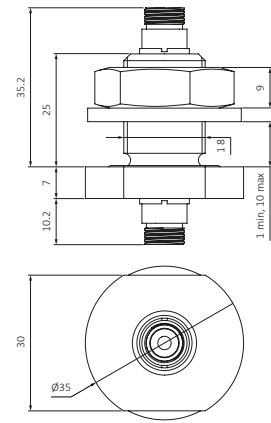
Housing 1: stand alone



Housing 2: flange



Housing 3: hermetic sealing



### ORDERING INFORMATION

Order code

|                      |                         |   |  |
|----------------------|-------------------------|---|--|
| K-POWER              | -                       | - |  |
| <i>housing style</i> | <i>wavelength range</i> |   |  |
| A : stand alone      | UV : 350-650 nm         |   |  |
| F : flange           | VIS : 600-1060 nm       |   |  |
| H : hermetic sealing | IR : 1050-1700 nm       |   |  |

Example : K-POWER-F-UV  
(Power Transfer with a flange for use at 350-650 nm)

Order now

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DTSKPOWER May 2020