# MS VANE

#### **MEASURING SYSTEMS**

Measuring spindles with blades (316L stainless steel).

These systems are ideal for viscosity measurement (value or curve) in control or development of all types of products even of very high viscosity with or without particles (size <5mm).

They can be used for direct measurement in user's containers or in tubes of MS-DIN systems.

These systems are not compatible with all instruments in LR version.

Name	Part number	Dim. (mm)
Vane 72	120017	Ø 21,67 - L 43,38
Vane 73	111108	Ø 12,67 - L 25,35
Vane 74	111115	Ø 5,89 - L 11,76
Vane 72 6 blades	111121	Ø 21,67 - L 43,38

#### SPINDLE WITH BAYONET COUPLING

Designation spindle <sup>a)</sup>	Part Number spindle	Diameter (mm)	Lenght (mm)	Shear rate range for FIRST/B-ONE (s-1)	Shear rate range for RM100-200 (s-1)	Viscosity range for FIRST/B-ONE (mPa.s)	Viscosity range for RM100-200 (mPa.s)
Vane 72	120017	22	43		0.3 to 1500	314 to 6.8M	52 to 15.7M
Vane 72/2	111112	22	20		0.3 to 1500	540 to 11.7M	90 to 27M
Vane 72/4	111113	22	10	0.0 \ 0.50	0.3 to 1500	800 to 17M	133 to 40M
Vane 72-6P	111121	22	43	0.3 à 250	0.3 to 1500	300 to 6.5M	50 to 15M
Vane 73	111108	13	26		0.3 to 1500	1.5K to 34M	262 to 78M
Vane 74	111115	6	12		0.3 to 1500	15.7K to 340M	2.6K to 785M

M for millions, K for thousand

All data given in this table are given for information and can be changed according container use for measurement.

## MS KREBS

Krebs type measuring spindles compatible with ASTM D562 standard (316L stainless steel). These systems are ideal for viscosity measurement in Krebs units in control of all types of products.

They can be used for direct measurement in user containers or in 600 or 150ml beakers.

These systems are not compatible with all instruments in LR version.

Name	Part number	Dim. (mm)	
MK-KU 1-10	111100	I. 53,98	
MK-75Y	111103	I. 42,88	

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a) All Vane system get 4 blades (exept PN 111121 6 blades). Can be used with DIN tube

## MS CHOCOLATE

Coaxial cylindrical measuring systems compatible with OICC and IOCCC standard (316L stainless steel).

These measuring spindle measure viscosity and flow limit of chocolates according to Casson and Windhab regressions models as recommended in OICC and IOCCC standards.

These measuring systems are not compatible with the B-ONE / FIRST PLUS and all instruments in LR version.

These measuring systems are compatible with our EVA DIN and EVA 100 temperature regulations.

	Name	Part number	Dim. (mm)
	MK-C	116002	Ø 13,60
	C Tube with insert	116001	Ø 20
	DIN 1 Tube	112932	Ø 32,50
	C Insert	116004	Ø 20
ā	Delrin cap	116005	-

### MS ULV

Measuring system for low viscosities usable with instruments LR version (Aluminium).

This system, unlike the MS-ASTM or MS-DIN systems, makes it possible to measure low viscosity products in control by applying a shear rate. Its advantage is to be compatible with instruments in LR version unlike all other measuring systems.

This measurement system is not compatible with the B-ONE PLUS.

This measuring system must be used with our temperature regulation CT DIN, EVA DIN and RT1 (according to models, see table).

Name	Part number	Dim. (mm)	
MK-C19	116016	Ø 19	
C Tube with insert	116001	Ø 20	
Delrin cap	116005	-	-
C Insert	111934	-	•
ST-R centring tool	114436	-	
MB-C Alu Cup	114306	Ø 20	

#### MEASURING SYSTEM WITH BAYONET COUPLING FOR DEVICE VERSION LR

Designation Measuring	Part Number	Diamet	Diameter (mm)			Viscosity range <sup>c)</sup> (mPa.s)	
system	Measuring system	inner	outer Volume Shear rate rangec (s-1		Shear rate range <sup>c)</sup> (s-1)		
MS-C19(light)-C	116030 <sup>a)</sup>	19	20	9	1 +- 510	4 += 001/	
MS-C19(light)-C(disposable)	116031 <sup>b)</sup>	19	20	9	1 to 510	4 to 26K	

M for million, K for thousand

a) Not compatible with oven RT1. Can be used without temperature control

b) Delivered with 100 disposable cup

c) Data calculated for speed range of 0.3 to 250 rpm

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