FLOW CUPS

Simple efflux type flow cups are used to measure and control the viscosity of paints, lacquers, inks and other viscous products.

Note: In the following tables all viscosities and flow times quoted are approximate values at 25°C. Cup verification oils are supplied in a 500ml container along with a works calibration certificate traceable to International standards (ISO 3104 and ISO 3105). The certificate quotes the viscosities of the oil at 20, 25 and 30°C, along with the equation required to calculate intermediate values and (where applicable) Krebs units at 20, 25 and 30°C.

SETA BS-ISO FLOW CUPS

ASTM D5125; EN535 - ISO 2431; DIN 53 224

- **Viscosity range from 8 to 2000mm²/s**
- **Aluminium body with stainless steel jet**
- **Suitable for 'break-thread' flow measurement.**

FLOW CUP		VERIFICATION OIL	
Seta Part No.	Description	Seta Part No.	Description
23560-0	SETA BS-ISO CUP No. 3 Orifice diameter 3.0mm Viscosity range 8 to 40mm²/s	99890-0	CUP VERIFICATION OIL Viscosity 26.2mm²/s Flow time 67 to 70 seconds
23550-0	SETA BS-ISO CUP No. 4 Orifice diameter 4.0mm Viscosity range 30 to 130mm²/s	99891-0	CUP VERIFICATION OIL Viscosity 65.5mm²/s Flow time 48 to 53 seconds
23540-0	SETA BS-ISO CUP No. 5 Orifice diameter 5.0mm Viscosity range 100 to 300mm²/s	99892-0	CUP VERIFICATION OIL Viscosity 115mm²/s Flow time 35 to 38 seconds
23610-0	SETA BS-ISO CUP No. 6 Orifice diameter 6.0mm Viscosity range 180 to 700mm²/s	99893-0	CUP VERIFICATION OIL Viscosity 398mm²/s Flow time 54 to 60 seconds
23611-0	SETA BS-ISO CUP No. 8* Orifice diameter 8.0mm Viscosity range 600 to 2000mm²/s		

*Note: * Cup is not in the current BS-ISO series, but offered for use with high viscosity samples.*

SETA ZAHN VISCOMETERS

ASTM D816 (Obs); D1084 (Obs); D4212

- **Dynamic viscosity range from 20 to 1200 centipoise**
- **Use for 'break-thread' flow measurement.**

Simple comparative instrument for checking the relative viscosity of batches of viscous fluids.

FLOW CUP		VERIFICATION OIL	
Seta Part No.	Description	Seta Part No.	Description
23750-0	SETA ZAHN CUP No. 1 Viscosity range 20 to 85 centipoise	99890-0	CUP VERIFICATION OIL Viscosity 0.262 Stokes Flow time 52 to 54 seconds
23760-0	SETA ZAHN CUP No. 2 Viscosity range 30 to 170 centipoise	99892-0	CUP VERIFICATION OIL Viscosity 1.15 Stokes Flow time 45 to 48 seconds
23770-0	SETA ZAHN CUP No. 3 Viscosity range 170 to 550 centipoise	99894-0	CUP VERIFICATION OIL Viscosity 4.53 Stokes Flow time 44 to 48 seconds
23780-0	SETA ZAHN CUP No. 4 Viscosity range 200 to 900 centipoise	99894-0	CUP VERIFICATION OIL Viscosity 4.53 Stokes Flow time 34 to 37 seconds
23790-0	SETA ZAHN CUP No. 5 Viscosity range 250 to 1200 centipoise	99895-0	CUP VERIFICATION OIL Viscosity 16.8 Stokes Flow time 70 to 78 seconds
17730-0	DIAL THERMOMETER Bimetal type -30° to +60°C, for Seta Zahn Viscometers.		

23750-0 & 17730-0

SETA FORD CUP

ASTM D1200; NF 30070

- **Kinematic viscosity range from 0.2 to 3.6 Stokes**
- **Brass construction**

FLOW CUP		VERIFICATION OIL	
Seta Part No.	Description	Seta Part No.	Description
23340-2	SETA FORD No. 2 JET Orifice diameter 0.0995inches Viscosity range 0.2 to 0.8 Stokes	99891-0	CUP VERIFICATION OIL Viscosity 0.655 Stokes Flow time 61 to 66 seconds
23350-2	SETA FORD No. 3 JET Orifice diameter 0.134 inches Viscosity range 0.4 to 2.2 Stokes	99891-0	CUP VERIFICATION OIL Viscosity 0.655 Stokes Flow time 33 to 36 seconds
23360-2	SETA FORD No. 4 JET Orifice diameter 0.162 inches Viscosity range 0.75 to 3.6 Stokes	99892-0	CUP VERIFICATION OIL Viscosity 1.15 Stokes Flow time 32 to 35 seconds

SETA B FLOWCUPS

- **Kinematic viscosity range from 0 to 50 Stokes**
- **CNC machined from brass.**

FLOW CUP		VERIFICATION OIL	
Seta Part No.	Description	Seta Part No.	Description
23570-0	SETA B FLOW CUP No. 2 JET Orifice diameter 0.093 inches Viscosity range 0 to 0.5 Stokes	99891-0	CUP VERIFICATION OIL Viscosity 0.655 Stokes Flow time 146 to 162 seconds
23580-0	SETA B FLOW CUP No. 3 JET Orifice diameter 0.125 inches Viscosity range 0.4 to 1.2 Stokes	99891-0	CUP VERIFICATION OIL Viscosity 0.655 Stokes Flow time 54 to 59 seconds
23600-0	SETA B FLOW CUP No. 4 JET Orifice diameter 0.156 inches Viscosity range 0.8 to 2.5 Stokes	99892-0	CUP VERIFICATION OIL Viscosity 1.15 Stokes Flow time 41 to 45 seconds
23590-0	SETA B FLOW CUP No. 5 JET Orifice diameter 0.187 inches Viscosity range 1.5 to 10 Stokes	99896-0	CUP VERIFICATION OIL Viscosity 2.29 Stokes Flow time 42 to 46 seconds
23510-0	SETA B FLOW CUP No. 6 JET Orifice diameter 0.281 inches Viscosity range 10 to 50 Stokes	99897-0	CUP VERIFICATION OIL Viscosity 11.3 Stokes Flow time 49 to 54 seconds

Note: This type of cup has been in popular use for many years but does not conform to the current requirements of ISO 2431 - EN535. Formerly required for BS 3900 Section A6.

FLOW CUP ACCESSORIES

OPTIONAL

23520-0	SETA PROTECTIVE COLLAR FOR TYPE B AND FORD CUPS
23660-0	SETA STAND, to support all flow cups, with adjustable feet for levelling, spirit level, and square glass scraper.
23680-0	SETA SPIRIT LEVEL, circular type to suit all cups.
23661-0	SIGHT SCREEN, FLOW CUP, aids detection of 'break thread'.
22750-2	STOPWATCH DIGITAL, hand-held, 0.1s resolution.

THERMOMETERS:
ASTM90C or 91C

For viscosity standards see page 49.

23660-0 and Flow Cups

FLOW CUP VERIFICATION

Over a period of time the orifice of a flow cup may become damaged or suffer from a build up of material. Stanhope-Seta offer a verification service for flow cups using oils with a certified viscosity. Please contact our sales office for more information.