

Chambers for Tensile Tester



TH 2700 *chamber for tensile tester*

*Self-supported two-fold body frame
Made of stainless steel 2mm 1.4301*

*Melted, polished and brushed from the outside
Heating power 2.3 kW (220 Volt/380 Volt)
Range of temperature -80°C + 280°C (optional 350°C / 500°C)*

Air circulation with a centric blower - mixing fan

*Front door contains 4 glass-platens;
Between inner glass platens are heating coils to remove
frosting of the glass – (optional door light, internal light)*

*Up and down hole has a Teflon guide tube outside, V2a inside
We add insert shells to reduce to smaller diameter for Pullrods
If we supply also Pullrods*

*External regulator self-optimizing 0.1°C Sika TLK96
(optional Omron RS232 or Eurotherm RS485, analog in and out)*

*19" Rack with 4 m cable and a solid plug on backside
Sensor PT 100*

*Frame to move chamber in and out of tensile tester
Chamber with adjustable feet is carried by the bearings and can be moved to
611 mm away.*

Heat up speed 15°C/Minute (from 20 to 80°C without grip)

Energy consumption of our standard TH2700 without grips

100°C	0,11	kWh/h
200°C	0,24	kWh/h
300°C	0,38	kWh/h

*Cooling requires liquid nitrogen, which is controlled by a
magnet valve on back side of chamber*

*Temporary frosting of the internal glass is occurred by opening the door and
can be solved by using heating coils*

*To come down to -70°C 4 kg liquid air is requested
To keep -70°C ~ 3 kg liquid air per hour is requested*

*TH 2700 standard size (delivery 14 days)
 Dimensions: inside 220x220x580 outside 360x480x766mm 50kg*

TH2700-Esk dto but with removeable wedge ports

*TK...-SX special versions of chambers with special dimensions
 Inside A x B x C (Width x Deepness x Height)
 1/3 prepaying required*

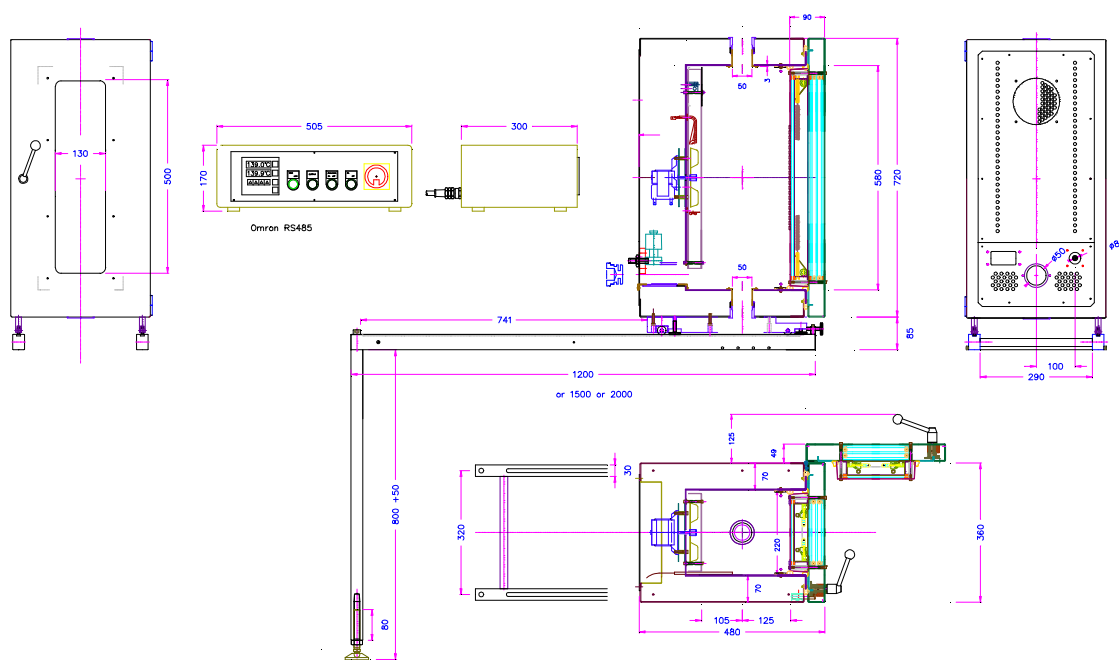
TK...-SX-Esk like Version SX but with removeable wedge ports

Options

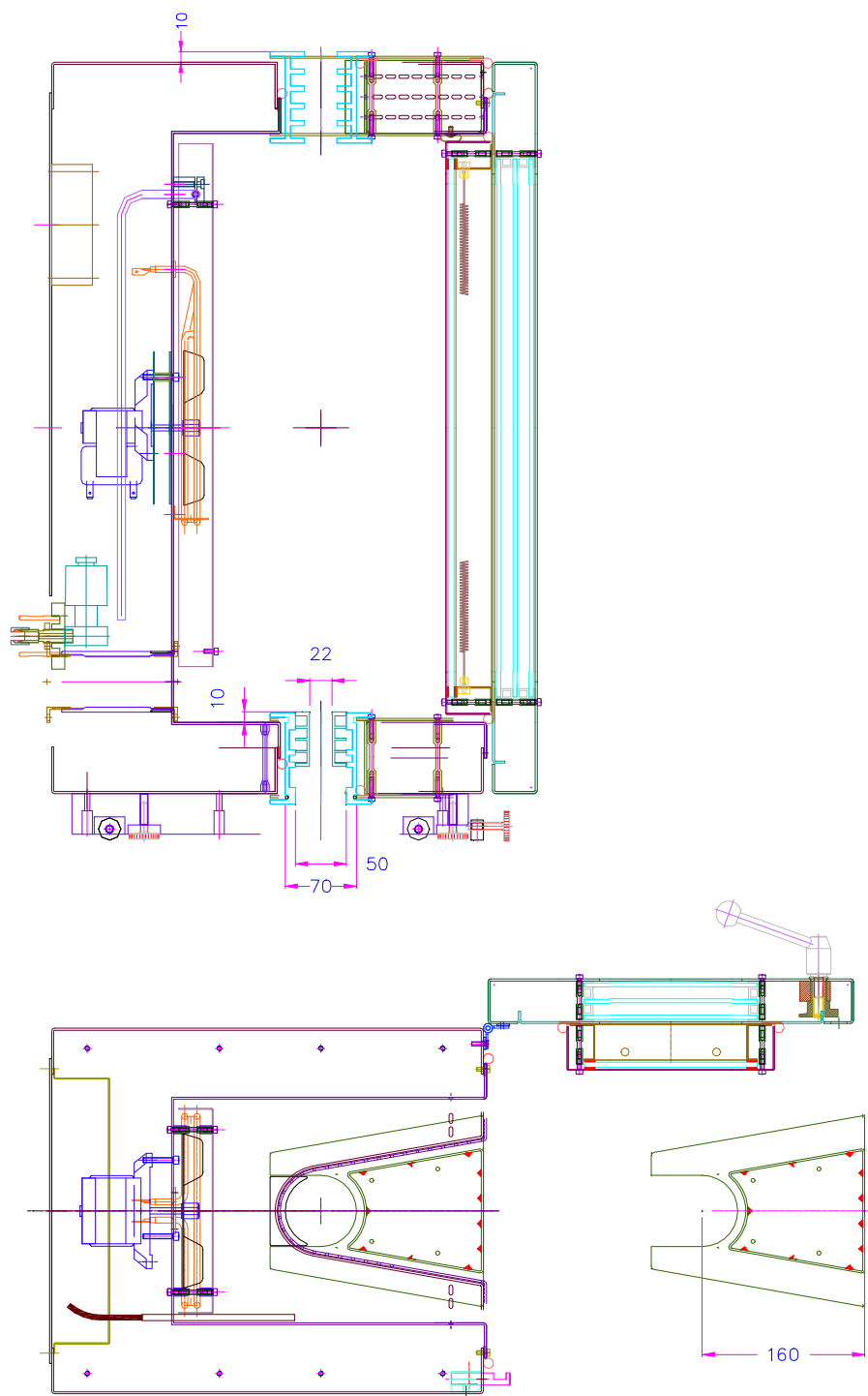
*-Lit door light (heating coils alternative)
 -RS232 regulator with RS232
 -RS485 regulator with RS485
 -T350 elevated temperature range
 -WT heat exchanger
 -SSR special hinge
 -ESP Antireflex glasses
 -LHBs long hole on back side for extensometer*

*Grips for
 chambers Suitable grips (TH175 THS321) you find on www.grip.de*

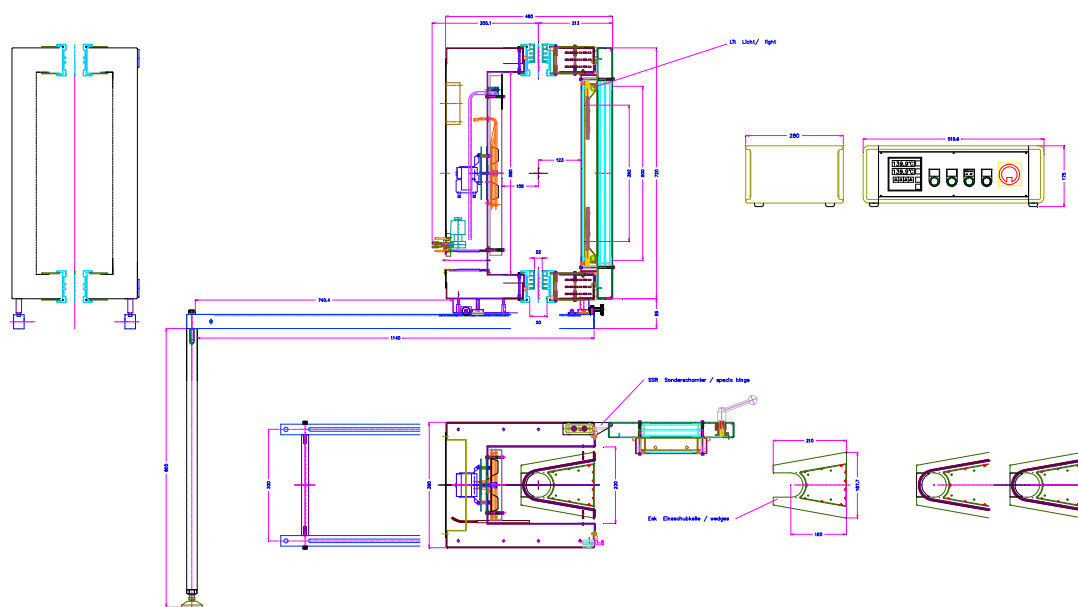
*THS521 Adapter made of stainless steel
 Tube with air pressure connector and Teflon tube*



Standard version on stock



ZH2700-Esk on stock



-80°C ... +280°C

TH2700+Esk+Lit+SSR

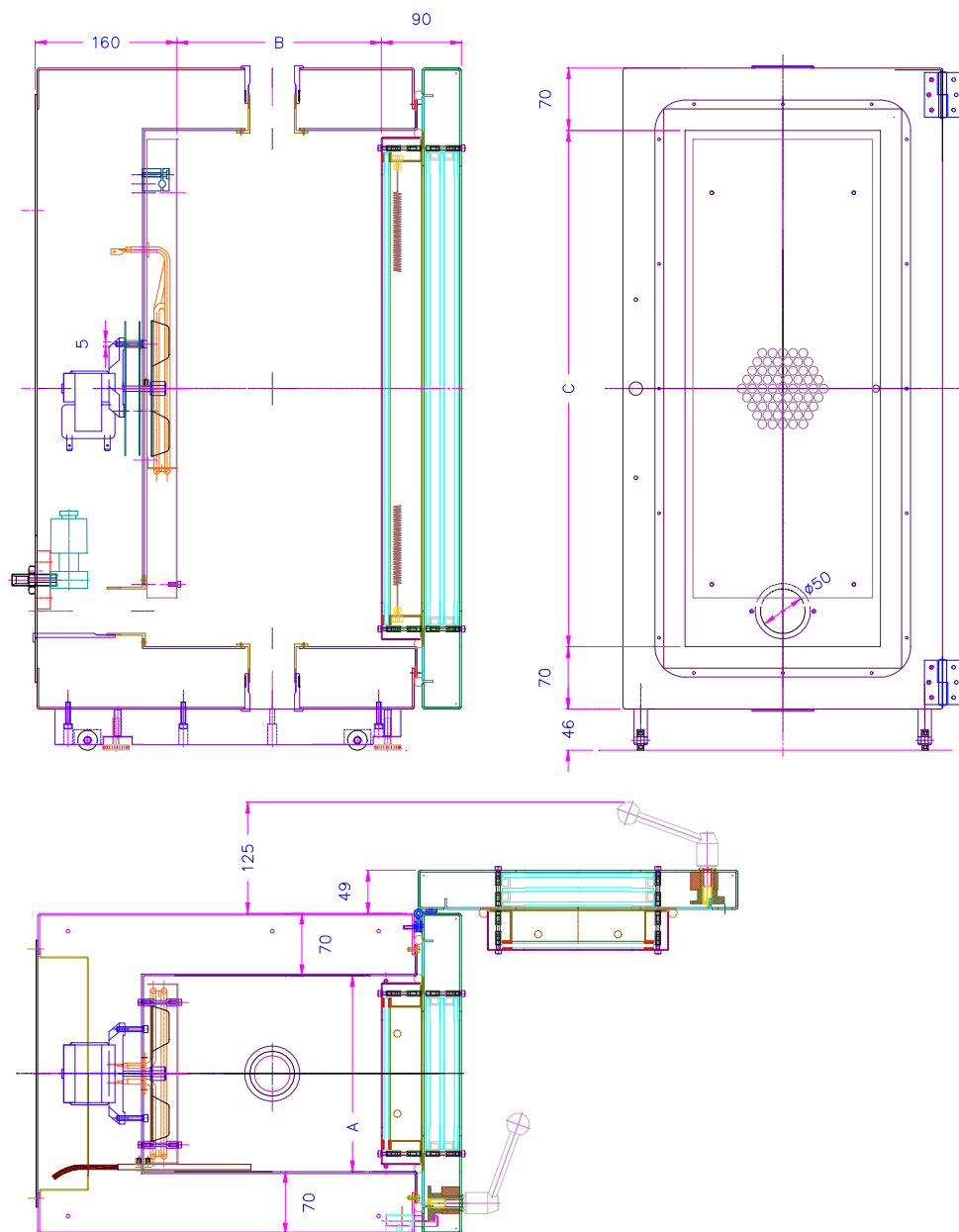
	 A stainless steel industrial unit, model TH2700, shown from a three-quarter perspective. The door is closed. It features a vertical handle on the right side of the door and a yellow warning triangle on the upper right. The unit is mounted on a base with four small feet.
<i>TH2700</i>	<i>TH2700+Esk+SSR Esk Removeable wedge ports SSR special hinge without lateral extension)</i>
 The TH2700 unit with its door open, showing the interior. The door is hinged on the right side and is open to the right. The interior has a circular opening at the bottom and a mesh screen on the left side.	 The TH2700+Esk+SSR unit with its door open, showing the interior. The door is hinged on the right side and is open to the right. The interior has a circular opening at the bottom and a mesh screen on the left side. The door has a vertical handle and a yellow warning triangle.



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Special Versions

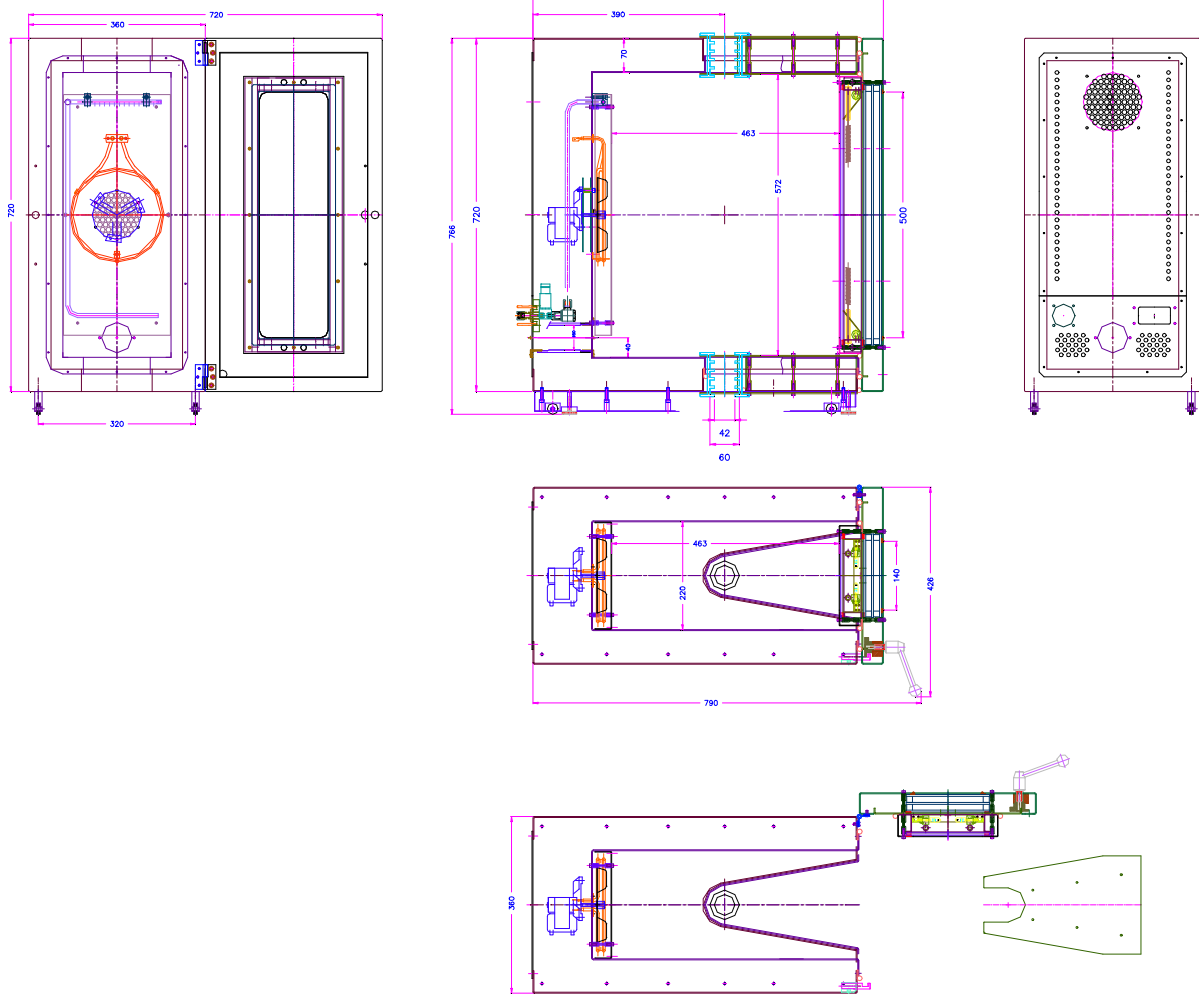


TH2700-A-B-C

Chamber with special Dimension



TK72.3+ESK200 deep chamber with inserts (option SAY + ESK1)



TK72.3



TK45 special small chamber (option SA1)



TH2700-H850-Li special chamber inter height 850mm with light (220x220x850mm) option SA1



*TK21-SX Little chamber
Cooler and heating on the right side*



TK332 -180°C innen 220x230x310mm 120mm Wallthickness



TK389 T500°C special chamber for useage up to 500°C



TK26- LHB-Esk with removeable wedge ports and slot on backside



TK190-LHB long hole on back side for long travel extensometer



TK43 SX-Esk Big chamber special size with wedges



TK349 special chamber with special wedgeports

<https://youtu.be/XWKYuSbwEKg>



TH3870-SX with frame for tensile tester



TK42 SX-Esk Special size with Light Special door turning point



TK168 220x230x580 side window removeable wedge ports light



TK293 SF45 side window 45°



TK43-SX-Esk special chamber



TK149

Dimensions 220x250x480mm

BE light

Esk Removeable wedge ports

SSR special hinge

SF extra windows on left and right

For single column machines



TK21-3 for single column machine



TK71 220x225x350mm (340x478x430mm) small chambers



TK108 310x280x400mm small chambers

Cooling

with fluid air - with magnetic valve - Standard Solution



Consumption at -70°C ~ 3 kg fluid air per hour

Special wide chambers for multi axe machines



TK56 Special chamber with double-folding door



TK101 open



TK62 4x glasses on each side - wedge ports - no heating - no ventilator

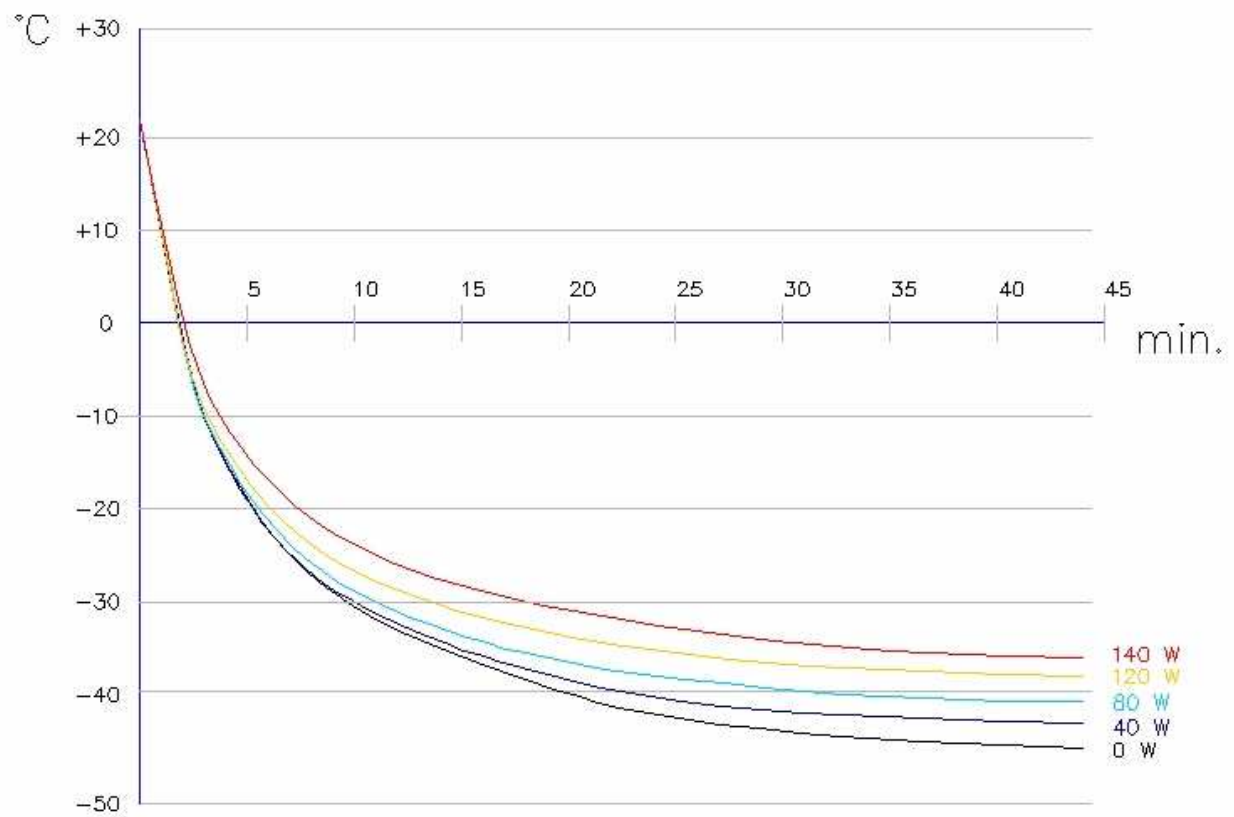


Chamber with cold air cooler TH4340-1000 -25°C





TK664+TH4240



TH4240-1000 Cooler + TH2700+Coo

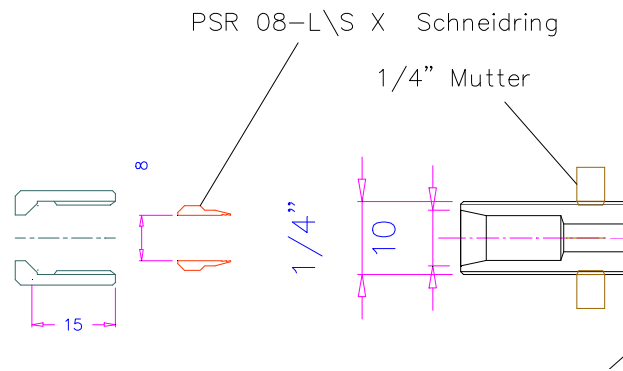
Temperatur / time in minutes



TK3740 Kammer für biaxiale Zugversuche

TH3870-SX mit Gestell

Connector for fluid air



To fix a 8mm tube on valve of chamber

https://youtu.be/ERwOe80rF_I how to connect liquid air



TK2-66-1200 rail for chamber



Teflon bushes for chambers -180°C ..+280°C

Pullrods



THS521-158-159-D21-L120

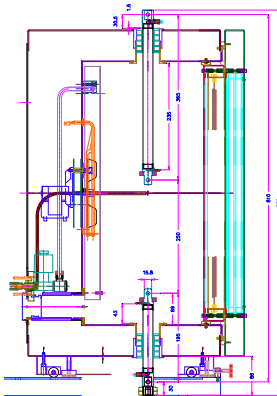
Pullrod with Teflon tube
and pneumatic fittings,



THS521-158-159-D21-L150

Male 15.8mm
Female 15.9 mm
Rod diameter 21 mm
Rod Length 150mm pin to pin

THS521-158-159-D21-L400-psd
Rod 400mm with protection shield



TH2700 +

THS521-158-365

THS521-158-195



THS481-158-100
THS481-158-50

Grips for chambers



TH175-10 + BP

Pneumatic grip 10kN -80°C bis 280°C V2a

TH175-10 + BP

pneumatic grip + pyramid jaws 10kN -80°C up to 280°C

www.grip.de/G12/TH175

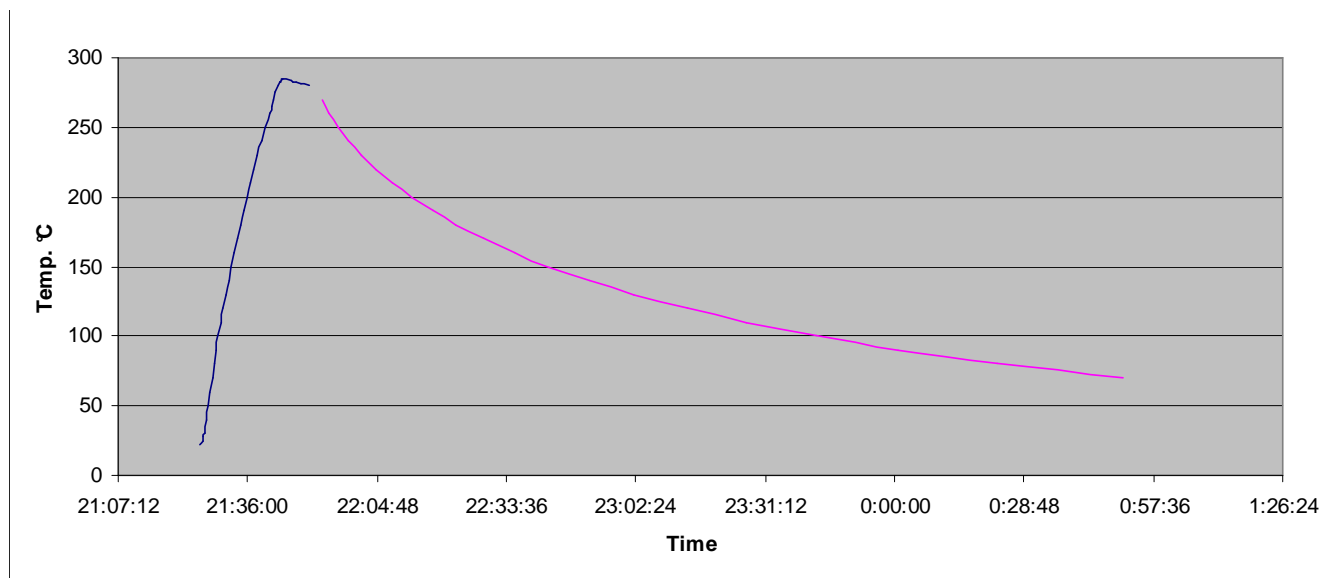


THS321-10 10kN -70°C up to 350°C



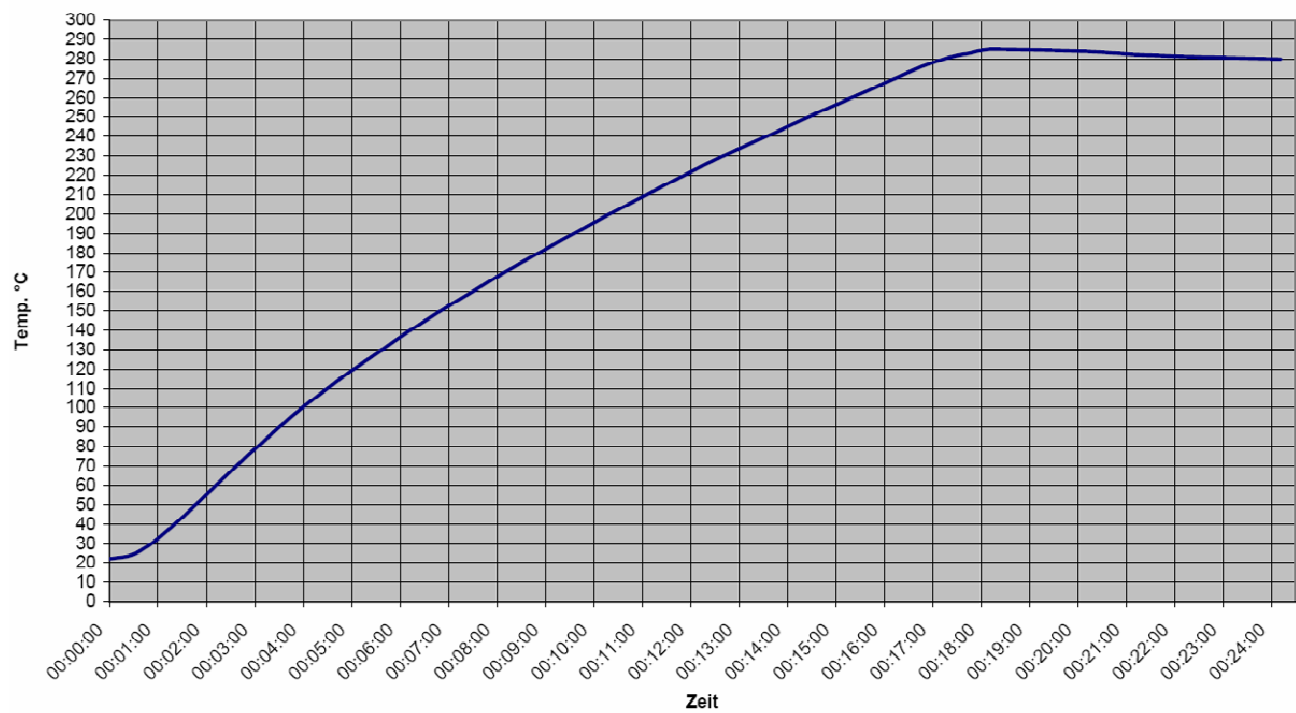
THS321-100-pn
100kN -70°C up to 350°C
www.grip.de/G08/THS321

TH2700



Heat up and cool down diagram without grips

TH2700



Heat up time of TH2700 without grips

Controller

Omron Standard Version **E5AN-Q3MT-500-N**

RS485

The universal regulators of the product line E5_N are available in 4 Standard-DIN-Formats. All constructions have lighted two-line display with good viewing angle. Each model of this line have 3-colored actual value indicating.

- 2-Point- or PID-Regulation
- relay output, hybrid Relay output, voltage output (for solid-state relay) or current output
- power options 24 V DC / 24 V AC or 100 to 240 V AC
- simply connection to industry-PC to configure, save and copy parameters
- simply setting and operation with the buttons on the front side
- clear diagnosis and alarm indication
- safety in use thanks to the password security and adjustable menu
- large selection of special functions and options

http://www.ia.omron.com/product/family/1432/index_1_u.html

Eurotherm 2404

MODELL (2404) Industrieregler Typ 2404
 FUNKTION (CC) PID Regler
 VERSORGUNGSSPANNUNG (VH) 85-264Vac Netzversorgung
 MODUL 1 (LH) Logikausgang Heizen
 MODUL 2 (YC) Relais Wechsler Kuehlausgang
 KOMMUNIKATION 1 (YM) RS485 MODBUS Protokoll
 BEDIENUNGSANLEITUNG (GER) Deutsch
 SENSOREINGANG (Z) Pt100 DIN 43760
 MINIMUM RANGE -70
 MAXIMUM RANGE 280
 ANZEIGEEINHEIT (C) Celsius

<http://www.eurotherm.com/downloads/documents/user-guides/>

Antireflex glass

Optische Eigenschaften

- Reflexion von BOROFLOAT® 33
im Vergleich zu BOROFLOAT® AR
(entspiegelt)

