Planetary Ball Mills *classic line* (different models), FRITSCH

webcode WWGF3004

Planetary Ball Mills
Ideal for fast, loss-free fine grinding of hard, medium-hard, brittle and fibrous materials – dry or in suspension – in geology, mineralogy, metallurgy, ceramics, material research, mechanical alloying, pharmaceutics, chemistry, biology, and sample preparation for analysis. Sample can be processed from a few milligrams to several kilograms at a wide range of fineness levels down to less than 1 µm. They are especially easy to operate and fast and easy to clean. They are suitable for continuous, heavy duty usage and guarantee safe clamping of the grinding bowls. Matching grinding parts of 7 different materials are available to provide maximum protection against undesired contamination. In addition to size-reduction, Planetary Ball Mills can also be used for mixing and homogenising of emulsions and pastes or for mechanical alloying and activation.

Technical data:	**PULVERISETTE 6 *classic line***	**PULVERISETTE 5 *classic line* model I**	**PULVERISETTE 5 *classic line* model II**
Working stations:	1	4	2
Max. feed size:	10 mm	10 mm	10 mm
Max. sample quantity:	225 ml	900 ml	450 ml
Final fineness:	< 1 µm	< 1 µm	< 1 µm
Rotational speed main disk:	100 – 650 rpm	50 – 400 rpm	
Grinding bowl sizes:	80, 250, 500 ml	80, 250, 500 ml	
Supply requirements:	100–120/200–240 V/1~, 50–60 Hz	200–240 V/1~, 50–60 Hz	
Dimensions (W×D×H):	37 × 53 × 50 cm	58 × 67 × 57 cm	
Weight net:	63 kg	120 kg	100 kg

Article	Order No.
① **Planetary Mono Mill PULVERISETTE 6 *classic line***	**53 98 06000**
② **Planetary Mill PULVERISETTE 5 *classic line*, model I**	**10 98 05520**
Planetary Mill PULVERISETTE 5 *classic line*, model II	**10 98 05620**

The Planetary Mill PULVERISETTE 5 *classic line*, model I and model II is also available in other voltages.
FRITSCH also offers a revolutionary Planetary Mill Generation *premium line* generation for fast high-tech grinding down into the nano range, worldwide unique in operation, performance and safety - a new reference class, please have a look at Planetary Micro Mill PULVERISETTE 7 *premium line*.

Further models of planetary mills on request. Please order grinding bowls and balls separately.

③ **Grinding bowls for Planetary Ball Mills PULVERISETTE 5 / PULVERISETTE 6 *classic line***

Material	Volume ml 80 **Order No.**	250 **Order No.**	500 **Order No.**
Hardened, stainless steel	**10 98 05419**	**10 98 05319**	**10 98 05219**
Sintered corundum	**53 98 05405**	**53 98 05305**	**53 98 05205**
Zirconium oxide	**53 98 05415**	**53 98 05315**	**53 98 05215**
Hardmetal tungsten carbide[1)]	**53 98 05409**	**53 98 05309**	
Adapter for grinding bowls[2)]	**53 98 90112**		

[1)] Grinding bowl in a steel casing
[2)] One grinding bowl holder can hold either 2 x 80 ml bowls or 1 x 80 ml bowl together with a grinding bowl adapter mounted one on top of the other.

Grinding bowls are also available in agate and silicon nitride.
Special gassing lids for grinding in an inert atmosphere and for mechanical alloying as well as the GTM-system (Gas pressure and temperature measuring system), for measuring gas pressure and temperature during the grinding process are available.

④ **Grinding balls for grinding balls: PULVERISETTE 5 / PULVERISETTE 6 *classic line***

Material	Ball Ø mm 10 **Order No.**	20 **Order No.**	30 **Order No.**	40 **Order No.**
Hardened, stainless steel	**10 98 05611**	**10 98 05612**	**10 98 05613**	**10 98 05614**
Sintered corundum	**53 98 05651**	**53 98 05652**	**53 98 05653**	**53 98 05654**
Zirconium oxide	**53 98 05751**	**53 98 05752**	**53 98 05753**	**53 98 05754**
Hardmetal tungsten carbide	**53 98 05671**	**53 98 05672**	**53 98 05673**	**53 98 05674**

Grinding bowls are also available in agate and silicon nitride.
Grinding balls are also offered in the diameters 0.1 to 3 mm (to achieve a fineness down to the nanometer-range) as well as in 5 mm and 15 mm (have a look at grinding balls for grinding bowls for Planetary Micro MILL PULVERISETTE 7 *premium line*)

Recommended number of grinding balls per grinding bowl for PULVERISETTE 5/ PULVERISETTE 6 *classic line*

Grinding bowl volume/ Useful capacity (sample volume) Ball dia.	80 ml / 10 – 30 ml	250 ml / 30 – 125 ml	500 ml / 80 – 225 ml
5 mm	250	1200	2000
10 mm	25	50	100
15 mm	10	45	70
20 mm	5	15	25
30 mm	–	6	8
40 mm	–	–	4