

3-COORDINATE MEASURING MACHINES

System LHF, Nr. 120

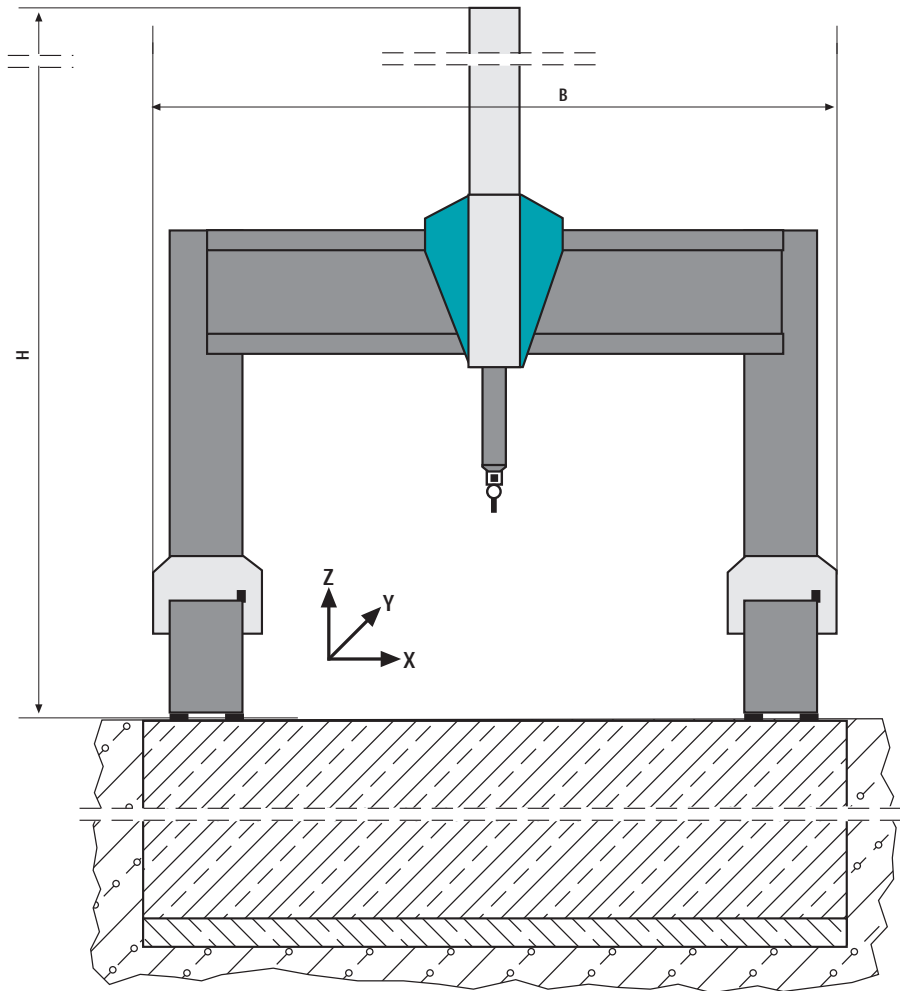
Air bearings, travelling bridge design

The LH 120 travelling bridge design Coordinate Measuring Machine series is equipped with air bearing guideway systems in all axes, providing frictionless and wear-free operation. X rail, Y beam and Z ram are made of dark granite in order to achieve the same thermal behavior in all axes.

The Z axes counterbalance is obtained through a pneumatic cylinder providing to keep the Z ram in any position.

For optimum performance this design requires foundations, which can be passive, or active, depending on the installation site conditions.

Other measuring ranges on inquiry.



All technical features and specifications may be subject to change without notice.

Technical features

			LHF 2517			LHF 3020		
Measuring range	X-axis	mm	2500	2500	2500	3000	3000	3000
	Y-axis	mm	4000	5000	6000	4000	5000	6000
	Z-axis	mm	1700	1700	1700	2000	2000	2000
Overall dimensions	length (L)	mm	6000	7000	8000	6000	7000	8000
	width (B)	mm	4200	4200	4200	4700	4700	4700
	height (H)	mm	4900	4900	4900	5500	5500	5500
Weight		kg	16000	19000	22000	18000	21000	24000
Air pressure min.	6 bar							
Air consumption		NI/min	200			200		
Power supply			115/230 V, 60/50 Hz			115/230 V, 60/50 Hz		
Power consumption		max. VA	2000			2000		
Temperature range*			20°C ± 2 K			20°C ± 2 K		
Max. gradient			1,0 K/h, 1,0 K/m			1,0 K/h, 1,0 K/m		
Measuring system			incremental scales			incremental scales		
Resolution		mm	0,0005			0,0005		
Measuring uncertainty acc. to VDI 2617								
Standard accuracy								
Linear uncertainty		U ₁ =	5,0 + (L/300) µm			6,0 + (L/250) µm		
Volumetric uncertainty		U ₃ =	6,0 + (L/250) µm			7,0 + (L/200) µm		
Order No.			120.4.190	120.4.191	120.4.192	120.4.200	120.4.201	120.4.202
High accuracy								
Linear uncertainty		U ₁ =	4,0 + (L/350) µm			5,0 + (L/300) µm		
Volumetric uncertainty		U ₃ =	5,0 + (L/300) µm			6,0 + (L/250) µm		
Order No.			120.5.190	120.5.191	120.5.192	120.5.200	120.5.201	120.5.202
Special accuracy								
Linear uncertainty		U ₁ =	3,5 + (L/350) µm			4,5 + (L/300) µm		
Volumetric uncertainty		U ₃ =	4,5 + (L/300) µm			5,0 + (L/250) µm		
Order No.			120.5.190	120.5.191	120.5.192	120.5.200	120.5.201	120.5.202

*With manual temperature compensation.