

## 1 Technical Data

### 1.1 Data Sheets

#### 1.1.1 Data Sheet ERGOtech 50 NC 4 - hhv

Model Description		ERGOtech 50 - hhv
Internat. Size classification		500-80 h / 80 v 500-120 h / 80 v 500-80 h / 120 v 500-120 h / 120 v
<b>Clamping unit</b>		<b>500 h</b>
Clamping force	kN	500
Locking force	kN	500
Max opening stroke	mm	400
Min. Mould mounting height.	mm	210
Max. Mould mounting height	mm	-
max. Daylight between platens	mm	610
Overall size of platens	mm	520 x 520
Daylight distance between tie bars	mm	355 x 355
Max. Mould Height	kg	400
of which mould weight on the moving mould mounting platen	kg	270
<b>Hydraulic ejector</b>		
Ejection Stroke	mm	125
Ejection Force	kN	41,2
Ejector retraction force	kN	14,8

**Data Sheet ERGOtech 50 NC 4 – hhv – continued**

Horizontal injection unit		80 h	
Plasticising cylinder		B	C
Screw diameter *	mm	22	25
L / D – Ratio		20	20
Injection Pressure (at 400 °C)	bar	2060	1590
Cylinder head volume	ccm	41,8	54,0
Component weight ( PS )	g	37	48
Max. Metering stroke	mm	110	110
Max. Nozzle stroke	mm	180	
Nozzle dipping depth ( SVO )	mm	40	40
Nozzle sealing force	kN	60	
Heating capacity of screw cylin.	kW	5,1	5,7
Hopper capacity	Ltr.	35	

\* Plasticising units with same screw diameters can be exchanged in injection units with the same configuration.



**Attention!**  
**Plasticising units for horizontal injection unit EE1 and the vertical injection unit EE:2 are not interchangeable.**

## Data Sheet ERGOtech 50 NC 4 – hhv – continued

Horizontal injection unit		120 h		
Plasticising cylinder		A	B	C
Screw diameter *	mm	22	25	30
L / D – Ratio		20	20	20
Injection Pressure ( at 400 °C )	bar	2400 **	2000	1390
Cylinder head volume	ccm	41,8	61,3	88,3
Component weight ( PS )	g	37	54	78
Max. Metering stroke	mm	110	125	125
Max. Nozzle stroke	mm	180		
Nozzle dipping depth ( SVO )	mm	16	40	40
Nozzle sealing force	kN	60		
Heating capacity of screw cylin.	kW	5,1	5,7	8,3
Hopper capacity	Ltr.	35		

\* Plasticising units with same screw diameters can be exchanged in injection units with the same configuration.

\*\* On temperature settings above 400°C injection pressure is automatically reduced by machine controller.



**Attention!**  
 Plasticising units for horizontal injection unit EE1 and the vertical injection unit EE2 are not interchangeable.

**Data Sheet ERGOtech 50 NC 4 – hhv – continued**

Vertical injection unit		80 v	
Plasticising cylinder		A	B
Screw diameter *	mm	18	22
L / D – Ratio		20	20
Injection Pressure ( at 400 °C )	bar	2400 **	2060
Cylinder head volume	ccm	22,8	41,8
Component weight ( PS )	g	20	37
Max. Metering stroke	mm	90	110
Heating capacity of screw cylin.	kW	5,0	5,1
Hopper capacity	Ltr.	20	
A total ***	mm	420	
A min. ***	mm	90	
A max. ***	mm	210	
B min. ***	mm	174	103
B max.***	mm	479	408
Max. Nozzle stroke	mm	305	305
Nozzle sealing force	kN	30	

\* Plasticising units with same screw diameters can be exchanged in injection units with the same configuration.

\*\* On temperature settings above 400°C injection pressure is automatically reduced by machine controller.

\*\*\* See Chapter 1.2 Mould mounting dimensions.

**Attention!**

Plasticising units for horizontal injection unit EE1 and the vertical injection unit EE2 are not interchangeable.

## Data Sheet ERGOtech 50 NC 4 - hhv - continued

Vertical injection unit		120 v	
Plasticising cylinder		A	B
Screw diameter *	mm	22	25
L / D - Ratio		20	20
Injection Pressure ( at 400 °C )	bar	2400 **	2000
Cylinder head volume	ccm	41,8	61,3
Component weight ( PS )	g	37	54
Max. Metering stroke	mm	110	125
Heating capacity of screw cylin.	kW	5,1	5,7
Hopper capacity	Ltr.	20	
A total ***	mm	420	
A min. ***	mm	90	
A max. ***	mm	210	
B min. ***	mm	158	96
B max.***	mm	463	401
Max. Nozzle stroke	mm	305	305
Nozzle sealing force	kN	30	

\* Plasticising units with same screw diameters can be exchanged in injection units with the same configuration.

\*\* On temperature settings above 400°C injection pressure is automatically reduced by machine controller.

\*\*\* See Chapter 1.2 Mould mounting dimensions.



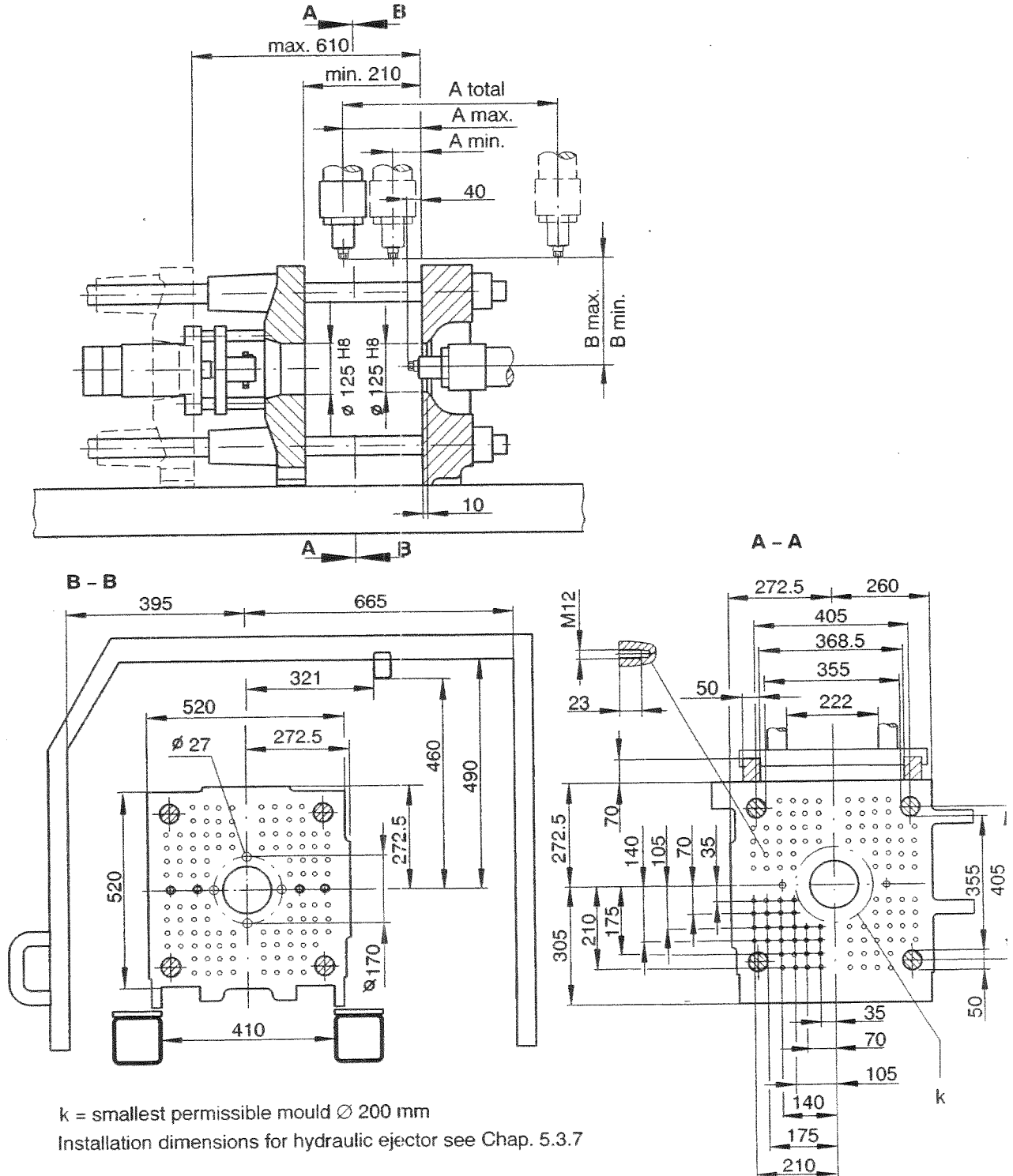
**Attention!**  
Plasticising units for horizontal injection unit EE1 and the vertical injection unit EE2 are not interchangeable.

**Data Sheet ERGOtech 50 NC 4 – hhv – continued**

General data		ERGOtech 50 – hhv
Oil tank capacity	Ltr.	200
Pump unit	kW	22,0
Net weight (without oil)	kg	3700
Machine dimensions L x B x H	m	4,0 x 1,4 x 3,15
Noise level (pressureless circulation of both pumps)	dB (AS)	65,0
Noise level (high pressure)	dB (AS)	75,0

## 1.2 Mould mounting dimensions

### 1.2.1 Mould mounting dimensions ERGOtech 50 - hhv: UNI layout



**1.2.2 Mould mounting dimensions ERGOtech 50 - hhv: SPI layout**

