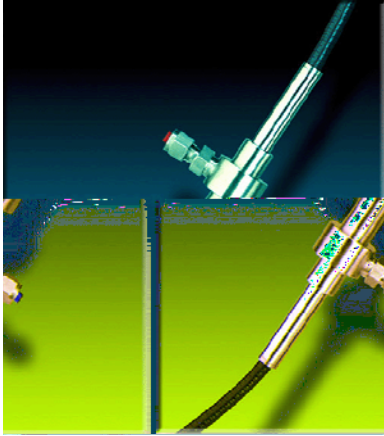


# Process Transmission Cell



## Features

- Economical
- High Throughput
- Rugged Construction
- 300°C, 3000 psi
- Compatible with all CDI Spectrometers

This high throughput transmission cell is ideal for industrial process environments. Outstanding performance, temperatures of -50°C to 300°C, pressures up to 3000 psi, high throughput and at the same time rugged and lightweight is achieved by using Kalrez O-ring seals. The collimating lens is held in the stainless steel housing with Kalrez O-rings. All wetted surfaces are silica, stainless steel or Kalrez. The high temperature capability is achieved by making all parts of the cell, including the first meter of the fiber, to be able to withstand 300°C temperatures indefinitely. The transmission cell is available in fixed path lengths of 1 to 1000mm. The optical fiber is 400 micron core fused silica and is clad in stainless steel armor. If needed, the armor can be sealed with Teflon to provide a barrier against the environment. A two inch extension tube added to each end of the probe provides protection against fiber shear. The transmission cell is available in both UV and NIR versions.

## Specifications:

### Optical

Path length	1 to 1000 mm
Lens/window material	Fused silica
Numerical aperture	0.32 NA
Efficiency	Typical: 70% at 500 nm Guaranteed: 50% at 500 nm
Fiber optic type	UV or NIR 400/440 silica <sup>#</sup>
Fiber optic cable type	Armored duplex
Fiber optic cable length	3 mtrs to 200 mtr
Fiber optic termination	SMA 905

### Physical

Body materials	316 SS
Body Length	2.5" plus path length
Diameter	0.5"
Seal type	Double O-ring
Seal material	Kalrez
Temperature range	-50° C to 300° C
Maximum pressure	3000 psi/207 bar

<sup>#</sup> Specify UV grade or NIR grade fused silica – UV grade 200 nm to 900nm – NIR grade 350nm to 2200nm

## Part Number: P-TC

Control Development, Inc., reserves the right to change specifications without notice.

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