

IKA® Crushing
Mills / Grinders



| A 11 basic Analytical mill

| M 20 Universal mill

| MF 10 basic Microfine grinder drive +
MF 10.1 Cutting-grinding head

| MF 10 basic Microfine grinder drive +
MF 10.2 Impact grinding head

	A 11 basic	M 20	MF 10 basic + MF 10.1	MF 10 basic + MF 10.2
Technical data				
Motor rating input / output	160 / 100 W	440 / 225 W	1.000 / 500 W	1.000 / 500 W
Speed range	fixed 28.000 rpm	fixed 20.000 rpm	3.000 – 6.500 rpm	3.000 – 6.500 rpm
Useful volume	80 ml	250 ml	max. 5 kg / h	max. 5 kg / h
Duty cycle ON / OFF	1 min / 10 min	7 min / 10 min	120 min / 30 min	120 min / 30 min
Overload protection	yes	current limitation	yes	yes
Circumferential speed	53 m/s	72 m/s	22,5 m/s	31,4 m/s
Max. granularity of task	10 mm	5 - 7 mm	15 mm	10 mm
Material grinding chamber	stainless steel (AISI 316)	stainless steel (AISI 304)	stainless steel (AISI 304)	stainless steel (AISI 304)
Material cover	-	stainless steel (AISI 304)	stainless steel (AISI 304)	stainless steel (AISI 304)
General data				
Dimensions (W x D x H)	85 x 85 x 240 mm	170 x 170 x 350 mm	320 x 300 x 560 mm	320 x 300 x 450 mm
Weight	1,5 kg	6,6 kg	9,7 kg + 0,8 kg	9,7 kg + 1,3 kg
Permissible ambient temperature	5 – 40 °C	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative humidity	80 %	80 %	80 %	80 %
Protection class acc. to DIN EN 60529	IP 43	IP 21	IP 22	IP 22
Ident. No.	2900000	1603600	2836000 + 2870900	2836000 + 2871000

IKA® Accessories
Electronic contact thermometers



| ETS-D5

| ETS-D6
1 incl. BNC bushing
2 incl. pH measurement.

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	ETS-D5	ETS-D6
Temperature		
Temperature measuring range	- 50 – 450 °C	- 50 – 450 °C
Resolution	0,1 K	0,01 K
Measuring accuracy	± 0,2 K + Sensor tolerance PT 1000 DIN IEC 751 class A	± 0,05 K + Sensor tolerance PT 1000 DIN IEC 751 class A
Setting accuracy	0,1 K	0,1 K
Control deviation	± 0,5 K	± 0,2 K
pH measurement		
Measuring range	-	0 - 14 pH
Accuracy	-	± 0,1 pH
Resolution	-	± 0,01 pH
pH connection	-	BNC bushing
General data		
Supply voltage	8 – 16 VDC	8 – 16 VDC
Power consumption	10 mA (per 9 V)	15 mA (per 9 V)
Max. ON time	100 %	100 %
Plug	6 pin DIN 45322	6 pin DIN 45322
Connection	DIN 12878 class 2	DIN 12878 class 2
Dimensions (W x D x H)	82 x 22 x 83 mm (without sensor)	96 x 45 x 98 mm (without sensor)
Permissible ambient temperature	0 – 60 °C	0 – 60 °C
Permissible relative humidity	80 %	80 %
Protection class acc. to DIN EN 60529	IP 54	IP 54
Ident. No.	3378000	3378100