

Version 2.0
Qt/Ro

02.05.2023

1. Force unit

1.1. Extrusion force: for standard tests $F = 1250 \text{ N}$

The ejection force is generated by a mass that moves freely in the ejection direction.

1.2. Extrusion punch traverse speed: $v = 0 \dots 35 \text{ mm/s}$. The maximum traverse speed of the extrusion is 35 mm/s

1.3. Pre-press time: adjustable $(0.5 \dots 10 \pm 0.01) \text{ s}$

1.4. Extrusion time: adjustable $(1 \dots 30 \pm 0.01) \text{ s}$

The extrusion force and extrusion time can be set via the operating terminal.

The default setting for the standard test is an extrusion force of 1250 N and an extrusion time of 10 seconds .

2. Extrusion device:

2.1. Cartridge tube

To ensure low and constant friction ratios of the cartridges being tested, a defined inner diameter is required for the cartridge sleeve, which limits the expansion of the cartridge casing during the pressing process.

Inner diameter of the cartridge holder: $D = 50.65 \text{ mm}$

2.2. Standard extrusion nozzle

The standard extrusion nozzle determines the shear of the product during the extrusion process. The geometry is designed as a hollow cylinder.

Dimensions: $d = 3 \text{ mm H6 } (-0.000/+0.006)$
 $L = 10 \text{ mm } (-0.000/+0.050)$

Inlet/outlet: sharp-edged

Cylinder surface: $Ra < 0.8$

Material: stainless steel 1.4301

3. dimensions

W (width) x D (depth) x H (height) = $645 \text{ mm} \times 425 \text{ mm} \times 1346 \text{ mm}$
Mass approx. 230 kg

4. connection/interfaces

Interfaces: Ethernet (RJ45), USB