

Rapid Kinetic Accessory

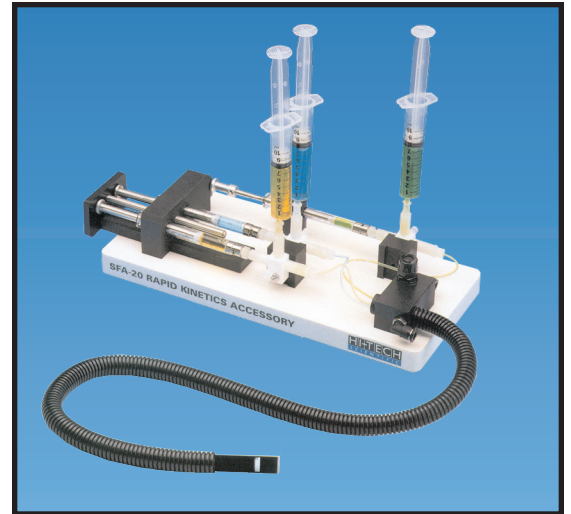
SFA-20 Series

The SFA-20 series of Rapid Kinetics Accessories from Hi-Tech Scientific can be used in conjunction with PTI's systems. The accessory has an empirical deadtime < 8 ms, allowing reaction rates of up to 100 s⁻¹ to be monitored, depending on the response time of the spectrometer.

The latest high precision, research grade, gas-tight syringes are used and are available in volumes from 250 µl to 5 ml. Variable ratio mixing applications are readily accommodated since the syringes are mounted outside the thermostatically controlled sample circuit, allowing easy and rapid replacement. This also prevents any possibility of leaks at low temperatures.

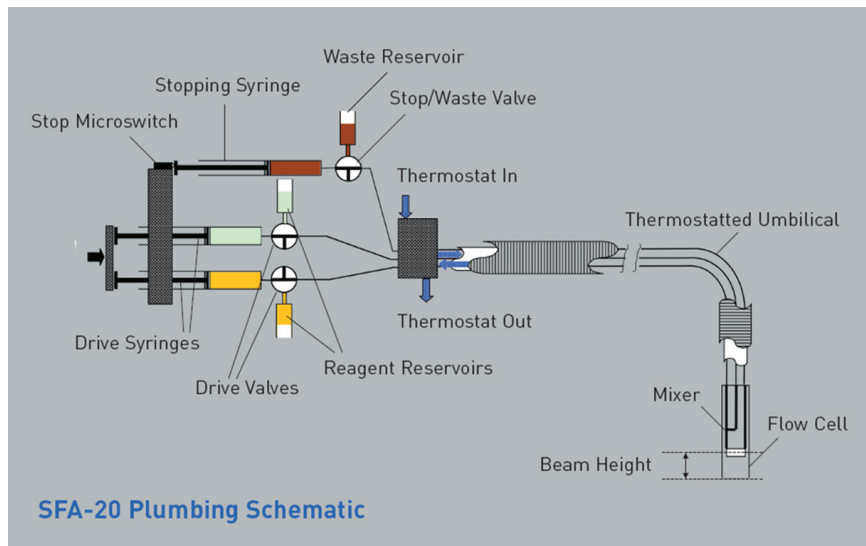
The syringes are mounted on a rigid drive platform ensuring that the flow is stopped precisely and instantaneously. This platform and the syringe mounting blocks are extremely resistant to chemical attack. The thermostatted sample circuit itself is constructed from materials which also provide optimum chemical resistance. Reagents travel in this inert sample circuit through an umbilical cord to the flow cell where they are mixed by a high efficiency T-format mixer.

The cell offers both 2 mm and 10 mm optical path lengths as standard. The standard flow cell supplied with the SFA-20 Series will fit any UV/Visible spectrophotometer or spectrofluorimeter having standard 1 cm cuvette holder and a 15 mm beam height. However, flow cells can be tailored for instruments with different beam height or optical geometry.



Features and Benefits

- Easy to fit, can be done by the user
- Easy to use
- Extends the capability of standard instruments providing a rapid mixing stopped-flow capability
- Temperature controlled reagents
- Accurate delivery of reagents – mixing ratios available
- Trigger cable supplied to synchronise data collection with stopping event



Rapid Kinetic Accessory

SFA-20 Series

Specifications

All SFA-20 versions have a sample circuit constructed from silica, Teflon, Kel-F and glass and have the following specification:

Empirical Deadtime	< 8 ms
Window Sizes	2 x 4 mm ² & 10 x 4 mm ²
Optical Path Lengths	2 & 10 mm
Minimum Volume Per Shot/Reagent	100 µl
Variable Ratio Mixing	Up to 20:1 by varying syringe sizes
Temperature Range	5–80°C
Adjustable stop volume	Available
Manual Drive System	Standard
Pneumatic Drive System (OPT 20P)	SFA-20 optional, SFA-20mx and SFA-20mxM recommended
Dead Volume Per Reagent	SFA-20 and SFA-20mx 700 µl, SFA-20M and SFA-20mxM 350 µl
Umbilical Length	All models 600 mm; 300 mm for micro-volume versions
Drive Syringe Size	SFA-20 2.5 ml, SFA-20M, SFA-20mx and SFA-20mxM 1 ml
Mixer High efficiency	T format



Photon Technology International

USA: Photon Technology International, Inc., 300 Birmingham Road, PO Box 272 Birmingham, NJ 08011
Tel: 609-894-4420, Fax: 609-894-1579, E-mail: marketing@pti-nj.com, www.pti-nj.com

Canada: Photon Technology International, Inc., 347 Consortium Court, London, Ontario, N6E 2S8
Tel: 519-668-6920, Fax: 519-668-8437, E-mail: sales@pti-can.com

UK: Photon Technology International, Inc., Unit M1 Rudford Industrial Estate, Ford Road, Ford, West Sussex BN180BF
Tel: +44 (0) 1903 719555, Fax: +44 (0) 1903 725722. E-mail: sales@pti-uk.co.uk

Germany: PhotoMed GmbH, Inninger Str. 1, 82229 Seefeld, Germany,
Tel: +49 (0) 8152 993090, Fax: +49 (0) 8152 993098, E-mail: sales@photomed.com