Sampling unit type PRS with screw

Reliable sampling

Continuous sampling

Compact and easy-to-clean

Quickly mountable

Preferred application

The unit is used for removal of samples or continuous sampling out of down pipes or pressureless hoppers with a cone inclination up to 30°.

Special advantages

Due to the modular design it is possible to adjust the screw shaft inclination as well as the drive according to the requested sampling capacity.

The easy-to-clean design ensures an optimal adjustment for each case of operation by means of its modular design.

Design

The sampling unit is available with pneumatic drive, electric drive as well as with manual drive (hand-wheel). The installation e.g. within a down pipe or a hopper is possible by means of tri-clamp connection or by flange. The unit consist of a screw housing, a screw, the connection flange as well as a transparent collection hopper for the samples.

THE INNOVATION





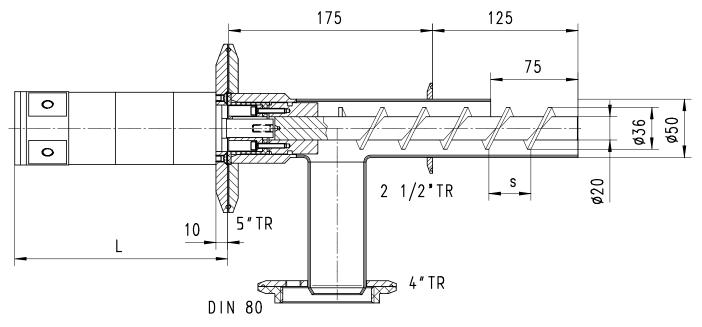
How it works

If the sampling takes place as random or continuous sampling is defined by the corresponding control unit. Pneumatic, electric or manual turning of the screw removes a certain quantity from the passing product and transports it to the transparent collection hopper. After finishing of sampling the collection hopper including the sample can be removed by quick acting clamps

and closed with a cover. This closed hopper can be brought to the laboratory. In order to keep the complete system closed and to avoid contamination it is recommended to fix a new, cleaned hopper immediately.



Technical data



L = depends on design and speed

s = screw inclination

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Conveying capacity: according to drive speed and

screw inclination

 $V \approx 0,0007 \times s \times n$

Conveying capacity V in [I/min] Screw inclination s in [mm] Drive speed in [min-1]

Product temperature: max. 80 [°C]

Ambient temperature: + 3 [°C] up to + 40 [°C]

Sound pressure level: 63 - 68 dB(A)

Design version

Pneumatic drive

Rated power: 400 [W]
Rated speed: 105 min-1
Rated torque: 18,2 [Nm]

Compressed air

consumption: 0,3 [m3/min]
Connection thread: G 1/8"
Weight: 2,8 [kg]

Pneumatic drive with zone admission

Admission: II 2 GD E Ex c IIC T6

Rated power: 130 [W]
Rated speed: 90 min-1
Rated torque: 13,8 [Nm]

Compressed air

consumption: 0,28 [m3/min]
Connection thread: G 1/4"
Weight: 1,15 [kg]

Direct current drive

Supply voltage: 24 V DC
Rated power: 25 [W]
Rated speed: 2,25 min-1
Rated torque: 3,45 [Nm]
Current consumption: 1,7 [A]
Weight: 0,9 [kg]

