Viscosity Cup Conversion Chart

The table below lists the major flow cup types together with a conversion chart of Efflux Time (in seconds) to Viscosity in Centistokes (cSt). It has been constructed from the various International Standard Calculators. Each cup design is unique and care must be taken when comparing viscosity values between different cup types. These values are the absolute values and do not include the allowed tolerances, as these differ considerably between each of the Standards.

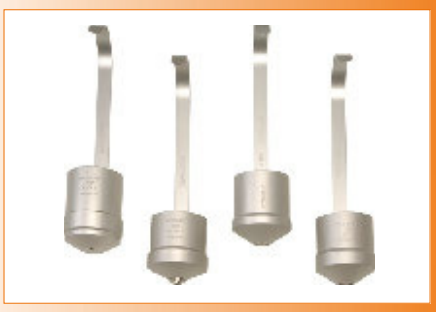
Viscosity Cup Type

Time (seconds)	DIN	BS					ISO				FORD / ASTM				ZAHN					SHELL					
	4	2	3	4	5	6	3	4	5	6	1	2	3	4	1	2	3	4	5	1	2	3	4	5	6
15	38	6.4		19	40	234			35	66			19	40		4	88	148	322			20	48	91	235
16	45	6.8	3	24	48	262			39	75			22	44		7	99	163	345			21	52	98	251
17	51	7.3	5	28	56	290			43	84			24	48		11	111	178	368			23	55	104	267
18	57	7.7	7	32	64	317			47	93			26	52		14	123	192	391	1.1	7.5	24	59	111	284
19	63	8.1	9	35	72	343			51	101		1	29	56		18	135	207	414	1.4	8.1	26	62	117	300
20	69	8.6	11	39	79	369			55	110		3	31	60		21	146	222	437	1.6	8.6	27	66	124	316
21	74	9.0	13	43	86	395			58	118		4	33	64		25	158	237	460	1.8	9.2	29	69	130	332
22	80	9.4	15	47	93	420			62	126		6	36	67		28	170	252	483	2.0	9.8	30	72	137	348
23	85	9.8	17	50	100	445	1		66	134		7	38	71		32	181	266	506	2.3	10.4	32	76	143	365
24	91	10.3	18	54	107	470	2		70	142		9	40	75		35	193	281	529	2.5	10.9	33	79	150	381
25	96	10.7	20	57	114	494	3		73	150		10	43	79		39	205	296	552	2.7	11.5	35	83	156	397
26	101	11.1	22	60	120	519	4		77	157		12	45	83		42	216	311	575	2.9	12.1	36	86	163	413
27	107	11.5	23	64	127	543	4.5		80	165		13	47	87		46	228	326	598	3.2	12.7	38	90	169	429
28	112	12.0	25	67	133	567	5		84	173		14	49	91		49	240	340	621	3.4	13.2	39	93	176	446
29	117	12.4	26	70	140	591	6		88	180		16	52	94		53	252	355	644	3.6	13.8	41	97	182	462
30	122	12.8	28	73	146	614	6.6		91	188		17	54	98	1	56	263	370	667	3.8	14.4	42	100	189	478
31	127	13.3	30	77	153	638	7.3		95	196		19	56	102	2	60	275	385	690	4.1	15.0	44	104	195	494
32	132	13.7	31	80	159	662	7.9		98	203		20	59	106	3	63	287	400	713	4.3	15.6	45	107	202	510
33	137	14.1	33	83	165	685	8.6		102	210		22	61	110	4	67	298	414	736	4.5	16.1	47	110	208	527
34	142	14.5	34	86	171	709	9.2		105	218		23	63	114	6	70	310	429	759	4.7	16.7	48	114	215	543
35	147	15.0	35	89	177	732	9.8		109	225		24	66	117	7	74	322	444	782	5.0	17.3	50	117	221	559
36	152	15.4	37	92	184	755	10.4		112	233		26	68	121	8	77	333	459	805	5.2	17.9	51	121	228	575
37	157	15.8	38	96	190	778	11.0		115	240		27	70	125	9	81	345	474	828	5.4	18.4	53	124	234	591
38	162	16.3	40	99	196	801	11.6		119	247	1.5	29	73	129	10	84	357	488	851	5.6	19.0	54	128	241	608
39	167	16.7	41	102	202	825	12.1		122	254	2.0	30	75	133	11	88	369	503	874	5.9	19.6	56	131	247	624
40	172	17.1	43	105	208	848	12.7		126	262	2.5	32	77	137	12	91	380	518	897	6.1	20.2	57	135	254	640
41	176	17.5	44	108	214	871	13.3		129	269	3.0	33	80	141	13	95	392	533	920	6.3	20.7	59	138	260	656
42	181	18.0	45	111	220	893	13.8		133	276	3.5	35	82	144	14	98	404	548	943	6.6	21.3	60	141	267	672
43	186	18.4	47	114	226	916	14.4		136	283	4.0	36	84	148	15	102	415	562	966	6.8	21.9	62	145	273	689
44	191	18.8	48	117	232	939	14.9		139	291	4.5	37	86	152	17	105	427	577	989	7.0	22.5	63	148	280	705
45	196	19.2	50	120	238	962	15.5		143	298	5.0	39	89	156	18	109	439	592	1012	7.2	23.0	65	152	286	721
46	200	19.7	51	123	244	985	16.0		146	305	5.5	40	91	160	19	112	450	607	1035	7.5	23.6	66	155	293	737
47	205	20.1	52	126	250	1008	16.6		149	312	6.0	42	93	164	20	116	462	622	1058	7.7	24.2	68	159	299	753
48	210	20.5	54	129	255	1030	17.1		153	319	6.5	43	96	168	21	119	474	636	1081	7.9	24.8	69	162	306	770
49	215	21.0	55	132	261	1053	17.6		156	326	7.0	45	98	171	22	123	486	651	1104	8.1	25.3	71	166	312	786
50	219	21.4	56	135	267	1076	18.2		160	334	7.5	46	100	175	23	126	497	666	1127	8.4	25.9	72	169	319	802
51	224	21.8	58	138	273	1099	18.7		163	341	8.0	48	103	179	24	130	509	681	1150	8.6	26.5	74	173	325	818
52	229	22.2	59	141	279	1121	19.2		166	348	8.3	49	105	183	25	133	521	696	1173	8.8	27.1	76	176	332	834
53	234	22.7	60	144	285	1144	19.7		170	355	8.8	50	107	187	26	137	532	710	1196	9.0	27.6	77	179	338	851
54	238	23.1	62	147	291	1166	20.2		173	362	9.0	52	110	191	28	140	544	725	1219	9.3	28.2	79	183	345	867
55	243	23.5	63	150	297	1189	20.7		176	369	9.8	53	112	194	29	144	556	740	1242	9.5	28.8	80	186	351	883
56	248	24.0	64	153	302	1212	21.2		180	376	10.3	55	114	198	30	147	567	755	1265	9.7	29.4	82	190	358	899
57	253	24.4	66	156	308	1234	21.7		183	383	10.8	56	116	202	31	151	579	770	1288	9.9	30.0	83	193	364	915
58	257	24.8	67	159	314	1257	22.2		186	390	11.3	58	119	206	32	154	591	784	1311	10.2	30.5	85	197	371	932
59	262	25.2	68	162	320	1279	22.7		190	397	11.8	59	121	210	33	158	603	799	1334	10.4	31.1	86	200	377	948
60	267	25.7	70	165	326	1302	23.2		193	405	12.3	60	123	214	34	161	614	814	1357	10.6	31.7	88	204	384	964
65	290	27.8	76	179	354	1414	26		210	440	15	68	135	233	40	179	673	888	1472	11.8	34.6	95	221	416	1045
70	313	29.9	83	194	383	1526	28		226	475	17	75	147	252	45	196	731	962	1587	12.9	37.4	103	238	449	1126
75	337	32.1	89	208	412	1638	31	3	243	510	20	82	158	271	51	214	790	1036	1702	14.0	40.3	110	255	481	1207
80	360	34.2	96	223	441	1750	33	16	260	545	22	89	170	291	56	231	848	1110	1817	15.1	43.2	118	273	514	1288
85	383	36.4	102	237	469	1861	35	28	276	580	25	96	181	310	61.6	249	907	1184	1932	16.3	46.1	125	290	546	1369
90	406	38.5	108	252	498	1973	38	40	293	615	27	104	193	329	67	266	965	1258	2047	17.4	49.0	133	307	579	1450
100	452	42.8	121	280	554	2195	42	62	326	684	32	118	216	368	78	301	1082	1406	2277	19.7	54.7	148	342	644	1612
110	499	47.0	134	309	611	2418	47	83	359	754	37	132	239	406	89	336	1199	1554	2507	21.9	60.5	163	376	709	1774
120	545	51.3	146	338	668	2640	51	102	392	823	42	147	262	445	100	371	1316	1702	2737	24.2	66.2	178	411	774	1936
130	591	55.6	159	366	724	2862	56	120	425	893	47	161	285	483	111	406	1433	1850	2967	26.4	72.0	193	445	839	2098
140	637	59.9	171	395	781	3084	61	138	458	962	51	176	308	522	122	441	1550	1998	3197	28.7	77.8	208	480	904	2260
150	682	64.2	184	424	837	3305	65	156	491	1031	56	190	331	560	133	476	1667	2146	3427	31.0	83.5	223	514	969	2422

All measurements are in Centistokes (cSt). Centipoise (cP) = cSt x product density

elcometer®

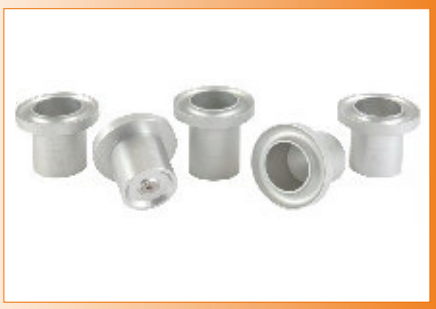
Viscosity



Viscosity is perceived as 'thickness' or resistance to pouring, but there is more to viscosity than this. All fluids have an internal friction between molecules, which determines how well fluid flows. Due to this internal friction, energy is required to move the liquid and viscosity is the measure of the resistance to flow.

Fluids are categorised as Newtonian or non-Newtonian.

- ***Newtonian fluids***, such as water and some oils, are fluids that continue to flow at a given temperature, regardless of the forces acting on it. No matter how fast it is stirred or mixed, Newtonian fluids will always behave in the same manner. Newtonian fluids are generally measured with flow and dip viscosity cups.
- ***Non-Newtonian fluids*****,** such as paints and ketchup, are fluids which change viscosity when a force is applied. There are several different categories and sub-categories of non-Newtonian fluids, they can be described as the following:



Thixotropic - substances which are gel-like at rest but liquid when agitated, eg: non-drip paints, tomato ketchup and most varieties of honey.

Rheopectic - substances where viscosity increases with duration of stress, eg: some lubricants.

Pseudoplastics - also known as shear thinning - the viscosity decreases with increased shear rate, eg: blood, gelatin and clay.

Dilatant - also known as shear thickening - the viscosity increases with increased shear rate, eg: suspensions of rice, corn starch or concentrated sugar solution.

Measuring Viscosity

Non-Newtonian fluids are measured using Rotational viscometers (please see pages 19-25).

Elcometer manufactures and supplies a wide range of viscosity gauges from flow cups to dip cups to rotational viscometers.

- ***Flow Cups****:* The process of flow through an orifice can often be used as a relative measurement and classification of viscosity. This measured kinematic viscosity is generally expressed in seconds of flow time which can be converted into Centistokes using a viscosity disc calculator. (See table opposite).
- ***Dip Cups****:* Using the same principle as flow cups, dip cups - Frikmar, Zahn, Shell etc. - can be used to provide a quick viscosity measurement either on-site or on the shop-floor.
- ***Rotational****:* Rotational viscometers are used to determine the viscosity of liquids which do not depend solely on temperature and pressure.
- ***Flow Measurement****:* Simple to use instruments that measure the fluidity and flow of coatings, especially thick or paste-like materials.

Elcometer Viscosity Dip Cups

Elcometer viscosity dip cups are ideal for the quick testing of the viscosity of paints, varnishes and similar products during manufacturing processes.

Dip cups are dipped into the substance being tested and the viscosity is determined by the time it takes for the cup to empty with a steady flow.

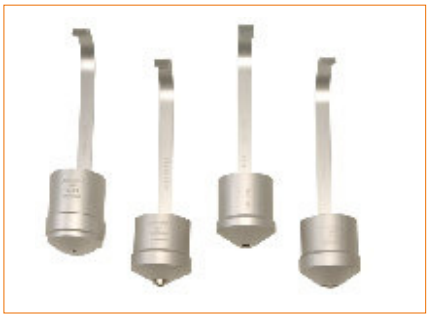
Elcometer has a range of viscosity dip cups which includes Frikmar, Zahn, Shell, and Lory dip cups.

Elcometer Frikmar Viscosity Dip Cups

Thanks to its handle, this cup is very easy to use to perform checks on site or during the manufacturing process. It is ideal for measuring the consistency of paints, varnishes and similar products.

The cup is first dipped into the product to be measured, then the contents empty through the orifice. The measured kinematic viscosity is generally expressed in seconds (s) flow time, which can be converted to Centistokes (cSt) if the Standard stipulates a conversion method.

Several ranges are available, according to the Standards being used; from 7 to 1100cSt.



Technical Specification

certificate available

DIN Viscosity Dip Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002434M001	Elcometer 2434/1 DIN Dip Cup	2	2mm / 0.079″	-
K0002434M002	Elcometer 2434/2 DIN Dip Cup	4	4mm / 0.158″	96 - 683
K0002434M003	Elcometer 2434/3 DIN Dip Cup	6	6mm / 0.236″	-
K0002434M004	Elcometer 2434/4 DIN Dip Cup	8	8mm / 0.315″	-
K0002434M001C	Elcometer 2434/1 with calibration certificate	2 (d)	2mm / 0.079″	-
K0002434M002C	Elcometer 2434/2 with calibration certificate	4 (e)	4mm / 0.158”	96 - 683
K0002434M003C	Elcometer 2434/3 with calibration certificate	6 (d)	6mm / 0.236″	-
K0002434M004C	Elcometer 2434/4 with calibration certificate	8 (d)	8mm / 0.315″	-

Can be used in accordance with: *(see Standards Explained inside Front Cover)*
DIN 53211 (cup 4 only)

FORD/ASTM Viscosity Dip Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002435M001	Elcometer 2435/1 FORD/ASTM Dip Cup	4	4mm / 0.158″	70 - 370
K0002435M001C	Elcometer 2435/1 with calibration certificate	4 (e)	4mm / 0.158″	70 - 370

Can be used in accordance with: (*see Standards Explained inside Front Cover)*
ASTM D 1200

(1) *For Information Only* (d) *Dimensional Certificate* (e) *Efflux Time Certificate*

Technical Specification

certificate available

ISO Viscosity Dip Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002437M002	Elcometer 2437/2 ISO Dip Cup	3	3mm / 0.118″	7 - 42
K0002437M003	Elcometer 2437/3 ISO Dip Cup	4	4mm / 0.158″	34 - 135
K0002437M006	Elcometer 2437/6 ISO Dip Cup	5	5mm / 0.197″	91 - 326
K0002437M004	Elcometer 2437/4 ISO Dip Cup	6	6mm / 0.236″	188 - 684
K0002437M005	Elcometer 2437/5 ISO Dip Cup	8	8mm / 0.315″	-
K0002437M002C	Elcometer 2437/2 with calibration certificate	3 (e)	3mm / 0.118″	7 - 42
K0002437M003C	Elcometer 2437/3 with calibration certificate	4 (e)	4mm / 0.158″	34 - 135
K0002437M006C	Elcometer 2437/6 with calibration certificate	5 (e)	5mm / 0.197″	91 - 326
K0002437M004C	Elcometer 2437/4 with calibration certificate	6 (e)	6mm / 0.236″	188 - 684
K0002437M005C	Elcometer 2437/5 with calibration certificate	8 (d)	8mm / 0.315″	-

Can be used in accordance with: *(see Standards Explained inside Front Cover)*

ASTM D 5125, DIN 53224, EN 535, ISO 2431, NBN T22-108, NF T30-014, NF T30-070

AFNOR Viscosity Dip Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002436M001	Elcometer 2436/1 AFNOR Dip Cup	4	4mm / 0.158″	50 - 1100

Can be used in accordance with: *(see Standards Explained inside Front Cover)*

AFNOR NF T30-014

Accessories

For a full range of accessories see page 17

(1) *For Information Only* (d) *Dimensional Certificate* (e) *Efflux Time Certificate*

Customers who have purchased the Elcometer Dip Cups also purchased:

◀ Elcometer 2400 Conversion Disc, page 17

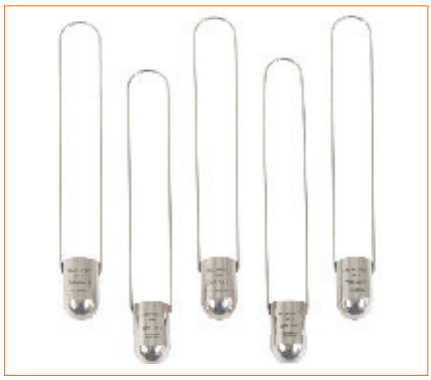
Elcometer 2300 Rotational Viscometer, page 21 - 27 ▶

Elcometer 2210 Zahn Viscosity Dip Cups

The Elcometer 2210 Zahn Dip Cup is a small U-shaped cup suspended from a looped wire. This method is ideal for measuring the consistency of paints, varnishes and similar products.

Simply dip the cup into the product to be measured, lift it out and measure how long it takes for the contents to empty through the orifice.

There are five cups with five different orifices sizes available, ranging from 5 to 1840cSt.



Technical Specification

certificate available

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002210M001	Elcometer 2210/1 Zahn Dip Cup	1	1mm / 0.039″	5 - 56
K0002210M002	Elcometer 2210/2 Zahn Dip Cup	2	2mm / 0.079″	21 - 231
K0002210M003	Elcometer 2210/3 Zahn Dip Cup	3	3mm / 0.118″	146 - 848
K0002210M004	Elcometer 2210/4 Zahn Dip Cup	4	4mm / 0.158″	222 - 1110
K0002210M005	Elcometer 2210/5 Zahn Dip Cup	5	5mm / 0.197″	460 - 1840
K0002210M001C	Elcometer 2210/1 with calibration certificate (e)	1	1mm / 0.039″	5 - 56
K0002210M002C	Elcometer 2210/2 with calibration certificate (e)	2	2mm / 0.079″	21 - 231
K0002210M003C	Elcometer 2210/3 with calibration certificate (e)	3	3mm / 0.118″	146 - 848
K0002210M004C	Elcometer 2210/4 with calibration certificate (e)	4	4mm / 0.158″	222 - 1110
K0002210M005C	Elcometer 2210/5 with calibration certificate (e)	5	5mm / 0.197″	460 - 1840

Can be used in accordance with: *(see Standards Explained inside Front Cover)*

ASTM D 1084, ASTM D 4212, ASTM D 3794

(1) *For Information Only* (e) *Efflux Time Certificate*

Accessories

For a full range of accessories, see page 17

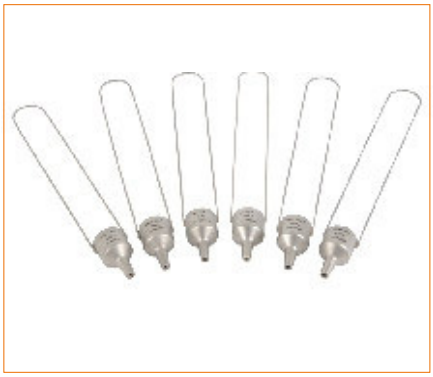
Elcometer 2310 Shell Viscosity Dip Cups

The Elcometer 2310 Shell Viscosity Dip Cups are stainless steel cups for quick measurements on-site or during production. These cups are often used in the printing or ink industry.

Simply dip the cup into the product to be measured, lift it out and measure how long it takes for the contents to empty through the orifice.

The measured kinematic viscosity is generally expressed in seconds (s) flow time, which can be converted into Centistokes (cSt).

There are six different orifice sizes available, for measurements between 2 and 1300cSt.



Technical Specification

certificate available

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002310M001	Elcometer 2310/1 Shell Dip Cup	1	1mm / 0.039″	2 - 20
K0002310M002	Elcometer 2310/2 Shell Dip Cup	2	2mm / 0.079″	10 - 50
K0002310M003	Elcometer 2310/3 Shell Dip Cup	3	3mm / 0.118″	30 - 120
K0002310M004	Elcometer 2310/4 Shell Dip Cup	4	4mm / 0.158″	70 - 270
K0002310M005	Elcometer 2310/5 Shell Dip Cup	5	5mm / 0.197″	125 - 520
K0002310M006	Elcometer 2310/6 Shell Dip Cup	6	6mm / 0.236″	320 - 1300
K0002310M001C	Elcometer 2310/1 with calibration certificate	1 (e)	1mm / 0.039″	2 - 20
K0002310M002C	Elcometer 2310/2 with calibration certificate	2 (e)	2mm / 0.079″	10 - 50
K0002310M003C	Elcometer 2310/3 with calibration certificate	3 (e)	3mm / 0.118″	30 - 120
K0002310M004C	Elcometer 2310/4 with calibration certificate	4 (e)	4mm / 0.158″	70 - 270
K0002310M005C	Elcometer 2310/5 with calibration certificate	5 (e)	5mm / 0.197″	125 - 520
K0002310M006C	Elcometer 2310/6 with calibration certificate	6 (e)	6mm / 0.236″	320 - 1300

Can be used in accordance with: *(see Standards Explained inside Front Cover)*
ASTM D 4212

(1) *For Information Only* (e) *Efflux Time Certificate*

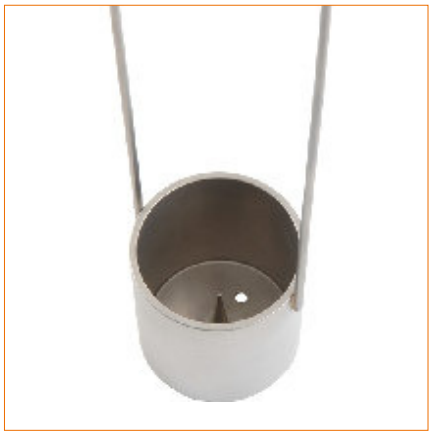
Accessories

For a full range of accessories, see page 17

Elcometer 2215 Lory Viscosity Cup

The Elcometer 2215 Lory Viscosity Cup is a conventional cylindrical cup with a needle fixed into the bottom for quick measurements on-site or during production.

The cup is first dipped into the product to be measured, then empties through the escape hole. Unlike other Viscosity cups, the flow time is measured as soon as the point of the needle appears.



Technical Specification

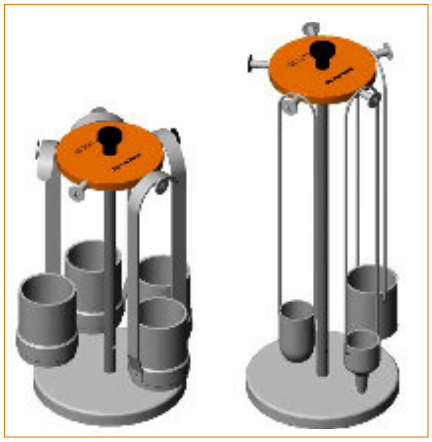
Part Number	Model	Cup Number	Range (cSt)[1]
K0002215M001	Elcometer 2215	1	50 - 1100

(1) *For Information Only*

Elcometer Dip Cup Stands

The Elcometer Dip Cup Stands provide a useful, compact way of storing dip cups when they are not in use.

The stand has been designed specifically to hold up to 5 cups. Suitable for Elcometer Frikmar, Zahn, Shell and Lory Viscosity Dip Cups.



Technical Specification

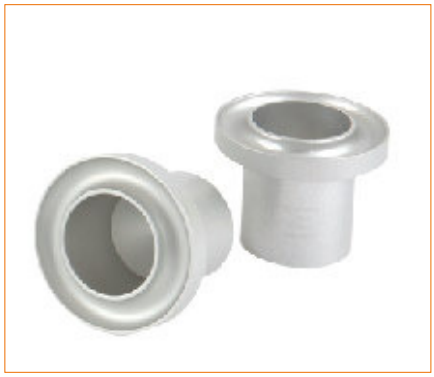
Part Number	Description
K0002999M001	Elcometer Dip Cup Stand for Zahn, Shell & Lory Cups
K0002999M002	Elcometer Dip Cup Stand for Frikmar Cups

Viscosity Flow Cups

Viscosity Flow cups are very easy to use instruments of anodized aluminium with a stainless steel orifice, for measuring the consistency of paints, varnishes and similar products. The measured kinematic viscosity is generally expressed in seconds (s) flow time. If the Standards stipulate conversion methods the flow time can be converted into Centistokes (cSt).

Elcometer offers the option to order viscosity cups complete with calibration certificates which offer traceability and assurance that the viscosity cups have been individually tested and comply to Standards. The cups can be supplied separately or with an adjustable stand which includes a precision level and an overflow glass draw plate. The stand can also be supplied with a flow jacket for temperature control (thermojacket).

Several ranges are available according to Standards, from 5 to 5100cSt; please refer to the table on page 8. For a full range of accessories, see page 17.



Technical Specification

e certificate available

ISO Viscosity Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002353M001	Elcometer 2353/1 ISO Viscosity Cup	3	3mm / 0.118″	7 - 42
K0002353M002	Elcometer 2353/2 ISO Viscosity Cup	4	4mm / 0.158″	34 - 135
K0002353M003	Elcometer 2353/3 ISO Viscosity Cup	5	5mm / 0.197″	91 - 326
K0002353M004	Elcometer 2353/4 ISO Viscosity Cup	6	6mm / 0.236″	188 - 684
K0002353M005	Elcometer 2353/5 ISO Viscosity Cup	8	8mm / 0.315″	-
K0002353M001C	Elcometer 2353/1 with calibration certificate (e)	3	3mm / 0.118″	7 - 42
K0002353M002C	Elcometer 2353/2 with calibration certificate (e)	4	4mm / 0.158″	34 - 135
K0002353M003C	Elcometer 2353/3 with calibration certificate (e)	5	5mm / 0.197″	91 - 326
K0002353M004C	Elcometer 2353/4 with calibration certificate (e)	6	6mm / 0.236″	188 - 684
K0002353M005C	Elcometer 2353/5 with calibration certificate (d)	8	8mm / 0.315″	-

Can be used in accordance with: (see Standards Explained inside Front Cover)
ASTM D 5125, DIN 53224, EN 535, ISO 2431, NBN T22-108, NF T30-070

BS Viscosity Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002354M001	Elcometer 2354/1 BS Viscosity Cup	2	2mm / 0.079″	6 - 43
K0002354M002	Elcometer 2354/2 BS Viscosity Cup	3	3mm / 0.118″	28 - 150
K0002354M003	Elcometer 2354/3 BS Viscosity Cup	4	4mm / 0.158″	89 - 340
K0002354M004	Elcometer 2354/4 BS Viscosity Cup	5	5mm / 0.197″	79 - 441
K0002354M005	Elcometer 2354/5 BS Viscosity Cup	6	6mm / 0.236″	369 - 1302
K0002354M001C	Elcometer 2354/1 with calibration certificate (d)	2	2mm / 0.079″	6 - 43
K0002354M002C	Elcometer 2354/2 with calibration certificate (d)	3	3mm / 0.118″	28 - 150
K0002354M003C	Elcometer 2354/3 with calibration certificate (d)	4	4mm / 0.158″	89 - 340
K0002354M004C	Elcometer 2354/4 with calibration certificate (d)	5	5mm / 0.197″	79 - 441
K0002354M005C	Elcometer 2354/5 with calibration certificate (d)	6	6mm / 0.236″	369 - 1302

Can be used in accordance with: (see Standards Explained inside Front Cover)
BS 3900 A6:1971, AS/NZS 1580.214.2 (cup 4 only)

(1) *For Information Only* (d) *Dimensional Certificate* (e) *Efflux Time Certificate*

Viscosity Flow Cups

Technical Specification

certificate available

FORD/ASTM Viscosity Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002351M001	Elcometer 2351/1 FORD/ASTM Viscosity Cup	1	1mm / 0.039″	10 - 35
K0002351M002	Elcometer 2351/2 FORD/ASTM Viscosity Cup	2	2mm / 0.079″	25 - 120
K0002351M003	Elcometer 2351/3 FORD/ASTM Viscosity Cup	3	3mm / 0.118″	49 - 220
K0002351M004	Elcometer 2351/4 FORD/ASTM Viscosity Cup	4	4mm / 0.158″	70 - 370
K0002351M005	Elcometer 2351/5 FORD/ASTM Viscosity Cup	5	5mm / 0.197″	200 - 1200
K0002351M001C	Elcometer 2351/1 with calibration certificate (e)	1	1mm / 0.039″	10 - 35
K0002351M002C	Elcometer 2351/2 with calibration certificate (e)	2	2mm / 0.079″	25 - 120
K0002351M003C	Elcometer 2351/3 with calibration certificate (e)	3	3mm / 0.118″	49 - 220
K0002351M004C	Elcometer 2351/4 with calibration certificate (e)	4	4mm / 0.158″	70 - 370
K0002351M005C	Elcometer 2351/5 with calibration certificate (e)	5	5mm / 0.197″	200 - 1200

Can be used in accordance with: *(see Standards Explained inside Front Cover)*
ASTM D1200

DIN Viscosity Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002350M001	Elcometer 2350/1 DIN Viscosity Cup	2	2mm / 0.079″	-
K0002350M002	Elcometer 2350/2 DIN Viscosity Cup	4	4mm / 0.158″	96 - 683
K0002350M003	Elcometer 2350/3 DIN Viscosity Cup	6	6mm / 0.236″	-
K0002350M004	Elcometer 2350/4 DIN Viscosity Cup	8	8mm / 0.315″	-
K0002350M001C	Elcometer 2350/1 with calibration certificate (d)	2	2mm / 0.079″	-
K0002350M002C	Elcometer 2350/2 with calibration certificate (e)	4	4mm / 0.158″	96 - 683
K0002350M003C	Elcometer 2350/3 with calibration certificate (d)	6	6mm / 0.236″	-
K0002350M004C	Elcometer 2350/4 with calibration certificate (d)	8	8mm / 0.315″	-

Can be used in accordance with: *(see Standards Explained inside Front Cover)*
DIN 53211 (cup 4 only)

AFNOR Viscosity Cups

Part Number	Description	Cup Number	Orifice Diameter	Range (cSt)[1]
K0002352M001	Elcometer 2352/1 AFNOR Viscosity Cup	2.5	2.5mm / 0.098”	5 - 140
K0002352M002	Elcometer 2352/2 AFNOR Viscosity Cup	4	4mm / 0.158”	50 - 1100
K0002352M003	Elcometer 2352/3 AFNOR Viscosity Cup	6	6mm / 0.236”	510 - 5100

Can be used in accordance with: *(see Standards Explained inside Front Cover)*
NF T30-014

(1) *For Information Only* (d) *Dimensional Certificate* (e) *Efflux Time Certificate*