

Sample Divider PT 100

General Information

A faultless and comparable analysis is closely linked to accurate sample handling. Only a sample representative of the initial material can provide meaningful analysis results. Rotating dividers ensure the representativeness of a sample and thus the reproducibility of the analysis.

The sample divider PT 100 divides the sample so exactly that the composition of each fraction of the sample corresponds exactly to that of the original bulk sample. This applies both for fine-powdered and coarse materials. The material feed and dividing processes take place automatically, without interruption and without loss of material. The Sample Divider PT 100 has a modular design and can be put together to suit individual requirements. It offers an extremely flexible range of possible applications. A feeder, various dividing heads, sample receptacle vessels and further useful accessories are available in addition to the drive unit.



Application Examples

cement clinker, chemicals, coffee, construction materials, fertilizers, fillers, flours, grains, metals powders, minerals, nuts, sand, seeds, soils, washing powder, ...

Product Advantages

- high division accuracy to suit modern analytical devices
- modular design
- automatic material feed via synchronized feeder
- quick-release clamping system for simple and rapid handling of sample bottles
- digital time setting
- speed is monitored and kept constant
- wide range of accessories including various dividing heads, collection and feeding systems
- compact, easy to clean

Features

Applications	sample division, sample reduction
Field of application	agriculture, biology, chemistry / plastics, construction materials, engineering / electronics, environment / recycling, food, geology / metallurgy, glass / ceramics, medicine / pharmaceuticals
Feed material	bulk materials
Material feed size*	<= 10 mm
Batch size / feed quantity*	<= 5000 ml
Rotary speed	110 min ⁻¹

Sample Divider PT 100

Number of divisions	6 / 8 / 10
Time setting	digital, 1, 3, 5, 10 - 60 min / continuous operation
Container volume	30 ml / 100 ml / 250 ml / 500 ml
Electrical supply data	100-240 V, 50/60Hz
Power connection	1-phase
W x H x D	580 x 910 x 420 mm (incl. DR 100)
Net weight	~ 33.5 kg (incl. DR 100)
Documentation	Operation & Application Video
Standards	CE

*depending on feed material and instrument configuration/settings

Sample Divider PT 100

Videolink



<http://www.retsch.com/pt100>

Function Principle

The material to be divided first flows through a decentrally located feed hopper. The material first flows through a feed hopper - which is located off-center - directly into the openings of the dividing head. This procedure results in very small, and therefore neglectable, deviations between the part samples in the sample bottles, even with coarse materials. The dividing process itself runs automatically and tamper-proof. The speed-controlled dividing head rotates at a constant 110 revolutions per minute, independent of the load and the mains frequency. This means that when using a dividing head with ten outlets, the feed flow is divided into 1100 individual samples each minute, thus providing optimum dividing accuracy. The dividing heads divide the material evenly among the sample bottles which are available in various sizes.

Order data

Sample Divider PT 100

PT 100 complete unit, incl. dividing head with 8 quick-release outlets, vibratory feeder DR 100-75/40 and 10 sample bottles 250 ml

40.535.0002

PT 100 complete unit, 220-240 V, 50 Hz

40.535.0003

PT 100 complete unit, 110-120 V, 60 Hz

PT 100 drive unit (please order dividing head, collecting receptacles, vibratory feeder/stand separately)

40.535.0001

PT 100 drive unit, 100-240 V, 50/60 Hz

Dividing heads for feed sizes up to 10 mm

42.793.0003

Dividing head of aluminum hard anodized, with 6 quick-release sample outlets

42.793.0001

Dividing head of aluminum hard anodized, with 8 quick-release sample outlets

42.793.0002

Dividing head of aluminum hard anodized, with 10 quick-release sample outlets

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42.793.0007 Dividing head of POM, with 8 quick-release sample outlets

22.523.0001 Sample bottles, 250 ml, 10 pieces

22.523.0002 Sample bottles, 500 ml, 10 pieces

Dividing heads for feed sizes up to 5 mm

42.793.0009 Dividing head of aluminum hard anodized, with 8 quick-release sample outlets

22.523.0003 Duran laboratory bottles, 100 ml, 10 pieces

22.523.0004 Duran laboratory bottles, 250 ml, 10 pieces

22.523.0005 Duran laboratory bottles, 500 ml, 10 pieces

42.018.0001 Support with beakers 30 ml and lids for dividing head 42.793.0009

42.156.0001 Spare beaker with lid 30 ml, 10 pieces

Accessories

03.785.0146 Hopper, stainless steel, volume 2.8 l (for PT 100 used without DR 100)

03.742.0013 Protective dust cap for hopper, of POM