

HERMETIC BULKHEAD FIBER-OPTIC FEEDTHROUGHS

KTRAV-T10

Reconfigurable Multichannel Hermetic Fiber-Optic Feedthroughs

The KTRAV-T10 reconfigurable multichannel hermetic fiber-optic feedthroughs are designed with either a DN 40 KF flange for high vacuum applications or a DN 40 CF flange for ultra-high vacuum applications.

Standard configurations are available with 1 to 4 individual channels within one DN 40 CF or DN 40 KF flange. Custom designs are also possible upon request; we offer different sizes of ISO, CF and KF flanges.

The channels are soldered on the stainless steel 304L housing, ensuring low outgassing rates and helium leak rates.

These reconfigurable multichannel hermetic fiber-optic feedthroughs can be made with either singlemode [SM] fibers or multimode [MM] graded-index [GI] fibers as well as step-index [SI] fibers with a cladding diameter of 125 µm in FC/PC version or with a core diameter up to 1000 µm with SMA termination.

Each channel is fully demountable for easy replacement by our production team. Upon request, both the fiber rods and connectors can be disassembled and replaced by other types of your choice when back in our production site.

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.
DTSKTRAVT10 September 2020

KEY FEATURES

- Low profile
- Replaceable parts
- 10⁻⁸ mbar.l/s hermeticity
- UV-VIS-NIR wavelength ranges
- Up to 4 channels
- DN 40 CF or DN 40 KF flanges
- SM and MM fibers
- FC/PC and SMA adapters

APPLICATIONS

- High vacuum
- Ultra-high vacuum

QUALITY

- ISO 9001:2015

KTRAV-T10

Reconfigurable Multichannel Hermetic Feedthroughs

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STANDARD PRODUCT SPECIFICATIONS

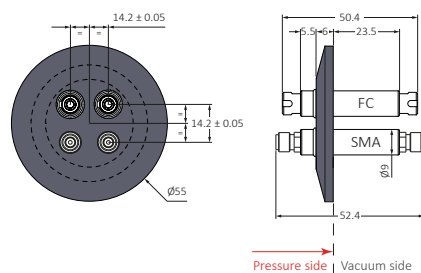
Parameters	Mechanical specifications	
Pressure	high-vacuum	ultra-high vacuum
Hermeticity	10 ⁻⁸ mbar.l/s	10 ⁻⁸ mbar.l/s
Flange	DN 40 KF	DN 40 CF
Number of channels	1 to 4	1 to 4
Operating temperature range	-55°C to +125°C	
Storage temperature range	-55°C to +200°C	

Parameters	Optical specifications	
Adapter interface	FC/PC	SMA
Fiber type	SM, GI 50/125, GI 62.5/125, LCH 50/125, LCH 105/125	100 μm to 1000 μm core fibers, low OH, high OH, solarization resistant
Insertion loss	< 1 dB max. @1550 nm (0.3 dB typ. @1550 nm on SMF28)	< 3 dB max. @850 nm (2 dB typ. @850 nm on 600 μm fiber)
Operating wavelength range	200-2000 nm; depending on the fiber	

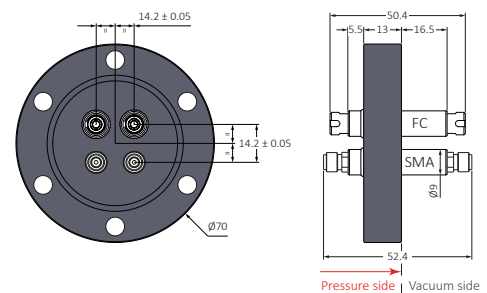
Every feedthrough is delivered with a helium leak detection test report. The helium test is realized in our facilities and is limited to 10⁻⁸ mbar.l/s by the test chamber.

MECHANICAL SCHEMES

DN 40 KF flange



DN 40 CF flange



ORDERING INFORMATION

Please note that in standard version, all the channels are identical in size, fiber type and connector. For unpaired channels, please contact our sales team.

Order code

flange type
KF40 : DN 40 KF
CF40 : DN 40 CF

fiber type
fiber code according to
our fiber's list DOCFL

Example : KTRAV-T10-KF40-2-SMA-HCL600
(Low profile reconfigurable fiber-optic hermetic feedthrough with 2 channels of HCL 600/660 fibers terminated with female adapter interfaces for SMA905 connectors, on a DN 40 KF flange)

KTRAV	-	T10	-	-	-	-	-
			# of channels 1, 2, 3 or 4			connector type FC : FC/PC SMA : SMA905	

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