

# Flow-through Refractometry

RFM REFRACTOMETER FLOWCELL ACCESSORIES AND INSTRUMENTS



# Micro. Macro. Funnel. Flowcell.

# Why use RFM Refractometer Flowcell Accessories?

Flowcell accessories from Bellingham + Stanley provide your refractometer processes with a means of semi or fully automated sample application and prism washing, creating more efficient workflows for your laboratory or factory.

For businesses that regularly measure volatile samples, RFM
Refractometers with Flowcell accessories can reduce waste,
and minimise exposure by eliminating evaporation from
the measuring process.

Bellingham + Stanley's Flowcell accessories offer inline multi-instrument configuration, useful within flavours, fragrances and essences applications. They can also provide connectivity to an auto-sampler for efficient automation to processes.

- Semi and fully automated means of sample application and removal
- Provides inline multi-instrument configuration within flavours, fragrances, essences & more
- Auto-sampler connectivity
- Eliminates evaporation minimises risk of exposure to volatile samples

# **Xycone Cell Technology for efficient washing**

Xycone Cell Technology is a unique process that efficiently washes away old sample and prevents entrapped air from forming over the prism surface. The Xycone cell chamber facilitates horizontal mounting, allowing for maximum flushing capability so that there is no interference with readings from leftover solids or residual air.

# High performance measurement improves your processes, your efficiency, and your bottom line.

For those working within food, beverage, industrial or pharmaceutical industries, RFM refractometers (from Bellingham + Stanley) complete with Flowcell Accessories, are the intelligent choice of manufacturers and producers the world over.

Bellingham + Stanley flowcell accessories are available as a "bolton" for simple fit to any RFM300/900 refractometer manufactured after April 2019 (easily identified by serial number 19100 and higher). For the food & beverage industry Bellingham + Stanley recommends Flowcell Accessories for the RFM300 Series refractometers - with micro, macro and funnel versions available. Providing automation and efficiency to your refractometry workflow.

Within the pharmaceutical industry or where aromatic and corrosive samples are prevalent, Bellingham + Stanley recommends RFM900-T Series in conjunction with Flowcell Accessories. The RFM900-T with Flowcell is built with a PEEK spill



# Micro.

Micro flowcells are used to transfer volatile, or limited volume, low viscosity liquids as part of a single or multiple instrument analysis, often incorporating an autosampler and pump within the beverage, brewing, flavours, fragrance or essential oil industries.

#### Macro.

Macro flowcells are used where sample viscosity limits the use of micro-flowcells. They are also used for connection to a pilot plant or small batch process line - where a normal process refractometer may not be suitable.

# Funnel.

Where larger volumes of sample are available, a funnel flowcell may be used. These negate the need to clean the instrument prism between sample measurements, providing a rapid sample turnaround, such as in Tare Houses of grape growers co-operatives and sugar mill receiving stations.

of Greene. Tweed and Co.

# Flow-through Refractometry flowcell accessories for RFM REFRACTOMETERS



# Flowcells for RFM300-T/M Series Refractometers (Polyacetal)

Туре	Code	Description
Micro	19-83	RFM300 micro flowcell, UNF 28/nozzle
Macro	19-84	RFM300 macro flowcell, UNF 28/nozzle
Funnel	19-85	RFM300 macro flowcell, UNF 28/nozzle, 100mm (diameter) stainless steel funnel and aniti-syphon tube

# Flowcells for RFM900-T Series Refractometers (PEEK)

Туре	Code	Description
Micro	19-91	RFM900 micro flowcell, UNF 28/nozzle
Macro	19-92	RFM900 macro flowcell, UNF 28/nozzle
Certificate	75-600	Material Certificate for wetted components (RFM900/PEEK cells only)

# **Spare Parts for RFM Flowcells**

Code	Description
19-140	UNF 28 to micro serrated nozzle, PEEK, pack of 2
19-141	UNF 28 to macro serrated nozzle, PEEK, pack of 2
19-142	RFM300 Flowcell Gasket, Chemraz®, pack of 1
19-143	RFM300 Gasket, Nitrile, pack of 5
19-144	RFM900 Mirco Flowcell Gasket, Chemraz®, pack of 1
19-145	RFM900 Macro Flowcell Gasket, Chemraz®, pack of 1

# **Flowcell Technical Specifications**

Description		Micro	Macro	Funnel
Cell Volume (chamber only)	ml	< 0.4	<1.0	1.0
Cell Volume (including nozzle adaptors)	ml	1.0	<2.0	2.0
Flushing Volume	ml	-	-	50-100
Sample Inlet Tubing Bore	mm	2	4	4
Sample Inlet/Waste Nozzle Outer Diameter	mm	3	6	6
Sample Waste Tubing Bore	mm	2	6	6
Sample Pressure (max.)	bar	0.5	0.5	Atmosphere
Sealing Ring	Chemraz® (R	Chemraz® (RFM900-T) or Nitrile (RFM300-T/M)		



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