Flow Cups

Ford Viscosity Cups

BYK-Gardner Ford Viscosity Cups are guaranteed to be within 3% (drain time of calibration oil) throughout the recommended use range.

- For low viscosity liquids
- Body made of solid bar aluminum
- Stainless steel orifice
- Calibrated against standard oils referenced to certified NIST oils (National Institute of Standards and Technology of United States)
- Certified cups available on request

	K	C
Ford Cup No. 2	1.24	770
Ford Cup No. 3	2.31	550
Ford Cup No.4	3.7	400

Standards

ASTM	D 333, D 365, D 1200

Ford Cup No. 4

DIN Flow Cup

This cup holds 100 ml ± 1 ml, and has an integrated orifice with a diameter of 4 mm ± 0.02 mm.

- For low viscosity liquids
- Body made of anodized aluminum
- Stainless steel orifice, interior polished
- Calibrated against standard oils referenced to certified PTB oils (Federal Institute of Physics and Metrology of Germany) to be within 3% (drain time of calibration oil)

	K	C
DIN 4 mm	4.57	452

Standards

DIN	53 211*

DIN Cup 4 Certificate included

ISO Flow Cup

This cup has a longer orifice, less tapered body and slightly different inner dimensions than the DIN 53211* flow cup and thus provides different efflux times. The extended measurement range makes the ISO cup a useful supplement of the DIN cup.

- Recommended for international use
- Body made of anodized aluminum
- Stainless steel orifice, interior polished
- Calibrated against standard oils referenced to certified PTB oils to be within 3% (drain time of calibration oil)

	K	C
ISO 3 mm	0.443	200
ISO 4 mm	1.37	200
ISO 5 mm	3.28	220
ISO 6 mm	6.9	570

Standards

ASTM	D 5125
ISO	2431

Flow Cup ISO 3 mm
Certificate included

Centistokes = K * efflux time - (C/ efflux time)

Centipose = Centistokes x Specific Gravity

Flow Cups

The flow cups offer a more precise vicosity measurement compared to a dip cup. A stand is used to hold the flow cup level and allows the operator to control the start measurment time. Jacketed stands or waterbath stands are available to control the sample temperature prior to and during the measurement.

The flow cups have a sturdy design to prevent damage during handling and cleaning.

Ordering Information / Technical Specifications

Cat. No.	Description	Standard	Certificate	Range in Centistokes	Efflux Time	Orifice Diameter
7201	Ford Viscosity Cup No. 2	ASTM	No	25 - 120	30 - 100	0.10 in
0172	Ford Viscosity Cup No. 2	ASTM	Yes	25 - 120	30 - 100	0.10 in
0175	Ford Viscosity Cup No. 3	ASTM	No	40 - 220	25 - 105	0.13 in
0173	Ford Viscosity Cup No. 3	ASTM	Yes	40 - 220	25 - 105	0.13 in
0176	Ford Viscosity Cup No. 4	ASTM	No	70 - 370	20 - 105	0.16 in
0174	Ford Viscosity Cup No. 4	ASTM	Yes	70 - 370	20 - 105	0.16 in
0140	DIN Flow Cup 2 - 8 mm**	DIN 53211*	No	see 0152 to 0158		interchangeable orifices
0115	DIN Flow Cup, 4 mm	DIN 53211*	Yes	100 - 500	20 - 110	4 mm
0213	ISO Flow Cup 3 mm	ISO 2431	Yes	10 - 40	30 - 100	3 mm
0214	ISO Flow Cup 4 mm	ISO 2431	Yes	25 - 130	25 - 100	4 mm
0215	ISO Flow Cup 5 mm	ISO 2431	Yes	70 - 370	25 - 100	5 mm
0216	ISO Flow Cup 6 mm	ISO 2431	Yes	130 - 700	25 - 100	6 mm

Comes complete with:
Flow cup
Operating manual
Certificate (except for 7201, 0175, 0176, 0140)

**** Note:** At least one interchangeable orifice must be purchased (0152 through 0158 listed in the accessory table) with the purchase of the 0140 DIN cup.

*Note: DIN 53211 was withdraw in October 1996

Info! Information on the flow cup stands please see the accessories page.

Flow Cups

Recommended Accessories

For consistent results temperature control of the sample and flow cup is recommended. The sample should be placed in a water bath for a sufficient time to equilibrate to the test temperature. The Flow Cup Stand with water jacket (7210) can be used to equilibrate the flow cup to the test temperature and maintain the temperature during the measurement.

To check the performance of the flow cup and measurement conditions certified standard oils are available. Please refer to the Viscosity Standard Guide table to select the correct standard oil.

Tripod Stand - 0425

Flow Cup Stand with water jacket - 7210

Ordering Information / Accessories

Cat. No.	Description	
0152	Interchangeable Orifice 2mm	For DIN cup Cat. No. PV-0140; Stainless steel; 2 mm diameter
0153	Interchangeable Orifice 3mm	For DIN cup Cat. No. PV-0140; Stainless steel; 3 mm diameter
0154	Interchangeable Orifice 4mm	For DIN cup Cat. No. PV-0140; Stainless steel; 4 mm diameter
0156	Interchangeable Orifice 6mm	For DIN cup Cat. No. PV-0140; Stainless steel; 6 mm diameter
0158	Interchangeable Orifice 8mm	For DIN cup Cat. No. PV-0140; Stainless steel; 8 mm diameter
0425	Tripod Stand, for Flow Cups	Holding device for Ford, DIN, and ISO cups
7210	Flow Cup Stand with water jacket	For DIN, ISO, and Ford cups; Closed double wall jacket , hose connection, spirit level, polished glass plate; made of anodized aluminum.
0420	Ring Stand for Flow Cups	Holding device for any flow cup
7208	Ford Cup Accessory Kit	For Ford cups; Cover glass for removing excess sample from cup; bubble level for leveling cup and stand; stainless steel beaker; package of cleaning swabs
0480	Thermometer	Measuring range: -10 °C to 100 °C
0440	Glass Plate	Spare glass plate with polished rims; Dimensions: 100 x 150 mm (3.9 x 5.9 in)
0446	Spirit Level	Spare spirit level for leveling flow cups; for horizontal adjustment of instruments